

University of Coimbra
13th March 2011

Remarks at the Honorary Degree Ceremony

It is wonderful for me to become associated with this distinguished university in this marvellous way. The history of Coimbra University is altogether inspiring. When, in 1288, a supplication was made, by the abbots of various monasteries, from Coimbra and the vicinity and also Lisbon, to Pope Nicholas IV to establish a foundation of "general study" in this beautiful historical town, it could have been hardly guessed what a powerful educational foundation would emerge from that modest but visionary move. The University came into existence in 1290, and went on to become a remarkable centre of learning as well as one of academic reflection and research. I feel very honoured in joining, admittedly without having done much to deserve it, this great academic tradition stretching over more than 720 years, and to count myself as part of the great community that make up the University of Coimbra. I have reason to be extremely grateful - and I certainly am.

The subject of old universities and their traditions have always been of great interest to me, and it has been very inspiring for me to have been not only associated with Cambridge and Oxford in England as a teacher at both places (I was also a student at Cambridge), but also, in one way or another, with Bologna, Padua, Paris, and a number of other ancient universities. These universities are all from Europe, and there has been no non-European university of similar antiquity that has tended to figure in this list. However, over the last five years I have become rather intensely involved in the re-founding of an old Indian university, at an early historical location called Nalanda (it is about a hundred kilometres from the ancient town of Pataliputra - now known as Patna - which was the capital of ancient India through much of the old days from the fourth century BC). Since Portugal has had a long history of association with India, and since I am speaking today at an ancient Portuguese university, I thought I should take the liberty of making a few remarks about

this old Indian centre of learning which some of us are trying to re-establish now. The inspirational quality of ancient abodes of education makes this project worthwhile.

Nalanda was a centre of higher education that was established as a Buddhist foundation in the fifth century, and it flourished as an international centre for learning for over 700 years, drawing students not only from different parts of India, but also from China, Japan, Korea, Thailand, Tibet and Mongolia. It is interesting to note that Nalanda was the only academic institution outside China to which Chinese scholars came for higher education -- it is the only one with distinction in the history of ancient China. The university was ultimately destroyed in 1193, about a hundred years before Coimbra University was founded. We know, of course, that there were earlier pursuits of education in this ancient town, preceding the establishment of Coimbra University, particularly at the internationally known monastery of Santa Cruz in Coimbra, and so there was a time when sophisticated education was being offered both at Coimbra and at Nalanda.

Nalanda university was ultimately razed to the ground by the violent conqueror Bakhtiyar Khilji, as he passed through that territory in his ruthless march from Afghanistan across India. The library of Nalanda university, it is reported, burnt for three whole days.

Even though Nalanda university was located in India, it drew students from all across South and East Asia (and there are reports that there were students from Turkey as well). The new Nalanda University is being established on the basis of a pan-Asian initiative, led by what is called the East Asia Summit, which includes, among other countries, China, Japan and India, in addition to the Asean group of countries. The new Nalanda University, located very close to the ancient site, has just been established, and this has happened even as I was preparing to come to the ancient university - that of Coimbra - for the events here today. Since I have been chairing the governing body of this new Nalanda University, I am quite strongly involved, right now, in developing a modern university on the foundations and traditions of an extraordinarily old university.

I should perhaps say a few words on how old the old Nalanda really was. When it was destroyed by Bakhtiyar Khilji's attack in 1193, Oxford University had just been founded, and both Cambridge University and Coimbra University would be established in the following century. Another way to think of Nalanda's oldness is that when the first European university, Bologna, came into being, Nalanda was more than six hundred years old already. Another distinguished university, which did not stay in existence continuously either, viz. Al-Azhar University in Cairo, with which Nalanda is often compared, was established at a time, 970 AD, when Nalanda was already more than five hundred years old. Had Nalanda not been destroyed and had it managed to survive to our time, Nalanda would have been, by a long margin, the oldest university in the world.

What were the subjects that Nalanda university taught? Even though Nalanda was a Buddhist foundation, it offered courses in secular subjects as well, including, in addition to religious tradition and canons, such standard academic subjects as history, law, linguistics, architecture, sculpture, astronomy, and medicine. I was looking into the early academic concentrations of Coimbra University, and there is something of a similarity here, since the "general study" at Coimbra started, I understand, with faculties of arts, canonical law, civil law, and medicine. Medicine was one of the early subjects taught at Nalanda, as in Coimbra, and even though I know of no one of comparable distinction to the medical scientists such as Egas Moniz of Coimbra University (even in the standards of contemporary medical knowledge in the period in which Nalanda flourished), it is interesting that one of the Chinese ex-students of Nalanda, Yi Jing, wrote the first comparative account of Chinese and Indian medical systems and public health care (perhaps the first such inter-country comparison of medical knowledge and practice in the world).

Coimbra went into mathematics teaching and research fairly soon, and produced such great mathematical scholars such as Pedro Nunes in the sixteenth century. I believe Christopher Clavius, who contributed greatly to the making of the Gregorian calendar, was also affiliated with this University (even though Clavius was himself of German origin). Because of the destruction of

the library of old Nalanda and of most other perishable - particularly flammable - documents from the large campus in the twelfth century, we have not yet found any records of mathematics teaching in Nalanda. But mathematics was a very strong subject in India at that time, and the nearby city of Pataliputra (or Patna) was a great centre of trigonometry and other mathematical studies in that period. My expectation is that we shall find a lot of evidence of mathematical education also at Nalanda as we excavate the still unexcavated ruins in the old campus. One further reason for thinking this is that astronomy was certainly among the subjects studied at Nalanda, and it is difficult to do hard astronomy without a grounding in mathematics. One of the most distinguished Chinese students at Nalanda in the seventh century, Xuanzang, wrote about a tall astronomical observatory that towered majestically over the foggy campus on misty mornings.

I must stop here. Being at this ancient university, I could not resist the temptation to say a few words on another old university with which I have become rather strongly associated now (in a country which has a strong historical connection with Portugal). There is, I think, something quite exciting about seeing modern knowledge and education in the light of the long history of knowledge and education in the world.

I end by thanking Coimbra University again for giving me the privilege of becoming associated with this famous and great university which has powerfully enlightened the world, over many centuries. I see myself as being very fortunate to be here today.