China-Europa Forum
中 欧 论 坛 2007

WS13 – Scientists and Experts

Session 1

The Chinese vision

- The expert is seen in a broad sense, being someone who has special knowledge about a subject be it physical and/or intellectual work. They are respected by society, their social status is rapidly increasing.
- The scientific work done within the mainstream (appr. 85% of experts) is goal oriented according to the national policy. The expert also profits from the increased knowledge, but when government funds research it also expects patents and publications in return.
- There is also a few that are going outside the system, working on their own. Rapidly evolving carreers.
- The Government in China is investing heavily in S and T. Expectations are high and S and T is seen as very important for productivity.
- Ordinary people perception is that through S&T the society will become wealthy and respected worldwide. The main goal of high school graduates is to pursue further education.
- The investment in S&T by private enterprises in China is lower in comparison with the western countries.
- The Government policy for 20 years has been to send researchers abroad. The knowledge is acquired but the environment and working conditions are different in China it cannot always be applied.
- The research done in some areas, like chemistry and physics, is high level, having rapidly increased the publications in international journals. Many researchers outside China wish to return but there are not enough high level public positions available yet.
- There is an evaluation system for assessing the quality of research which is the basis for the distribution of grants and funding. In areas like chemistry and physics international experts are invited.
- There are fears and risks that S and T can generate instability to society, e.g Internet and cloning. As to internet the main concerns are about loss of privacy and inappropriate content. As to human cloning it might bring ethical concerns.
- China acknowledges that scientific development might bring externalities and side effects to society, so there is an obligation that scientists should be concerned about humankind, social responsibilities addressed, and the fears and risks brought about by science tackled.
- There is the problem of pollution and many efforts are devoted to reduce it in order to achieve the sustainability of the environmental systems

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The European questions addressed to Chinese

- Which are the main differences between the Chinese and European S&T systems? The motivation as to the economic impact in society is unproblematic in China.
- How is the impact in society? High, even at top policy levels.
- What is the policy of the Chinese Government regarding the fears and risks for society, like Internet and cloning? Some websites with inappropriate content are blocked.
- What is the status of collaboration between the public and private R&D? State institutions fund mainly fundamental research the Bureau of S&T funds applied research and there is no much private research
- How is expertise organised in the face of a disaster, eg. Floods? There are teams of experts dealing with them, not only top experts.
- Given the different cultural contexts, one observes a divergence of understanding in the meaning of specific “terms”. A Thesaurus of terms and concepts would be helpful.
- Considering the changes in the Chinese society it is possible to perceive a change in role for experts in China as more individual flexibility is permitted in research topics.

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Session 2

The European vision

- The definition of expert is of someone that has knowledge to distribute, people bring in their expertise by networking around a commom problem, Experts are no more considered ‘”social enginners”s
- New models like the ARENA model are set where all the actors are at the same level: the experts who ideally don’t have a self interest and stakeholders, which have a vested interest in project. It requires time to negotiate processes of change.
- New methods of learning appear like in the OECD – National Innovation Systems where a country is reviewed by their peers and the conclusions are taken on board, or not, by the country. Also within the EU through CREST and the OMC-Open Method of Coordination where countries learn from each other.
- There is a distinction between the Specialist (including technical) and the Expert. The expert is the one to whom is addressed from outside demand by those who know less. There is the tendency to create the Myth of the omnipotence of science.
- On the other end if a problem arises, eg. Asbestos usage in cosntruction, the consequences fall in the all the hierarchy that did the technical development regardless of the individual roles.
- There is a great demand for transparency of S&T as experts act on behalf of the various stakeholders. Methodology and results are being debated by society. In areas like pharmaceuticals patient organisations are very active and became experts on their field. Medicine knowledge transfer is complex.
- Knowledge and Science have to be distinguished. There are the theoretical inputs first then a voice for all the ‚tacit knowledge’ is given through negotiation, until the last stages of the implementation
- How results of research can be transferred to policy makers is a key issue. There is the need to ‚translate’ the scientific knowledge through adequate communication strategies. A good example is the preparation process for the last IPCC report.
- A new role for the expert is emerging from referee to trainer, or moderator in implementation of a project
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The Chinese questions addressed to Europeans

- Which are the criteria for a project in nano?
- Relevance for the priority area, Excelllence, Efficiency of resources and how can the project contributes to innovation

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Session 3

The convergences between the European and Chinese society

- Societal 'Resistance' to technology/innovation (eg GMO labelling) : GMO are labelled (for 3-4 yrs? in China)
- Societal Org. like NGO : Some related to environment by the civil society
- Experts involved in controversy : Yes, in internet and sometimes in newspapers. Eg The building of Yangzi river dam generated a big public discussion. The practice is increasing eg. Fujian province chemical project
- Experts in Professional Associations : Individual members pay a small fee in China like in Europe
- Scientists (like eng) look at ethical and societal aspects of technology : Yes – It is a growing process both individually and institutions on a case by case basis in China.
- Brain Drain : Main destination is US, The trend is increasing returns
- Mobility of students : Mobility schemes are oriented to going abroad

The divergences between the European and Chinese society

- Societal 'Resistance' to technology/innovation (eg GMO labelling) : Gov ethics in safety issues / Consumer pressure in Europe but not in China
- Experts involved in controversy : Formal approval process involving scientists and public
- Experts in Professional Associations In China is strongly influenced by gov. – Chinese Chemical Soc. Two types of org. Society (private) + Organisation (public)
- Brain Drain : Large projects to promote returning by the Education Dep +Chinese Academy of Sciences. Also some and Int. Univ. have their own programs. Why return ? 1 – Return funds, 2 – Economy developing fast – good employment opportunities, 3 – Culture differences – East West.Private funding in China to reduce Brain Drain
- Mobility of students : In Europe there are programs like Erasmus and Erasmus Mundus.

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Session 4

Acting together on common challenge

- Considering the differences and convergences identified in the previous sessions, the WS 13 proposed to further explore the possibility to develop mutual knowledge about the interaction between scientific expertise and societal needs/challenges.
- Enabling mutual participation in the relevant processes of the other partner, even as an observer, is an appropriate way to achieve a better understanding of the Chinese and European societies.
- Through this approach different concrete actions can be initiated: For example, creating a Thesaurus on notions, concepts and definitions relevant to understanding society and technology interactions (such as, experts, autonomy, flexibility etc). This will facilitate mutual involvement and understanding.
- This action should be based on joint participation by Chinese and European partners and a multidisciplinary dialogue and around common societal needs/challenges and/or themes like: - Ageing, - What can Nano bring to society. Advantages/Disadvantages, -Involvement of young generation in the development of S&T, -Brain Drain. Other themes will be considered by the partners.
- Action proposed :Setting up a project which will contain among others the following activities: 1) On line forum where opinions would be expressed – run with 2 moderators from China and Europe. In DG Research-Socio Economics Affaires there is a tool – Sinapse that creates ‘knowledge communities’ which brings together groups in a web forum. 2) Short Term Exchange Schemes to promote the knowledge of realities – like Marie Curie for decision-makers. 3) Mutual participation by Chinese/Europeans as observers, in for example, evaluation studies, bioethics committee and foresight studies - any policy process involving society, experts and policy makers.