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Kroatische Humboldtianer-Klub
Klub hrvatskih Humboldtovaca

Science and Higher Education Legal Regulations in Central and South-Eastern European Countries

Mladen Pavičić (Ed.)



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Science and Higher Education Legal Regulations in Central and South-Eastern European Countries

PROCEEDINGS OF AN INTERNATIONAL CONFERENCE
held on May 24–25, 2002 in Zagreb, Croatia

Principal Organizer:

Mladen Pavičić, University of Zagreb,
Chairman of the Croatian Humboldt-Club

Local organizers:

Davor Krapac, University of Zagreb, Dean of the Faculty of Law
Ivo Josipović, University of Zagreb, Faculty of Law

Sponsored by:

Alexander von Humboldt Foundation
Croatian Humboldt-Club
Faculty of Law, University of Zagreb, Croatia

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SCIENCE AND HIGHER EDUCATION LEGAL REGULATIONS
IN THE CENTRAL EUROPEAN COUNTRIES AND THE EUROPEAN
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and

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Preface

The ways and conditions under which scientists carry out their research and teach at universities are shared concerns of scientists themselves, those who make use of their research, and those who are taught by them at universities. The latter user groups are well represented by professionals, often simply called politicians. They recently proposed radical changes to science and higher education legal regulations in order to observe overall integration processes in Europe. The changes are demanding but, at the same time, encourage scientists to take a more active role in defining their own working conditions.

On the other hand, and unfortunately, it is often unclear where such changes will lead our research and our education and how we can articulate this. The idea of the present conference was to offer some answers to such issues. Its aim is to provide scientists, lecturers, students, members of parliament, government bodies, the electorate, and the media with details on higher education and science legal regulations in central and southeast European countries alongside their comparative advantages and disadvantages. The contributed presentation of legal documents and statistics supporting the positive and negative consequences of legislation in these countries will hopefully help to improve laws, rules, and policies under which science and education are being carried out in each of the respective countries.

The invited speakers from Austria, Croatia, Czech Republic, Hungary, Italy, and Slovenia presented legal regulations of science and higher education in their countries in a pro and con way. They are scientists and, at the same time, specialists in the field of legal regulations of science and higher education: either juridical specialists or those involved in the application of laws (notably rectors and institute directors) from different countries.

The following points in science regulations are elaborated:

1. Who decides on the percentage of the gross national product allocated to science and on what basis; how it is distributed and who decides (and how) on its distribution;
2. The evaluation system used for scientific projects;
3. The equipping and maintenance of scientific institutes and universities;
4. The role of scientists in decision-making;
5. The system used to finance young scientists;

6. Possibilities arising in the financing of interdisciplinary projects by different institutions;
7. How priorities in world science are connected with priorities in particular countries – which bodies decide on the distributions of money, projects, new equipment and on the opening of new institutes and universities.

In higher education regulations the following points are elaborated:

1. Planning the number of enrolled students per study: who decides and how – faculties, specialist areas, universities or the Ministry; admission policies; admission fees;
2. Study duration and success: exam regulations, benefits, fellowships, fees, the role of students in evaluating subjects, demands on lectures, number of lecturers per students;
3. Experience with the European Course Credit Transfer System (ECTS); the Bologna Charter;
4. Development, modernisation and planning – who decides and how: which bodies and who are their members; election principles, requests, and speed of elections and re-election of lecturers and scientists at the universities; stimulation, expediency and promptness of decision-making,
5. Organisation of universities:
 - 5.1. Who is the owner of buildings and equipment – university, faculty, or department;
 - 5.2. Who decides on projects, development, teaching programmes, investment, cooperation, evaluation, elections, maintenance.

All the details on this conference – including these proceedings and photos of the participants, as well as links to laws and regulations of science and higher education in several European countries – can be found on the web site of the Croatian Humboldt-Club: <http://www.humboldt-club.hr>

In the end, I would like to explain the title, which apparently clashes with the content. We have invited many specialists in the field (Humboldtians as well as non-Humboldtians) from Bosnia and Herzegovina, Bulgaria, Greece, Macedonia, Rumania, and Yugoslavia. Unfortunately, no one of them was eventually able to come. Still, we shall try to put documents relevant for higher education regulations in these countries on our web page as soon as we are sent them.

Mladen Pavičić

Short curriculum vitae of the invited speakers and the editor

Prof. Aleksa Bjeliš

Full Professor at the University of Zagreb, Faculty of Sciences, Department of Physics, Theoretical Physics Department, Bijenička c. 32, POB 331, HR-10001 Zagreb, Croatia. Phone: +385-1-4605555; Fax: +385-1-4680336.
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Born 2 February 1947

PhD theoretical solid state physics, 1976, Univ of Zagreb;

From 1988 at Dept. of Physics, Faculty of Science, Univ of Zagreb;

2000 – 2002 dean of the Faculty of Science;

Since 2001 a member of the National Council for High Education;

Since 2002 Vice-Rector for science and development of the University of Zagreb.

Numerous publications in scientific journals.

Prof. Andrea R. Castaldo

University of Salerno, Full Professor of Penal Law and Economic Penal Law at the Faculty of Law, Department of International Studies, Salerno, Italy, Contrada don Melillo – 84084, Fisciano, Salerno, Italy.

Phone: +39-89-962908; *Fax.* +39-89-962507.

E-mail: castlaw@tuttoptmi.it

Web page: <http://www.unisa.it/Didattica/Facolta/Giurisprudenza/docentiprogrammi/Castaldo.htm>

1982: Bachelor in Jurisprudence at the Naples University

1984: Program of research financed by the Ministry of Public Education, carried out at the Max-Planck-Institut für ausländisches und internationales Strafrecht of Freiburg, »The crisis of the legality principle«.

Scholarships: **1985:** Ministry of Foreign Affairs (Max-Planck-Institut Freiburg); D.A.A.D. (Institut für die gesamten Strafrechtswissenschaften of the Monaco Baviera University); **1986:** Max-Planck – Gesellschaft (Max-

-Planck – Institut di Freiburg i. Br.); **1988, 93**: C.N.R. (Institut für die gesamten Strafrechtswissenschaften of the Monaco di Baviera University); **1990/91, 92, 95**: Alexander von Humboldt (Institut für die gesamten Strafrechtswissenschaften of the Monaco di Baviera University); **1994**: Visiting Professor at the University of Bogotá (Colombia) **1996**: Visiting Professor at the Supreme Court of Justice – Escuela Judicial of S. José (Costarica); **1996,97**: Visiting Professor at the Tunja University – Boyacà (Colombia); **1997, 98**: Visiting Professor at the Austral University of Buenos Aires; **1998**: Visiting Professor at the Montevideo University. Visiting Professor at the Cattolica Pontificia University of Porto Alegre, Brasil.

Prof. Miroslav Furić

Croatia, January 31. 1941. Married, two children.

Ph.D. in Physics Faculty of Sciences in Zagreb 1970.

Research posts: Institute Rudjer Bošković, Univ. of S. California at Los Angeles, Rice Univ. at Houston, CERN Geneva. Associate Professor, 1980 and Full Professor, 1986 at the Physics Department of the Faculty of Sciences of the University of Zagreb.

Physics Department, University of Zagreb, Bijenička c. 32, POB 331 HR-10002 Zagreb, Croatia. Phone: +385-1-4605555 Fax: +385-1-4680336

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Main achievements: discovery of new nuclear reaction mechanism for processes leading to three nuclei in final state, participation in discovery of new pion absorption mechanism. M. Furić leads Zagreb Univ. users group since 1980. He was principal investigator for several international projects with U.S. and Germany. He was the President of Croatian Physical Society, member of the (Croatian) National Scientific Council and of the Board of Governors for University of Zagreb. He has received Croatian Scientific prize R. Bošković, J.J.Strossmayer prize of Croatian Academy. He is a Fellow of Institute of Physics (U.K.) since year 2000.

Prof. Diana-Urania Galetta

Associate professor for Administrative Law at Milan University (Faculty of Political Science – Department for law and politics), Italy.

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University Degree in Political Science (1990 – Milan University).

Master in Law (1993 – Osnabrück University – Germany).

University Degree in Law (1998 – Milan University).

Humboldt Research Fellowship (1999)

Most important publications:

- The principle of proportionality and the jurisdictional control in Administrative Law, Giuffrè, Milan, 1998, XVII-273
- The Administrative Proceeding between norms granting participation and accelerating provisions within the administrative proceeding, in »The Administrative proceeding between simplification and acceleration: a comparative study within Europe«, Giuffrè, Milan, 2000, 39–127
- The cooperation of Police and the Schengen Information System (SIS) for an European System of Security and Justice, in »The Italian privacy law: a balance of the first five years«, Laterza, Bari, 2000, 177–253.

Prof. Herbert Haller

Full Professor of Public Law at the Vienna University of Economics and Business Administration, Institut für Verfassungsrecht und Verwaltungsrecht, Althanstraße 39–45, A-1090 Wien, Austria; Tel: +43-1-31336-DW; Fax: 31336/713

E-mail: Herbert.Haller@wu-wien.ac.at

Web page: <http://fgr.wu-wien.ac.at/INSTITUT/OR/haller/haller.html>

Born 7.2.1940. Married to Dr. Roswitha, 3 children

PhD in Law

Vice-Dean and Dean of studies between 1996 and 2000.

Vice-Chairman of the Control Committee in Public Procurement since 1998

Chairman of the Austrian Data Security-Council since 2000.

Project: Federal Waste Law and the Data Protection Act 2000

Numerous publications in scientific journals.

Recently published: Eder, A., Grün, O., Haller, H., Michl, J., Genehmigungsverfahren bei Betriebsanlagen. Dauer, Beschleunigungspotentiale, Effizienz – Maßnahmenhandbuch. Studie im Auftrag der Vereinigung Österreichischer Industrieller und der Bundeskammer für Arbeiter und Angestellte. In: Informationen zur Umweltpolitik 129. Wien: Bundeskammer für Arbeiter und Angestellte (235 S.), 1998.

Prof. Sándor Gyula Imre

Born on 18.09.1941 in Kaposvár, Hungary

Current Occupation: Head of Department of Gerontology, Medical and Health Science Center, University of Debrecen. Married on 03.11.1973 to Dr. Elisabeth Adorján. 2 sons

Details of Education: Graduated from the University Medical School of Debrecen in 1965 Specialist in Clinical Pathology (1970) and Geriatrics (2000). Ph.D. in 1979

Scholarships: Alexander von Humboldt at the Institute of Biochemistry of Georg August University Göttingen, Germany (1974, 1980). Széchenyi Scholarship from the Educational Ministry of Hungarian Government (2000–2003).

Membership: Hungarian Haematological Society, Society for Free Radical Research, German Society for Clinical Microcirculation and Haemorheology.

Office: Vice Secretary of the Hungarian Humboldt Club (1997–2003); Vice Treasurer, Executive Committee of International Association of Gerontology (1993–1997); Member of the Presidential Board, Hungarian Physiological Society (1990–1998); Member of the Board, Hungarian Physiological Society, Hungarian Gerontological Society, Hungarian Clinical Haemorheological Society; Member in the Professional Committee of Geriatrics.

Award: Presidential Award from the President of the International Association of Gerontology (1997).

Adviser: National Scientific Research Basic Programme (OTKA) Pathology Section.

Research activities (keywords): aging, haemoheology, free radicals, lipid peroxidation

Identification: pathophysiological, gerontologist

Description of major fields of interest: Age-dependent changes in the metabolism of polyunsaturated fatty acids, Haemorheological alterations in cerebrovascular diseases, Study on centenarians and healthy aging.

Creative works: Publications: papers: 91 in journals and books and 149 presented at different congresses.

Selected publications: 1. Acta Biochim et Biophys. Acad. Sci. Hung. 7, 247–249 (1972); 2. Experientia 28, 513–514 (1972); 3. J. Neurol. Sci. 63, 279–283 (1984); 4. Mech Ageing Dev. 38, 259–266 (1987); 5. Stroke 25, 2416–2420 (1994).

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Professor of criminal procedure and international criminal law at Law School, University of Zagreb. Trg Mašala Tita 14, 10000 Zagreb, Croatia

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He was or is a member of Judiciary Committee of the Croatian Parliament, lecturer at The Diplomat Academy in Zagreb, former Observer to the ICTY of the Croatian Government and present Croatian co-agent to the International Court of Justice representing Croatia. Also, as expert-member of the Croatian delegation participated in the preparations of the Statute of ICC and Rome Conference. He wrote numerous scientific papers, articles and books, including those dealing with pre-trial detention, ICTY and ICC. Also, acted as an expert for Council of Europe. Ivo Josipović participated in several legislation projects and is a member of several lawyer and scientific societies in Croatia and international societies, including being a member of World Academy of Art and Science.

Dr. Oto Luthar

PhD. in history

Since 1992 the Director of The Scientific Research Centre of the Slovenian Academy of Sciences and Arts (ZRC SAZU), Gosposka 13, Ljubljana, Slovenia.

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Web page: <http://www.zrc-sazu.si/zrc-a/direktor.htm>

His vision is: »ZRC SAZU is a network of independent research units which are linked together exclusively by a common and well-founded research interest. We are all committed to creating a competitive (yet secure) open (yet regulated) and free (yet responsible) research and educational environment for qualified researchers, and to paving the way for them to be able to embark on the perilous road towards new discoveries without the fear of being deprived of their social status and personal freedom. In addition, we are committed to setting up a responsible, initiative-taking, and innovative network of research institutes, the research interest of which is to reach all Slovene regions and, indeed, all continents.«

Prof. Giunio Luzzatto

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Director of CARED, Center for Research in Education and Didactics, University of Genoa, and President of CONCURED, National Conference of the Interdisciplinary Centers for Educational Research in Italian Universities.

Member of various official Committees in the Italian Ministry of University and Research (now unified with Education); among those, the Permanent Committee for relationships of Universities with other Sectors of education, and the Special Committee for University Reform (1998–2000). Delegate for Italy in CERI (OECD) till 2001 and in ENTEP (European Network for Teacher Education Policies) till 2002.

Recent books (in Italian!): *Insegnare a insegnare* (Carocci, Rome, 1999, 2nd ed. 2001) 2001: *L'Odissea dell'Università nuova*, (La Nuova Italia, Florence, 2001)

Recent papers in English *Higher Education in Italy 1985–95: an overview*, *European Journal of Education*, 31, 3 (1996) Editorial and Pre-service Teacher Education in Italy: short note, *European Journal of Education*, 33, 4 (1998) Preservice teacher education in Italy, in *Teacher Education Policies in the European Union*, Proceedings of the Conference in Loulé (Portugal, 2000)

Helena Jasna Mencer (born Postružin)

Born on April 3, 1943 in Zagreb. Two children.

Education: 1966 graduated in Chemical Engineering, University of Zagreb; 1973 M. Sc. in Chemical Engineering, University of Zagreb; 1976 PhD in Chemical Engineering, University of Zagreb.

Positions: 1986 – 1991: associate professor, Faculty of Chemical Engineering and Technology, University of Zagreb; 1992 – : full professor, Faculty of Chemical Engineering and Technology, University of Zagreb; 1994 – 2002: Vice-Rector at the University of Zagreb; 2001 – 2002: President of National Council for Higher Education; 2002 – : Rector of the University of Zagreb

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Specialisations: 1976: doctoral studies and 1978 – 1979 postdoctoral studies in Strasbourg, France, Centre de recherches sur les macromolécules (H. Benoit and Z. Gallot); 1991/92: postdoctoral fellow in Catholic University Leuven, Belgium (H. Berghmans)

Area of scientific interest: Physical chemistry of polymers, chemical engineering, engineering of materials (polymerisation engineering, thermodynamics of polymeric solutions, mixed polymeric systems)

Area of specific interest: 1994: Development and quality assurance in higher education

Scientific and professional work:

- published about 70 articles, out of which 43 are scientific and about 20 are professional publications and papers dealing with the popularisation of science

- participated in the majority of scientific and professional meetings
- held 18 public lectures as a visiting professor in Croatia and abroad
- was a member of research and organisational committees at numerous scientific and professional meetings as well as summer schools in Croatia and abroad
- was the editor of proceedings and columns in national magazines (»Priroda i polimeri«) and guest editor of some special editions
- has participated in 14 research projects as an assistant (8) or the main researcher, i.e. coordinator (6)
- has carried out 26 research and professional projects and expertises in cooperation with industry and other institutions
- is a member of several research and professional associations in Croatia and abroad

Prof. Mladen Pavičić

Married to Dubravka Ravlić. One son: Karlo

Ph.D. in Physics 1986.

Research: University of Zagreb, University of Cologne, Germany, Technical University of Berlin, Germany, Humboldt University of Berlin Germany, University of Maryland – Baltimore County, USA, Atoimstitut, Viena, Austria, etc.

Full Professor of Physics at the University of Zagreb, 2002

Web page: <http://m3k.grad.hr/pavicic>

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Chairman of the Croatian Humboldt-Club, since 2001

Head of a Ministry of Science project 1991–1996.

Head of the Ministry of Science project »Quantum Computation and Quantum Communication«, 1996–2001.

Head of the Ministry of Science project »Quantum Information Theory«, since 2002.

Alexander von Humboldt fellowship, 1988–1990, 1993, 1995.

Senior Fulbright Scholar, USA, 1999–2000.

Main achievements: proof of Pauli non-uniqueness, discovery of interaction-free destruction of atom interference pattern, discovery of polarization correlation between beams of unpolarized light, parallel discovery of

teleportation, discovery of non-spin entanglement preparation of pure spin superposition, discovery of a non-distributive lattice model for classical logic.

Numerous publications in scientific journals and a book.

Member of the Optical Society of America, European Physical Society, International Quantum Structure Association (member co-founder, nom. Com.1992–94), etc.

Prof. Stanislav Tůma

Born: 30. 03. 1934 in Melník, Czech Republic.

Married, 4 children

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1952 Gymnasium in Melník; 1952–1958 Faculty of Pediatrics, Charles University, Prague; 1958–1960 District Hospital in Šumperk, Czech Republic; 1960–1962 Pediatr.Dept. Faculty of Pediatrics, Charles University; 1962–1970 Radiodiagnostic Dept. Univ. Children Hosp., Prague; 1970–1990 Pediatric Cardiocenter, Prague; 1990–1999 Head of the Clinic for Imaging Methods 2nd Medical faculty, Charles University, Prague; 1999 Retired; 2000 Until now: Head of the Dept. for Research and Education, Ministry of Health of the Czech Republic.

Specialization in pediatrics (1962), radio diagnostics (1964, 1970)

Ph.D. (1970)

Doc. habil. (1991) and Professor (1997) of Charles University, Prague, for radiodiagnostics.

Professional and scientific interests and publications:

Pediatric cardiology, congenital heart malformations, invasive and intervention radiology and cardiology

Books: Radiodiagnostics in Children with Congenital malformations; Dextrocardia.

Prof. Lothar Zechlin

Born in 1944 in Ploen (Germany); 1963–1967 study of jurisprudence in Marburg, Munich, and Bonn; 1967 1. State Exam; 1967–1968 post graduate program and Diplôme d'études Supérieures at the University of Nancy

(France); 1971 Ph.D. (University of Bonn) and 2. State Exam, 1972–1980 assistant at the Interdisciplinary Centre for Higher Education Didactics of the University of Hamburg; 1978–1980 press spokesman of the Hamburg Ministry for Science and Research; 1980 appointment to a professor for public law at the Hamburg School of Economics and Politics; 1992–1999 president of that university; since June 1999 Rector of the Karl Franzens University of Graz; Vice-President of the Austrian Rectors Conference for Planning and Organisation.

Numerous publications in the area of higher education law and organisation development.

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THE CONFERENCE

(as recorded live)

24.05.2002, 9:00 am

Prof. Mladen Pavičić, Chairman of the Croatian Humboldt Club:

On behalf of the Humboldtians of Croatia I would first like to greet all of you, in particular our participants from abroad, and say a few words before announcing the speakers and invited guests.

Exactly a year ago, when discussions about the new university and science legal regulations began, we came to the idea of opening a dialogue between professionals in different countries on the integration in Europe and on the regulations in science and education. However we soon realised that we could not do so without a professional help, because our regulations are immersed in many different other laws. It was then that the idea was born to organise a conference which would enable a comparison of different laws in our countries however facilitated by specialists: by juridical specialists and those involved in the application of laws from different countries, notably rectors and directors of institutes.

I am delighted that the Humboldt Foundation has found this subject very interesting, and even more so to see a representative of His Excellency the German Ambassador to Croatia, Dr Eberhard Weiss, here, because it was His Excellency Dr Eberhard Weiss who initially gave an impulse and support to our idea and presented it to the Humboldt Foundation.

I would first like to give the word to Mr Wendel. He will be followed by the representative of the University, who will offer a few introductory words, and then by the dean of the Faculty of Law who will introduce the subject. Thank you very much.

**Mr Wolfgang Wendel, Counsellor
(on behalf of the German Embassy to Croatia):**

Although the legal regulation of science and higher education normally does not stand in the centre of the public awareness when focused on the legal situation in a specific country or region, it does, however, play an important

role in the sustainable development of one of the most crucial sectors of a modern state. Today there is not only competition among national economies, competition has also emerged among the national science and education systems. Not only do we find that the brightest minds in science don't care much for national borders or interests and that they go to where they can find the most convenient conditions for realising their scientific ideas, but it also seems that there are more and more cases where the quality of the systems of science and higher education themselves determine the future success and well-being of national economies, and not only marginally.

It is against this backdrop that I gladly welcome the initiative of the Croatian Association of Alexander-von-Humboldt Fellows, which organised this conference on science and higher education legal regulations in Central and Southeast European countries in Zagreb and with the support of the Alexander-von-Humboldt Foundation headquarters in Germany. For some of the participants, it may seem quite unusual not to tackle difficult scientific problems, but to engage in discussions on the legal framework in which successful scientific research only can take place. But it shows that the scientists present here and today have recognised their responsibility in the social and political transformation process that is presently taking place in the whole region.

And in addition to that, I'm happy to see Zagreb's geographical Situation, at the crossroads between Central and Southeast Europe, also developing into a market place of discussion and information exchange between all countries in the region – stretching from Tallinn to Skopje. In this sense, it is my great pleasure to open this conference and to wish all it's participants fruitful discussions and an enjoyable stay in Zagreb!

Prof. Vjekoslav Jerolimov, Pro-Rector for Science, University of Zagreb:

Good morning, ladies and gentlemen. My name is Professor Jerolimov. I am the vice-director of this university and I am representing Professor Jasna Mencer, the rector of this university. She is unable to come today, but she will attend this conference tomorrow morning during the round-table discussion. I'm here to forward her regards and to wish you a cordial welcome.

I am also very proud to be here today with so many distinguished colleagues and I wish you a fruitful day and fruitful discussions on this very important issue on the agenda today. Thank you very much for your attention.

Prof. Davor Krapac, Faculty of Law, University of Zagreb:

Ladies and gentlemen, I am Davor Krapac, dean of the Faculty of Law in Zagreb. I am glad to be able to wish you all a warm welcome in this old building, that has a long-standing judicial tradition in Croatia. I hope that our Club's conference will contribute to helping Croatia, a small country in Central Southeast Europe faced with a large reform, to find the right approach to our education system. This is why the president of our Club, Professor Pavičić, has asked colleagues from neighbouring countries to come here and to help us find the right solutions to this task.

I presume that Professor Pavičić intentionally chose to invite guests from Austria, Slovenia, Hungary, Italy, and the Czech Republic because, as we know, these countries have extensive experience in the reform of their secondary schools and their education systems.

At the start of our task we must act rationally and we have to see all these experiences with a critical eye. This reminds me of an anecdote related to my profession. I deal in criminal law. I recall a story about Croatia's largest prison that is located in the vicinity of Zagreb. A criminal once came to the prison and the warden asked him how many years he had got. He answered: »Fifteen years.« And the warden asked: »Why so many? You seem so old. You're over sixty.« And the criminal answered: »It happened due to my lack of experience and tender years.« »What do you mean, tender years and lack of experience? You're over sixty,« said the warden. And the criminal said: »Yes, but my defence lawyer was only twenty-five.« It's important to note that all experiences are coming from countries that have a long-standing tradition in this field, so that we don't get a twelve-year sentence, but a brighter future.

Our guests from abroad have probably heard which issues are most important to us. Issues at hand are organisational issues, especially judicial issues. Perhaps you have heard that the most critical issues are those related to judicial personalities at the faculties and the university and I presume that your contributions today will help us to see how such issues, and similar ones, can be resolved. Once again, I wish you all good and fruitful work here and, naturally, a pleasant stay in Zagreb. We have information that the weather will be fine. We hope that all necessary things work out. Once again, good luck to you all, today and tomorrow.

Thank you.

Prof. Pavičić:

We can start our conference now and I would kindly ask Professor Zechlin to come here first and then Professor Josipović, who is our moderator, and also Professor Haller. Is Dr Luthar here? Yes. And Dr Luthar.

Prof. Lothar Zechlin:*Transparency 1*

The Reform of the University System in Austria:

- The New University Bill 2002
- Lothar Zechlin, Rector, University of Graz

Prof. Haller and I share the presentation of the situation in Austria. I will focus a little more on the critical points of this reform and he will present the more favourable side to this reform. I will talk about organisational structures and he will talk about study programmes and the labour law at the universities. Although I will focus a little more on the critical points, I don't want to convey that I am overall a supporter of the university reform.

Transparency 2

1) Framework

- Organisation Bill 1993
- Tuition fees 2001
- New Labour Law 2001
- University Bill 2002

A few words on the overall framework. Austria is now building up a new university legislation. Until 1993 Austrian universities had the same structure as those over the last 200 years and stemming more or less from the Humboldt model. This means that main decisions were centralised and taken at the Ministry of Higher Education in Vienna, whilst academic decisions were taken at the universities. This was, in the first step, changed by the 1993 organisational bill, because a certain kind of autonomy was given to the university. For instance, negotiations with new professors were carried out by the rector and no longer by the minister and a more managerial system was established in the governance of the university; there was one rector and two, three, four vice-rectors who had to manage the university. Up until this time, the rector was more of a representative figure, good for events and university ballrooms, but not so much for the management of the university.

The 1993 university organisation bill was implemented at major universities in Austria – the University of Vienna, the University of Graz and the University of Innsbruck – in 1999, so now when we are implementing this reform, we are faced with a totally new system.

It introduced tuition fees into the Austrian system in 2001.

Up until then, anyone could go to a university without paying tuition. Now, each student has to pay 363 euros per semester. As a consequence, the number of students has decreased by approximately 20 percent. I, personally, believe it's not a real problem, because usually these are students who weren't really studying at the university. They were enrolled, but not really present at the university and now it's too expensive for them to pay. So it's rather a statistical clearance, than a real change in the university system.

We have a new labour law. Mr Haller will talk about this. And now we have this new university legislation. As of last week we have seen the official government proposal. The Austrian parliament will decide on this bill by the beginning of July. The bill will come into power by 1 October and it has to be implemented by 1 October 2003.

So we have a period of one year to get to know the bill and to implement it and as of 1 October 2003 the universities have to work according to the new bill.

Transparency 3

2) Expressed Goals of the Reform: More Autonomy by

- Legal Entity
- Management by Objectives
- Finance Autonomy (Lump Budget)
- Autonomy in Personal Matters
- Autonomy in Organisational matters

What are the goals of this reform? If we listen to the politicians and believe what they are telling us. There are expressed goals. They consist of giving more autonomy to the universities; doing it by first making the university a legal entity. The legal entity is the university, not the faculty, not the department.

Secondly, a management by objectives will be introduced. This means that until the present the government and the Ministry could control and steer the university in a very detailed way, especially through budget control. This system will be abandoned and we will have a management by objectives. This

means that the government is responsible for the strategic orientation of the higher education sector and will negotiate contracts with the universities with the purpose of finding a consensus on how the university can contribute to achieving the strategic goals of the government. It will no longer be a detailed steering of the universities. The Ministry will abandon this and take on the responsibility for the strategic orientation of the higher education sector.

The universities as legal entities receive financial autonomy; we get a lump sum, no longer a detailed budget, and we have to decide what we will do with this budget, how we will distribute it to the faculties, to the departments, what our priorities are and how we will finance this. We receive autonomy in personnel matters. There will no longer be civil servants at the universities but normal labour contracts. The university is the employer, no longer the state. And we will receive autonomy in organisational matters. This means that the university decides on its internal structure and no longer the University Bill. The university decides whether or not it will establish faculties, whether or not it will establish departments, how it will organise its services, the central administration, the information service, the public relations service and so on. This all belongs to our organisational autonomy. These are the expressed goals.

Transparency 4

3) Hidden effects

- Loss of Political Responsibility
- Controlling by Persons, not by Goals
- Budget Cuts

I guess that there are some hidden, I don't want to say goals, but some hidden effects beside these expressed goals. I'm a bit anxious that this system, and this is one of the critical points in it, means also a loss of political responsibility. I will come back later to this point. Just let me bring it up here as a hypothesis. In my opinion the state has stepped too far back from the university, it has given in too strongly to market forces. We should analyse this reform between state control and market orientation. It is a good scale for the analysis and evaluation of reforms worldwide.

Paradoxically to what I just explained, there will be political control, but this control will be made by individuals. We get university boards composed of 40 % by the government. So there is no steering by strategic goals as promised, but rather by individuals.

Finally this system enables budget cuts. Up until now, the state was obliged to finance the universities, the departments, the posts. If we get a new position, we also get the sum, the financing for it. With a lump sum you don't have this guarantee. You have a certain amount of money and you have to manage your personnel budget. It's much easier for the state to cut such a budget, because the concrete impact of budget cuts depends on your decision as a university and no longer on the decision of the Ministry.

Transparency 5

4) Relations: State – Universities

Historically: »Humboldt,« »Cultural State«

- State : Personal, Budget, Organisation
- University (Professors): Academic Education and Research

New Public Management: Adaption of »Cultural State«

- State: Strategic Goals, Controlling
- State and Universities: Contract Management
- Universities: »Production« of Output and Services

Austrian Reform:

- Steering by Boards (1/2 Government, 1/2 University)
- No political responsible Body

I want to concentrate now on two focuses. The first are the relations between state and university and then I want to talk about the internal organisation structure of the university.

First, the relations between state and university. As I am here at the Humboldt Club, let's take a short look at the university structure in the Humboldtian system. There we have a clear distinction. In this old system the state was responsible for personnel; the minister negotiated with the new professors, the state was responsible for the budget and the state was responsible for all organisational issues at the university. This was done by the government, by the ministry and not by the university itself. And on the other hand, we had individual autonomy given mainly to the professors. This individual autonomy covered all academic affairs, teaching and research. The methods of teaching, the concrete content of teaching was a matter of academic freedom, one of the main and most important values of this system.

It was a cultural state, because the state was committed to facilitating such an academic freedom. It had to finance the university, it had to bring forth appropriate organisational structures, it was responsible for obtaining qualified

personnel; all this in order to enable the academic freedom which was important, because it contributed to political democracy, to an open society, and to the economic welfare. This was the reasoning that underlay the Humboldtian system.

The new system is often connected to the expression »New public management«. It could have been a chance, an opportunity to adapt the old cultural system in the direction of a different repartition of powers and responsibilities between state and university. In this new public management the responsibility of the state consists in bringing forth strategic planning and setting strategic goals. The state should say how many students we want to have, how many graduates, which should be the differentiation between universities and polytechnics, what the Bologna process means for our higher education system. This strategic orientation should be done by the state and transferred into concrete strategic goals. These goals are the basis for negotiations between the state and universities. This is what is meant by the term »contract management«. If the state has the goals, it can negotiate with the universities, for example, What can you do at the University of Graz, or what can you do at the University of Zagreb, with your faculty of law in order to contribute to the Bologna process, our strategic goal? The university is autonomous in defining by what means it tries to achieve the strategic goal. If the Faculty of Law at the University of Zagreb takes on the responsibility of contributing to the Bologna process with, for example, the goal of a higher internationalisation of its teaching, it will depend on them how they will do it – sending more students to foreign-speaking countries, getting more foreign students into the faculty, having more international content, more international law in the syllabus or whatever. In this system we have a change from the individual autonomy, to a corporate autonomy, to the institution, to the legal entity.

If we were to analyse clearly, Austria doesn't really follow this system. It creates a certain mixture from some elements of this new public management and some other elements. It gives the strategic steering of the university to university boards or university councils. This board consists usually of five members, two of them are nominated by the government of the Republic of Austria, two are nominated by the university and these four persons have to consent on the fifth one who is to be elected by these four. These boards are the true strategic steering committee at the university. It's copied slightly from the U.S. system, I think. All American universities have boards of trustees, which are a »replacement« for the state. One of the main differences between Europe

and the United States consists in the fact that at least the system in continental Europe is more state-controlled and the American system is more of a civil society. American universities don't have so many ministries above them. The Austria system reminds me a little of the American system. This has as a consequence the fact that in the new system, we have no politically responsible body. Up until now the minister in parliament was responsible for the higher education system. In the future, the real strategic body will consist in these boards which aren't responsible to anyone. This is one of the weaknesses of this reform.

Transparency 6

5) Internal Organisation

- Board: Strategy Body (Decision on Strategy, Organisation, Budget, Contract on Services, Election of Rector)
- Rector's Committee: Operating Body (Preparing Decisions of Board, Executing it)
- Senate: Academic Body (Decision on Curricula, Junior Scientists Promotion)
- Highly centralised structure

The other focus is internal organisation. The internal organisation is mainly divided into three bodies.

I already mentioned the board which is the strategic body. It has the power to approve the strategy of the university, its internal organisation – faculties, yes or no; departments, yes or no – it has the power to approve the decisions on the internal repartition of budgets and it has to approve the contents of negotiations regarding our services. We have to deal with the state. It is also responsible for the election of rectors. The rector is elected by a proposal issued by the senate. This proposal contains three persons and the board then chooses one.

The second important body is the rector's committee. Unlike the present situation, we no longer have a rector and vice-rectors. There is a committee composed of one rector and up to four vice-rectors and they form a kind of directory of the university. They have to prepare the decisions of the board on strategy, organisation, budget and contracts on services. The board takes decisions on the proposal of the rector's committee and the rector's committee is responsible for the execution of the decisions taken by this board.

The third important body is the senate, which loses a great portion of importance in comparison to the present situation. It is only responsible for academic decisions on curricula and on the union scientists promotion. It also has to voice its opinion on the election of professors, but it doesn't take decisions on it. The decision is taken by the rector. He is given a proposal by three persons, which is elaborated by a committee. So, it's a rather centralised structure. I also mentioned that the legal entity is the university, not the faculties, and one of the highly debated questions was whether or not the senate would be allowed to decentralise some decisions.

In the first draft it was forbidden to do so; everything was to be decided by the senate itself, which is really a stupid solution, because the senate of my university couldn't really decide what was good for the theologians or the medical faculty or the law faculty. Now it can give some decisions on the faculties, but it can always revoke them. So if it disagrees with decisions taken at the faculties, it can recall these decisions.

Transparency 7

6) Budget

- More Tasks, less or same Money
- Negotiation based, not indicator based

The last point is the question of the budget. There is the danger that, as the consequence of more autonomy, we take on more tasks carried out up until now by the ministry. According to the new system, we have to do so, but the posts and the money remain in the ministry. Actually, a lot of posts and a lot of money should have been allotted to the universities by the ministry, because tasks are also given the universities by the ministry. The process of negotiation with the Ministry of Science and the Minister of Finance is a very tough one. And the other thing I'm concerned about is that the concrete budget we are given in the future remains one on a negotiating basis. I would prefer a system with an indicator base. More autonomy means that there must be more fairness as to who decides on the sum of our budget. Up until now, it was a very Austrian system of negotiating which depended on who knows whom and who has good connections and who has bad connections with the central units in the Ministry. Therefore, I would prefer a system with indicators. All modern higher education systems are indicator-based, but in this legislation all that is written is that a maximum of twenty percent of the budget is indicator given, so we don't know what happens with that.

This is all I want to give as a first overview.

Thank you for listening.

Prof. Josipović:

Thank you very much. I would like to call Professor Haller.

Prof. Herbert Haller:

Firstly, I want to thank you for your invitation. It is a great honour for me to be here at your faculty and at the Humboldt Club.

Secondly, as my English is poor, please excuse me if I sometimes use German or if I happen to divide a sentence by starting it in English and ending it in German. I was told that the languages of the conference would be English and German. May I speak German? I will divide my speech: one part in English and one part in German.

[German parts have been translated into English later on.]

There is a really important reform going on in Austria – a big change in the Austrian university landscape. But not only universities are changing, the whole of Austria is under change, one might say. One of our colleagues already mentioned yesterday the effect of the Maastricht criteria. The pressure to fulfil them has certainly resulted in the reduction of structures, which sometimes date back to the monarchy. From too much bureaucracy and over-protection in some fields, we move to more market-oriented and to more competition. We are opening up to more European and international interests.

In comparison with the rest of the Western world Austria's economy had the highest degree of state-ownership.

The influence of political parties and social partnership organisations was traditionally very high and the extent of legal regulations was remarkable.

At the moment, Austria is, therefore, in a process of deregulation and privatization. The university reform is only part of this process. And there are, as you have already heard, pros and cons and dangers and hopes.

I would like to add one point to Professor Zechlin's explanations. The student representatives in Austria – amounting to one-third of almost every decision-making body – never voted individually, they voted as a block. Since professors and assistants voted in most cases individually, the student group gained a very high influence, which did not always produce the best results. It is problematic to grant the group, which spends the relatively shortest time at

the university, the strongest influence on decision-making. This is one of the points that is to be changed now. Professors will have more weight in decision-making and decision-making will be centralised.

At the moment, there is much opposition against the new reform, especially from the political parties in opposition. It is a known phenomenon, however, that while reforms initiated by those who govern are opposed and criticised by the opposition, they could have at the same time been strongly supported by the same persons, had they been the ones to make the proposal. In every reform there are losers and winners – I hope and am convinced that the universities will be on the winning side and with them Austria as a whole.

It is my intention to give you an overview of the organisation of studies and the position of the persons living and working at the universities. Let me begin with the studies. Until a few years ago we had relatively uniform studies. Federal laws constituted special studies like medicine, law, business administration etc.

Studies all over Austria were nearly the same and the possibilities of the universities to deviate a bit were very limited. And, as I already mentioned, the student groups tried their best to keep studies from becoming too difficult.

Under the reform there will be more possibilities of different regulations, according to specific local strengths and needs. For example, the Vienna University of Economics will offer studies called »economics and law« – with economics amounting to about sixty percent and law forty percent of the curriculum.

The University of Vienna Faculty of Law will offer studies »law and economics«. Here the curriculum will consist of sixty percent law and only forty percent economics. There will be competition, who can attract more students, which curriculum will meet best the needs of our economy, namely the small and medium enterprises. I believe that this competition will be positive for our universities and strengthen them.

The curricula for ordinary studies are set up by the senate and will consist of three steps – the baccalaureate, about 180 ECTS points, the Master of Arts degree and for those interested in scientific studies – the doctoral studies.

As Professor Zechlin already mentioned, we will not be able to afford ordinary studies of every sort at every university. We will have to give up certain studies at some universities for the sake of new studies, which we think we need. As Austria is a small country I think that this is quite normal. Students

will have to choose where to go for legal studies and sometimes they will have to go where something is offered.

Let me now comment on individual studies. A student might want to combine religious studies, the African language and economics, because he plans to do development work in Africa. If the workload of these combined studies is equivalent to that of ordinary studies, permission is given to do this. We have many students who create their individual studies and they usually already know where they will go to work after university.

For example, in law there is one law study plan with more European law and there is another law study with more economic law or international tax law. Switching from one university to another may be complicated by these facts. Another difficulty arises for those studying abroad.

This is where the ECTS points will help us. As you know one ECTS point represents about 25–30 hours of workload. We have a very interesting regulation here. If a student wants to transfer to another university or to go abroad, he can ask his university beforehand in regard to recognition. He will get an administrative decision on whether what he intends to study abroad, will be accepted as a part of his studies in Austria or at his university. This contributes to very specific study combinations.

Many universities promote exchange programmes or those for study abroad in order to increase the value of a curriculum. My university, for example, has agreements with over a hundred foreign universities where we already have a type of recognition. This does not apply to individual studies, but there is an agreement with certain universities on credits for types of studies. About half of our students spend one semester or more abroad. I believe that this is important, especially in economic and administrative studies.

What we also expect is that there might be a smaller budget. Universities want to do more, but the budget will be restricted and there is a need to get money from other sources. Sometimes there is a fear that the industry will pay and ask for special things in return.

The Vienna University of Economics has quite a positive record in this respect. Much money could already be obtained from outside without risking influence on the university. Student programmes, summer programmes, special lectures, to mention but a few financed actions.

I would like to continue by speaking about the three main groups at the university – about students, assistants and professors. Up until now professors

had a lifetime appointment. This will change. The first step is an appointment as a professor for a certain period. The possibility exists, as is the case in America, that one may compete for a permanent post afterwards. I believe that this is a good solution, which has to be carried out on an individual basis. There are fields where one can switch easily from the university to other professions.

The disadvantage of the old system was that in some cases after being appointed professor, persons would show an overall stagnation in activities or increase their activities outside the university, purely for financial gain. Work at the university suffered somewhat under these conditions. I believe that this step-by-step approach binds professors to the university, but it should also further the possibility of running for posts at other universities.

There is a growing awareness that one cannot live in one place for a lifetime. This might be difficult for the family, for the employed partner, for the children, but it also offers a series of possibilities. The fact that the position of professor is not by nature a lasting one also has its negative sides, in the case of political influence in some fields. As Professor Zechlin has already mentioned, this question may be very important.

In Austria we will publicise vacant posts for professors. There will be four evaluations, two on the part of the university and two by external evaluators. The evaluators are not part of the decision-making body. In the nominations committee, which is appointed by the senate, more than half of its members have to be professors and at least one student has to be a member of the nominations committee. This committee presents three candidates. The rector chooses and concludes a contract with the chosen professor. We believe that this will lead to a greater openness.

We already have many colleagues from all over Europe teaching foreign languages in Austria. I believe that this mobility will also be possible in other fields. In order to promote the international character of our higher education, we have decided to expect from all who compete for a post that they are able to teach in English. This means a more international orientation and one that most probably anticipates future developments. It maybe too early and besides I believe in a multitude of European languages. Therefore, I would prefer to see also other European languages on the list besides our own and English, but we shall see how that develops.

As far as the work contracts with the professors are concerned, one has to take into account a number of various issues: How to classify them from the fi-

nancial aspect. There will be universities which are thriftier and then there will be universities that will be able to afford more expensive professors, perhaps only for a certain period. Decisive will be the workloads that individual professors are expected to carry. This workload will differ from university to university and will depend, of course, on the subject taught.

I come from a university with the worst ratio between professor and student. There is one professor to almost 300 students. That is an enormous strain when one holds seminars, workshops and lectures for 150 to 180 students with two written essays per semester. All of this will play a role in the elaboration of work contracts.

I see the new regulations for professors as something positive. Problems will arise when it comes to assistants, the younger generation of academics. So far, we have complained that too many positions intended for the younger generation of academics are obstructed by permanent posts; that there are many people who spend a lifetime in the academic middle field and take up a post intended for newer and younger colleagues, so that we no longer have young assistants.

The reform also intervenes here. There will be time-limited positions that will also be for further education, allowing young people to be at the university for two, four or six years and then to move on elsewhere. There will also be permanent positions and it will be the task of the university – and this is a very difficult decision – to find the correct ratio. The same applies to payment. We will have a collective agreement, that is, on one hand universities and, on the other, the unions will work together to establish a plan according to which the professors and assistants are to be paid and which will also enable them to be classified according to various degrees prior to employment. For the assistants this is a real problem and will depend on the professor they depend on. If they have a strong professor, they might have a greater chance than with a weaker professor. If he stimulates them to have more initiative in their job, then they will move ahead faster, they will be asked to take part in projects of the professor or be (ab)used to care for his students and then problems will arise. Here the proposal leaves many unresolved issues and, as Professor Zechlin said, the responsibility is transferred to the universities and I think we will make mistakes in many points.

There will be universities coping better and there is hope that a good solution will develop out of this competitive system. Much still remains open in the new proposal. We hope, naturally, that we can win resources from the vari-

ous research projects for the creation of resources. Here the influence of the industry or specific interested parties will be relatively great. It will be the task of the rector's office to balance this properly. My colleague, Professor Zechlin, has already said that we have study taxes and I agree with him that the loss of 20 percent of students has been overdue. There were students who were studying for 10 or 15 years or who were in the entrance phase, but had not passed a single exam. I noticed that with the introduction of the 5,000 schilling fee, students began to attend classes more, they began to pass exams. Their families exerted slight pressure and we already have a higher percentage of graduates. The number has risen over the last period. I believe that these 5,000 schillings are not an obstacle to their studies, primarily because I can say that we have an efficient studies promotion system, whereby one third to one half of the students are reimbursed for this sum if they are social cases and show good results. I recall my own case. In my time we had to pay student taxes, I had to pass a number of exams each semester. It didn't harm me to run after the professor and ask for exam dates so that I could pass them in order to obtain exemption.

I think that the reform will have positive effects on the students, they will have special studies, they can choose depending on where they see greater opportunities for themselves and the professors and assistants will have to make a greater effort. I already fear that we will have more publications than can be read, and especially publications that aren't of the highest standard and which are written solely so that publications can be shown.

Professor Zechlin said that he is, overall, a supporter of these reforms. I, too, am, overall, a supporter. However, I think that we have abandoned some good, old traditions far too hastily. Even if we direct only 20 percent of the budget on objective performance criteria, up until now it was probably 95 percent, whereby the rest is negotiation, this is probably not the very best and in the field of academic resource formation. It will be the task of the university to offer opportunities outside the university to assistants that will be only kept at the university for a shorter period. This already exists in various fields – additional education at universities for lawyers, for judges if it's meaningful for the specific subjects.

This is the case in the field of economy and medicine. In other fields we must simply accept that we cannot tell young people: »Study what you want and then be unemployed«. One has to say that straight away. In Austria, for certain highly interesting studies, there are three, four, five posts and no more.

Here one has to be honest. There shouldn't be studies based on what's in fashion, or those who chose such studies, should be aware of what awaits them. For example, in Austria it was fashionable for young ladies to study archaeology. We now have a couple of museums with departments of archaeology and a couple of Austrian excavation sites in Syria and Turkey, but in this field there are very few posts for a lifetime and this has to be said at the very start. I think that Austria can no longer afford to offer certain studies, that we will send students who wish to study this to studies abroad, because these studies exist there. The reform will bring about more will and pressure to perform, whereby nice things will, hopefully, happen in individual studies. We will make foreign languages obligatory at certain universities, and this we have already achieved in the study of economics. We already have business studies where students have to learn at least two foreign languages and if I had completed such studies, I would have perhaps been able to present my statement in Croatian. Unfortunately, I cannot do this.

Thank you.

Prof. Josipović:

Thank you very much Professor Haller. We recognise very many interesting ideas and some similarities between the Croatian proposal for new legislation and your proposal, but I have to tell you that, in accordance to the new proposal to the Croatian law, your university should be closed immediately. And why, I'll tell you in the afternoon. Now we have Dr Luthar from the Slovenian Academy of Science. The floor is yours.

Dr. Oto Luthar:

Thank you very much. Actually, it's the Scientific Research Centre of the Slovene Academy of Sciences and Arts. I, too, would like to thank the organisers for inviting me to Zagreb. This is really a great honour for me.

When discussing the future of scientific research and higher education in Slovenia, it seems that people in institutions responsible for this sphere of activity, those employed at the Ministry of Education, Science and Sport, the chancellor's offices, the directorates of public institutes have more or less the same ambitions. There is a common agreement that a country needs a rational system of research and research-related education. The majority of researchers share the opinion that they should be much better organised and interrelated. In principle, all of them agree that two Slovenian universities and re-

search institutes, there are about 40 research institutes in the country, should be more effectively bound. The majority of researchers and faculties also share the opinion that, besides already established centres – in Ljubljana, the capital, Maribor, the second largest city, and Kopar, economically the most prosperous town located on the Adriatic coast – it would be useful to relocate part of the research all over the country. And finally, they all seem to be aware that we should try harder to establish an effective network of research project groups and provide the best or better possible opportunity for interdisciplinary long-term research. The whole scientific environment, however, is, nevertheless, still determined by two extremes.

On the one hand, there is the still very strong division between research groups at universities and those at public institutes. On the other hand, people involved in science and higher education are very much convinced that they should cooperate more if they want to compete on the European field of science. They all know that if we continue the way we have done the past ten or fifteen years, this division can result in establishing two separate post-graduate and teaching environments. In a country with just 6,000 people involved in scientific endeavour, this could cause immense problems. Similar dualities are to be found within particular research fields – on the one hand we have humanities and social sciences that are mainly involved in the analyses of regional and local cultural practices and artefacts and rarely place a result on the broader scientific market. On the other hand, some institutes of natural sciences can provide a strong tradition of international research. The situation began to improve after political and social changes in this part of the world during the last decade. Now Slovene scholars believe that these changes can only be understood by following detailed political, historical, cultural and social analyses. Like many other academics in the area, they believe that only overall European comparison will provide a comprehensive picture of the current demographic situation, migration trends, multilingual and other cultural practices.

When discussing the decision-making processes, that includes evaluation and the establishment of priorities and procedures of financing, we have to keep in mind that most of Slovenian research and university education is organised in public, non-profit institutions and universities. The finances are mainly provided by the state budget. A proportion of the Slovene budget spent on science, however, has fallen since 1992. At that time it amounted to 0.8 of the gross national product, but in 2000 it had already declined to 0.6. The gov-

ernment simply failed to provide adequate budget allocations, while the Ministry of Science and Technology through its institutional, organisational structure, has been delaying or postponing the development of suitable conditions. It also failed to draw the necessary wider attention of society to issues raised and solved by science and research.

Under such conditions Slovene science, particularly at research institutes, attempts to be a self-initiating enterprise searching for new solutions for solving a problem of insufficient finances. Heads of research units are trying to invent new ways of communication with the state administration and broader public. Those who try to adapt some techniques, already in use in Western Europe and in the United States.

After the decline in state financing, for example, they have launched a campaign for an increase in the proportion of the state budget spent on research for the lack of funds has already influenced both the development of our research, as well as our institutional growth. The campaign with the title: *Are you worried about the future?* launched in 1997 and signed by some 1,500 scientists, became an unexpected success. For the first time, but unfortunately only for a year, our research institutions received slightly more funding. But what may be even more important, however, is that these difficult conditions resulted in the creation of the informal coordination of research institutions in Slovenia – an association of 38 research institutions and research departments at the university. The coordination now serves as a working body for resolving concrete problems we all share and it serves also as a pressure group. The members of the coordination are well aware that most research groups, no matter where they are located, at the university or in the state or in the private sector, face similar problems.

Firstly, the problem of transparency. There is simply not enough transparency in the decisions who will get the financial resources and who won't. The usual system of reference is often undermined clientelism typical for small research communities. The second problem we face is the problem of organisation. During the last ten years the system of organisation and financing of research has already changed twice. At the beginning we had a pure research project system which changed into a modified programme project system just as the first one began to function. A more recent, but fast growing structural problem is the lack of interest of scholars from the West to work in Slovene research institutions. This problem is intensified by extremely rigid state legislation for all those who are willing to come to work in Slovenia from East and

Southeast Europe. In the list of major problems the most crucial still being the problem of insufficient financing, is the problem of solidarity. After a short period of orchestrated activity, the research community now lacks the basic solidarity needed to achieve better conditions for research work.

But I would, nevertheless, like to end this first part of my presentation with some bright aspects of research activity in my country. Even before the disintegration of Yugoslavia, authorities responsible for science developed a successful system of recruiting young people interested in research. This so-called young researchers' programme not only helped Slovene science to survive the crucial years of transition, but it also enabled a significant number of young people who, according to the flexible financing scheme of the programme, were able to spend some time at well-known universities and institutes abroad. Last year, the Ministry of Education, Science and Sport upgraded this initiative by adding a new governmental ad future programme, that not only sponsors post-graduate students, but also finances those graduate students who manage to enrol at well-known universities

And finally, I should also mention the draft version to the new research legislation, according to which the decision-making process for finances is moving towards autonomous agency.

Secondly, when speaking about higher education regulations I'm adhering to the guidelines given at the conference announcement. First, planning the number of enrolled students. After the call for enrolment signed by the Minister of Education, the faculties prepared the proposal that has to be accepted by the university senate. The final green light is given by the government, since the number of students is closely connected with finances available in the state budget. There are no real admission fees in public schools. This is one of the main reasons why the number of students has almost tripled over the last twenty years. From 26,000 in 1981 to 68,000 in 2001. At the same time, the number of bachelor degrees duplicated. The same happened with MA students over the last ten years.

The general enrolment policy is described in the national programme for higher education. The last one was approved this year and will continue over the next four years. Before speaking about the land and overall success of studying, one has to be familiar with the basic regulation of exams, benefits, fellowships, the role of students in the evaluation process and the number of lecturers per student.

A student in Slovenia can take a particular exam three times without paying, without additional regulations. After failing to pass the exam for the third time, he or she has to pay a special fee, which is now around 25 euros, and then he or she answers the questions before a commission. On the other hand, the best students can get one of several state and private fellowships, which range from 100 to 300 euros. Students are involved in the evaluation process on all levels of the decision-making process. Their requests directed at lecturers are made on the level of faculty senate. At some faculties they can also use a special website for this purpose, but the biggest problem is not so much the quality of lecturers, but the number of students per lecturer. The best result ever was a proportion achieved in 1991 when there were on average twenty students to each lecturer. Today, each lecturer has twenty-four students.

Thirdly, the European Course Credit Transfer System, ECTS, has not yet been implemented. According to the plan, it should start at most faculties in the next academic year, that is 2002/2003. When discussing any kind of development and modernisation, the faculty senate and the board of trustees, or administration board, are the central authorities. After plans for new programmes of study, new lecturers, corporation, election, maintenance or additional space for the lecturers or for faculty have been agreed upon in these two bodies, the approval of the university senate is needed. The final green light is given by the governmental council of higher education.

And, finally, since the last change to the higher education legislation in 1999, the universities own the buildings, while the equipment is owned by the faculties.

In conclusion, I would like to stress one more thing. It is a statement already mentioned in debates like ours. It is the statement also mentioned by Lord Ralph Dahrendorf in his book »Universities after Communism«. It is the statement about the lack of openness to the world outside. For our universities this is a sensitive subject. They believe that protecting their boundary is a condition of academic freedom and that if they venture outside, they will be taken over by alien forces. We all know this is the wrong strategy. Therefore, I completely agree with Dahrendorf when he says that such protectionism is as self-defeating as protectionism in trade. It may be a short-term expedient, but it will soon lead to impoverishment and slow death. On the contrary, a multiplicity of mutually advantageous relationships with the world outside immediate borders will help a country like Slovenia and universities in Slovenia.

Thank you.

Prof. Josipović:

Now many people think that coffee breaks and coffee talks are the most valuable part of conferences. I don't completely share this opinion, but now I have to ask you to have some coffee and some coffee talks. I hope the coffee is ready, so we can have more time for our coffee break and use it for further discussions. Thank you.

24.05.2002, 11:20am

Prof. Pavičić:

I would kindly ask Professor Castaldo to take the floor. Professor Castaldo comes from the University of Salerno, not Palermo as is written. And I would also kindly ask Professor Imre and Professor Tüma to come forward.

Prof. Andrea Castaldo (translated into English later on):

Ladies and Gentlemen, it is a great honour for me to be able to take part in this symposium today. Allow me to express my deepest gratitude to Professor Pavičić for inviting me to this symposium, and to the Humboldt Foundation, the Alexander von Humboldt Club in Croatia, for its support. I am a former scholarship holder of the Humboldt Foundation, from 1986 to 1988, first at the Max Planck Institute in Freiburg and then in Munich at the Faculty of Law. Today, I teach criminal law at the Faculty of Law of the University of Salerno in Italy and not in Palermo, as Professor Pavičić already mentioned, and as was written in the announcement. I also deal in criminal law in economy. As such I am not at all competent to speak about higher education laws. The reason why I am here today, is that I wish and have to convey the results of this congress to my university and, on the basis of certain statements, to discuss with our Faculty of Law and in sessions with the dean of the Faculty of Law and perhaps, after such experiences, to attempt to test and improve our own system. Here I refer to the autonomy of the Faculty of Law in Italy. Like the dean of the Faculty of Law in Zagreb, I also teach criminal law and perhaps my personal experience, in respect to my work and field, could contribute to the discussion. I am sorry that, due to my language deficiency, I am not speaking in English and I should also apologise for the difficulties I find expressing myself in German.

What I wish to talk about here is to offer you a small image of the higher education law in Italy and it is my special wish to present the new image, after the reform in Italy. It is not my wish to hold a proper lecture, but to give some reflections that will contribute to the discussion. The other colleagues from Italy, especially Professor Luzzatto, know better than me and can better explain the content and the ratio behind the political guidelines for the overall reform. But here are some points of the reform of the higher education law. I would like to concentrate on the new architecture of the system, on the new academic titles, the access to these titles and, finally, on the autonomy of the faculty.

Firstly, the picture of the system in Italy the higher education law, law 127 from 1997, gave the Minister for Higher Education and Technological and Economic Research the right to organise higher education and this is a positive step, because the previous system was not congruent with the autonomy of the university and did not allow for a flexible university policy.

One of the more important regulations is Regulation No. 509 from 1999, which defines the degree, the discipline and corresponding certificates, the course certificate examination, the disciplines corresponding to the ECTS system (the new viewpoints of the reform in Italy), the overall disciplines after enrolment into courses and, finally, the inner competence of various university bodies. As other colleagues have already said today, the criteria are the result of the European agreement reached in Bologna, 18–19 June 1999.

The novelty that the reform in Italy brings is a new kind of diploma: an initial diploma, which ends with a doctor's degree and which takes three years to receive. The goal of this initial diploma is to enable course participants to receive an adequate command of scientific methods and specific professional knowledge. A course participant must collect 180 ECTS credit points in order to obtain the degree. He must also have knowledge of an EU language, naturally, one other than Italian. According to the reform, after this degree, this diploma, a participant can go for a specialist diploma, that is, after the three-year doctor's degree the participant can take a further two years and obtain a specialist degree, for which he must collect a further 300 ECTS credit points. The regulation also defines further degrees, so-called specialisation degrees which come close to the specialist degrees and which offer participants knowledge and abilities. Doctor's degrees for research and specialist doctor's degrees should offer competence and can be adapted to train and bring students with the degree closer to the productive world. Universities can offer them further education in the form of courses for scientific excellence. I believe that it

might be interesting to point out criticism aimed at the previous system and to also say what novelties the reform in Italy brings. Criticism of the previous system was focused primarily on the drop-out rate at schools of higher education in Italy. I will give you some numbers that you might find interesting, although statistics are not always objective. In Italy 44 percent of enrolled students complete their university studies; 25 percent of the students drop out after the first year and a further 13 percent drop out each successive year. But perhaps more importantly is the fact that almost 90 percent of drop-outs get a degree elsewhere. 35 percent of the students manage to get the degree after an average of six years. This means that something is not functioning properly and the answer to such a view is not so easy. But, perhaps before I try to respond to such a criticism and to explain why it is so, I would like to mention yet another criticism – the fact that the previous system created a bad connection between those obtaining a doctor's degree and the productive world. This means that those receiving a doctor's degree had great difficulties in finding a qualification and had very little or almost no connection to the productive world. Here I am referring to my experience at a university in southern Italy where this problem was dramatic, especially at some faculties – at the Faculty of Law, for example, where one sees that many students are nothing more than surrogates for unemployment. Students enrol at the university, because they have no other real alternative which will enable them to engage in the world of employment. And the world of politics is interested in keeping such a worldview, in order to avoid sharp criticism which might be directed at the government by the students because of unemployment. What happens after the student graduates. We started with the average student who doesn't have any real alternative and who enrolls at the university with the hope of getting a degree, and here I'm talking about the Faculty of Law and not the Faculty of Natural Sciences. Having received his doctor's degree, such a student wants to be sure he can find a job. But is it really so, or does something else happen? The degree brings the student only adequate knowledge in respect to theory, not practice. Does this discrepancy mean that there is a deficit in faculties and universities overall, or should we tell the truth and say that after the reform this discrepancy is visible more in the field of human sciences? I say from my personal experience, not only as a teacher of criminal law, that this not only applies to students who have advanced to a doctor's degree but also to those who have taken a step further to becoming, for example, barristers or solicitors. After the above course a student receives a doctor's degree after four years, but in reality it is on an average after six, as we have already said. And,

finally, with this doctor's degree, he can choose whether he wishes to go on to become a solicitor, a barrister, a notary, a judge or whether he wishes to continue with an academic career. Here the discrepancy between theory and practice is visible, because such a person is not capable of doing or practising something practical. The students are not capable of practising the practical side of their profession, because, and this is my opinion, the course is far too theoretical. What is perhaps lacking is, as is the case at the Faculty of Medicine, that the students spend some time working for a judge or in a barrister's office, which might prove to be very interesting. In response to such criticism, the reform attempts to create a new image. Regulation No. 503, Paragraph 6 from 1999 foresees that before a student can enrol, he must have a certificate from a school that has offered him adequate practical work and preparation. It is, perhaps, interesting to note that the verification of such preparation does not fully coincide with the *numerus clausus*. Let us take the example of a student who wishes to enrol, but does not pass the above entrance test. This does not mean he will not be able to attend the course, only that the university will have to offer such a student additional support. This means that the overall policy should be one which is aimed at supporting the student. Perhaps it might be interesting to mention another important and critical point to describe the situation in Italy. Here I restrict myself to numbers and statistics on the funding allocated to universities by the government. Perhaps we should speak about universities or colleges with due consideration. There is always a certain dissatisfaction on the part of the students, on one the hand, and on the part of the lecturers, professors and assistants, on the other. Why is this so? The simple answer is that universities have very little money. A university can have autonomy, but only in theory; in practice it has no real autonomy, because the premise to autonomy is financial support. Financial support is lacking, at least that's what the critics say. But perhaps statistics show a different picture of reality. Government expenditure for universities per annum in Europe comes to an average of 5.0 percent. In Italy it less – 4.8 percent. In Germany it is 4.3 percent and in Austria 6 percent. It is interesting to compare these numbers with the United States or Japan. Government expenditure for colleges in Italy is 4.8 percent per annum – the same 4.8 percent are allocated in the United States, in Japan it is 3.5 percent. This means that it is not only a problem of allocations, but also, in my opinion, a problem on a more difficult level. What is lacking is a coordination policy for allocations and this is lacking at all universities in Italy today and I think also in Europe. What is lacking is an internal coordination policy and we are seeing on a daily basis at our uni-

versities what is lacking for lecturers to do a good job. Where research is concerned, not only is money important, but also adequate structures. My experiences while visiting the Faculty of Law in Munich and in my contact with colleagues, professors, were that each professor had his own room, something like his own secretary's office. This is not only a matter of money, but also an issue which is important for the organisation of work and for the coordination policy which I mentioned above. In conclusion, I would like to say that I am for the new reform, which, in theory, is already in power, but whose results are not yet visible. I would, however, like to say that in order for this reform to be successful, one has to make sure that there is a coordination policy and we have to bring the Italian universities closer to the European ones. I believe that this symposium is a step in the right direction.

Thank you.

Prof. Pavičić

Any questions?

Question from the audience:

Do we know how many students decide to go on after the third year and how many take the first degree in order to leave the university?

Prof. Castaldo:

We still don't know, because this reform allowed us to begin this new three-year undergraduate course last year and that means that we still don't have the statistics. We have the statistics of the previous system, to which I have already referred. What I perhaps can say is that the students are not satisfied with the reform, because they still have not understood its goals and because they worry about the length the undergraduate study, which is shorter than it was before, and here I'm looking at the course at the Faculty of Law which once lasted four years and now lasts three, and this means a shorter course and a deficit in knowledge.

Prof. Pavičić:

Any other questions? If not, I would kindly ask Professor Imre to take the floor.

Prof. Sándor Imre:

Dear colleagues! Firstly, I should like to express my thanks for your invitation and it is a great pleasure for me to be here and to give my contribution to this conference which is very interesting and of high quality. My contribution deals only with the differences and our new suggestions, new experiences in the science and higher education regulations.

Firstly, science regulations.

The government, with the approval of parliament, decides on the percentage of the gross national product to be given to science. The government is responsible for the distribution of this money between the applied and basic sciences. In the sphere of basic science the National Scientific Research Basic Programme (OTKA), and in the sphere of applied science the Ministry of Education has the responsibility. Basic science needs a long-term science policy and it is determined by the National Scientific Research Basic Programme. Applied science means short-term and the application of new research results to the practice and this is regulated by the Ministry of Education, both financially and politically. The National Scientific Research Basic Programme and the Ministry of Education nominate the members of the different elected bodies. These bodies are responsible for an objective evaluation of the scientific projects.

The decision on the equipping of scientific institutes and universities is the general task of the National Scientific Research Basic Programme and the Ministry of Education. The Ministry of Education is responsible for the maintenance of scientific institutes and universities. There are also academic institutions. These academic institutions belong to the Hungarian Academy of Sciences and the budget of the Hungarian Academy of Sciences is approved by parliament, separately from the universities.

The role of the scientists can be defined in this system such as to prepare (individually or as a member of a group) and to carry out (by a group of scientists and technical co-workers) a scientific project and it is the role of the scientists to apply for its financial support. It is not supported by the universities, only maintenance and equipping and instruments are given. The scientific programme is supported primarily by the National Scientific Research Basic Programme.

The National Scientific Research Foundation has a special application form to support young scientists before PhD. It is a positive discrimination.

Special scholarships have the aim to finance research work of post-doctorate young scientists. The Hungarian Academy of Sciences, the National Scientific Research Basic Programme, the Ministry of Education coordinate and support, one by one, and/or jointly interdisciplinary projects. These interdisciplinary projects are supported by different foundations from the state and interdisciplinary projects also have some support from international foundations or the Brussels Scientific Centre.

These projects offer opportunities for cooperation between institutes from different countries, for example, one institute from the European Union and another or two others from Central and Eastern European countries. Scientists, in cooperation with their colleagues in European Union countries, prepare common scientific projects and apply to the European Union Scientific Centre in Brussels for grants. The opening of new institutions and the opening of universities comes under the competence of the Ministry of Education.

Higher education regulations.

Every year the number of enrolled students is decided by the Ministry of Education for the whole country. The education of the enrolled students per study will be supported by the budget. Every student has the right to admission. They have to pay for application, it is a very limited sum. There are no tuition fees in Hungary for the first degree.

The length and quality of studying is decided by the Ministry of Education. Quality control belongs to the Hungarian Accreditation Committee, which is an independent body. It controls the quality of education at different universities and this accreditation can be repeated after five or ten years. The election of members to this Accreditation Committee is regulated by the higher education law. Scholarship money for students is determined by the Ministry of Education. The universities have the right to differentiate between the students applicants according to their performance in their studies. Accommodation, for instance in student hostels, is determined by the social position of students. It is a social support for the students. It is independent of their performance in their studies. After every semester, the students evaluate the courses, the professors, the lecturers and the general quality of the courses. This evaluation plays a role in controlling and developing the quality of education. For example, we introduced a new course for gerontology. This course offers the introduction and the basics of clinical gerontology and we controlled the level and the interest of the students for this new subject, for this new topic of medical education every year. And when we had a positive reac-

tion from the students, we increased the number of hours, we enhanced the interdisciplinary character of this course and it increased the credit value of this course. It depended, partly, on the importance of this new course and partly on the participation and the interest shown by students.

Within the framework of Erasmus we are using the ECTS system and it will be introduced into higher education by a law. The system will be totally compatible to ECTS. In the curriculum we have obligatory, compulsory and free choice courses. The system is much stricter in medical and judicial training. For example, in medical training the percentage of obligatory courses is 80 percent, much more flexible in other types of education. For example, at the Faculty of Arts the proportion of obligatory courses is only 40 or 50 percent. At the highest level the Ministry of Education, at the university level the vice-rector of education and elected bodies decide on development, modernisation and planning of education. The members of these bodies are professors and lecturers, as well as the representatives of students. Election principles are determined by the organisational and operative rules of the universities.

The state is in most part the owner of universities. For example, now six universities out of twenty-three are private universities. First of all church universities. Main investments for the universities are determined by the Ministry of Education. At the university level detailed local decisions are made by the university council and the rector's council. The rector's council consists of a rector, vice-rectors, deans and a general manager for financial affairs. Thank you very much for your attention.

Prof. Pavičić:

Are there any questions? Dr Luthar...

Dr. Luthar:

You said that the Ministry of Science and Education has the competence to open the new university.

Prof. Imre:

Yes.

Dr. Luthar:

Does this mean that the Ministry does not need the approval of the government or parliament and if yes, who in this case gives the money? I mean the additional money. Does this mean that other universities get less?

Prof. Imre:

I think this decision is made by parliament. Only the operational part of this decision belongs to the Ministry of Education and it demands cooperation, of course, with the Ministry of Finance and some contribution from the regions. It is a state university, but the financial support from the region is a very important factor, especially for the development of this university.

Question from the audience:

Regarding the same question, are there some criteria established regarding the foundation of universities on the state level or does it depend on case to case in the accreditation procedure?

Prof. Imre:

In the accreditation I think we need the same evaluation system for old and newly opened universities. And we can accommodate to this and we have to accommodate to this system and it operates not only in the European Union. I think it has some advantages for development.

Question from the audience:

I just wanted to ask if in Hungary they discussed to change legislation according to the Bologna proposals or do you have a point of view that your system now is better? Are there plans in Hungary to also introduce new legislation, like for instance in Austria and Italy or is there a point of view that the present legislation is the right one for the next step?

Prof. Imre:

I have the impression that not only one path leads to Rome, but many paths. And when we have the aim to find the most perfect path, it is also an experiment. And we also have a national tradition, some advantages, and a combination of this tradition and the accommodation of new challenges. This is really a very difficult path, but consultation with these countries can help us in solving these problems with a relatively low number of mistakes or misunderstandings. Thank you very much.

Prof. Pavičić:

No other questions? Then I would like to pose one. In our correspondence you stressed that present Hungarian law for higher education and science is rather brief and elastic. Is that a recent law which is so brief and elastic in com-

parison to previous laws? And can you tell us whether you have tried to take European integration into account when bringing this law?

Prof. Imre:

I summarised briefly the principles of the present Hungarian law for higher education and science. We have tried to take European integration into account when the law was passed by parliament. We need the flexibility of this law to accommodate new challenges.

Prof. Pavičić:

Thank you. I would now kindly ask Dr Tůma to take the floor.

Dr. Stanislav Tůma:

Mr Chairman – Professor Pavičić – ladies and gentlemen. I am not a member of the Humboldt Club and, therefore, it's a great honour for me, and a great privilege, to be here and to present some of our problems concerning the education of medical doctors to the discussion. Many of the problems are profound. They also touch upon other health care professions. We were advised to spend our coffee break discussing problems. Together with Professor Imre I have found problems in the postgraduate education of medical doctors which are common for both Hungary and the Czech Republic. Their roots originate deeply within history, dating back to the time of the Austro-Hungarian Empire. They are connected to our recent problems and they are mostly their cause.

In the Czech Republic there are three universities Charles university in Prague, Hradec Kralove and Plzen, Masaryk University in Brno and Palacky University in Olomouc. The education of the medical students is completed at 7 medical schools, 5 of them affiliated to Charles University. The quality of education at various faculties is guaranteed by an independent Accreditation Committee. Overall admissions of 1200 students per annum comes from up to 8 applicants for each place with a gender ratio of 55% versus 45% for women which results in up to 900 graduated medical doctors. There is no formal numerus clausus, but the quantity of facilities such as laboratories, beds etc. create a limiting factor. There are 5–6 students per teacher. The undergraduate course of 6 years and 5,500 hours of study is completely in accord with the directives of European Committee. Graduation follows a final State examination with the practical and oral examination. It gives the title »MUDr« Medicinæ Universæ Doctor. Up until today, the title MUDr was also given to

Czech dentists after their study of dentistry (stomatology). Both the terms – stomatology and MUDr – have to be changed. It will be possible after the admission of the new Health Care Profession Act by the Czech Parliament. It is prepared as a Bill on the qualifications required for pursuing the activities of a health care professional and on further medical education and training.

The present structure of a two-level qualification in a speciality is derived from a historical and political background. However, this is incompatible with the 93/16/EC Directive, which only recognises one course of study leading to specialisation and the title of »Specialist in...«. The present postgraduate training and two-step-level education is rather complicated. The first-level specialisation lasts 3 years and is under the supervision of the specialist. The training is covered as a salary by the Health Care institutions. The training, examinations, log-books etc. are supervised by the Institute for Postgraduate Education, which is independent, but financed by the Ministry of Health. The Institute organises the postgraduation attestation course of study at accredited clinics and in cooperation with the universities.

Also the specialities differ from those listed in the directives of the European Committee. The Czech system is rather complicated. Until the specialisation the medical doctor can provide his services only under the supervision of a specialist. General Practice is one of the basic specialities in the Czech Republic. The medical doctor after the attestation examination – a specialist – has to execute the profession according to his best knowledge and conscience, to the present knowledge of medicine, rules and ethical principles of the medical profession on the basis of his full responsibility.

The scientific branches of the Czech Medical Society play an important role in postgraduate education. With its continuous tradition more than 140 years the Society still maintains an important position in the medical life supporting medical education. All practising physicians have to be members of the Czech Medical Chamber. The Czech Medical Chamber keeps the record of doctors and until the acceptance of the new Act gives licences allowing them to practise. The Chamber is responsible in the Continuing Medical Education activity with a requirement of 150 credits in 5 years.

In the Czech Republic there is an urgent need for a new Act of Parliament to regulate and harmonise Health Care consistent with European directives 93/16/EEC, 97/50/EC, 98/21/EC, 98/63/EC, 1999/46/EC and 2001/19/EC. The present two levels specialist training will be abolished by the new Education Act. It will be replaced by a single structured training programme leading

to the award and licensing of the doctor as an independent specialist It will be guaranteed by the government due to the Institute for Postgraduate Education. List of specialities will be changed to be more comparable with the list of other member states and to better enable the provisions of free movement. The main responsibility lies on the Czech government institutions. The necessary legislation has to be enacted at the earliest possible moment. The present arrangement of postgraduate education of medical doctors in the Czech Republic is not compatible with European law.

Thank you for your attention and allow me at the end to thank the secretaries of Professor Pavičić as they prepared my documentation in a very short time this morning.

Prof. Pavičić:

Are there any questions?

Question from the audience:

Obviously, in modern medicine you need research workers from other fields, like nuclear physicists for some special sub-fields. How do you treat them in your system?

Prof. Tůma:

A very important question and we try to resolve it in our act. We perform such paragraphs in the act where technical and other specialists coming in the health care system can provide their profession under the supervision of the specialist. For example in the biochemistry laboratory chemists who worked in a chemical factory and are now coming into the hospital can work under the supervision of the head of a biochemical laboratory. We recommend three years of this special practice. After a special examination, he belongs to the so-called health care professionals. With the title engineer, not medical doctor, but it's an academic title. It's not a professional position. There is also a system of courses for basic education. There are some possibilities for nurses who finish their education when they're eighteen and it is not acceptable for the European Union, but after several years, we recommend five years, of the practical education, ending with a special examination, they can get some specialisation and become a general nurse or midwife. With the midwives there is no problem. They have some special school. Education will come under the faculties, under the universities. This means that the Ministry of Education will give them the title, maybe a baccalaureate as a lower university degree.

There is no problem with the nurses. The Czech Republic has eleven million inhabitants and there are roughly 100,000 nurses and after our calculations not all of the nurses must have this university degree, but we think that it is one-fifth. This means roughly 20,000 of them. For 20,000 to study at a faculty means it will last minimally ten years. Therefore, we recommend some examination for the skill for nurses. Every profession has some special problems, for example stomatologists. I talked about some of them and it is a social problem. But there is also a problem in the fact that 97 percent of them are private doctors. They work for cash and their income is very high and as a results there are some specialists that we have problems to educate the new students for, e.g., orthodontists – with some children there are congenital difficulties, mouth deformations of the oral cavity, and we do not have a satisfactory number of such specialists since private doctors are not interested in the field. The government must offer financial and economic support through equipment and so on. In every profession there is something.

Prof. Pavičić:

Thank you very much.

Question from the audience:

I have some minor questions. Is there any difference in the duration of the first and second specialisation?

Prof. Tůma:

Yes. The first is three years and the second grade specialisation is the next five years. Or seven years. Between the specialisations there is a gap of generally up to seven to ten years.

Question from the audience:

The second specialisation is longer?

Prof. Tůma:

The second specialisation is longer.

Question from the audience:

The salaries of doctors during the first specialisation is paid from a central, a health society?

Prof. Tůma:

Yes.

Question from the audience:

And the insurance comes from the universities or the hospitals for the first specialisation?

Prof. Tůma:

The question for the round table is the income of the teachers at the medical faculties. They are very low in comparison to the same professions, the same specialist in the private insurance company performing the profession and we are asking about the way how to elevate the income of tutors. And the second question... How to support the intensity in the study of the young so-called post-graduate students. They are the doctors who perform some study as for philosophy PhD.

Prof. Zechlin:

I have a question related to the organisation of the medicine at the universities. The background is that in the actual reform in Austria the government plans to establish medical universities and to take the present Faculty of Medicine out of the universities. This system is usually used in Eastern Europe, in the Czech Republic and in Hungary, but not used in Western European countries. How do you evaluate the two possibilities – independent medical universities or medical faculties as part of larger universities?

Prof. Tůma:

I can answer from two points of view. One is the historical. We are now living in the so-called unified, centralised system of health care in the Czech Republic, maybe socialist system. It was built upon the law 20 from 1966... At that time it was acceptable largely in the world, it was accepted in Great Britain, for example, in Sweden. It was generally accepted as good, but now it is not... It doesn't allow enlargement and changes in the competence between the government and the so-called universities and between their cooperation. A large dispute is now under way between the director office of the university hospitals (the office is governmental and consists not only of doctors but also of economists) and the faculty, after the director office dismissed two heads of clinics, professors, medical doctors, without any consultation with the faculty. It is not acceptable for our university that directors bring such decisions with-

out any discussion with deans and their colleagues and with the senates and so on. And, therefore, there is some discussion on how to change this system of the faculty or university hospitals, or these faculties and hospitals, into one system of the university hospitals. The curriculum is also under discussion. It only prepares the field for other legal preparation of certain rules or some new acts in the future.

Prof. Pavičić:

Thank you. And now, we should continue our discussion in a cosy restaurant where lunch has been ordered for us all.

24.05.2002, 3:00pm

Prof. Josipović:

I would kindly ask Prof. Galetta to take the floor.

Prof. Diana Urania Galetta:

I would like to excuse my English. It would have been better to speak German, but my speech is in English so I ask you to be patient. I will only give the general guidelines of the Italian system of scientific research and university organisation. And my speech will, therefore, be articulated into two parts: a first part about the system of scientific research and the second part about the university system in Italy. The reform will be explained better by professor Luzzatto.

First of all, the governing of the system of scientific research. In the Italian system the main institution in planning research activity is the National Research Programme, which defines the general objectives and requirements for participation in the implementation of programmes in which the public administrations, including university and research institutions, compete for resources available in the state budget. The National Research Programme is a three-year plan which supplies the participants in scientific research with information on titles and strategic priorities previously defined by the government during the approval procedure of the document of economic and financial planning. The Inter-minister Committee for Economic Planning approves this programme, as well as the yearly update and relevant instructions for coordinating the programme with the plans and the programme of the public ad-

ministrations. The Minister of Education plays a big role in approving the financial programme of the research, but he works with other committees.

Most important is the Committee for Research Evaluation, which among its several functions, sets the general criteria in procedures for evaluating the results of research. Within the Italian research institution there is an institution which is most important. It is the National Research Council. This institute deserves particular attention, because it can be surely considered the most important public institution for research. It was reorganised in 1999 and is now a national institution for research with general scientific competence and scientific institutes, distributed throughout the territory, and among its several duties it has to carry out and promote research activities in order to achieve high quality goals of strategic importance on a national and international level. It also manages and coordinates national and international research programmes and supports scientific and research activity of high interest in the national system. It develops activity in the course of post-graduate research studies and post-graduate education.

The financial resources of this committee comes from regular funds, from the Ministry and from occasional contributions from special integrating funds for specific projects or participation. More generally about the system of research financing in Italy. Today, the main reference document for evaluating the system of financing scientific research in Italy is the National Research Program (PRN) approved by the Inter-ministerial Committee for Economic Planning in December 2000. Considering that the research expenditure is the crucial component of material investments, the National Research Programme currently in force envisages an allocation of financial resources aimed at reaching, in the long run, actually in a decade, research expenditure gross domestic product rate of approximately two percent, which is also the European average value. You must think that, compared with the other European member states, in the last decade Italy has, in fact, experienced insufficient interest in scientific and technological research, which is clearly evident in the research expenditure gross domestic product ratio, which amounted to an average of approximately one percent referring to a decade. A whole series of considerations need to be added to the background, including the fact that the labour market for researchers is not very attractive and competitive for young talents, that there is a total lack of any research activity within enterprises, a low level of education compared to other European countries, and a general decrease in the technological specialisation in the national industrial

system. This gap between Italy and other European countries becomes wider if one considers that the research expenditure gross domestic product ratio in southern Italy is around 0.6 percent of the gross national product. Therefore, the opportunity to increase the research expenditure gross domestic product ratio is closely connected to an investment programme characterised by strong interaction between public and private entities. Not only must the state invest more money in scientific research, but it must also create the necessary conditions for enterprises to realise that they have a material interest in investing their money in research.

A few words about the funds which finance scientific research in Italy. First of all there is a regular fund for research institutes which is financed by the Minister of Education, Universities and Scientific Research, and is aimed at financing various institutions, including the National Research Council, the Italian space agency, the geophysical experimental observatory and so on. This is an annual fund the allocation of which is determined by the minister. Secondly, there is a special fund for the development of research of strategic interest. Thirdly, the Special Integrity Fund for Research, which is only for individual research projects, and then, last of all, a fund for research support, which provides finances for various interventions, including the cooperation with the private entities.

In conclusion, with the exception of the first fund I mentioned, which is designed to finance the public research institutions, supervised by the Minister of the University, all the other funds are aimed at financing not the individual institutions or institutes, but individual research projects, private or public. The universities, the polytechnics, the university institutes, apart from the chance to see their projects financed through these funds, annually receive funds for their regular functioning. In the general system of university autonomy of Italy it is then the individual university that decides how to divide the funds and how to spend them for the different activities within the university.

In the last decade different legislative intervention with the goal to reform the system of scientific research have been undertaken based on certain fundamental objectives or strategic choices. The intention was, above all, to introduce a new system of research governing. The second aim was to rearrange the network of public research institutes. The main idea of this reform was to orient the activities of those institutions toward the real demands of the region and not to be totally separated from the needs of the region. Another aim that

needed to be reached was to reduce the territorial imbalance between the south and the north of Italy.

Part two. Some words about the university system. The last paragraph of Article 33 of the Italian Constitution states that universities and academies have the right to introduce autonomous regulation within the limits set by the state law. Therefore, university autonomy is a crucial feature of our system and an irrevocable principle in achieving the institutional goals of the universities. The application of this principle of autonomy, established by the Italian Constitution, began in the early sixties, but a wider definition of this principle is given by a law in 1989, which envisages an entire reform of the university system, establishing an educational, scientific, organisational, financial and accounting autonomy of the universities, either in accordance with the state laws, or with the statutes and regulations of the individual universities. As a consequence, in addition to the general system designed by the state laws, there are presently status regulations of individual universities that may differ considerably.

It is certainly not possible to consider the various options adopted by the individual universities in their autonomous statutes and regulations. Therefore, I will only supply a general view of the norms applicable to all universities, bearing always in mind that the voids left by the national legislator can be filled up with statute regulations adopted by the individual university. This is a general guideline, which I can give you, but you must always bear in mind that every university has a statute which can differ significantly from the national regulation.

The university governing bodies. They are the dean, the academic senate and the administrative council. Within the university we have faculties, schools and courses and seminars and at the universities every faculty has a dean, who is also the dean of the faculty if the university has only one faculty. Within the faculties of utmost importance is the faculty council, a collegial body in which professors, researchers and students have their representatives. The faculty council can work in a restricted form, including full and extraordinary professors, in an enlarged form, including also associated professors, or in its full form, including all its components. In its enlarged form it results in the teaching regulation, the control of research activities, the timetable of courses, the proposals for changes to the organisation of teaching, the requests of the teaching staff, the coordination of programmes of courses, which the professors intend to hold, as well as all student-related activities.

In the organisation of the Italian universities most important are institutes and departments. The institutes are a type of university organisation with the aim of developing teaching, research and administrative activities relating to similar subjects. It develops activities of teaching character in collaboration with the faculty and then the activity of the research character in collaboration with the faculty and with the department, but it has no autonomy from the university. I will explain it better now before we talk about the departments. The departments, in contrast to the institutes, can be considered the organisation of research sectors with consistent goals or methods and that may be related to different faculties or courses of graduate study at the same faculty. The department practically promotes and coordinates the research at the university, developing the structure at its disposal for achieving that goal, and elaborating, which is most important, research programmes. It organises courses with the purpose of acquiring doctorates in research and performs teaching activities. In order to fulfil all these functions, the department enjoys financial and administrative autonomy. And now something about this autonomy. The department, as we said, enjoys financial autonomy, which means that it is entitled to a regular fund assigned by the administrative council of the university for the acquisition of equipment and for financing research activity and it can have access to revenues from research contracts or agreements stipulated with public and private entities. In addition to this, the department enjoys administrative and accounting autonomy from the university, it approves its budgets and balance sheets, its own accounting records and its own bank current accounts. Thus, the autonomy of the department is only of financial and accounting nature and does not concern assets. I mean that the movable or immovable properties remain the property of the university and the department only administers them. The trend is now to shift from an institute system to a department system, which means that in the statutes of most universities the institute must disappear and we must have only departments with all the autonomy and responsibility.

A few words about the bodies connecting the Ministry and the university. The Ministry of the university collaborates with several collegial bodies, which connect the university and the Ministry. First of all, there is the National University Council, an elective body which represents the autonomous institution of the university. Then we have the Conference of Deans of Italian universities, which is also very important and has a consulting and advisory role on the topic of major interest to the university. The National Council for Sup-

porting Students decides on subsidies and scholarships, as we shall see later on. The National Council of University Students is a consultative body representing Students, which formulates proposals in order to reorganise the university system. Last of all we have a National Committee for the Evaluation of the University system, last but not least. This one is very important, because it is composed of members appointed by the Minister of the University upon hearing the competent parliamentary commissions, and it determines the criteria for the evaluation of all the university activities.

About the financing of young researchers in Italy. Post-graduate scholarships. According to the law of 1989, Rules on University Scholarships, the universities can offer scholarships for the following purposes:

- attendance of proficiency courses and specialisation schools,
- participation in courses of doctoral research,
- continuation of research after PhD,
- attendance of proficiency courses abroad.

You must think that in the statute of a single university there is always a specification about these funds, for example at my university, the University of Milan, there is a consistent number of scholarships for proficiency courses abroad and also a special fund in order to finance research projects of young researchers who do not hold a stable post within the university.

About subsidies and scholarships for students. According to the Italian Constitution, I quote: »School is available to everybody. Those who are capable and deserving, even if they don't have the necessary means, have the right to achieve the highest degrees of study. The Republic guarantees this right by awarding scholarships, granting cheques to families and other forms of support, which, however, must be assigned by open competition.« This is what our Constitution says. Practical are the Italian Regions who decide how to implement these Constitutional provisions. In short, there are loans granted to students with the highest merits and less means that have to be returned without interest after their completion or final interruption of study. Then the Regions decide on the amount of money that will be used to enable the university study and distributed as scholarships. It is the decision of a single Region, not of the ministry. Then, the Regions are also in charge of constructing, reconstructing, expanding and maintaining buildings aimed at accommodating students.

Some words about university fees. The national law prescribes only a regional tax for the right to university studies aimed at funding scholarships and

honour loans. Capable students, who don't have the means, don't have to pay this tax. Then, the other amount is decided by the Region and generally the students who are capable are exempt from paying these fees. The amount of the general university fees is always related to the student's economic status. The amounts are split into fee brackets, based on the number of family members, income status and the nature and source of income and amount of assets, so it's not the same for every student. It can be very different from one to the other, depending on these points. In Italy there are also some criteria to restrict the access to university and to specialisation schools. There is a ministerial decree from 1999 which subjects to restriction the access to graduate courses at the Faculty of Medicine and Surgery and veterinary medicine, graduate courses at the Faculty of Architecture, newly established graduate courses for six years upon activation, university courses whose educational regulations prescribe a period of apprenticeship, specialisation courses. For all the other there is no restricted access to university.

Some words about the recruitment of lecturing staff. In the Italian university system the lecturing staff consists of full professors, associate professors, like myself, and researchers. To recruit them the dean of the university, not the minister, prescribes in a decree a comparative evaluation procedure for each scientific sector. We are divided into scientific sectors. A person responsible for each procedure is appointed and, first of all, the curriculum of the candidate must be evaluated and in this case it's necessary to take into consideration, among other things, the originality and innovation of scientific production, the consistency of the candidate's activity within the disciplines belonging to the scientific sector, the continuity of the research activity, then the teaching, if practised abroad, the titles of doctorate in research and the scholarships used for research activities, the organisation, management and coordination of research programmes.

These are all points which must be taken into consideration in this evaluation. Upon the evaluation of titles, in case of filling researcher posts, there are two written and one oral test. In case of the filling associate professor posts, one teaching test and a discussion on presented scientific publications are required. In order to fill full professor posts, a discussion on presented scientific publications is necessary and one public lecture only for those candidates who do not hold a position of associate professor. The faculty council can also decide on the title of scientists of outstanding reputation with the purpose of fill-

ing full professor posts. This faculty council resolution must be submitted to the Ministry of the university for approval.

Before I leave this spot to professor Luzzatto, I would like to say a few words about the university reform of 1999, which he will then explain in details. The reform of the university educational system in Italy implements radical changes in the system, which became necessary because of several factors, such as the excessive duration of studies, the rigidity of curricula, the high percentage of drop-outs and the important transformation taking place in our society, which requires totally different cultural and educational profiles. The main innovation is undoubtedly represented by the introduction of credits, which consist in a unit of measure of the student's learning work. This allows to shift from a teaching perspective to a learning perspective, because not only the hours that the student passes in the classroom are taken into account, but the time spent on studying is added to the hours of attendance. This should avoid an excessive burden on the student, which was the principle cause of the excessive duration of studies in Italy. The new system of university education after the reform is still in progress and it is characterised by a lot of blind areas. In spite of this it represents, in my opinion, an important challenge to all of us and a big opportunity for my country to step into the future of university education. I just hope that our legislator realises that such important goals cannot be achieved only through the personal engagement of the existing teaching staff, but that it is necessary to invest more money in universities, in order to increase the teaching staff and to avoid any excessive teaching burden on the existing teaching staff. Thank you very much.

Prof. Josipović:

Are there questions for Prof. Galetta?

Question from the audience:

Can you comment the previous law which favoured fluctuation in Italy? The central election of professors. I would change this system. How do you comment on this? How is the fluctuation of professors between several universities?

Prof. Galetta:

You mean the moving of professors within the universities?

Question from the audience (cont.):

Right. Before there was a central election and then if there was an opening in Bari, you went to Bari. I think that was good, but now the law has changed. Can you comment, is it better or worse?

Prof. Galetta:

Then I must say something more. I talked about the recruitment of university staff and I didn't say that there was a reform also in this field which means, that before it was a central procedure and everybody had to go to Rome to attend, to try to get an associate professor post or a full professor post, and now it is done by the decree of the dean of the faculty, which means that the procedure is local. For example, if the University of Milan decides that it needs a full professor post for teaching administrative law in the Faculty of Political Science the entire procedure is occurring in Milan. The people are chosen on the national level, but the procedure is in Milan. Practically, this means that when the evaluation procedure is finished the university of Milan chooses one of the two candidates, who have had a positive evaluation and the other one has the possibility, within three years, to be called from another university or faculty, and it often happens that he is called from the faculty he belongs to, because for the faculty he belongs to it's less expensive to transform his post (for example an associate professor post to a full professor post) than for another university to call one person for which it has no post. So, in end effect, this means that there is no more moving within the university and I think this could be a disadvantage in the long run. But I must also say that in the previous system it took so much time for a procedure to the end that it could last five, ten years and it was really terrible. I have the example of colleagues who have problems because it lasted too long. This was one of the main reasons why it was reformed. So if it will be more negative than positive, we will see it only in the long run. Now it's difficult to say.

Prof. Josipović:

Other questions?

Professor Imre:

I have two questions. What is the percentage of the gross national product to be given to higher education? And what is the percentage of private universities in respect to universities with accreditation?

Prof. Galetta:

The percentage of gross national product now is 1 percent as a medium value, but in the south of Italy it is actually 0.6 percent. I really don't know what the percentage is for financing private universities. I think professor Luzzatto knows better perhaps, but I think it's not so much, because they are private universities and they have a lot of financing from private institutions, which is also now the case of state universities. We are starting to find financing from private institutions and in Milan we have already, as a department, some agreements with private institutions which finance research projects or master degrees or something like that. This is also the idea of the reform.

Prof. Josipović:

Thank you. Other questions? Thank you very much. Now I would like to call professor Luzzatto.

Prof. Giunio Luzzatto:

I would like to start by thanking you for your invitation. I think it's very useful to have this kind of meetings; also the fact that we are not many is positive, because it's like a seminar or symposium. This helps all of us to understand better how the other one stands. Thank you again.

The title of my talk is »University Reform in Italy, theory and practice« and I would like to divide it into 5 sections:

Transparency [1]

1. The Reasons For Changing
2. The main objectives
3. The steps in the procedure
4. The structure of the Reform
5. From theory to practice

Let us start with

The Reasons For Changing

Looking at the number of students at Italian Universities, we see (Table 1) that during the last third of the past century the increase has amounted almost to an explosion.

Transparency [2]**Table 1** – Trend in student number (thousands)

Year	Regular students	Late students ^[1] (fuori corso)
1965	298	105
1975	736	199
1985	767	346
1995	1.116	569

^[1] »Fuori corso«: students who did not get the degree in the right number of years and still are at university trying to get it.

This trend has been almost universal, in Western Europe, starting in the 1960s, when Higher Education (H.E.) radically changed its role. Due to the dramatic increase in the number of students, H.E. institutions had to transform their functions: their goal was no longer limited to educating and training the next ruling class, but became instructing a growing percentage of the population in the age group 18–22.

At the same time, due to the acceleration of the pace of change in science and in the labour market, the H.E. systems had to be prepared to develop new study programmes in reasonably short spans of time.

If we look at the details of the solutions adopted by the various countries to face both the new situation and the new commitments of their H.E. institutions, we easily see that those solutions were not the same ones everywhere; however, a unifying key-word, differentiation, characterises all strategies. Diversity in the purpose of H.E. (general or vocational, aimed at providing an extended or a specialised basis of knowledge), in the cultural background of students entering from different secondary schools, in expectations by those students, called for diversity in H.E. programmes. Degrees, curricula, teaching methods became differentiated; sometimes the system itself of H.E. institutions became articulated through the introduction (or the development, where it existed already) of a non-university sector mainly focused on high-level vocational training.

Another key-word – autonomy – is also worth recalling. In fact, differentiation is usually linked with flexibility, and a decentralised system, in compari-

son to a centralised one, is more apt to respond quickly to rapidly changing demands. Therefore, almost everywhere autonomy (of H.E. institutions with respect to political authorities, and sometimes of local administrative bodies with respect to national ones) has been consistently enhanced during the past decades. However, there are a few exceptions. In some of the countries where a »binary system« of H.E. exists, full autonomy has been recognised only in the university sector; for the vocational sector, it has been argued that its strict connections with the economy and the labour market require supervision by political and/or administrative authorities.

The problems to be faced, in Italy, were the same ones, but for a very long time the answers have been different. Both political authorities and universities responded with more of the same, merely increasing the number of universities, of faculties, of teachers, and ignoring the fact that a massive quantitative change should necessarily require qualitative transformations. Actually, attempts to adopt substantial reforms aimed at coping with such transformations have been made, and have been discussed in Parliament several times during the 1960s and the 1970s; however, no reform was ever adopted, as the proposals did not reach the final vote.

At last, in 1980 a law was passed, dealing however only with a restricted number of themes. It introduced the PhD as a new academic degree (previously, only the laurea programme existed, consisting of 4 to 5 years – 6 only for Medicine – of course work). It allowed universities to establish departmental structures, on a voluntary basis (faculties were untouched as chief decision-makers in universities). It reorganised the teaching staff, this being in fact the main objective of the law, into three positions called *professore ordinario* (full professor), *professore associato* (associate professor), *ricercatore* (lecturer).

Except for stopping an unrest which had been extremely widespread among university teachers (particularly among those lacking tenure), the 1980 law didn't change the situation. It became increasingly clear that an academic structure thought for an elite could not respond to the new situation; the data on student drop-out and delay in graduation (Table 2) are disconcerting.

A decade later, two new laws promoted by late Minister Antonio Ruberti tried to make a difference.

In 1989 the autonomy of universities was heavily enhanced. Previously, almost every detail of their organisation had to comply with rigid national

Transparency [3]**Table 2** – Drop-outs and delay

Year	Degrees awarded (thousands)	% of students enrolled 5 years earlier
1965	29	48,6
1975	72	36,6
1985	76	29,6
1995	112	34,8

Year	Students graduating in the prescribed number of years (%)
1968	25,8
1995	9,9

models; many decisions concerning their activities were adopted through ministerial decrees, and even in the fields where universities were free to decide, their resolutions required an approval by the Ministry. The law passed in 1989 gave universities the power to adopt autonomous Statutes. Furthermore, it restricted the subjects regulated by national rules.

In 1990, a new degree, diploma universitario, was established. The idea was to have a 3-year programme focused on applications rather than on theories, and providing skills which would be useful for professional activities at an intermediate level. Its purpose was to absorb the majority of students, those who are not interested in in-depth scholarly studies (and who very often do not succeed in completing a laurea programme). The courses leading to diploma and to laurea were completely separated, even if some credits acquired in one of the programmes may be recognised by the other. The 1990 law also tried to find a compromise concerning responsibilities in the design of curricula: curricula still had to be defined – through ministerial decrees – at a national level, but such decrees were not supposed to be detailed, and therefore were meant to leave a good amount of room for the choices of individual universities.

The process towards institutional autonomy, started in 1989, unfolded rather quickly, and was strengthened in 1993: new regulations on budgets

gave universities much more freedom in allocating funds into the different headings.

However, centralisation and rigidity remained almost untouched with regard to degrees, programmes and curricula. The 1990 compromise didn't produce the expected results. Any introduction of a new study programme, resulting from scientific developments or demands from the labour market, still required many years, very often decades. The new diploma failed as well: more than 90% of the students continued to choose the old laurea.

So what I want to say now is what are the cornerstones,

Transparency [4]

- The Main Objectives in the system.

This was the situation in 1997, when Minister Luigi Berlinguer decided to go further, and succeeded in having a Reform law passed in Parliament. His main goal was to transform a system, whose structures still corresponded to an obsolete idea of university, devoted to an elite and static, in order to enable it to fulfil its new functions and be widely open to a dynamic world.

As we have already recalled, experience from other countries had proven that for this purpose the key concepts are differentiation and autonomy.

Looking at differentiation, the failure of diploma has shown that, in the Italian situation, separate channels for a »short cycle« and a »long cycle« in universities did not work: The appeal from tradition is too strong, both for students (and their families) aiming at a laurea, and for professors, accustomed to teaching pure science and uninterested in vocational education. Furthermore, there is no tradition of tertiary education institutions outside university. H.E. coincides with university, except for a small number of institutions operating in particular areas (visual arts, music, physical training).

Thus, a reasonable flexibility of programmes inside university appeared to be necessary in order to avoid drop-outs and delays: students should not be forced to make drastic choices at the beginning, but should be progressively oriented.

Flexibility calls for autonomy, as curricula have to be adapted to different demands coming from different kinds of students, and even individualised. At the same time, autonomy allows us to organise new study programmes, or to adapt existing programmes to new needs, without unacceptable delays.

Transparency [5]

- The Steps in the Procedure

The Reform law passed in 1997 gave a strong indication towards autonomy; at the same time, it stressed that autonomy is a tool, not a goal. The main goal was to proceed towards the objectives summarised above.

The general indications given by the law had to be specified by ministerial decrees. A Committee of experts, led by Guido Martinotti, was appointed to elaborate proposals for those decrees; after a few months, a Report was submitted, and a debate about it started all over the university world. While almost every Academic Senate, every Faculty, every professor had always complained about the absence of reforms, many diverging opinions immediately surfaced once a concrete project was put on the table. Very often, a formal agreement on the basic ideas was expressed, but substantial changes were requested on almost every point. Overall, there was a great call for caution: no need for rush. (35 years had passed since the first proposal of reform, dated 1962!).

To overcome resistances, Minister Berlinguer strengthened connections with Europe – a centenary celebration of the Sorbonne University in Paris was utilised for that purpose. Ministers for H.E. of France, Germany, United Kingdom and Italy signed an agreement on the »convergence« of their university systems. Such an agreement listed objectives which followed a line very close to the one the Italian government wanted to follow in our country. One year later, the text adopted in Paris became the basis for the well-known »Bologna declaration«, signed by 29 European countries.

In formulating the final texts of the decrees defining the Italian reform, Sorbonne and Bologna became cornerstones. A change of minister (quite frequent in Italian government habits) brought some delay; however, continuity was ensured by Under-secretary of State Luciano Guerzoni, who was in charge of the ministerial action concerning the reform, and finally decree number 509, Regolamento recante norme concernenti l'autonomia didattica degli atenei, was adopted in November 1999.

Further decrees had to establish broad national frameworks for the degrees in the various scholarly areas, and for the corresponding study programmes; they were adopted in the year 2000.

Finally, each university had to make its own choices: each one had to decide the study programmes to be offered, and to define those programmes in

every detail. Time was very short, as the curricula had to be initiated in autumn 2001; however, much preliminary work had begun even before the national rules had been formally completed, and all universities are now experimenting the new curricula for almost all their bachelor (laurea) programmes.

Meanwhile, master programmes, leading to laurea specialistica, have been defined; in all likelihood, most of them are going to start next autumn, at the beginning of the academic year 2002–2003.

It is worth noting that after the general elections, which took place in 2001, a new political majority came into power in Italy. The new government stopped the implementation of a law changing the structure of the primary and secondary school system; after some hesitation, it did not stop the University Reform. Two reasons seem to have led to this decision: first, universities were so close to the conclusion of their planning, that stopping them would have been quite problematic; second, the solutions adopted by the previous majority for university were less controversial than the ones proposed for primary and secondary schools.

Transparency [6]

- The Structure of the Reform

According to the Reform, two main degrees are given by universities. A first cycle leads to a degree called laurea (the traditional Italian degree); a second cycle leads to laurea specialistica. The first degree is a necessary step leading to the second one. This is a radical change, if compared with the previously existing alternative between diploma (short cycle) and laurea (long cycle).

Transparency [7]

»Long« study programmes lead directly to laurea specialistica in a few cases (e.g. Medicine, Pharmacy), where prescriptions about degrees and curricula are given by the European Union. We are not considering those cases in detail here.

Clearly, this choice goes back directly to the Bologna declaration. Moreover, other elements of that agreement are at the root of the system. The most important ones are credits, flexibility, transparency, and employability.

Transparency [8]

European Credit Transfer System: at the beginning, it mainly established conditions to allow accreditation of courses followed abroad by students involved in the ERASMUS programme.

Credits, to be defined according to ECTS rules, are no more just a transfer system connected to mobility of students. Credits become an accumulationsystem, the modules which compose the curriculum, like the bricks composing a building. Thus, laurea is defined as a 180-credit programme, laurea specialistica as a 300-credit programme; 3 years, or 5 years, do not define the length of those programs, as they are only indications about the time required to complete those programmes for regular full-time students.

Flexibility is ensured by the fact that curricula are built through sums of credits, and that those credits are not rigidly determined.

At the national level, Classes of study programmes are defined: 42 classes for laurea (e.g. Class 1 Biotechnologies, Class 25 Physical Sciences and Technologies, Class 38 Historical Sciences), 104 classes for laurea specialistica (e.g., Class 7/S Agricultural Biotechnologies, Class 85/S Geophysical Sciences, Class 98/S Modern History). When a legal value has to be assigned to a degree (e.g. for access to regulated professions or to civil service), the value corresponds to the Class to which the degree belongs.

For each class, a description of general cultural and professional objectives is given, and prescriptions are given for no more than two-thirds of the credits required for the degree; those prescriptions assign a certain amount of credits to sets of subjects, not to individual subjects. Within any class, each university has the freedom to define a study programme.

The university:

- determines precise cultural and professional objectives, within the general ones which characterise the class;
- chooses the name for the degree awarded at the end of the programme;
- assigns no more than two-thirds of the credits by picking up one or several subjects within the sets that are defined by the national prescriptions;
- is completely free in assigning approximately one-third of the credits.

In any case, at least 5% of the credits are left out, in order to leave some freedom of choice to each student (see Table 3).

Transparency [9]**Table 3** Credits and Classes

	Laurea	Laurea specialistica
Credits	180	300
No. of classes	42	104
No. of credits indicated in the class (maximum)	118	198
Credits left to student's free choice (minimum)	9	15

In each study programme, more than one curriculum may be offered, and this enhances flexibility. Moreover, a student may propose autonomously a do-it-yourself curriculum, combining credits according to his own interests; the proposal has to be submitted to the Council in charge of the programme, and the Council may either approve it, or reject it, or else ask for modifications.

To guarantee transparency, the study programmes of all universities are included in a national website. Furthermore, it is compulsory to add to any degree the Diploma Supplement, formulated according to European agreements.

In the description of the objectives for each class, employability is always indicated as a fundamental goal. This is particularly emphasised for laurea, as the value of the first degrees on the labour market is a central issue in the Bologna process. To this purpose, stages and other extra-mural activities are included in the curricula.

In addition to laurea and laurea specialistica, PhD is a legally recognised degree as well. No classes are defined in this case, the only national prescription being that laurea specialistica is necessary to be admitted, and that the PhD programme has to last at least three years.

Programmes not leading to a recognised degree (e.g., programmes for further education, or specialisation courses) may be offered by universities on a completely autonomous basis. Programmes of at least 60 credits requiring a degree for the admission, be it laurea or laurea specialistica, may use the name Master universitario (»di primo livello« if they follow laurea, and »di secondo livello« if they follow laurea specialistica).

No restriction («numerus clausus») to enter university programmes is established on a general basis, except for the cases where rules are given by the European Union. Universities are allowed to put some restriction on individual programmes, due to limitations posed by existing facilities (classrooms, laboratories).

Transparency [10]

- From Theory To Practice

As far as results are concerned, it is too early to make an assessment, as the new system has only just begun. It may be worth mentioning that, even if it started at the beginning of this academic year, we will have a new kind of graduate as early as next summer. In fact, students who were already at least in the third year of the old programmes may have been allowed to enter the new system, with the recognition of a certain amount of previous credits.

While we can't comment on results, much can be said about the attitude of the academic world, and about the problems which the implementation of the reform had to face, and is still facing.

The attitude of the academic world, on average, is rather positive. Its involvement has been strong from the very beginning, as the deans and other faculty staff played an important role in the definition of the various classes. Later, in a country which had been accustomed to a completely centralised system, the great degree of autonomy suddenly bestowed to universities in designing study programmes has stimulated wide-spread participation.

Of course, there is also a good number of professors with a sceptical or passive attitude, but only few expressed clear opposition. When the change in the political majority raised some doubts as to the future of the reform, the voices against any hindrance, and even against any postponement, were overwhelming.

The start of the new system, which depends completely on the decisions of universities, would not have happened without their active engagement. My personal opinion, however, is that the programmes and the curricula, as they have been defined up until now, are rather traditional. This is due to at least three quite different reasons.

Firstly, ministerial bureaucracy and a consultative board, C.U.N. (Consiglio Universitario Nazionale), elected years ago are continuously trying to force new rules upon old habits. In order to be recognised, programmes

and curricula defined by the universities have to be inserted into forms prepared by the ministry; those forms follow rather rigid schemes. Flexibility, which should have been the very substance of the reform, is not completely thwarted, but its realisation has been made very cumbersome; the attitude of minister Berlinguer, who used to say that »whatever is not forbidden, is allowed«, seems to have been forgotten.

Secondly, financial support for innovation was extremely poor at the beginning, and is now completely lacking. The new government does not seem engaged in the implementation of the reform, which it had to accept without really believing in it.

Thirdly, very seldom, within universities, have programmes and curricula been elaborated collectively. Usually, each disciplinary group, or at most each faculty, has worked on its own; the Academic Senate (the authority which is formally responsible for the decisions) has just added the different proposals, with a minimum of coordination.

Thus, interdisciplinary programmes are very rare; in fact, many among them are not only concentrated on just one a subject area, but move towards an excess of specialisation right from the beginning. Very often, local boards, far from fighting against rigidity induced by ministerial schemes, have gone even beyond it.

All this was to be expected. In a short time, and without extra money, the easy decisions have been taken. However, almost everywhere it has been said that this is only the first step, a first approximation to the goals, and that further work needs to be undertaken. As a mathematician, I can appreciate a procedure of successive approximations; but I also must recall that the convergence of an approximation procedure is not automatically guaranteed.

Let me try to indicate, as a conclusion, a few steps which would be in the right direction.

A very important opportunity is just coming. At the moment, curricula have been defined only for laurea, the bachelor programme which started this year. Now, curricula for laurea specialistica, the master programme (300 credits), have to be prepared. The rules favour flexibility, as laurea (180 credits) is required to accede to the programme, but each programme has to be composed by the full amount of 300 credits. Thus, the idea should not be to add 120 credits to one specified laurea; in most cases 180 credits, or maybe 150, may have been acquired in more than one laurea programme, and the curricu-

lum for laurea specialistica has to be devised individually, for each student, building on what he has done before. If this idea is going to be taken seriously, it could counterbalance the rigid mono-disciplinary nature of many laurea.

A sustained effort is required to define the basic knowledge to be considered as propaedeutic to the first year courses. Free access to university has been confirmed by the new rules; however, it has been stressed that good results may be obtained only if the students start from a reasonably homogeneous basis.

Accurate monitoring work, an examination of results of the first year is necessary in order to check that the number of credits attributed to the various courses is correct. There is a suspicion that in some cases the workload is too heavy. Sometimes, programmes which are meant to be completed in 3 years still maintain all the course-work of the previous 4-year programmes, which usually required 6 years to be completed (there has merely been a small reduction in the contents of each course: the image of a bonsai has been evoked!).

Finally, one should draw all the implications of the worldwide trend towards life-long learning, an idea which up until now universities accepted, but one which remained on paper. This means that not everything needs to be taught during the programmes leading to the various degrees, as further study, in different moments of one's professional life, must be envisaged; it also means that the teaching duties of professors have to go beyond the traditional lecturing in degree-conferring programmes.

Prof. Josipović

Thank you. Any questions please?

Question from the audience:

One of the main motivations was to shorten the studies, or not to have six or seven years. What in the new system makes you hope that you will not make laurea in six instead of three and laurea specialistica in ten instead of five? Why do you think that this system guarantees that students will finish on time.

Prof. Luzzatto:

At the moment, nothing gives us a guarantee. In fact, if a university acts with a bonsai system, just reducing the previous course contents proportionally, we won't succeed: if four years were not enough to complete a curricu-

lum, three years will not be enough to complete three-quarters of it. But the difference, I think, is made by the fact that we don't have any rigidity any more; that is, we can hope that we shall make changes when we are going to see that we have made a programme where the course work is not compatible with the time that the students have at their disposal. ECTS says that the work a student has to do, including his homework and so on, has to be evaluated. In our decree it is written that a credit corresponds to 25 hours of work by a student. 60 credits in a year mean 1,500 hours. I am in a programme, »Tuning«, of the European Commission; there we saw that similar rules hold for the ECTS system in all Europe, and that everywhere the evaluation of 60 credits goes from 1,400 up to 1,600 hours. This is reasonable, because, for example, work agreements for workers are usually made on the basis of 1,600 hours a year.

If a course is organised, as it usually is, so that for each credit you have something like 8–10 hours in class, you would have something like 15–17 hours homework. This is OK, because usually one says that an hour in class requires one and a half up to two of personal work related to it. Well, we have to check if the programmes have been made so that this time is sufficient for a student who has a reasonable background and who works seriously. If a big number of students having these characteristics doesn't succeed, we have to understand that we have asked too much, and we have to reduce something in the course work which is written down. So, I think, flexibility gives some hopes, if we take it seriously. We have also to say that in the rules there is something which is rather revolutionary: the indication of credits attributed to the course has to be approved by the representatives of students. So, there should be some kind of balance mechanism, as professors usually want to have large course contents, students usually want to have small course contents. At the moment, this is just a hope, as we started only a few months ago.

Prof. Josipović:

We're a little bit out of time, so, only two more questions. Professor Bjeliš.

Prof. Aleksa Bjeliš:

When this Bologna system was proposed and formulated and after it was started, were there any analyses or simulations to see what would be the real percentage of students terminating their studies after three years? What do you expect to have in this first stage? What percentage will continue and what percentage will terminate?

Prof. Luzzatto:

I really don't dare to say. There have been some statements about what would be a hope, but I don't like to bet on what will happen, as the laurea specialistica at the earliest will start next year. You could ask why next year, as we started now just the first year; in fact, students who were already at university can ask to pass to the new system, having previous credits recognised, so we are going to have the first students of the three-year laurea right this year. Thus, some universities, for some sectors, start with laurea specialistica next year: then we are going to see something. As we had, till now, just slightly more than one-third of students who succeeded in getting the old laurea, I would think it reasonable to say that we want to have 90 percent or 95 percent getting the first laurea, and just one-third trying to get the second one. However, this is just a personal opinion.

Prof. Mencer:

You told us that there is a list of 42 classes, students can choose to be granted with 180 credits. How many out of these 42 classes are they obliged to follow?

Prof. Luzzatto:

I wasn't clear about this point. The word »Classes« just means that universities offer programmes classified in 42 Classes. This has nothing to do with credits, it's just a classification of the different kind of degrees.

Prof. Josipović:

The last question

Prof. Imre:

Can you say how many percent of the young generation and how many percent of the whole population are involved in higher education?

Prof. Luzzatto:

I can give you for sure the first figure. Looking at the age group of 19 years, during the two or three last years we had between 55 and 60 percent going to university. For your other question, I have to distinguish. If you asked about the elderly population which comes to university, like persons who are coming for further education and so on, then the number is extremely small: we don't have, at the moment, a big system of further education or something

in the direction of lifelong learning. If you ask what is the percentage of the whole population that has a university degree, then we are still under 10 per cent, because this is the result of not having many persons going to university 20 or 30 years ago; so I would say it is not very significant.

Prof. Josipović:

Thank you very much. Now it's my turn, but we are a little bit out of time, so I promise to be short.

Prof. Ivo Josipović:

Probably it would be better for me to speak after distinguished experts like our rector professor Mencer or professor Bjeliš, because I'm going to speak about the project of new legislation. It would, probably, be more logical to speak about this project after the presentation on the present situation, but I'll try to express some of the main concerns of this part of the project. I shall not read all this prepared paper. You can find it in Croatian and in English on the mentioned website.

Keeping in mind that I was a member of different work groups for this piece of legislation, one can assume that I'm going to champion this new piece of legislation. Quite the contrary. I'm going to be very critical about it and I'm one of the opponents of the last version of the new legislation. That means that my work in this work group was not very successful. I did my best, but without much success.

The rational reform of a certain system proceeds from the analysis of the prevalent conditions as well as a projection of the future, desired conditions. The reform of the system of university education and science in the Republic of Croatia, which according to an announcement of the Ministry of Science and Technology is entering its final phase, can be dubbed irrational. Its basis is not a detailed analysis of the prevalent conditions in the science and higher education sector and the projection of the future, desired condition, but myths and voluntary impressions of prevalent conditions acquired by observation through lenses and criteria of a dominantly single segment of science and education, maths and physics, as well as the interest lenses of the major Croatian institute, or at least certain scientists who seem to advocate these interests. This is why the seemingly incredible and paradoxical appraisal on how we proceed from the prevalent conditions as the unknown into something even less known becomes more convincing as certain starting points of the reform

are demystified. One of the acclaimed documents on the possible development of the University, which is at least worthy of careful consideration on the part of the legislator – Breakthrough 2001^{*}, the development strategy of Zagreb University – was politically labelled and excluded from the further preparation of the Act. Not only does the new legislation proceed from the almost mythical precepts with regard to the prevalent flaws of the science and higher education sector, it does not explain, lacking a well-based analysis, why even in the present system certain segments of science and higher education produce very good, sometimes even excellent results.

The system of higher education and science in Croatia consists of 86 public institutions (4 universities, 7 polytechnics, 7 autonomous colleges) and 8 private higher schools open to the public, and also 28 public research institutes. Such a complex system needs to be approached with great care during the reform, so as not to destroy the present positive aspect of higher education in Croatia.

If one compared the above mentioned network of institutions of higher education (universities, polytechnics, faculties, academies of art, colleges, and university and college departments) to legal definitions of such types of institutions under Article 2 of the Act on Institutions of Higher Education in effect, as well as definitions of types of studies (university and polytechnic), it becomes clear that there is a considerable inconsistency in distinguishing college and university institutions in practice, and a tendency to bring them closer and unify them. The reason for this could be found in the inconsistency of persons who create the policy of higher education, the Ministry in particular, as well as in the dependency on various political influences when it comes to decisions on what kind and where the institutions of higher education should be established. However, the hypothesis which has been readily launched from the ranks of the so-called scientific-educational bureaucracy, that the negative aspects of the prevalent situation were caused by the flaws of the institutions and teachers of higher education and scientists, might be easily contested by a counter-hypothesis which says that the current problems have been generated by the inefficient and incompetent scientific-educational bureaucracy headed by the Ministry combined with a considerable deficit in the budget of science and higher education (which is an almost widely accepted claim).

^{*} <http://www.unizg.hr/iskorak/2001.html>

The goals of the reform of higher education have been explicitly stated on the website of the Ministry of Science and Technology in the text under the title »Basic Principles of the Draft to the Bill on Institutions of Higher Education«, which was drafted when the legal project was still being prepared on 'two tracks' (science and higher education). These goals can also be found in a special PowerPoint presentation on the MZT website. The partial insight into the starting points and goals could have been provided in public appearances and interviews of some high-ranking officials and scientists who have been dealing with politics. Generally speaking, the reform goals are summarised in a request for three principal goals of higher education:

1. preparation for the labour market;
2. preparation for active participation in community activities (citizens) and
3. preparation for life-long personal development and progress.

In a simplified form the MZT proposed them in its presentation of the reform.

But, the Ministry wants to reach these goals using, not through rational arguments and decisions, but by using several myths, – statements without clear proofs, and I'll stress the most important.

Firstly, the myth about the Bologna Declaration and its omnipotence. The Magna Charta Universitatum Bologna from 1988, on the occasion of the 900th anniversary of the University of Bologna, and which was also signed by the University of Zagreb, points out the important elements of a modern university and its autonomy. The document defines the university as an autonomous institution in the heart of society; it produces, reexamines, assesses and promotes culture by means of research and teaching. In order to satisfy the needs of the surrounding world; research and teaching at the university have to be morally and intellectually independent of any political authority and economic power. Lectures and research at the university have to be interdependent so that the curriculum does not lag behind the needs, which shift according to social demands and progress of science. Unrestrained research and curriculum are the primary principles of university life, and governments and universities have to, as much as possible, adhere to this fundamental requirement.

The Bologna Declaration of 1999 lays down the goal of the so-called Bologna process of coordination of the European higher education systems as follows:

Firstly, the acceptance of a system of easily recognised and comparable degrees, and the introduction of a diploma supplement in order to promote the employment of European citizens and international competitiveness of the European system of higher education.

Secondly, the acceptance of a system based on the two principal cycles, the undergraduate/graduate and postgraduate (doctor's degree) cycle. The approach to the second cycle involves the successfully completed first cycle of studies, which have to last for at least three years. The degree achieved after the first cycle is considered to be enough for qualifications on the European labour market. The second cycle is supposed to result in a master's degree, which is the case in most European countries.

Thirdly, the introduction of the European Credit Transfer System (ECTS) as an appropriate means of promotion in respect to student exchange.

Fourthly, the promotion of mobility by overcoming barriers of free movement. For students it offers an opportunity to learn, it provides access to courses and relevant offices. For teachers, researchers and administrative staff it is a recognition and evaluation of time spent in Europe while carrying out research, lecturing and studying, without the prejudication of statutory rights.

Fifthly, the promotion of European cooperation regarding the quality provision in order to develop the comparable criteria and methodology.

And, finally, the promotion of the required European dimension in high education, especially in the development of curricula, inter-institutional cooperation, schemes of mobility and integrated syllabi of studies, courses and research.

Croatia entered the so-called Bologna process at the Prague conference on 19 May 2001. The signatory countries should fulfil their commitments under the Bologna Declaration within a period of 10 years, which means by the beginning of 2010. None of the countries has completely, even dominantly, finished the adjustment of their system of higher education to the Declaration.

As it was set forth, it is clear that the Bologna declaration, as a very general, primarily political document, does not lay down numerous details which have been treated in discussions conducted in Croatia as a commitment to the Bologna process (the myth of Bologna). Almost each opposition to certain solutions under the Act is justified by saying that the solution is in accordance with the Declaration, and the opponents suggest contrary solutions. As it can be noticed, it does not provide information on »the question of all questions«

regarding the reform in Croatia (as some like to say), the organisation scheme of higher education institutions, especially the existence or non-existence of the legal entity of the faculty. Furthermore, the content of the Declaration is often misinterpreted by insisting on the 3+2 model of studying. Remarks, which refer to a quite inconvenient three-year duration of some studies in the first stage, have been often opposed by the myth of the Declaration which demands precisely this point. However, text of the Declaration, as regards the first stage which should last for at least 3 years, is very clear and wants to prevent the shorter duration of studies. Of course, longer studies do not oppose the Declaration.

The Declaration does not give any information on the organisation scheme and the legal position of components (faculties, in particular) within the university. So, it could be interpreted as manipulation using the Declaration when one gives prominence to the fact that the annulment of legal entity of faculty is *sine qua non* of the Bologna process. This is why in a subsequent reform the Declaration should be used not as a myth, which would justify any solution considered appropriate by the author of the Act, but as a rational (framework) basis of the reform with numerous supporting documents and analyses.

The myth of organisation refers to the theory that the central problem of the Croatian universities is the autonomy of faculties and their legal entity. This autonomy generates financial and organisational irrationality, thus preventing interdisciplinary approach. Moreover, it is supposedly opposed to the autonomy of university because it restricts the passing and application of a development policy and the implementation of educational processes. Even the assessment of some international experts supports this theory.] Apart from incorrect observations on extensive implementation of certain organisation models in the world, such a myth results from the confusion with concepts which refer to the terms »university« and »legal entity«. Even a glimpse into the organisation of high education in certain countries indicates that, contrary to our perception, university has to include various (even all) scientific areas. There are specialised universities in the world which resemble Croatian faculties in terms of facilities and size (especially the major ones, such as the Faculties of Medicine, Law, Economy or Philosophy); that there is a considerable number of autonomous institutions of higher education at the level of university, in Europe, the USA and Canada alike; that the concept of legal entity has not been clearly defined, so our comprehension very often matches in content

the authority of the faculties at the so-called complete universities in other countries.

It is exactly for this reason as well as respect for the autonomy of university that the author of the Act should give up a rigid solution which is not inherent in any judicial system. In legal terms, according to this solution there are only universities excluding the possibility of what we call the legal entity of faculty and their existence outside the university. The best solution would be to let the universities distribute functions and authorities, as well as their internal organisation by means of statutes. In this context, one should accept the fact that different universities will define their organisation in different ways depending on their needs, size, tradition and other factors.

The myth of inactivity or the myth of a lazy professor is an essentially unsupported claim that Croatian scientists and teachers are not worth much, that they do not publish articles, that they have no international reputation, and that the institutions of higher education provide their students with poor education, which has a negative effect on the recognition of Croatian diplomas in the world. The obvious lagging behind of some segments of science, especially the ones related to high technology, should be analysed and examined to see to what extent it is the result of subjective and organisational flaws, and how much it is conditioned by the scarce financing of science and overall (primarily economic) slow Croatian society in general. Contrary to the mentioned myth, it can be pointed out that Croatian diplomas are recognised in the world. Croatian diplomas serve as a basis for usual enrolment in postgraduate studies in the world, and the process of diploma validation (in both directions) is related to employment, and not the issue of (in)valid diplomas. Diplomas do not have to be validated in case of employment, not by measuring up to the »Bologna requirements«, but by joining the EU. The fact that Croatian students and graduate professionals assume various posts (undergraduate and postgraduate) all over the world does not support the theory that Croatian educational institutions are not good. In the worst case, they are probably not any better or worse than in countries at a similar level of overall development.

The theory of widespread inactivity, parasitic relations, incompetence and the inability of scientists, universities and their staff to compete on the international labour market, which is inherent in the Act, as well as the theory that a university is »weak« in science with regard to institutes, can be disputed by means of a detailed analyses. When comparing the Croatian situation to the Western democratic systems, these analyses would also introduce the factor of

social differences, especially economic ones. The criteria for international competence contained in the selection criteria in the Croatian regulations would hardly (due to their rigidity and focus on the criteria for natural sciences) meet the needs of even the most reputed international institutions in the area of the humanities. Anyway, the analysis dealing with the share of the University of Zagreb in the so-called internationally recognised science, which was conducted by the academician Paar, clearly shows that Zagreb University, which has been criticised severely by the scientific bureaucracy, accounts for over 50 percent of Croatian science, while all the other universities and institutes in Croatia (including the Ruđer Bošković Institute!) have barely more than 40 percent. Similarly, the share of Croatia in the world share of scientific production moves beyond the expected one regarding its size and economic status.

Generally ill-founded, legal reform of high education has significant legal gaps.

Institutions of science and higher education are organised according to the Act in a system characterised by a thicket of various blurred and intertwined relations, competence and commitments. The bodies which are supposed to »provide services, coordinate or control the two complementary systems« are numerous. A considerable introduction of etatism and instrumentalism of the National Council for Higher Education and the National Board for Science, which have been treated more like a professional service of the Minister than an independent body competent for strategic issues of science and higher education. The same remark can be used for the scientific departments and central boards (see Article 150, Paragraph 4).

The procedures stipulated for a decision-making process are complicated and feign democracy and social control, see, for example, provisions on project decisions.

Legal solutions of a questionable constitutional status are (at least): the cancelling of the legal entity of faculty and inability to found autonomous faculties; the omission to define the conditions for election to scientific posts in detail under the Act and leaving the subject to a sub-legal deed and the student veto; the consent of the Minister to establish special studies under Article 43; the consent of the Minister to establish a scientific park (Article 99, Paragraph 2); the provision against the career advancement of scientists and teachers who were elected to the same post three times (Article 125, Paragraphs 4 and 5); the obligatory earmarking of gross income under Articles 142 and 143; the

provision on the property rights of the Republic of Croatia of funds and equipment which has been financed by 30 percent from the budget (Article 145, Paragraph 6); the transfer of equipment from one institution to the other following the decision of the Minister (Article 145, Paragraph 9); the provisions on the treatment of faculty assets (transitional and concluding provisions).

From numerous nomotechnical and logical shortcomings, we can point out several of them as examples: the vague distribution of authority in the university-faculty relation, which appears as a thread throughout the text of the Act; the possibility to have (public) universities organised by cities and districts. The issue of rational expenditure of funds planned for higher education is raised; the report on the exam has to contain results and the course of examination (!) (Article 38); the method to elect the Senate does not function efficiently and, instead of the democratic element in the academic community, it enables the bureaucratic oligarchy; the provision of Article 56 on relieving the rectors of their duty due to the violation of legal or subordinate provisions (traffic offence, for example?); apart from the deputy rector, assistant rectors have been planned (Article 57); Article 61, Paragraph 2 – the right to use somebody else's infrastructure; the participation of »other employees« in the professional council according to Article 63, Paragraph 1 (chairlady, for example); according to Article 108, Paragraph 1 it has been implied that lectures would be (independently?) delivered by persons who are not appointed to scientific-research posts. Such a situation is absolutely unacceptable; the supervisor of the assistant is appointed by the university, not the faculty (Article 126, Paragraph 3); Article 130 states that the contractual relation between a teacher and other staff members will be regulated by the statute, which is completely wrong. Contractual relations are regulated by an agreement, and the statute can provide for acceptability, limitations and conditions of the agreement; Article 145 deals with the appointment, as well as the election of members to the National Council for Science; the provision of Article 156, Paragraph 5 is also somewhat strange because it states that ministers can put forward the names of candidates for the National Council; deadlines in the transitional and concluding provisions are not realistic (too short); the provision of Article 177, Paragraph 2 is also absurd because it states that applications can be invited according to an act which is no longer in effect!; the provision of Article 189 makes no sense by demanding that permissions should be extended in a situation when (if the Act will be accepted as such) 90 percent of the institutions of higher education will be closed soon afterwards.

Concluding recommendations and suggestions concerning proposed draft legislation can be summarised as follows. The present project of the Act is completely futile. Not only will it not achieve the desired reform goals, but it will result in considerable destruction and chaos; a new project should be initiated which would be based on detailed analyses of prevalent conditions and a projection of the future desired situation; the starting point should definitely be the experience of developed countries, which match the Croatian situation, as well as the Bologna Declaration, which should be applied gradually and in detail. University autonomy has to be the important component of each legal project. It also has to include the right to various strategies of organisation, taking into account the possibility that the components have a limited legal entity. The whole text of the Act should be simplified and many relations relieved of standards leaving them to the autonomous decisions of university. The network of bodies dealing with science and higher education should be simplified, with less subjects and pinpointed authority of each body. Each legal project, especially those implying drastic or even revolutionary changes, should be tested in adequate simulations. This particularly refers to the case when society would support the reform through economic, cultural and other resources.

Thank you very much.

Coffee Break

24.05.2002, 5:00pm**Prof. Josipović**

Professor Mencer, please take the floor.

Prof. Helena Jasna Mencer:

Thank you, Mr Chairman. Ladies and gentlemen. The overall title of this conference, of this meeting, suggests that I should talk about my own opinions and experiences concerning this topic. We worked on strategic planning for years at the rector's office, for the past eight years when I was a vice rector at the University of Zagreb. We published our vision and our concepts outlined from many of our discussions and knowledge we have gathered over these years. I dare say that the University of Zagreb is aware of the fact that the universities in Croatia and world-wide are facing changes. The changes of stake holders, the changes of society and the changes of universities themselves. In turn, what does this mean? I think that it means that the university has to adapt to society and to the stake holder's needs and that the university has to be changed as well. I'm not going to talk about the analysis we made in the past. I'm not going to talk about our former vision and concepts. I'm going to talk about our new vision. I think that the conceptual elements I'm going to talk about could be a good basis for our colleagues from the Faculty of Law, for our legal experts to write the regulation for our higher education act. As a Croatian rector, I would like to highlight an issue that I believe is useful for the international audience to understand. There is a kind of tension between our executive government, which has proposed the new draft to the higher education act, and the university, but I could say that that's the case everywhere in the world. One of the main disagreements is, as we heard a few minutes ago, the legal entity of the faculty granted in the past. Some of the faculties cannot easily accept criticism, suggestions and proposals for change, posed at today's structure made by some authorities. But I would now like to quote a part of a document called the Magna Charta Observatory for university rights:

»Universities cannot exist in the most essential meaning of the Magna Charta Universitatum where each unit can, at its discretion, opt either to be part of it or to establish itself as a fully separate legal entity pursuing its own aims in its own way. The Observatory is fully aware of the great variety in the internal articulation of universities and the diverse patterns concerning the distribution of responsibilities and tasks between the university's central au-

thority and its constituent parts. However, only those universities which have the possibility of defining their mission and priorities and of making strategic decisions and contractual obligations and allocating resources from the point of view of the whole new institution can be considered autonomous. Only universities capable of acting as a single entity and speaking unanimously are able to function efficiently in the knowledgeable society and successfully in the challenging new field of higher education ».

In my opinion, university autonomy and university integrity should be the focal points of concern when writing new laws, new regulations. Universities should act within the framework of internationally accepted and respected ethical norms and quality standards. Academic freedom, which everybody talks about when talking about institutional autonomy is really something else and can be achieved only by respecting institutional autonomy. Institutional autonomy means university autonomy.

I have prepared a slide in which I would like to show you how I see autonomy.

- Autonomous University

University autonomy can be defined as a necessary and required level of independence from external influences (from the state), and it refers to the rights, competence and accountability of the University to make independent decisions on:

- internal organisation and government budgeting and other financing issues (budget proposing and establishment within limited governmental funds, on financial allocation of funds and on realisation of additional earnings – incomes within general provisions and regulations)
- appointment policy
- curricula and their performance
- enrolment policy
- university – international relations and co-operation
- university strategy and development

University academic bodies should be the main decision-making bodies for the mentioned elements of university autonomy.

In addition, I would like to draw your attention to the integrated university.

I'm opposed to the division of the University, as the physical size of the University, the number of its members or its students do not determine its efficiency and rationalisation. Rather, it is crucial that the organisation of a University is appropriate for its size. In this day and age, when different profes-

sions and artistic and scientific disciplines increasingly and fruitfully overlap and converge, a strong, structurally and financially united university will successfully realise its goals and aims, synergically create additional values, improve the quality of attending generations and, thus,

- function as the driving force of society.

Slide of the integrated university

The Integrated University has unanimous and co-ordinated views at a strategic, working level and for developing decisions on:

- academic issues
- funding policy
- investment policy
- development issues
- policy towards stake-holders.

These two conceptual elements of the university lead to an integrated University with inside autonomy and the following is achieved:

- an increase in internal mobility of students and teachers
- rational use of human resources
- development of new inter/multi-disciplinary studies
- an increase in quality, competitiveness, recognition.

Consequently, an autonomous, rational, efficient and responsible realisation of our University's mission can only be secured if the University is seen as a united (not divided, not separated), integral system. In such a united system there are no neglected and privileged elements. In keeping with our realistic needs and possibilities, we should jointly determine and balance the attention directed toward the development of any university activity, toward all professions, artistic fields, and different fields and branches of science. I am convinced that our University is ready for such a division of authorities, rights and obligations. I believe that the University and faculty bodies will have the competence to accept the increased level of university autonomy responsibly and tolerantly, and that they will function appropriately and successfully with the help of the newly-established working bodies.

In my opinion, no legislative solution of the legal entity issue should affect the establishment and functioning of an integrated and autonomous university. Our academic community deserves this better and fairer organisation.

»All this has important consequences on decision-making, planning or consensus-building within the university when the »European obligation« re-

quires clear lines of responsibility, transparency of operations, fast reactions to social demands. Thus, the organisational flexibility needed to give the institution the specific profile it has decided to develop for itself.« (quotation from Andris Barblan)

Prof. Aleksa Bjeliš:

My first duty is to give a short presentation of basic facts related to the University of Zagreb. Then I shall try to address some of the dilemmas we have now regarding the future role and the structure of our university, dilemmas which are very probably similar to those of other universities from this part of Europe.

The first part will perhaps give insight into where we are. We are really still just at the point of clarifying some basic questions and in this situation I have a not so easy task of trying to be more practical, perhaps even more pragmatic, in the sense of trying to propose, to give a model, to give some information about the model of the future organisation of our university which is currently being discussed at different university levels and also at other relevant places in Croatia. The plan is just to describe shortly the present situation, to say a few words about how these concepts, which were mentioned before by our rector, can be implemented, can be defined more precisely in the real situation and then to present what could be steps, tools and so on, especially in the situation in which, as professor Josipović informed you, we are now in; the situation of new proposals for legislature from the state authorities.

In the present organisation of the university we have the following situation. We have 33 faculties as legal entities. This is however not the best term. I have just learned from my colleague, professor Krapac, that it is better to use the term juridical personality. So we have 33 faculties as juridical personalities, which are loosely associated into a university which have the same juridical level, the same legal definition.

In this situation, the university in the last ten years at least, and even more, was most often synonymous for the rector's office. So the people who go to this building, they usually say they are going to the university, and usually this was not a joke. Unfortunately, the process of this fragmentation, which started 40–50 years ago, has not been completed, particularly regarding a few faculties which are the last to really have the structure of a faculty in the usual, standard, sense. There are sometimes strong tendencies within these faculties to make further divisions in order to get state position at the university level, be-

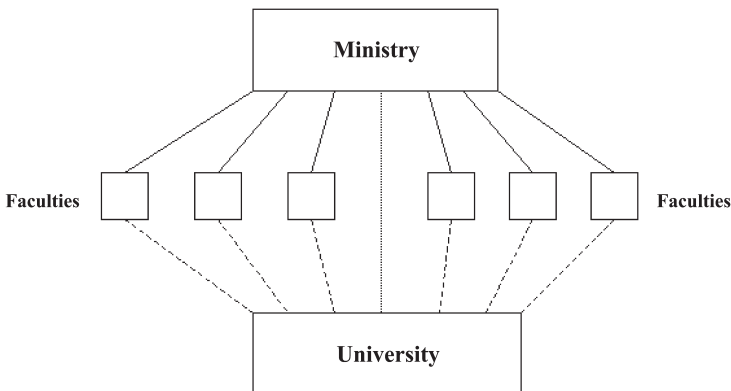
cause they are somehow in a handicapped position. This is the legislative aspect.

The territorial aspect, which is also similar to others in this part of Europe, is that faculty studies are spread all around the town; perhaps within a radius of 5–7 kilometres, you can find facilities belonging to different faculties. Furthermore, three of them are in towns close to Zagreb, which is not a bad aspect.

Finances and investments and decisions, and all these executive steps are all at the level of faculties and the key persons in these circumstances are deans. These deans and the faculties are strongly related to the budget plans and the management of the Ministry of Science and Technology, so they shouldn't be thinking in terms of cutting any kind of connections and relations with this Ministry. This is the last of the decisions to try to make a strong opposition to the Ministry as long as you are dean, because you are responsible for the faculty, for the staff, for the students, for the financing, and so on. In this segment, the university has no role, it is just not present, and this is even more evident when the freedom of faculties increases in general with additional income, which is, for some faculties, substantial. The main sources of this additional income are student scholarships, external projects and expertise, and so on.

Just a few words about the employment policy. Concerning employment, the number of posts is strictly defined by the Ministry of Science for each faculty, and, in addition to this, in the last five or more years there is a regulation

Transparency 1



which has frozen these numbers due to the economic situation here. The policy of employment, which means choice of staff, appointments, and so on, together with the quality assessment in these steps, is provided jointly by the university and the Ministry through special committees, while the final decisions are taken by faculty councils.

For the enrolment policy faculties propose quotas through the university senate, but the final decision lies in the hands of the Ministry, and in practice quotas are usually frozen for years. There are very small changes from year to year and, in addition, there is another category of students, so-called students who study for personal needs. Faculties have great freedom in regulating the number of these enrolments, and the Ministry does not interfere too much in this segment. Naturally the faculties have rather strong motivation to increase numbers in this category of students, because the participation of students in scholarship means the income goes directly to faculty.

Post-graduate studies, as one of the most painful points in our system, are also organised by the faculty, or even at more local levels. They are sometimes, to a lesser extent, financed by the Ministry. These studies are often organised more or less on a free-will basis or as free initiative by the staff, who wish to have these studies, because they are essential for the scientific and research activities of the university. Professor Josipović told you what the scientific output of universities is, so one could not have these results without having quite a strong post-graduate system of studies.

To summarise, once you look at this schema you see one single ministry, and strong links between this ministry and all 33 faculties, and you see weak lines between faculties and university. These former strong lines should be respected, because they are of vital importance for each faculty and for each dean in his daily work. Of course there is also a tiny line in the direction Ministry-University, with the exclusive purpose of covering the expenses of the rector's office.

Clearly there is general discontent with this situation and this is not new. I think that for the last ten years at least we have been struggling with the same type of questions and trying to find solutions and concepts for how to change this state of affairs. So what are the possible directions for structural changes?

Before going into this direction I would just like to mention some of the data which are, in my view, the product of such a situation. We have a staff of 4,200 and we have an administrative personnel of about 2,400, so this proportion gives you some idea of the efficiency of the university as a whole; one ad-

ministrative employee for every two lecturers. This is one weak point. Another weak point is that we have about 13,000 students enrolled each year, and simultaneously about 5,000 students receiving diplomas. This means that about 38 percent of the students succeed in finishing studies more or less successfully, i. e. the dropout rate is almost 60 percent. In our experience among in this 60 percent there is a large dropout after the first year.

Looking at the positive elements, I shall repeat what professor Josipović has already said, namely that the University produces about 50% of the total scientific output of the Republic of Croatia. Another positive element is that, for decades, this university was the generator of economic and national development of the country and the nation in all sectors – not only in scientific, but also in engineering, in medical care, in law, in economy, in art, and so on, so the University is really a kind of generating point of our society, and it has been for a long time under different regimes, for 100–150 years.

What are the outcomes of efforts in the last ten years? On the long list of attempts, the last was within the last two years and carried out by a group which was formed at the initiative of the previous rector, professor Jeren. This group included more than 100 members, some of them were more active, some of them less, but the result is a document which was approved by the senate a few months ago as the official document defining the strategic roles, the strategic programme for our university. It was named Breakthrough 2001. It would take too long to go into great detail into all parts of this text. I shall touch upon only some points.

Professor Mencer stressed that one should have a well-defined distribution of commitments within the university. Since we are a research-oriented university, the natural conclusion would be that we should compose the structures of the university recognising various areas, various sectors of the university and distribute competence with respect to these sectors. In this sense, we distinguish between three levels, or three groups of commitments. The first one is allocated to the entirely integrated university and this was, more or less, mentioned by professor Mencer – global strategic decisions, relations with external structures, accreditation of programmes, big investments, and so on.

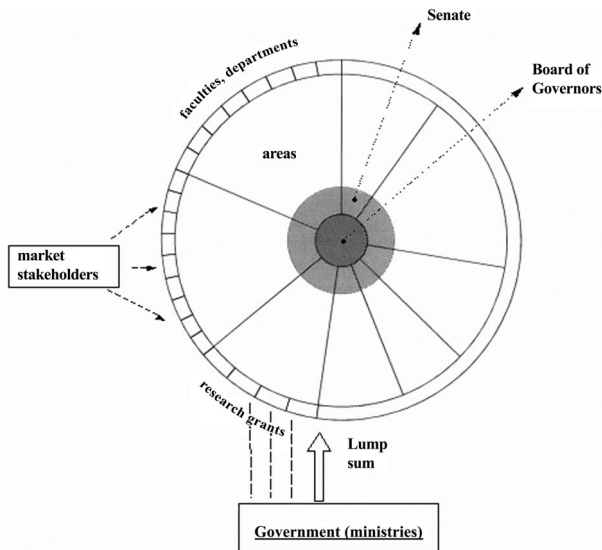
Then we have another level, the level of clusters of faculties or departments within the same area. We take this as has been done in a clear cut way by the former rector, present here today, professor Šunjić, and his team. Provisionally, one can recognise seven sectors or areas – art, natural science, medical science, human sciences, and so on. At this level the natural commitments

could be strategic plans for the given sector, criteria for staff appointments, co-ordination in the study programmes, the foundation of institutes, hospital centres, workshops, and so on, thus all kinds of decisions connected with research and other activities of the university.

Finally, the third level is the level covered by faculties and departments. Examples of these commitments are quality insurance, scientific projects and themes, decisions on staff acquisition and appointments, and many other things.

The usual examples of universities is such that you have a strong university, which has strong relations with its external counterparts, and you also have the strong parts at the basic level – faculties, departments – which give a strong internal structure to the university, and you have an intermediate space of smooth consultative activities, which gives the co-ordination between these elements. Under standard circumstances, this smooth intermediate level corresponds to the faculties, which are usually composed of departments. In our specific case, the faculties are already basic parts of the university, due to the long history of fragmentation. At the moment, I wouldn't dare to tell anybody: your segment, your part of the university shouldn't be called a faculty but a

Transparency 2



department. I wouldn't like to initiate this type of dispute. I think there is no reason to go in this direction. The point is simply how to make this division of commitments in a clever way and to work in the best possible way. All in all, the scheme which could be applied to gather all these elements is here, in fact, this circle has already been created by professor Šunjić, we just added a few elements. So all this is university. All around are departments and faculties, which give strength to the circle. You have co-ordination in this area. The co-ordination is divided into sectors, and, in addition, in order to have proper management, the integrated university should have its bodies. One of these is expected to be the board of governors, which existed until two years ago when it was eliminated by the amendments to the law. We should also have a stronger academic body, a senate, and, finally, the third body is, as usual, the rector. This all concerns governance, and relations with the environment. We expect to have relations with the government as whole indeed, not only with one ministry, but also with a number of them, because the sphere of activity of the university is very broad and it is normal to have relations with other ministries – with the Ministries of Health, of Culture, of Economy, for the Environment, and especially with the Ministry of Finance, because, as somebody has already said, even if one ministry makes a decision concerning finance, the Ministry of Finances still often has something else to say, and may decide something entirely different. Until now we have had no entrance to the Ministry of Finance, but the Ministry of Science and the administration there can always say that they had problems with the Ministry of Finances and that this is the reason why some things are not working.

All state budgeting of the university is to be realised through a lump sum, which then has to be allocated all around the university. We also expect to have a much better and much more intensive connection with the market, with the stock holders, in all possible ways, and, of course, we expect to have direct allocation of money oriented towards research through research grants as is customary in the scientific field.

This was the model that was proposed in the Breakthrough 2001* document. Another possible translation is Step Forward, or perhaps better Step Out. Among the steps towards this aim the first step is the hottest point today, namely the legislation. In this sense I would just like to emphasise that our

* <http://www.unizg.hr/iskorak/2001.html>

university is the largest in Croatia, because it covers practically all disciplines to the full extent within our standards, whilst other universities are much smaller and much younger and are still supported mostly by human resources and research resources from the University of Zagreb. They are 30–40 years old. Fortunately, this dependence is gradually decreasing. These universities are more and more our competitors, and this is a good sign. This is essential, I think, for the future progress of the university system in Croatia, because with competition, everyone will work better. In addition, we now have the initiative to open some new universities, two of which are scheduled to be discussed in parliament. Therefore, in this case we expect, and professor Josipović stated something along these lines, that state law will have to give a sufficiently broad framework in which each particular institution, university, has the freedom and possibility to organise itself in an optimal way. Details on the internal structure of each university, relations between its various parts, the problem of juridical personalities and degrees, the system of governing, the roles of rectors, the election of rectors – all these things should be elaborated in detail in the institution's statutes. This is not so in the actual law proposed recently by the Ministry of Science.

I would also just like to mention a few points regarding the university statute, which would need to give clear-cut solutions for a functional integration of the university. It needs to establish, in particular, the defining role of the university and its openness to co-operation with external subjects, and this is indispensable for setting up the Bologna scheme, which is, as professor Josipović explained, one of the elements of the new legislation. The second is that we imagine our university as a corporate system, not a centralised system, in managing and decision-making, with well-defined competence of university bodies and bodies at lower levels, especially when finances, budget planning, investments are concerned. These are usually the questions we discuss when we try to simulate or see how something will work if we go in a particular direction. So we are aware that we should bear this in mind when writing a statute. Furthermore, the statute should include proposals for a stimulating system of criteria in the election and appointment of staff and study programmes. Up until now, this system was quite fixed, there was no freedom. We were not able to replace one activity with another. Some outdated activities have persisted for a long time just because there was no means of changing attitudes, which is very important and necessary for a modern university. By integrating the university we expect to get this type of freedom.

And finally, we should consider problems related to studies. I mentioned some numbers. It is clear that students should take an active part in the setting of stimulating and equitable enrolment policies. I think that the enrolment policy in Croatia today is definitely unjust, because there are two randomly picked categories of students and if you are in one category, you have to pay until the end of your studies, whilst in the other category you can study for 8–10 years with all the privileges of student life without any consequences. This is, definitely, unjust and the students should participate in resolving this question and also in resolving the question as to what would be the most efficient process of studying. We should change the way we examine students, the way in which students and professors communicate, and so on. And I think it is very important that we do this together, working with students, with their commitment, instead of having them siding against us.

This is what I planned to say. Thank you.

Prof. Josipović:

I suggest that we first hear professor Furić and then ask questions. Do you agree? Thank you. Professor Furić was a member of the National Council for Higher Education and former member of the board of the University of Zagreb. Obviously, he is a person with great experience.

Prof. Miroslav Furić:

I wish to thank the organisers for inviting me. I realise that many things have already been said, so I shall try to restrict myself to just those things, which you may not have heard. We have seen a beautiful projection here of what we could achieve, but I shall concentrate on the impending dangers of the proposed law on Science and Higher Education, and I shall suggest that the new law not be voted in. This is what I will concentrate on.

Transparency 1

- Science / Higher Education in Croatia
- Present Overview
- Historical background and basic fundamental facts
- Essential weaknesses of the proposed law
- Summary of the current situation

Transparency 2

- Historical background and basic fundamental facts

- Student population ca 60.000
- University professors ca 1.000
- Researchers ca 8.000
- Science funding ca 0.47% GNP
- Quality issue:
 - USA-Croatia science co-operation (book)
 - 10 years (300 joint projects, 700 Croatian participants)
 - Croatian scientists published in top world journals:
 - Nature, Cell, Phys.Rev.Lett.,..
- University versus Institute R. Bošković

Let me start with the background, which is characteristic of countries like Croatia and Slovenia. I apologise if my colleague from Slovenia disagrees with things that I mention. Here are some numbers [Transparency 2 is on display], which should introduce you to our reality, to our dimensions. One thing that I would like to mention is that maybe the sources of all displayed statistical data are not identical and some people argue that maybe there are only 2,000 real researchers, but I have picked this official number of 8000 researchers, because I will later discuss the unusual geometry in which institute workers could outvote university professors in some important decisions, according to the new law.

I would also like to go to the percentage of GNP spent on research and explain that this is not the optimal spending that we have in our history. At the time when Croatia had a hungry population, the Manhattan type of project was started, and at that time larger sums of money went into buildings, they went into equipment, and this might have been the golden era of research. Even now if you go to some of the institutes you might find pieces of equipment which were purchased at that time. In the mid-seventies party economists recognised that a very small return of the money came from pure research, so money was cut dramatically. And since then this sort of a number exists [0.47% of GNP for Science] and is coupled with a small national product per person, this is really a symbolic amount of money.

Professor Josipović has mentioned the quality issues and some people argue that our science is not in very good shape. For this reason, I am an experimentalist and like to have hard facts to hand; I am showing you the book written by professor Paar analysing ten years of U.S.-Croatian scientific co-operation. The co-operation has produced about 300 scientific projects and

700 Croatian scientists have participated in them. What is the secret? Why should Americans share their dollars with Croats? It's like this. I have a small budget of 10,000 dollars. My American colleague has a budget of 500,000 dollars or a million dollars and we all work in the same field. Maybe he is richer and he has a little more expertise, but our expertise is at a similar level. So the two of us join the same experiment. We provide half of the manpower, they provide half of the manpower, so he effectively doubles the manpower at practically no costs; maybe he helps us to travel, or maybe he takes care of our accommodations at the institute. This is the way that we have operated for quite some time and this has enabled us, not all of us but some Croatian scientists, to publish in top journals. There is a peculiarity which is very important for the understanding of our local situation. I will demonstrate this again with facts. This is a famous book [Prof. Furić is showing the book *Croatian University for the 21st Century: Vision of the Development of the University of Zagreb*, by M. Šunjić and H. J. Mencer (Eds), *Sveučilišni Vjesnik*, Vol. 44, 1–192, (January 1998) (in Croatian)] in fact, was produced by Professor Šunjić and Rector Mencer and which has, not only bright colours, but it also contains beautiful maps on how we should develop. It contains useful tables and it contains a vision. The vice-rector mentioned that some of ideas that he has presented are also from the period of professor Šunjić. This illustrates that the government has chosen to completely ignore existing expertise and existing expectations and visions.

There is the dichotomy in our scientific life. This is a booklet on the Rudjer Bošković Institute produced for the 50th anniversary of the institute. If you open it, you see beautiful equipment; young people doing research. Truly, there is the important component of the scientific work performed at this institute. The relationship between the Institute and University is not resolved to everyone's satisfaction; it is a source of some very unnatural solutions in this new law.

This is how I see some of the main problems in the proposed law. I think that professor Josipović has already mentioned that over-regulation kills autonomy. I would like to be very blunt and explain to you a point, which, to me, seems to symbolise how very inflexible an approach the Ministry has had. You have, on the one hand, the University of Zagreb. It has 50,000 students. On the other hand, there is the University of Osijek which doesn't have enough manpower to run itself, it borrows professors from the University of Zagreb. Yet, our minister chooses the same number of senate members for both of them. This brings enormous turbulence within Zagreb University, be-

cause there is a tradition now that each dean has a position in the university senate. On the other hand, maybe, the present membership of the Osijek senate will be doubled. This just shows how incredible this approach is.

It is very rare for someone to mention unethical aspects. I will bring to your attention just one point very much related to this dichotomy of the Ruđer Bošković-University relationship. With this article on university departments, they are, in fact, trying to introduce members of the institute, who are much larger in number but lack the teaching experience, into a body which would then decide on every strategic decision, so, in fact, this means that the institute will control the university, and this is contrary to international solutions. You know that normally every national institute is now searching for a mission, but those national institutes are mostly run by university professors and I have never heard of national institutes running universities. I think that, here, certain persons, on the team which has composed the law, have misused their powers and they have committed unethical acts.

Transparency 3

- Essential weaknesses of the proposed law
- Over-regulation threatens University Autonomy
- Unethical aspects
- Methodology of law construction: poor
- Transitional regulation endangers University
- Introduction of the police language

I also think that the methodology of bringing the law is very wrong. First of all, the base of professionals who composed the law was too narrow. As I mentioned, there was the presence of uncontrolled particular interests, there was also a lack of admitting that there is a fine-quality analysis of the situation. They did not start with an analysis which they would have accepted and then continued to improve from there. I think they have spent too short a time on consulting and trying to reach a consensus. I understand that even among the official members of the team of the Ministry no consensus has been created to produce the present legislation.

I would also like to illustrate how they are trying to accelerate this procedure, because only a month after it appeared on the web, (we didn't get it through the mail), we had a chance to see it on the Internet, and a month after that, without wide public discussion, it was already discussed within the Par-

liamentary Subcommittee on Science and Education, and I think that the lack of true public debate by true professionals is very bad. I would also like to stress that there are transitional elements in legislation which really endanger the university. You should know one thing: this university is one-third of a millennium old and we are now, in my conviction, really afraid that if this regulation is passed, there will be no more University of Zagreb, at least nothing similar to what exists now. Why do I say that? There is a transitional period in which the government takes all our property. It doesn't say what it will do; it doesn't say what the vision is with which it will be rebuilt. So my fear is as follows. You see this beautiful building in the centre of Zagreb (Rectorate)? Why not sell it to the bank? Because they are obsessed with a lack of money. I see severe dangers in two directions. One I have just explained, and the other one is provocation of serious collisions with the University here. The Ministry is very skilful in small political games (i.e. it gains some support from smaller universities through investments), and we in Zagreb are not yet coherent. I do see that the University is in danger, especially because from now on until the law comes into effect, they leave us only a few months, so the University will be completely surprised. The University is not prepared for radical change in such a short time.

Let me say a word about something that excited me emotionally. This is the introduction of the police language. Everybody knows that the rector, the dean, the chairman, the chief of the lab, they have to know what's happening in the life of the university and there should be, as is the case in every university, a sort of internal control, but the Ministry has constructed inspections. A person who is far below university professor will come and inspect us to see how we are performing. I don't think that in your countries something like this is possible. You can have your chairman, you can have your dean, you can have your rector calling and asking about your possible misconduct. He can also ask you about your performance, but it will never be an inspector from the ministry. In addition to this, I would like to stress another change which reflects the atmosphere. The atmosphere will not be as academic as it is now. This is the example of the Board of Governors. Normally one has such a board, which secures that the University fulfils its mission foreseen by the Founder. The last Board of Governors performed such a mission without interference into personnel policies. Its practice was the approval of the Senate's decision. The only thing it really tried to secure was more financial autonomy. Such a board was removed due to a political mistake by the present adminis-

tration, so I believe. On the other hand, the ministry has now introduced a Supervising board. These words: inspecting professors, supervising the University, reflect the plans of the changing atmosphere within our University.

Transparency 4

- Summary of the current situation
- New legislation shows no superiority over the old one [National Councils example]
- Hard numbers measuring sectors well being: poor Ministry forcefully advances with new Law despite demonstrated weaknesses
- University forces work on alternatives

I see the current University situation differently from that portrayed by the Ministry, and I will also again take some books. I don't see that the new legislation would be superior to the old one and here are some examples. Professor Reiner sat with me on the National Science Council when we produced the only official strategic document on Science in Croatia; it is the National Scientific Programme. The new administration didn't produce anything like that although the law obligated it to do so. Here is another report. This one is by the National Council for Higher Education. The National Council for Higher Education passed through all the faculties and for some of them they issued public statements, for some of them things were prepared. Nothing of this is mentioned in the text, which covers the new legislation. However, they have significantly reduced the things these Councils can do. They also decided that the National Council for Higher Education would not have a majority of professionals in its composition. So you see that everywhere professionalism suffers against authority.

I would like to state things, which I have heard in the parliament debate. We are facing the future with a 30 percent lower budget for scientific projects. Our faculties are receiving less money just for daily operation. Journals for Croatia are late in order by one year, so this is, for me, a very poor performance on the part of this administration. However, they »compensate« this with this law that has demonstrated significant weaknesses. They have organised several discussions; at no faculty have they found support for the new legislation, and I see this new law as a cover-up for past failures. Fortunately, you have seen rectors, vice-rectors and others working hard on alternatives.

Transparency 5

- Conclusion
- Revolutionary versus Evolutionary
- Need for a consensus
- University, Institutes and the Ministry must accept responsibility for synergy
- Hope that third-of-millennium-long tradition will not be interrupted

Let me draw a brief conclusion. I completely agree with professor Josipović. And you should understand that he was a member of the Ministry's team, but he was overruled. I favour evolution over revolution. We need to have a consensus. This consensus has to be built first within the universities. Then universities, institutes and the Ministry have to accept responsibility for synergy. The present situation is such that the minister's appearance is extremely autocratic. He refuses to listen to the University of Zagreb. There is no synergy, because he is not ready for co-operation. When I remember the dangers facing the university, I can only express the hope that the third-of-a-millennium-long tradition of this University will not be interrupted.

Prof. Josipović:

Professor Furić, please do take a seat here. Thank you. The Croatian team is ready for questions. I know that we have run out of time, but we still have time for your questions. Or should we conclude that everything is clear or completely unclear?

Prof. Zechlin:

I don't want to ask questions now, because I think that what you presented to us was so complex that questions would be too concrete, but I want to say that I am very impressed by your presentation. For me, it is a very impressive process of strategic planning focused on organisational structure and concrete goals and objectives. I know a lot of German and Austrian universities, but very seldom have I seen such a complete and systematic approach as the one you have shown us. This is the first thing I wanted to say. The second is related to what Professor Furić explained to us. If Mr Haller and I compare this with the present situation in Austria, there are many similarities. In Austria, too, the Ministry put forward a lot of proposals the universities didn't like at all, and it held a lot of negotiations with the universities purely aimed at receiving legitimization, but not at integrating our proposals. But, nevertheless, we didn't give up and there was even a strike at the Austrian universities which happens

very seldom, because, according to the OECD indicators, Austria is a country with the least number of strikes world-wide. And now the Ministry has changed its position in the last minute. A whole year they had talks and discussions and nothing changed, but in the last two weeks they changed the proposal to the legislation brought by the government into parliament. They changed it at the very last moment, and I want to encourage you not to give up. I really wish you all the best.

Prof. Luzzatto:

I was also very interested. Autonomy has to be autonomy of an institution as a whole, not as a federation of independent subjects; this is the only way you can be strong against others, because otherwise each part, each element of the federation thinks for himself. I am worried about how you can reach this goal if you say that the law at the national level shouldn't go into the internal organisation. We had an experience, in Italy, ten years ago, when the law just said that each university had to create for itself a statute. The main point was, which is the structure, inside the university of today, in charge of defining the statute of the university of tomorrow? Of course, there is a danger that the statutes are related to what the situation is now, and not to what we want to create. In our situation, the new statute had to be decided by a board where all kinds of categories of persons living in universities were present, that is professors and associate professors and researchers and technical staff and students; the result has been that the whole discussion about statutes, instead of debating what the university should do, came to just one point, »what kind of proportion the different categories are going to have in the boards and in the decision-making process of the university?« So, an essential point is just who is going to give the rules; if the board which gives the rules is composed, for example, by the deans of the 33 faculties, it's clear what kind of statute is going to come out. Not an autonomous institution, but a federation.

Prof. Josipović:

Thank you. Any comments?

Prof. Bjeliš:

What we said is, to begin with, under the impression gained when regarding the reading of this proposal of the law. It contains a large amount of very strict and very detailed norms regarding the internal structure and bodies, and the governance of the university, which would certainly lead to a very large

number of questions on the implementation at our university, because it is written with smaller and more flexible and simpler universities in mind. In our case, we are sure that the implementation of these norms would lead to, what a few of our colleagues have mentioned, to a dangerous situation of disorganisation at the university. We agree, and we are just in the midst of these discussions, that the law, that the legislature should define general elements, should define what the general parts of the university are, should put in guarantees in the situation of some kind of arguing, of some kind of dispute, which will defend parts that could be in danger. So the legislature should give some proposal regarding the safety of the faculties and the departments and the members of the university with respect to university governance. This we agree upon, but all these details, all these specifications regarding the internal structure and composition of the university, how to define the relations between, how to distribute the competence, and in consequence of competence, the degree of independence of the different parts of the university, this should, quite certainly, differ from one university to another. As I mentioned, we are now faced with the inauguration of small new universities in smaller towns. They are smaller than our average faculty, so it is very dangerous if somebody pretends to line up many proposals, expecting them to be applied to all these very different structures. This is why we think we should have enough liberty, enough freedom to define and to resolve some questions which are specific for this University. And we don't see these solutions in the present proposal.

Prof. Haller:

At the end of his speech professor Furić expressed hope. I should like to join him and I am convinced of the following: Personal quality and personal dedication will be stronger than the present flaws of laws or organisation. We just have to survive.

Prof. Josipović:

Are there any other questions or comments?

Prof. Imre:

My congratulations on your presentation, and I think these weaknesses are generally common in these countries and not only in Croatia. How do you explain, in contrast to these weaknesses, the high efficiency of the co-operation with the United States? It is very impressive. Is there other co-operation with

Europe or EU countries and what is the percentage of this co-operation in respect to the co-operation with the United States?

Prof. Furić:

The way these things have happened is the following: The U.S.A.-Croatian co-operation has ceased to exist. It existed over a certain period during which it worked very well. We had parallel co-operation with Germany; a similar structure was present there. We had co-operation with France, and I think some of my colleagues co-operated with Italy, so we had quite a broad spectrum of co-operation. Why was this co-operation so successful? It's very easy to answer. You'd submit a proposal, it would go to the environment where professionals who don't know you judge it, and they would just judge by merit. It is very different than things are over here.

Comment from the audience:

Thirty years ago physicists from Hungary went to Zagreb to conduct measurements on our equipment. Now it is just not possible.

Prof. Šunjić

In continuation to this, there is one thing you should remember about the University of Zagreb and the academic community in Croatia in general. All these positive achievements are, in the first place, the result of the quality of individuals and not of the structure and organisation. In fact, most of this was done in spite of the weaknesses of the institutions and not because of their quality, and that includes the success of our students. These talented and strongly motivated students in the top layer usually succeed even against the system. Of course, in the system there are also some good segments, but it's mostly up to their own initiative that they find a good mentor, a good professor, and so on. This is the general characteristic of the University of Zagreb – excellent individuals – and this is why I always considered it to be our priority to preserve these individuals, these »pockets of excellence« and to multiply them. When I was in the Ministry of Science we started financing young scientists through the system of scholarships, but the supervisors were allocated to these young people on the basis of their merit; in other words, bad scientists were given zero young scientists and good ones could have two or three. In that way, you achieve positive reproduction, because in the previous regime you had the opposite effect: when you allocate funds administratively, then bad scientists usually get more influence and more funds.

Another comment. Of course we all want to have a strong University of Zagreb, all of us here, but not everybody in Croatia and in former Yugoslavia, especially among Party politicians. The attempts to destroy the University of Zagreb have a long history. One such disaster was when the University of Zagreb was, in the seventies, transformed into a loose confederation of »members«. These members included, for example, the student housing system and the institutes and the faculties and the library – they were all »members«, but the University didn't exist. And that was done in the seventies, so this »tradition« is not a very long tradition. In that way the politicians simply destroyed this synergy of the university and eliminated the danger of professionals endangering the absolute rule of the party. Unfortunately, this attitude is still present, and as before, the smaller universities are again used for this purpose, in a »voting block« three against one. The minister seems to be trying to make a deal with three smaller universities in order to neutralise some initiatives of the University of Zagreb, dispensing funds generously, I wouldn't say exactly bribing them, but gathering support for his new legislation. The main problem is that there is too much politics in all this, the university is still not strong enough to oppose it, because it is, among other things, completely micro-managed by the Ministry. So this is why I'm also slightly pessimistic.

Prof. Josipović

Thank you very much. I think our time is up. I would like to thank all of you, and, of course, our translators, and see you at nine o'clock tomorrow morning. Thank you.

Saturday, 25.05.2002 (9am-1pm)

Round Tables

**Science and higher education legal regulations in
Central European Countries and the European integration
and
Science and higher education reforms in
Central European Countries against inertia and resistance**

Prof. Pavičić:

I would just like to wait for our rector to arrive.

Now, we can start. The title of the first section of the round table is: »Science and Higher Education; Legal Regulations in Central European Countries and the European Integration.« The idea of this round table is that we first have an overview from our guests about what has been done concerning the points required by or suggested in the Bologna Declaration. Also to discuss our path to European integration. I would first ask professor Luzzatto to present the main points from the Prague and Bologna declarations. Just to remind us of some important points for our way of carrying out the reform.

Prof. Luzzatto:

Thank you. I won't say anything particularly new, because, as you said, the Bologna Declaration is well known, but maybe just to start the meeting this morning we can go through the six points of that statement. As a preliminary remark, I would say that the most important thing is that the Declaration has a kind of implementation procedure: 29 countries decided not only to state something, but also to control the following steps, with an objective, having results in 2010. The ambitious idea was to be able to bring the European system, not to integration or equality of organisation (this has been said yesterday in many ways, diversity is a value), but to have, first of all, comparability and convergence, in order to bring the European system to become competitive on an international basis.

This was the first point of Bologna, and it's extremely important: everybody knows that e-learning, and everything that has to do with technology in teaching, needs a world market. There is now the fear that lots of software, and other educational technological offers, coming from the United States are more competitive, if European countries act each one for itself, just because U.S. are favoured by the fact that the market is much bigger. So the idea is that if the European system of higher education really becomes a system, this could be very important in order to make it competitive for the new technologies in education, and also to attract students from the old world. We know, for example, that from eastern Asia many good young persons are interested in coming to study in Western countries, and there is surely competition among the United States on one side and European countries on the other. This is one of the objectives, that in 2010 Europe as a whole is something existing on the international market of education. It has been established to have every two years a sort of check-up of how far we went on the way which has been indicated. The meeting was held in Prague last year, and there is another rendez-vous in Berlin in Autumn 2003. This idea of international competitiveness was one of the indications in the first point of the Bologna Declaration, together with the idea of comparability of the degrees given in the whole of Europe, and with transparency, in order that everyone knows what is behind any degree. The attempt is to be concrete, in order to avoid that things just stay on paper (as it happens sometimes with international statements): a concrete result, for example, is the diploma supplement, an instrument which gives this kind of transparency to the degrees. After a long period of debates, the text of this document has been finally approved at the European level; some countries made it already compulsory, establishing national rules which ask all universities to deliver these diploma supplements together with any degree.

The second point is probably the one which has been more examined, that is, the one about the two cycles. The indication is to have two cycles, the first cycle being of at least three years. Probably many know that the Bologna meeting almost failed to come to a conclusion, because somebody didn't want this indication of three years; as in all international meetings, if we want to come to an agreement there have to be compromises, so that, at the end, the first version, which was »three years«, was altered to »at least three years«.

Anyway the important point, and this is one of the things which are now being checked in different countries, is that in the system the first degree is a

necessary step in order to reach the second one. This is not obvious, because in some countries the tradition was to have a short cycle of higher education studies and a long cycle, not necessarily connected. For example, the first cycle was taking place in higher education institutions, different from universities, like colleges or polytechnics or similar institutions. The idea of having the first degree as a necessary step to go further is a new idea; in Prague, in the first check-up meeting, it was remarked that this idea brought an interesting result for the institutions different from universities. Usually, they used to have just the first degree, because they were not research institutions: during the last years, in a certain amount of cases also some professionally oriented institutions started having a second degree after the bachelor. However, a serious problem has to be mentioned concerning the serial structure of the two degrees: according to the rules of the European Commission, you still have situations in which for some kind of curricula (medicine and other cases) there are rules which consider the long cycle without any intermediate step. This is a contradiction, and one has to face it: there is no coherence of this Bologna indication with rules which the European Commission itself gave for the education leading to degrees for some regulated professions.

A further indication concerns the credits system, with a reference to ECTS as a way of characterising the curricula and of having mobility. Mobility is encouraged not only for the students, but also for teachers. The objective is to have as many teachers as possible, in the countries of the European Union, having not only periods of leave (or something like that) to stay for some time in other countries, but also another possibility: if a person has a position in one country and is interested in going to another country to get a position, this should not cancel the rights connected with the previously held position. This is explicitly written down.

There is the problem of having quality assessment in the different countries; this theme has also been discussed later by the rector conferences on a European level. Someone had interpreted this as an idea of a European assessment system, which would not have been accepted, but it's not written down in this way. It just says that each country should have its own system, and this should be transparent: the assessment system of each country should be organised in a way that everybody else can understand exactly what this quality assessment system is, and how it works. In some fields, more internationalisation is wanted: engineers started for themselves having a kind of European as-

assessment system for engineering teaching, but this is not the only way to do it. In any case, one has to be clear about what kind of quality assessment system is operating.

Finally, there is a tendency to have in the curricula something which has to do with the European dimension of education, that is, contents of some course or activity which have to do with European cultural tradition, European integration, from a cultural or a historical or even a legal point of view. These are the six points; two years later, in Prague, there has been a check-up to see what has been done about these points. One of the points which attracted more attention is the one about the cycles, that is, what has changed in the different countries from the point of view of how the curricula and the degrees are organised. However, as I think we all know, this is not the only point which needs to be taken into consideration.

In Prague there has been just a communique, and not a new declaration; this shows that the different countries thought that Bologna is sufficient as an indication of a eleven-year plan to work on, and that the following rendezvous are just places where you should look at what has happened, not give new objectives or new statements. So the Prague communique is mainly a check-up of the situations, but, for example, it says something more about participation in what is called the Bologna process. That is the importance of involving not only the universities as institutions, but also different organisations, for example, university teachers' organisations and students; delegates of the Union of European Students were present in Prague. In the Prague communique there are indications of the importance of having student representatives involved in the system; after all, they are those for whom the education of tomorrow is going to be organised and prepared.

This could be sufficient, just to bring these things to the attention of the table.

Prof. Pavičić:

Now I would ask professor Galetta to tell us something about the legal aspect of the reforms that have already been enacted, and those that remain to be passed, in particular in Italy, but perhaps also wider afield.

Prof. Galetta:

If you agree, I would like to talk more about the needs for European integration and the consequences European integration has had on our system and on every system, because the implementation of the reform in Italy was ex-

plained yesterday. I wouldn't say anything more on this point. We just have to wait and see what happens, but, in principle, the great changes are the credit system and the new 3+2-cycle system: but there is nothing more to say about it. Professor Luzzatto agrees. I don't think it's useful to talk about that again.

I would prefer to say something about European integration and what is meant by European integration in practice and why we are talking about this now, referring obviously to the system of education. The fundamental principle of European integration is that of enumerated competence, which means that normally, if we read the treaty, the European community shouldn't care about the education system. You don't see it explicitly mentioned in the treaty, but the problem is that the competence of the European community can always be enlarged when it is needed to achieve one of the freedoms guaranteed by the treaty. And, in this case, there are two freedoms which were questioned: the free movement of people and the free movement of services. Obviously, these two freedoms need a homogeneous system of high-school education, because the free movement of people and of services is not possible if you cannot have the recognition of degrees and of qualifications in other member countries of the community. So, this was the reason why we came to this problem and I would like to take a step back and give an example by referring to the Italian system. We already have the Erasmus programme for ten years, which is a student movement programme within Europe, which means that our students have the possibility to spend a semester in another member country and to have the recognition of these studies in other European countries in their national curricula. But there were always huge problems, because once they got back to Italy, they asked the university for recognition and the university wanted all the kinds of papers possible in order for them to prove that what they had learned abroad really corresponded exactly to what they should have been studying in Italy. Most students concluded that it was not useful to go abroad for a semester, because it was just a waste of time. Sometimes they didn't get the recognition at all and sometimes they had huge problems getting the papers needed to get this recognition.

This was the departure point, in my opinion, because we already started to talk about this credit system ten years ago. Which means that the period of study spent abroad has to be automatically recognised in some way. I don't need to have the same thing in Italy, but somehow it must be recognised, otherwise the student will not move, or will not be interested in moving to other European countries.

So, to have a more homogeneous system, the European community has come up with the idea of using regulations or directives. Directives are a far more flexible means. It means you know what you have to achieve, but you are free to choose the means by which you will achieve these goals, and in the education system it is all done through directives. So, I don't see the risk of losing the originality of every high school and educational system in the different countries, because it's not sought for by the European community. It never asked for something like that to be done. It just asks that the member states give a minimum of homogeneity, so that it is possible to recognise the degrees of qualification. Personally, I'm an administrative lawyer and I know that the problem was very great among lawyers in Italy, because at a certain point in time, it was possible for people from Belgium to come to Italy and to pretend to act as lawyers, although they had only a three-year curriculum and it didn't correspond, at all, to the five-year curriculum in Italy, because it is a four-year curriculum, but then there is always a second step in order to get a post as a lawyer, and so we had a huge discussion and the problem came to the court of justice. So the problem is really a practical one, in my opinion, and to solve this problem, we need a European dimension of education as professor Luzzatto has already said.

I won't say anymore if you don't have any questions on this point. I don't pretend to be holding a conference about the European system. It's not the issue here.

Prof. Pavičić:

Any questions?

Prof. Imre:

I have only a short remark. What is the language of the education in the Erasmus programme. What would be determined as the language of co-operation in teaching? Only English? Or would it be possible to have a compromise from country to country?

Prof. Galetta:

The problem of language has not yet been decided by the European community and I don't think they should take a decision on this. At the University of Milan we now have the Socrates programme. We have a lot of agreements with the main universities in Europe and we just arranged it somehow. Normally, students who come to Italy have to have a basic knowledge of the

Italian language, because they come to Italy in order to improve their knowledge of the language. That was the central point of these programmes. The main idea, the point of departure, was to improve the knowledge of languages among young people within the community, so I don't expect a German student who comes to Italy to speak German all the time. It makes no sense. They should have a basic knowledge of the language and then improve it in the country. But in order to facilitate this improvement, we have supplied language courses at our universities. So, apart from the specific law courses, or whatever, they also had language courses specifically aimed at improving their knowledge of the language. I know that in some other places students go to a foreign country and they don't speak a word of the language and they don't learn a word, but I don't think that helps much. It is not in keeping with the sense of the whole thing.

Prof. Pavičić:

Thank you.

Prof. Imre:

At least two languages would be needed for the transfer of students. One would be English and then perhaps the language of the host country. We need this two-language education, perhaps in secondary schools.

Prof. Bjeliš:

I have a question about this 3+2-year system. If we applied it at law school, I think we have to consider two problems. Firstly, the Bologna Declaration asks that the first three years have to enable students to join the working market, that means to find a job. In the Croatian situation, I cannot imagine what kind of profession this could be, because you cannot have enough knowledge to be a lawyer, you already mentioned this. And the second ideological question in this system is how to distinguish this first part of education from education at polytechnics, because we have the same administrative law school, but it's not university education, it's education at a polytechnics school. So how can we divide these two things? And the second question is – How can we improve or make it possible for students who finish this first step to find a job? Especially in a society, like in eastern or central European countries, where you have some many unemployed people.

Prof. Luzzatto:

Italy is probably the country which, until now, has chosen in the most complete way the 2-level system; except for the case of medicine and the other ones where we have European rules, the choice has been just to eliminate any kind of separate diploma. For example, administrative law is a three-year degree at university.

In our system, it has not been written down that any bachelor degree has necessarily to find a master programme where the 180 credits are completely recognised, whereas any second cycle curriculum, any master programme, must have a bachelor programme which is entirely recognised. For a master you have to achieve 120 more credits and you already have 180, but there is no opposite rule: there can easily be first degree bachelor programmes which are only partly recognised by some second degree programme. These are, of course, the degrees which are more similar to what you called a moment ago a polytechnic AI kind of degree, directly connected to the labour market.

Of course, there are many ways in which the differences between these degrees and the ones more apt to accede to a master programme can be realized. For example, in the first cycle you can have what engineers call a Y-structure: Y is just the letter Y, a common trunk (the first two years) followed by two branches. The students who are interested in going on, on one side, and the students who are already thinking of stopping after the first degree, on the other. Courses in the third year are totally or partially differentiated: either more theoretical courses, in order to have fundamentals to go on with studies in the following years, or more applications and stages, in order to be ready to join the labour market.

In many technical fields this can work quite well, as has been shown by experiments already done in the last years. I would say that this could work not only in engineering but, for example, also in physics: in the third year, either more theory, or more specialisation towards some definite application which can be immediately used. Of course, everything has to be done in a rather flexible way, and a very important pedagogical point has to be stressed. In our tradition we are accustomed to teach always going from general to particular, that is, always being deductive in some way, whereas you can also have a kind of teaching which is inductive. It starts, at the beginning, from more concrete and less profound explanations, and then – for those who are interested – it goes more deeply into the subject, coming back to it with more theory. Of course, no law can impose this kind of thing; but I must say that in various ar-

as there is good work being done in that direction. This should avoid that persons who are interested in an intermediate level of university studies are just cut out from the beginning, like it happens in many countries; in Italy, we had till now two-thirds of dropouts.

Of course, the problems have to be examined separately for each profession. You say that the first degree is not sufficient for those who are going to become lawyers; however, for lots of places to be taken in banks, offices or industries, who want to have persons just giving administrative help inside a public or private structure, this bachelor programme could quite well be adequate.

Prof. Mencer:

I think that the question professor Josipović posed is a very important question, at least in Croatia. It launched a lot of discussions and within these discussions we encountered a lot of problems. First of all, we, actually our Ministry and National Council for Higher Education, asked some people to prepare an analysis of the differences in vocational and, let's say, university studies, and we did this. And the result is that in most European countries these two types of studies are clearly divided, so university studies are more theoretical; I'm now talking about the situation today – more theoretical university studies with the usual degrees, which differ in different countries. Then, the other direction is vocational studies, strongly directed towards the labour market, with an emphasis on teaching skills, and so on. If we look at the numbers, we have analysed more than 30 European countries. Only in 3 European countries are these 2 directions of studies unified. In all the other European countries, they are clearly divided. In our case, in Croatia, according to the law from 1993, these 2 directions are divided as well. The Bologna process came into consideration, and it was not clear how to distinguish between these 2 profiles. Now, as you have explained, I would dare to say that they are very confusing. I think that it will cause a mess, but I think we can recognise this mess as flexibility. It will be up to the discipline, and, moreover, it will be up to the student because every student can opt for the 3-year programme at the university, and then maybe he can fail and then what? At least then, after 3 years, he can find a job. But I think that this student will be in a worse position than a student who immediately started studying at a vocational school with a vocational education. So the student graduating from university should have some additional skills because he's not skilled for the job. But, as you said, I think more students should be directed towards vocational study by public opinion.

This situation should be improved and very well profiled because vocational study graduates could be the ones to carry the country's economy. They would go through integrated study programmes during the first years of their studies but would be highly profiled later on.

Prof. Franz, Dean of Faculty of Mechanical Engineering and Naval Architecture:

Mladen Franz. I'm from the Faculty for Mechanical Engineering. Professor Mencer has already said something I also wanted to say. But there is a question. Have you any data on how many students continue after the 3 years? For another two, If any. Because if I were the owner of a factory in the field of mechanical engineering, I would never employ somebody after 3 years of general education at the faculty. I would always prefer somebody from the polytechnic »Fachhochschule«, as we say, to use the German term. So I think that the 3+2 system is totally unacceptable for the technical field here in Croatia. And, as we have said, at university, I think that for all faculties in the technical field the minimum should be 4+2, if possible. Thank you.

Prof. Šunjić, former rector of the Zagreb University:

I agree. I only have something to add. We already had this experiment, and we know the results: they were disastrous, we are still recovering from it. This experiment was started in the seventies, for ideological reasons, for political reasons, and that reminds me very much of what is now happening in Europe, under the code words Bologna, or Prague, and so on. These ideas usually do not come from the university framework, within which we live and work, but from outside, and we simply have to fit in somehow.

So in the seventies somebody »high above« had the idea that a 4-year university education could be split into 2+2 years, the first 2 years were really to be vocational, and therefore give practical knowledge and a final degree. And then if you continued to study for another 2 years, you had a university education and degree. And, as professor Franz said, almost nobody was useful for anything after such 2-year. Whether you break 5 into 3+2, or you break 4 into 2+2 it's the same thing. After 2 or 3 years the student is completely useless, and helpless, but you have also spoiled the long cycle because you cannot organise studies so that in the first 2 or 3 years you throw out some theoretical or preparatory contents to make room for some »cookbook« subjects so that he may look employable, because then after 3 years, or 2 years, in the second part

of the long cycle you have to start again with these basic subjects, but you have already spoiled the structure of the curriculum.

We are still recovering from this distortion of the curricula, for example, in engineering which suffered most because they had to produce engineers after 2 years and some subjects were forced into the second year which were not enough for practical knowledge, but were enough to suppress the basis for the third and fourth year. So we went through these experiments and we saw that 4 years is not 2+2, so 5 years is not 3+2. These have to be separate curricula.

Of course, life is even more complex because it also varies from one field to another. You see that in England, for instance, they had two separate tracks – university and vocational, but soon discovered that some of the polytechnics were becoming more theoretical, more, let's say, basic, more scientific. This is a natural process, and you cannot stop it, you can only regulate it. So some fields are changing continuously, and we have to be prepared to allow for life and experience to suggest solutions, and not over-regulate it.

There is still very much that one could do in the curricular reform without revolutionary changes. For example, we could unify curricula and make them mutually compatible for all technical, engineering programmes in the first 2 (or 3) years and thus increase flexibility – and mobility. After all, this is perfectly feasible in a credit point system, but this would not imply that after 2 (or 3) years we stop and give them a piece of paper called a diploma or whatever. Instead of falsely pretending that this makes them employable, we should all agree that this »certificate« simply enables them to continue studying in the third, fourth year course in some other engineering or any other topic.

So, my main point is we went through this experiment and it didn't work.

Prof. Furić:

I would like to point out that this idea of the Y model, which is asymmetric, maybe there is a chance for that in Croatia because if you have listened to professor Luzzatto carefully, he stated that it is a year and a half which could be general and then you have division; those who will try to do something for real life quickly and the rest who go on more seriously. I do not think that this is completely excluded. However, I like the idea of having options to think about. We have a tradition of form. Maybe it is not an option, but four years it is a tradition, and I imagine that a system of 4+1 could satisfy both your request for at least 3 and a total of 5 and I have a feeling that this is at the border of quality, but, in this way, we could formally squeeze in, with large efforts,

something of quality without causing upsets, as mentioned by professor Šunjić.

Prof. Pavičić:

Yes, professor Luzzatto. But might I just add a question to what professor Furić already asked. So, is there, perhaps, any hope, that the European Union will unify requests from particular fields, for example, medicine or the juridical profession, expecting each candidate to have a second degree to be employed? So that we simply have a list valid for all countries, that for particular fields only 4 years, or only 5 years are useful for anything, so that we don't even perhaps issue a diploma after the first degree for these fields?

Prof. Luzzatto:

I wanted to say something about the first questions, but let's start from the last ones. As far as I know, the European Commission does not plan, at the moment, any kind of new uniform regulation for particular fields. On the contrary, as I have said, many persons have already remarked that there is some contradiction between the Bologna Declaration, which suggests more flexibility (just giving the main ideas of the structure of the system of higher education, but not going into details, and not giving rigid indications about courses to be followed), and the examples which we have in the European union: medicine and dentistry, as was said yesterday, and veterinarians and architecture. Here there are very strict rules, fixing how many hours have to be taken in any kind of subject to achieve a degree in these fields. Those are directives of approximately 10 or 12 years ago; the opinion which is mostly present is that this is the old way of doing things, and I don't think there are proposals for doing now the same thing for other fields. Rather, somebody says that those indications should be brought more coherently in line with the Bologna process.

Coming back to the main point of the Bologna Declaration, the idea is that the first degree is the one where there should be European mobility and European mutual recognition. This is the very strict indication in the Bologna process, whereas there is no rigid indication about the number, »3 years«. For example, what you said, 4+1, is exactly what has been done recently by Portugal. Portugal organised its system into 4 years, with 1 more year to get a master. This is perfectly acceptable along the lines of the Bologna process: there is no rigid indication about 3+2.

In answering engineers who posed the question about what has happened till now in Italy and what we foresee, I have to repeat, as I said yesterday, that we can't say anything about how many people will go on with their studies after the first degree, because the first degree just started this year. But I can say that the diploma, which we started doing at universities 10 years ago, 1992, wasn't successful from the point of view of numbers: whereas it was thought as something that would absorb the majority of students, not having them all trying obtain the »laurea« degree and very often not getting it, in fact we had only 10% of the students taking this course. I interpret this as related to the fact that when a person starts higher education, he doesn't like to choose a direction where he has to stop: this is the reason why only a few students chose this kind of first degree. The first degrees were active particularly for engineering and economy, and we had maximum employment; graduates didn't have to wait a moment to get positions, to get work after completing their degree. That is, it was not a success from the point of view of numbers of students taking it, it was an enormous success from the point of view of the results for those who took it, because they had immediate work, both in engineering and in economy. So, I would say that we have a proof that there were a lot of industries interested in having persons with this kind of intermediate degree. Of course, the professional organisation of engineers tried to deny their being called engineers, but this is a rather corporative attitude: they wanted to call them in any way which would clearly distinguish them from high-level engineers. A compromise was then made, as it cannot be denied that holders of the first degree have a right to be called engineer: the solution, which is not bad, is to call them junior engineers (bachelor) and senior engineers (master). I can perfectly understand the difficulty you can find about how you teach things for students having different objectives; however, this is a problem not related to occupation. From the point of view of work market, we didn't have a negative experience with the 3-year degree.

Now I'd like to discuss the problem of Europe: is »harmonisation« really going on, or not? Of course, every time you look at a glass, half of it containing water, you can say it's half full or half empty. You can look at the example of polytechnics in Great Britain, which has already been quoted; whereas, just in the opposite direction, somebody speaks of differentiating university and technical studies, there they were completely separated and now they merged, today you don't have a difference in Great Britain between universities, on one side, and polytechnics, on the other one. Of course, there is a tradition, and I

am sure that an engineer who comes out of what used to be a polytechnic school is different from one who comes out from Oxford; however, the differences lie in the curriculum and maybe in the profile, not in the institutional structure.

Let me recall that, before Prague, there have been meetings at a European level, to examine pieces of the Bologna process. I took part in a very interesting one in Helsinki; it produced a rather detailed document, 4 or 5 pages, and I think it would be interesting for you to look at it because it analyses in detail what is going on with the bachelor degree. What came out is that, first, there is a majority of countries where the bachelor programme lasts 3 years, but there is a certain number of countries which still are convinced to stay on a 4-year period. Another indication is that there is a tendency to reduce the differences among universities and technical higher education institutions. Also in Germany, where the distinction, as we know, was extremely rigid, there are tendencies to make it less rigid. In my opinion, in Europe all together there is a movement that definitely goes into the direction of having more flexibility, more interchange between »academics« and »technicians«.

Coming to another point, I wouldn't say that governments have managed the whole process just on a political basis, without any contribution by professionals: for example, the European Conference of Rectors is highly involved in the process. There was a difference in Prague, with respect to Bologna: whereas only ministers signed the Bologna Declaration, the Prague meeting, and consequently the Prague communique, were organised together by the governments and by the European Conference of Rectors. So there is an involvement. Of course, it can't be denied that the initial push into a certain direction came from political decisions, because the actors were the governments; but I wouldn't use the word »ideological«, as one cannot compare the reasons why some countries in Eastern Europe in the Seventies took certain decisions with what is now going on in Europe. Further, looking at the length of the programmes, one has to be very clear about the fact that 2 years and 3 years is quite different. 3-year programmes have a good tradition; it's not something you are bringing in by force. The 2-year programmes didn't work in France. Actually, this was one of the reasons for the Sorbonne Declaration, when 4 ministers (from Italy, Great Britain, France and Germany) signed, one year before Bologna, the first document, which was the basis for the Bologna Declaration. It came because the French minister of university was not satisfied with their system of having, after 2 years, a CGE (Certificat General

d'Education), which was not a professional degree. It was just a certification, on the basis of a rather general and theoretical curriculum, of the attitude to go on with university studies. This hadn't worked; thus, even if France had no tradition like the English bachelor, it was decided that the right thing to do was to generalise a first degree called licence, previously present only in a few cases. This is the origin why, even if nothing like »3+2« is written in the Bologna Declaration, very often one speaks about this; in fact, the countries which had met in Paris the year before had the idea of having a 3-year degree like the French licence and like what we did later in Italy.

Finally, I want to mention another point, connected to this: at what age do we start with university studies? Of course, this has an influence. If we start at 17 or 18 then it's one thing, if we start at 19, it's another.

Prof. Galetta:

I'd like to add something about this problem of flexibility. In my opinion flexibility is not a mess, it's an added value. I mean, it's a typical attitude of Mediterranean people, this flexibility. And I think that the European Community should, instead of compromising attitudes, sometimes take the best from European member states, so, in this case, I would say that flexibility is an added value. I'd like to give an example. In administrative law, European law has a huge influence on public contracts. And this is something that also has a lot to do with the university. I mean, when the university is trying to acquire the buildings, the equipment, and so on, it has to make a public contract in Italy, but the problem is that of having real transparent procedures, as the European legislator needs, in order to achieve free competition within the member states. And this is a positive side to the European legislation, not a direct effect, but a positive effect. So, I think, as professor Luzzatto said, that we always have to try to see the positive side to the whole thing. Obviously, there are also negative sides and negative effects, but I think that the main idea is a positive one, and no one is forced to do something one doesn't want to do.

Prof. Jeren, former Rector of the University of Zagreb:

Good morning. Let me share some views I have collected in the last 4 years, and in the last 2 months. First, I will start with a sentence I heard from one of the Austrian ministers. She once said at a meeting with Austrian rectors: »We never eat so hot as we have cooked«. And that's something that clarified, at least for me, many aspects of the Bologna process. It happened that I was serving as rector of Zagreb University while so many important meetings,

like the Sorbonne meeting, the Bologna meeting, and the Prague meeting took place. Maybe one additional scene. During the Sorbonne meeting, just before the signing of the Sorbonne declaration, I met the German Minister of Science and I asked him, »Is it really true that the Germans are going to change their higher education system according to the Sorbonne Declaration?« And he answered, »Well, you know, we are a small country«, and at that time his budget was 17 billion DEM. It's clear that Europe needs changes to its higher education, and what is clear to me, after these 4 years, I think, and I have realised this in the last 2 months, is that things were mostly pushed by the administration. Well, the European University Association was involved, but still rectors are highly administrative people and they tried to look at what was happening on a global level. I mentioned these 2 months. In the last 2 months I have been very involved in the preparation of a round table for the Third European Engineering Forum. That's a meeting of European engineering chambers and it's happening in Dubrovnik in September, so they asked me, as a former rector, to organise this round table, just because of the experience I have with the Bologna Declaration. And then I started to see the opinion of different engineering associations, including architecture, and all other engineering areas, concerning the Bologna process. There is an agreement that we need changes and there is an attempt to try to recognise in the Bologna process something that we already have in engineering and there is a general agreement.

On the other hand, there are clear statements in different declarations of different European engineering associations that we have to be careful and that we have to take care about each profession. What is the opinion of engineering associations on the 3+2 model? They say, well, that's good for mobility, so it means that after 3 years at the University of Vienna you want to continue at the University of Karlsruhe, that's fine, 3 years, then the next 2 years, and then you'll be a proper engineer, but they're not sure that after 3 one is appropriately educated for the engineering profession. Therefore, in many declarations they insist that, in Europe, we have to continue with 2 types of engineering education. They recognise 2 cycles of education in the Bologna process, but they are still insisting that we have to continue with this shorter type of education, like polytechnics, or even as well as with a longer education, like 5-year engineering studies, which we already have in many countries. That's something I wanted to share with you.

There are no definite solutions and definite opinions. We had a preparatory meeting for this meeting in Dubrovnik months ago and there were partici-

pants from many countries in Europe, and it seems that the Declaration of this European Engineering Forum will again include what has already been concluded by other engineering associations, that we have to go carefully, and we have to take into account the specifics of the professions. I am a professor of electrical engineering, and in discussions with many colleagues, in Germany, in Italy and in some other countries, I realised that we as professors are not sure what is better for our profession. If you look at just development in technology, and I would agree with professor Šunjić here. Just a couple of days ago I had the opportunity of being at the presentation of one of the leading directors of INTEL, and had an opportunity to see what is rolling behind computer engineering in the next 2 years. It is definitely clear that in a few years we will have to change engineering education more towards basic education, basic knowledge, because many things which were solved by engineers in the past will be solved by technology. The role of the engineers will be totally different and it will be very important to have a basic knowledge in chemistry, in physics, and other subjects. It's very questionable what will happen if we introduce this two-tier education, the 3+2 model. I agree that in Prague nobody spoke about 3+2, even earlier, nobody in Bologna spoke about 3+2 and that's tragic that we have such a rigid decision in our law in Croatia because definitely nobody in Europe is strictly speaking about 3+2. Therefore, I think that there is a huge responsibility behind the professions.

Finally I would like to add a few words about the labour market. There is no problem now to get a working permit in Germany if you are in computer engineering. But, of course, there is no way of getting a permit if you're an architect. Or the same applies if you're a medical doctor in Germany. It's very hard to get a working permit in the U.S., but if you are in computer engineering, because they are needed, there is no question about it. So it's not a question of the organisation of higher education and whether it will be happy with 3 or 4 years of education, the labour market needs what it needs and it doesn't care about the organisation, but does care about the quality. If you see discussions among real representatives of engineering chambers, they have different opinions about what universities should deliver. So I think it is very important, and I welcome this round table as well, that we have more chances to share our opinions and to clear this up. I have to say that ever since the Sorbonne meeting, every few months I have changed my mind, yes, the 3+2 model is good or the 4+1 model is good or it's not good because it's definitely something that is rolling, but we're not sure how. And, again, I will finish with the sentence: »We never eat so hot as we have cooked.« Thank you very much.

Prof. Pavičić:

Thank you. Now, if I may add a remark, that perhaps this failure of the 2+2 experiment in the past is not due to the failure of the system itself. It was due to the political environment at the time, because in the free market we would expect, especially in the light of what you [pointing at Prof. Luzzatto] have said, that 3-year courses produced many successfully employed, finished students. We could, in the free market, conclude that such polytechnics that produce such bad engineers would have collapsed in the process of acquiring new students. So, one might argue that it's not proof that the system, by itself, was bad, and we shouldn't conclude from this experience of ours that there is something wrong with the 3+2 system now because, now, if a polytechnic which issues 3-year diplomas is bad and produces bad students, it simply has to close its doors. This is the way in which we can approach the whole problem.

Prof. Mencer:

Why are those students bad? Who takes care of the students? We should know the reasons. Not just close doors. I'm not sure I've understood you.

Prof. Pavičić:

The point is that we have examples in Italy of schools that produced finished students after 3 years of schooling who were able to find jobs and positions in industry, that is, who finished up happily employed. So, if we have got polytechnics which produce useless finished students, who cannot find a position or job, simply because they are so bad that nobody wants them, then there is something wrong with these polytechnics.

Prof. Mencer:

Are you talking about Šuvar's time or are you talking about...?

Prof. Pavičić:

I'm talking about the interpretation of our former experiment. Professor Šunjić said that we already had such an experiment and it failed. It failed in another system. If it failed in today's free market system, it would only mean that those polytechnics, which produced students, or engineers, who were bad and useless, were bad.

Prof. Šunjić:

I was talking about the Faculty of Mechanical Engineering which was forced to play the role of a polytechnic in the first 2 years, and the role of a university in the next 2 years. That didn't work and it was not a failure because of the students or of the faculty, it was simply the wrong concept, and I still stand by this. So, they produced bad first-degree engineers, and they also had problems completing the long cycle. Also, experimenting with students by putting them on the job market, and then seeing whether a particular school, or university is good or bad, is very dangerous. We should analyse changes in higher education in advance and carefully, and protect the students from experiments, because they are too costly. And the second, final comment is that the job market is not and cannot be the only criterion, because, for example, now you can have first-class, world-renowned scientists or other experts who cannot find employment in Croatia. You can have excellent engineers who cannot be employed here because there is unemployment. So, it's a very tricky argument to say that, if people cannot find employment, then you simply close this school. In the first place, you see that many students go to bad schools for various reasons, even if they are paying a lot of money. They may simply be misinformed or just want to continue having student status, and often waste their time. So there are social reasons and many other reasons, but our problem is that we should analyse the system and anticipate the results because it's too costly to pay for these experiments afterwards. Education is not, at least in Europe, simply a matter of a free market. We are now dealing with a complex, social problem, where education is not only a private thing of an individual. Education, like health, is a social commodity. We are all interested in having a qualified and healthy population. You do not »buy« education, you do not »buy« health, because, otherwise, the whole of society would collapse. Society has to protect itself by protecting students and allowing them to get a decent education. Otherwise, after 15 or 20 years we may find that our main commodity has been wasted, and I guess that a qualified and capable population is one of the few commodities that we have in Croatia, that we find ourselves without qualified people. So, we have to anticipate these things, not in an experimental way – this is why I quoted this experiment – but by modelling the situation and using the experience of other countries as well. And this is why I warned our Italian friends that things are not so simple, that the 2 or 3 years of vocational education cannot be the first stage of the university type of education.

Prof. Bjeliš:

I'll try to state how I understood the main motivations of the Bologna Declaration and process and to link this with our circumstances. For me, one of the starting points was the recognition that we have massification of studies in the last few decades. The other thing is the magnitude of knowledge that is needed in many activities has increased considerably in the same period. And, of course, the individual human capacities has remained the same, and, in addition, society has become richer, so they are able to give more money to higher education. In our case, I estimate that we have about 20–30,000 young people each year entering the higher education system. At our faculty we have about 12–13,000, and about 5,000 students finishing studies, so the dropout rate is extremely high. I suppose this was the situation in Italy when it reached the critical point. So, I think we are in a critical situation in this sense and I'm afraid we don't have a clear-cut answer for the critiques that could come, and are coming from the political and other structures regarding this point. This is a situation that should be confronted because the circumstances have changed and our universities have worked in the same way for a long time. What can we do? Thinking about the Bologna process and the Bologna initiatives, we can try to see our programmes and make some kind of reduction to the programmes, some kind of limitation to the contents of the programmes in order to enable people to come out of their studies with some capabilities to be employable, but then it seems, to me, very similar to say that we should go more in the direction of vocational studies. As professor Mencer told you, these vocational studies were inaugurated by state law about 7 years ago, so this part of higher education started to be implemented. I think that it is very important to offer vocational studies and corresponding schools, to have a better quality and at a higher level because, by doing that, we will create free spaces for university studies, we will make university studies much more transparent and better defined. Among these 20–30,000 people, I would say that at least half could be oriented towards these types of studies, and these types of studies are inductive, they start from facts, practical knowledge and do not care, in a sense, for a deeper understanding and a studious type of acquisition of knowledge. As for university studies, I always thought that the Bologna Declaration in fact suggests that the first degree of studies should be, could be broad, in the sense that they could cover, could give you a good knowledge, good acquaintance with a larger field in which you will afterwards find your way towards professional orientation. This means that the

programme would have some basic course subjects that are indispensable for professional orientation that comes afterwards. I have learnt about some experiences in Germany and France where it is done in this way. In the first 3 years they give general, broad knowledge, subjects from natural sciences or other basic sciences – in medical schools, even in the »Hochschule«, and then in the 2 years after that they turn towards strong professional orientation, usually in co-operation with enterprises and other subjects outside the university who are interested in well-defined, well profiled professionals who they need for some sophisticated reasons at just that moment, or for just a period of their work. So, I am still somehow inclined to prefer a theoretical type of studying, if I am at university, not if I am in a vocational school. The theoretical type of studying in the first 3 or so years, and then, a division in the second degree, with people who are capable of meeting the demands of higher technologies, and so on. If we make this division, then I think we have enough space to create modern studies at our universities. We should do this because we cannot remain in the same situation for a longer time. This is a critical situation; we cannot endure having this at university. If there are 8,000 people each year at our university who do not finish studies, and let's say 3,000 just came by chance without any real motivation to study, still you have about 4–5,000 people who are lost in the system, and we have to do something with them. It's just a waste of money and time, and we have to use our money in a better way.

Prof. Furić:

I would like to ask a heretical question and you don't have to try to answer. Maybe, later, in a private discussion, you can help me. I, in fact, look at things slightly differently than pro-rector Bjeliš. How bad is a high dropout rate? If the system really worked, people were exposed to the educational system, they learned something, they faced realities, and they got information, but life is not just joy, they got a lecture on the hierarchy in the world, which is very real. Is their experience lost? They were off the streets, they were off dope, and there is more to the university than just diploma acquisition. So, I would like for us to really think hard about whether the dropout rate is such a significant thing that we should concentrate exclusively on that because there are wider benefits of being at university. I wouldn't say this in public, but I will admit it in a narrower circle – I am concerned about this concentration on diploma acquisition only.

Prof. Bjeliš:

Of course, I am aware of all these points raised. I agree that it is better to be in such an environment than to be in another, but the numbers are too high. I think that if 10 or 15% of the people coming to university have no or little success, and they leave university, this is tolerable. But, our numbers are simply too high. The first year is the critical one. I would also tend to link this to the lower education part of our system. I'm pretty sure that we should be thinking in terms of a more evolved transition from secondary schools to universities. The additional 13th year, which we do not have at the moment and which is now being mentioned in the context of future changes to elementary and secondary education, could be of great importance. Very probably it will come into the system sooner or later. The question is how it will be spent. I think it should be spent, not at the basic level, but at this critical transition level, at which people would be much more prepared to come to university. And now we are losing the first year of studies, the great part of the first year just to substitute this preparatory process.

Perhaps for some kind of preparatory and elementary type of job the system should be changed without losing all the characteristics of university life that you mentioned. I agree with this. Of course, this is a type of cultural education of people, which is much wider than just profession. This is why we are here, not just as professors. But the numbers and the system now have some critical problems, I think.

Prof. Reiner:

I would like to latch on to that question. I also saw yesterday and heard from all the countries which presented their data here that the dropout rates are very high, not only in Croatia, and also the students take a much longer time to get their degrees than they are expected to. My question is, is there any analysis on what that position is at polytechnics and in other vocational, educational branches, and, if it is better, isn't it a question of perhaps paying more attention to entrance exams and at that stage, before anybody starts their study, trying to direct students towards other kinds of further education? But I don't know the position at polytechnics and other vocational studies. Does anybody have any data on that? Thank you.

Prof. Mencer:

As we know, the new law, adopted in 1993 divided university studies and vocational studies and we do not have an analysis of the dropout rate in vocational studies yet.

Prof. Reiner:

We discussed the high dropout rate and the very long time needed to obtain a degree yesterday. Do you have some other experience?

Prof. Mencer:

I think, I have some numbers for Croatia and also for some other European countries, but I don't have them here.

Prof. Haller:

We have a dropout rate of about 50% in economic studies and we found this was too high. We therefore experimented. Firstly, we set up and organised so-called »studying in groups« during the entry phase. Participating students accept that they are not totally free, but in a group. They receive guidance and prepare jointly what they have to do. They are always in the same group from language to mathematics, from economic law to economics, and in these groups the drop-out rate is significantly lower.

The second experiment will begin this year. We will now have an »entrance phase« of one year, a period of general classes. We hope that the dropout rate will decline, but if dropout occurs, it will be at the beginning. In that case the students can decide on other options without wasted years.

As we had our 100-year anniversary, we planned to invite all those who didn't finish their degrees, but had become very successful in life. Some of the top managers declared that the time they had spent at the university of economics had helped them very much, but they didn't need a degree.

Prof. Luthar:

I think when discussing dropout rates we also have to speak about the qualities of the programmes, about the organisational side, the work. As I said, the situation in Slovenia is that we lose a lot of students because nobody really cares about them, because the programmes are bad, because organisation of the work is bad, because there are not enough good lectures. I agree with those who say that comparisons with the United States are not such a good idea

when talking about Central Europe, but still, if you take schools, they have students until the end, they try to keep them until the end. They have some instruments to do so, so I would suggest, when we talk about the global organisation of studies here in Europe, we also have to discuss the quality of the programmes, or the problems that occur in this discussion or within this system.

Prof. Šunjić:

I am most concerned with the situation in Croatia, and, after all, this is the title of our symposium, and the legislation proposals and all this pressure that is being put on our academic community by the 3+2 formula of the Bologna Declaration. If I remember correctly, in the discussions at various European meetings not so long ago, we were talking about 3+2 or 2+2 not in terms of degrees, but in terms of the structure of the curricula, so that mobility after this first stage would be facilitated. I think that this could be what you meant – the student would receive a piece of paper that would enable him to say, »Look, I finished my 2 years of civil engineering in Zagreb, and this is, more or less, similar to civil engineering in Munich, so, I'm going to Budapest with this piece of paper to continue my studies, and get a degree in Budapest«. Now politicians, and I don't know why (and this where I talk about ideology, where words can substitute facts!) turned it into final degrees. And that created this whole problem. Now, do we agree with this interpretation? Do we agree that the formula 3+2 means that we have one curriculum, where we have the first stage, which is a preparatory stage, and then the second stage, where, in any programme, in any curriculum, we have some focusing and some diversification? Are we essentially talking about 2 stages of the same degree, or do we still insist that we have 2 separate degrees? Because, in Croatia, this is the crucial argument and part of the pressure on the academic community. The politicians, that is, the minister want us to accept the whole package of legislation simply because, he says, if we don't accept this legislation, we're not going into Europe, we'll be kept in the wilderness, and our students will be excluded, and so on and so forth. Therefore I think we have to understand this point.

Prof. Mencer:

I would like to combine the discussion of rector Jeren and rector Šunjić (I'm sorry, but once a rector always a rector) because I think that combining both of their discussions is crucial for a comprehensive opinion of Croatian professors. First of all, I would like to add to our Italian friend's discussion

that there is no common European model. At the moment, there is no common model in any discipline, so, as they said, there is no obligation to follow a strict and rigid structure. So, 3+2 is just one possibility. I think it's up to each discipline to communicate at a European level and to find the optimal structure for itself, and that's what rector Jeren is doing at the moment in the engineering field. Moreover, there are already some cases and these are the Imperial College in London, Delft University, Aachen University and ETH, who have decided that they don't have the same curricula, they have kept their identity, but they have a common agreement and they can exchange students. If one of the students spends at least one year in any two of these universities, then the student can get a diploma from both of these universities. Or, moreover, if a student spends 1 year at one university, 2 years at another, and then again only 1 semester at a third university, the student can get a diploma, which is immediately recognised at every one of these 4 universities. This is the » Ivy League« in engineering in Europe. So I think that using a method of benchmarking every discipline from every country and from every university is the right method for finding an optimal structure, and what is even more important, optimal curricula, which would not be strict, but should be flexible and dynamically developed in the future as well.

Prof. Luzzatto:

The Italian reform went rather deeply into the problem of recognition of credits taken in other universities. As a general rule, the recognition of any kind of credit taken elsewhere, either inside the country or in other countries, has to be decided by the board which is in charge of the study programme which the student is following. But there could be agreements among universities, or among disciplinary sectors inside universities, that is, a general agreement of the university or even an agreement of a faculty, say engineering or law. According to these agreements, recognition may be automatic: the student does not have to ask each time for recognition, but he knows that those 2 or 3 universities, or faculties, have already arranged their programmes in order to have automatic recognition.

I would like to make 2 further points. First, I would like to say again that a second kind of higher education system does not exist in Italy: we just have universities for both objectives, scholarly studies and vocational studies. Of course, you could say, it would have been possible just to build another system, but this was not the idea. Both politicians and academics thought that to create a second higher education system was not convenient. Surely rectors

didn't want to lose students, I've no doubt about this; further, it was thought that the trend on an international basis is not in the direction of having more differences, but in the direction of reducing them. We spoke already about Great Britain; also France is reducing the differences between the IUT, the Institut Universitaire de Technologie, and the university. Anyway, to understand the Italian situation you always have to remember that our university system includes both sides of higher education studies.

As for my final point, I'm very interested in the debate about the nature of the first degree. I am personally convinced that the idea of having a degree at the end of the first part of higher education studies is useful. On an international basis, if we look at statistics, we see that the majority of persons, in developed countries, usually studies till the age of 21 or 22. Some time ago, some decades ago, it was frequent to stop studies at the end of secondary school; now, the majority of young people of the corresponding age group goes on to higher education. Of course, you can say, they can just stay there for 2 or 3 years and they will have some kind of cultural development anyway, even if they don't get a degree. This could be reasonable, if such cases would be exceptions: however, numbers here are very relevant. If there is a great amount of people who just stop their higher education studies after approximately 3 years of higher education, it makes sense that you have some kind of degree of certification which corresponds to this. I said yesterday that Italy has a very low number of people with a university degree; everybody has always interpreted this saying, of course, we don't have a first university degree, we only have the long cycle and this makes the difference with the majority of other countries, which have a first degree. I think this is true. However, it's not absolutely necessary that a first degree has a specialized professional value. Personally, I must say that, even if I have been involved in this reform in Italy, I'm not happy about how this point has been treated in its final formulation. In the Martinotti Committee, where I worked, we tried to give the idea that the first degree could have a wide cultural basis, with a large spectrum of contents. For example, looking at sciences, this is not in contradiction with employability: I'm quite sure that if we had a first degree not in physics or in biology, but just in sciences, this would be a good basis both for those who then go on studying for a master in one particular science, and for those who want a job. In fact, competences and skills acquired in a programme of this kind would be adequate in fields which are developing, like science museums and technical educational plays, in addition to science teaching. This is just an example, in order to clarify that it is quite different to say that the first degree is

generalised and to say that it is specialised in a restricted vocational direction. This vocational interpretation seems to prevail in Italy, and on this I don't agree.

Prof. Mencer:

Maybe I'm talking too much, but I would like to share an opinion with you. I would have liked to have somebody from the UK here because of these 2 directions, vocational and university. Some 2 months ago, there was a symposium in Austria devoted precisely to this theme. At the moment, these 2 directions are strictly divided in Austria. 17 years ago Austria was advised by UK advisors not to do this, but to have both studies within universities. The same person, who advised the Austrian government and Austrian universities not to divide them into 2 directions, was present in Austria 2 months ago. The main point is that this non-university sector in Austria is flourishing and the same sector within the university in the UK is declining. The same person, and this is the most prominent expert in this field, John Pratt, conveyed this opinion.

(inaudible interruption from the audience)

It was 17 years ago.

(inaudible interruption from the audience)

No, but in most countries. I just wanted to point out that we should not listen to the opinions of other countries, we should find our own ways, because every country has different economic backgrounds, geographical, demographic and traditional, and that's the point. Isn't this so? Yes. Thank you.

Prof. Pavičić:

If I might come back perhaps to the point of the huge dropout we are faced with. First, I would say that we have to have more data about that and that our unemployment rate is high. Perhaps fees would solve the problem, as in Italy. One faculty with a really big dropout at Zagreb University is the Faculty of Civil Engineering. We have a student representative here from this faculty, Rok Čosić, who also attended secondary grammar school in another country, in Germany, and I would like to give the floor to him and ask him to tell us how he sees the situation at the Faculty of Civil Engineering and give us his opinion on why so many of his colleagues have dropped out. You can speak German.

Rok Ćosić, student representative (translated into English later on):

Do you all understand German? It's easier for me to speak German. I lived in Germany for 4 years, so I speak German well. The problem at our faculty is that a lot of the people are not interested in studying. They start studying only for the sake of studying something. About 60–70% of the students are, at least in my opinion, spoilt brats. That is, their parents force them to go and study something without them actually knowing what they want to study. They have no direction in life. Perhaps because they have led sheltered lives and this is the problem. Their parents continue giving them money, and the bad thing about it is that many parents in Croatia pay for remedial classes, and I just can't understand that, at university level, people pay extra. A professor once said that if you're paying for tuition, then you have to study; if you pay somebody for remedial classes, to teach you, then you needn't bother studying, you're not learning anything on your own. I think this is bad and it's a great mistake at my university, and that is why studying economics and law is so popular because the student will eventually find work and is happy to finish, to manage to scrape through his studies.

Prof. Jeren:

I think there is another important thing when talking about dropout rates. At the Faculty of Electrical Engineering we have a group of mathematicians who have been studying, for maybe 30 or more years, the correlation between success at enrolment exams and success at studying. What they have realised, after so many years, is that there is a very strong correlation between the most successful students at the entrance exam and success during studies and that's clear. Another important thing is what I would call the capacity of a nation, the human capacity of the nation. We realised, regardless of whether we have 220 entrant students, like when I was a student, or 350 students in the first year, or 700 students like we used to have, the result is always the same, so that's the human capacity of the nation. We don't have more students who are capable of finishing, let's say, a serious study of electrical engineering. Of course, corrections are possible and we have done that, I am not happy with them, it's a question of criteria. Now we have an exit of 450 students a year and our national exit for many years was 250. Of course, you can have lower criteria and then you have better output and that's again, referring back to what the Engineering Association discussed, why we have to have different types of studies. And that's why these polytechnics or these professionally oriented studies are very

important because they have a different education, and very important education. This is something I have always insisted on, these professionals who have to be first class in order to educate those who have decided to study in this type of higher education, so they can get the greatest benefit. The question of dropouts, as somebody mentioned, is a social question. When you have huge unemployment, of course politicians force as many young people as possible into universities in order to postpone solving the problem of employment. But we have to recognise, at least we realised, judging by numbers at my faculty, that there is a human capacity of about 300 young people in one generation who are capable of studying electrical engineering, not more. If the necessities are greater, like now, you have more people educated in computer engineering. Of course, by lowering the criteria you can produce more engineers, but the result will be a lower quality of engineers. Definitely it's a very complex problem and I'm not sure that just this decision about having a 3+2 model or a 4+1 model will solve this problem. That's a question of curricula, that's a question of the support and the infrastructure a university has, of having a better infrastructure. If you have smaller groups, you will have better results than if you have large groups of students and they don't have a chance to have personal contact with the professors, and so on.

Prof. Pavičić:

Thank you. Before I give the word to professor Bjeliš, I would just like to make a proposal. I've seen several people looking at their watches. We've foreseen a break, but since we've already entered the second round of our round table – »Science and higher education reforms in the Central European Countries against inertia and resistance«, I propose we continue for another half an hour and finish our discussion because I would like our colleagues from Austria, Hungary and the Czech Republic to say something. Do you all agree? OK. So, I give the floor to professor Bjeliš.

Prof. Bjeliš:

Just a short continuation of the course of thinking started by professor Jeren. I also thought for a long time that there is something that is a final capacity within nature or a profession and our experience is similar regarding physics. But another thought is that very probably 90% of today's fairly successful physicists in Croatia were peasants 100 years ago, I would have been a peasant. Perhaps a successful physicist, but a peasant. I think another point is that there are grey zones in Croatia. In view of how secondary schools func-

tioned, I was engaged in this kind of popularisation of physics in secondary schools. A lot of schools showed no signs of talented people. So this distribution of talented people, where we get them, how we get them, this was not homogeneous at all. You had a few schools in Croatia with very successful people and others with nothing. There is a direct correlation between the skills and capability of the teachers in these schools. If you have more, very good and very attractive teachers, you'll have more talented people, sometimes. So, we haven't used all our capacities. I think we should work very hard to get people who have the capacity, and very hard not to lose them.

Prof. Pavičić:

Thank you. Now, I would like to give the word to professor Haller to comment perhaps on what he has heard, and if not, to present some of the steps taken towards reforms in Austria.

Prof. Haller (translated into English later on):

As my English is very bad, and in honour of the Humboldt Foundation, I'll speak German, but very slowly. The European credit transfer system is something new and forced us to adapt our study programmes, especially in order to design them so as to comply with 30 credits per semester. There are always pros and cons with regard to reforms. As it was decided to introduce these reforms, they had to be introduced step by step and people were necessary to implement them.

The first step was a project phase with 5 different universities each adapting one programme for ECTS credits. This phase lasted from '92 to '95. The relevant expert in Austria is Dr Edlinger from the Technische Universität in Graz.

Secondly, on the basis of the results of this process, universities in general started giving credits for certain other studies where a high rate of international student exchange exists. The rationale was to award students the appropriate certificates for their studies which could be recognised at their respective home universities. And this worked quite well.

The third step was that the Ministry of Science required each university to have an ECTS representative to implement the process at the university, who would nominate others to take part in the ECTS training sessions organised by the ministry. That is, as many people as possible took part in the whole process.

In the fourth phase, the ministry stated, that wherever a study programme was modernised, the ECTS credit system had to be integrated. Since the reform process is constantly going on, the number of adapted studies far outnumbers unreformed ones.

The last phase, which should be completed by 1 October 2002, requires that all regular studies be adapted to include the ECTS.

For PhD studies there is still the freedom of choice, that is, it has not yet been decided whether or not they should be included in the system. This also applies to post-graduate studies. In both cases there is a provision for ECTS credits, but there is no deadline.

The difficulties this process is causing are that, in some cases, friendships between colleagues have been affected. Who would not like to have half a credit more?

Even quarter credits have been established, which is not compatible with the rules. The real problem is, that in some studies there has been a dilemma, whether or not to introduce the baccalaureate. This three-level system – the baccalaureate, master and PhD – still has not been introduced for all studies. This still remains to be done.

Personally, I see another problem: the case of very specialised unique studies. It is of little use for them to have an ECTS if these specialised courses are offered nowhere else. Currently there is a process in Austria to establish specialised courses at particular universities. The result could be, that, for instance, specific economic studies at some

Austrian universities will not be recognised because their combination of courses is not comparable with others.

And this is where I hope that »you never eat as hot as you cook«. We will have to be more lenient in our concept of recognition and it will have to be done on an individual basis. The workloads are known, but we will also have to give recognition to similarity.

I have spent 14 years as head of a board dealing with recognition of studies and degrees from abroad. I have always held that whoever has the strength to go abroad, to cope with the red tape, and to study despite of language difficulties, deserves support as far as recognition is concerned. And I believe this will eventually be the general attitude.

Personally, I believe in the European Credit Transfer System because I believe in the exchange of students. Student mobility is a necessity for the promotion of openness.

Prof. Pavičić:

Prof. Imre, I would like to give the floor to you now.

Prof. Imre:

Thank you for this opportunity. I'd like to refer to professor Luzzatto: »Diversity is valuable«. I think the proof of this paradigm is an example. Obligatory courses at university are strictly defined and determined. We give speciality and diversity in compulsory and free-choice courses. And this is diversity. Universities are – to a certain extent – diverse and it makes a transfer of students possible, it gives them a chance to attend the special courses in the section of free-choice or compulsory courses. I agree with professor Diana Galetta. Flexibility is a contribution from Mediterranean countries to the European Union. I would like to ask the participants of this round table a question which is open to discussion – What would be the special contribution to the EU from central and eastern European countries?

Prof. Pavičić:

Prof. Tüma, could you now provide us with some information from your field?

Prof. Tüma:

Thank you Mr Chairman. This conference was very encouraging for me. I have plenty of notes on important issues we are discussing in our daily work. Some of them I mentioned yesterday. I would like just like to present my 2 notes on 2 problems, which are related to concrete numbers I have on this position. Years ago a so-called doctor study programme in biological sciences was opened at Charles University. Every year, after their promotion, their basic education, about 100–120 doctors come here. At the moment there are about 3000 doctors working for their future PhDs. It lasts 3–4 years and they accept a basic payment, which is at the same level as the payment medical doctors would receive after their promotion and on starting their practice. Everything looks great, but after some years we calculated how many of them had completed the 3 or 4 years of studies in relation to the gradation of PhDs. This is the official number – only 5. This is a great economical, ethical, philo-

sophical loss. It's a terrific number. We are now thinking about what to do with this. Personally, I am not satisfied with this system, especially when people try to get medical, professional specialisation thanks to scientific work and studies in laboratories and libraries. This is a concrete number.

The other note is generally about the system of science or the planning of scientific programmes for research in the Czech Republic. There is a law, number 130; it's a national programme for research in the Czech Republic and it will start by 1 July of this year. It roughly states that it will lead to the sounding of all economical issues in the hands of the maybe future ministry for research and universities. This ministry may also include – this is the philosophy of this law – the institutes of the Czech Academy of Sciences. The financing of this work, of this research for this and next year as a bill for the budget of the Czech Republic for 2003 is 0.53% of the GNP. This is planned to increase to 0.7% of the GNP by 2004 or 2005. Some step-by-step guidelines have been prepared for this law on how to manage all the institutions that need to be transferred under one ministry in the next year. We hope to finish our plans and funding by the year 2005, and this means that as of 2006 all research will be centralised. This looks like a socialistic centralised system, but we have been assured that it is a form of transition into the European six-frame programme in the so-called European framework of science and research. This is new information.

Thank you.

Prof. Pavičić:

Thank you. I would like to ask Dr Luthar to tell us briefly about these reforms in Slovenia, about his institutes. He also mentioned that 40% of his scientists from these institutes are taking part in education, teaching at universities, so whether they have to prepare in a special way to adapt to this, and so on. Thank you.

Prof. Luthar:

Thank you. I will be very brief. I would like to say the same as I said yesterday. The credit transfer system has not yet been implemented in Slovenia. It was implemented at one faculty only and this because this is a new institution. It's the Faculty of Human Sciences in Kopar, Capodistria, and they have a system where students can choose some 25% of the courses in the first year, 60% in the second and it goes up to 50%. So 50% is obligatory in the third and

fourth year and they can choose all the other courses. In general, the plan is to introduce the system to all faculties in the next academic year, that is, this fall. People are already very frustrated about it, but not only because of the system itself, but also because of the debate that has been going on for 6 or 7 years and because of the bad organisation of this debate. Not enough energy has been invested in this debate at all levels. So, there are still people at university who don't know anything about the system. They have information on the Internet, in brochures, but that's not the way this system functions, or that's not the way to introduce the system. In my opinion, and I have been following the debate in Slovenia, you have to get people into one room and not let them out until they get the basic idea, and this is really the problem. Now they are trying very hard to get, not only one person at the faculty, but more of them. One for each department, and now they are trying very hard to educate these future educators quickly on how to make the system work. These debates, 3+2 or 4+2, are pure theory. So now they are looking at the implementation of the system. There is a danger. They just give credits to some lectures. So they have tried to push one system into another without thinking a lot about what should be changed and this is the problem. Perhaps, just one last thing. The real danger at the moment in Slovenia is this division between research and higher education that we are facing in our environment. As I said yesterday, if we proceed this way in the next 2 or 3 years, we will get 2 completely separate systems at the post-graduate level. Perhaps some of you from Croatia know the Institute of Jure Stefan. They have now introduced their post-graduate school. They are trying to push this through. What we will get now is a battle between the University of Ljubljana and Jure Stefan. What I see as great danger coming from a research institution, which has almost 50% of the people engaged in higher education, is that the university is really too rigid and it's too big. Ljubljana University now has more than 58.000 students. This is simply too large.

(inaudible interruption from the audience)

This is already another discussion. I would very much like to meet colleagues from Croatia to discuss this issue of dimensions. One last note. When I heard that the University of Zagreb was gradually becoming a university for students who are only from Zagreb, I was very sad because you have to know that the University of Zagreb was also, in a way, a Slovenian university before 1919 or before 1941. There were a lot of students coming to Zagreb, instead of going to Graz, Prague, Brno, Munich.

Prof. Imre:

I would like to reflect on the contribution from my colleague from Austria [Prof. Haller]. I am a medical doctor and I also have some interest in medical psychology and I think we suffer from long-term education. In medical specialisation it is 2–4 years and we have heard that there is a reduction in psychological motivation during long-term education among students. I think this is also questionable. Is it possible to carry out an effective educational programme without psychological motivation?

Prof. Haller:

Professor Imre asked a question and I only want to give a short answer, it's a polemic one. Some countries inside the EU would give you the following answer. What do we expect from countries from the southeast of Europe? We expect to make money, to get a bigger market, to get cheap labour. And we hope that those little states will not disturb the functioning of the EU. As an Austrian coming from a little country, which – as you know – sometimes disturbs the EU, we welcome every little country. We hope the little ones can also express their interests. And that their interests will not be dominated by big states.

(inaudible interruption from the audience)

We want to keep our specific political and cultural system. We feel difference and similarity at the same time. I think this is a very interesting relationship. I appreciate this relation, to learn from each other, to visit each other. And we hope to get partners against too much unification which we sometimes see and don't like.

Dr. Došlić, Institute Ruđer Bošković, a member of the Croatian Humboldt-Club Committee:

Thank you. For the Italian colleagues. I look at this reform in education as a chance for greater mobility of students and improvement in studies. However, I would like to ask whether in Italy you have mobility among universities on a national level at all? Whether it is possible to have 2 years of medical education in Palermo and then to move to some other university?

Prof. Galetta:

In the previous system in Italy there was a huge possibility of mobility among universities. You had to have recognition of your curriculum, but in

most cases it was almost automatic because the name of your exam was not identical, but the practical matters were identical. Personally, I have a practical example of this movement from one university to another because as a young student, I was 18, my passion was languages, so I wanted to study languages at the University of Milan. After 6 months, I decided this was not my life and so I changed to the Faculty of Political Sciences and I did this without any problems, very quickly, so that I finished my university courses very rapidly without problems. It has always been a possibility, within faculties and within different universities, through the recognition system. So there has never been a problem.

Prof. Pavičić:

Perhaps I should ask professor Galetta to tell us something about another experience of hers. About the mobility of professors among the universities in Italy. That's perhaps another story. It might be instructive to us, it might explain to us how that is carried out in Italy.

Prof. Galetta:

Now or in the future?

Prof. Pavičić:

Now.

Prof. Galetta:

Because it's totally different now. In the past, if you wanted to get a professor's degree, you usually had to move from your university to another because the procedure was centralised and was in Rome and you had your seat somewhere else throughout the territory. Now, with the new system, as we learned yesterday, the evaluation procedure comes from the university with the decree of the single university. So normally, for example, if I am a researcher at the University in Milan and want to become an associate or full professor, then my post as researcher can be simply converted into the post of associate professor and that costs less than getting another professor from another university. So the tendency at the University in Milan, and I'd like to hear what professor Luzzatto has to say about it, in my case, is that you continue your career at the university where you were born as a researcher because the university has economical convenience to get the people it has inside. Obviously, this has something to do with the financial lack of money that

we have in the university system. That's not a direct consequence, but a very important indirect consequence of the new system for acquiring, recruiting lecturing staff.

Prof. Luzzatto:

I don't have much to add. Nobody can deny the facts, which are surely negative; what our colleague has said is not just her opinion. Many people in the university world in Italy are worried about this kind of effect, that has developed recently; however, at the moment there is no proposal about how to change, as this new system has been established just a couple of years ago. It has to be pointed out, in any case, that the law about recruitment has nothing to do with the reform of degrees and curricula along the Bologna lines.

Let me give my personal opinion. The Italian ministry made a mistake changing the rules to recruit university professors without a general discussion of what we call »stato giuridico«, the legal status of professors as it is and as it should be. There are a lot of things that need to be changed in the legal status of professors. First of all, the teaching duties formally still require just teaching one course. Till a few years ago there was even what we called »titolarità«, that is a professor just was a professor of, say, infinitesimal analysis: if I'm a professor of infinitesimal analysis, nobody is authorised to oblige me to teach algebraic analysis, because this is not what I'm supposed to do. This changed slightly, a few years ago, for new professors, who have to cover a sector; personally, I am sufficiently old and if I wanted to stick to the course for which I was appointed thirty years ago, I could still do it. The teaching obligation for all of us, anyway, is always for just one course. So there were a lot of things to decide about teaching, connections with research, and other duties; a few years ago only the recruitment system, which was just a part of the whole thing, was changed, and this was really a mistake. Of course, being on the way towards autonomy, it was difficult to oppose the idea that a university has the power to choose its own professors; previously, it was the ministry that organised the selection procedure. However, the selection Committees were always elected by the professors of the field; so there was, in a certain sense, autonomy of the professional staff at a national level, not at a local level. This is an interesting point. Luciano Modica, the President of the Italian conference of Rectors, always says that the big change which came along, within the last 5 or 6 years, is that the decision-making process in universities has shifted from connections of professors of the same subject at a national level to connections of professors of different subjects at the same university. You have some-

thing like a matrix, but previously the vertical lines, i.e. the connections along each subject, were more important, whereas now the horizontal level, the individual university, is more important. From this perspective, it was rather reasonable that the appointment of professors had to be decided locally instead of nationally. But this should have been counterbalanced by a system of evaluation and assessment. That is, if a faculty, which recruits at a low level (possibly because it never looks for people from outside), gets a bad evaluation in an assessment system, then after some time there should be a penalty for those who operate in this way. As a final step, it would have been reasonable to give more responsibility to local boards in choosing the professors; but this should have been established after the complete implementation of a system of evaluation and assessment, and not before.

Prof. Pavičić:

Thank you. Anything to add? I would like to ask professor Mencer to give us a final word.

Prof. Mencer:

Thank you very much. I didn't expect this. What should I say? Maybe, concerning the same topic and what is going on in Croatia, or...

Prof. Pavičić:

The choice is yours.

Prof. Mencer:

As I have already told you I think this topic is a hot topic in Croatian academic circles as well. We started working on the university reform and on the Bologna process right at the beginning of the launch of this problem many years ago. Moreover, ECTS as a credit system was launched even before the start of the Bologna process and we were involved in the ECTS problems from the very beginning. At the beginning of ECTS I met a person in Brussels, because the first ECTS office was organised in Brussels, and we stayed in touch with this ECTS office. So, it was 7 years ago when we started talking about this. I would say that we are quite advanced in dealing with this problem because many of our faculties and many of our curricula already have this credit system. The most important thing is that we recognise this system as a system that could increase the mobility within the faculty, within the university, and

within the universities in Croatia. At the beginning, this was our most important task.

Our second task within the ECTS system was to change the curricula, and this is what we have been working on all this time, in order to acquaint more people with this process. So we established a committee of 4 persons at the university level; I personally chaired this committee. This committee chose one person from each faculty and later this was a broader committee, which was first concerned with the ECTS system and then with the Bologna process. These persons from the faculties were obliged to disseminate knowledge about this. At that point, we were not successful, and that's why I understand our colleague from Slovenia, because dissemination of knowledge is something that I think is lacking everywhere. For example, in these 2 days we have learned a lot about each other, as well as how to convey messages to the broader community. This is the bottleneck. It's not just something that belongs to the topic of the Bologna process. It is something that is being discussed within every other topic at universities these days.

Two days ago, I learnt from rector Zechlin from Graz that he wrote more than 500 letters to each and every professor. He wrote these letters because e-mails were not enough. What I have learnt in the last 8 years is that this book [Prof. Mencer is showing the book *Croatian University for the 21st Century: Vision of the Development of the University of Zagreb*, by M. Šunjić and H. J. Mencer (Eds), *Sveučilišni Vjesnik*, Vol. 44, 1–192, (January 1998) (in Croatian)] is still sleeping on the shelves in the dean's and vice dean's offices and that the message has not been conveyed further. This book was written after the mandate of rector Šunjić. Later on, we learnt this and rector Jeren decided to broaden this process. We decided to involve more people in the process of the reform as a whole and we sent e-mails to more than 2,000 addresses within the University of Zagreb. We were slightly more successful, but not much.

I said that rector Zechlin had this in mind and he was aware that he should write letters and even contact more people personally. This is my message about dissemination of knowledge, about the importance of the process. At this very moment, I think we should be aware of what is going on in Europe and that we should not remain on the margins of all these processes, but find our own way while respecting European trends. But we should do this by finding our own way of development while taking into account our background. This is completely in accordance with what our colleague from Austria had said.

That's all from me. Thank you very much and I think this 2-day discussion was very successful, and it's a pity that more people were not present.

Prof. Pavičić:

And Professor Luzzato ...

Prof. Luzzatto:

We thank you very much. This kind of informal discussion has been, at least for me, very useful. Probably if we'd just had a conference with all of us on one side of the table, and people just listening on the other side, then it would have been less fruitful. I have learnt a lot. Thank you again.

Prof. Pavičić:

Thank you. I would like to thank all the participants, especially our guests from abroad and professor Mencer for all the help and participation. I would like to have more conferences of this kind, in particular with representatives from the ministry.

With this I declare the conference closed.