

Changing roles in a changing world: scientific societies in contemporary science

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The research project

SOCSCI – Scientific societies in contemporary science

Funding: FCT (national agency)

Duration: 2 years (2010-2012)

Aim: to draw a panorama of scientific societies in Portugal and to study the associative behavior and representations of Portuguese scientists

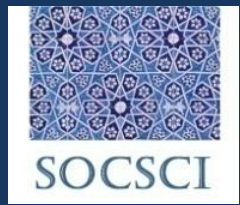




Scientific societies

- One of the types of organisations involved in the Mode 2 of production of science, but the least studied
- Most of the existing studies only cover the historical role of academies in early modern science, the part played by international associations in the internationalisation of science, or case studies of single associations





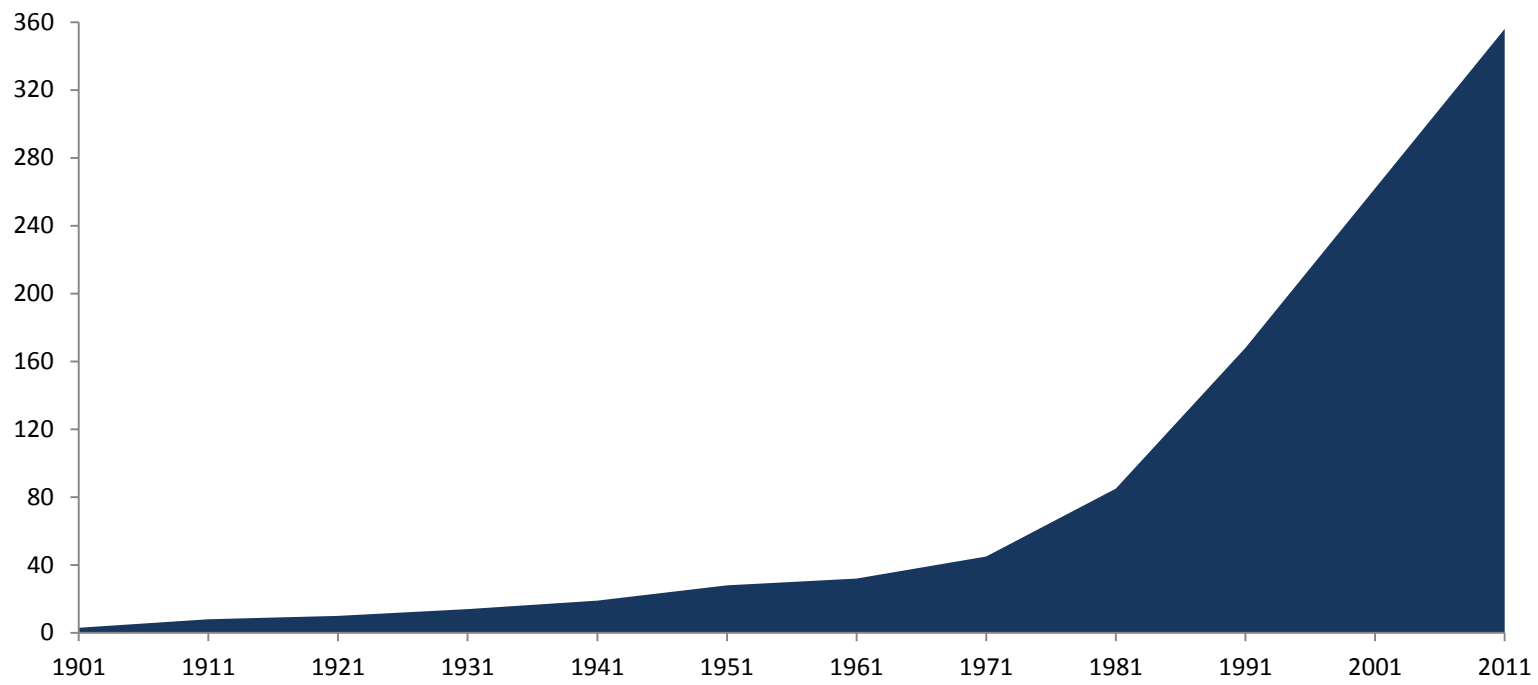
Methodology

- Census of Portuguese scientific societies (N=443)
- Survey of scientific societies (N=107)
- Cases studies (N=24)
 - Document analysis
 - Interviews with presidents
 - Survey of members
 - Ethnographic observation at events





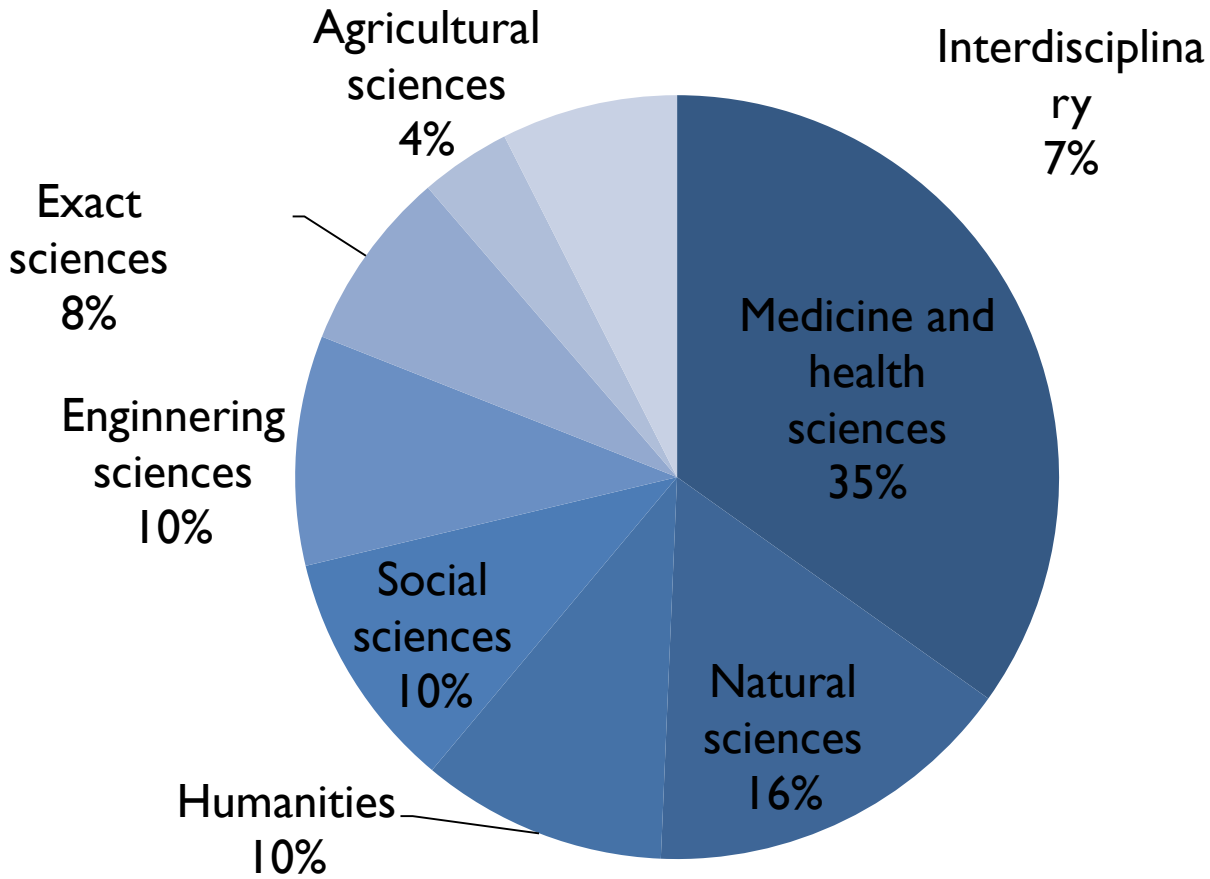
Growth of scientific societies in Portugal



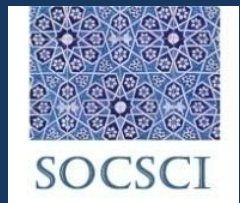
Source: Census of scientific societies



Scientific societies by discipline



Source: Census of scientific societies

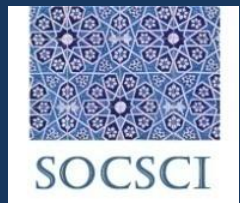


Roles of scientific societies

- Science promotion
- Internal communication
- Professional support and representation
- Scientific dissemination
- Policy advice

(partly based on Schimank 1988)





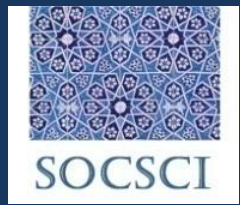
Science promotion



% of associations performing:

Research activities	61,9%
Consulting services	55,2%
Prizes, awards and grants	43,8%
Technological transfer	22,9%

Source: Survey of scientific societies



Science promotion

- Research activities are more frequent in natural sciences associations (often paired with environmental conservation)
- Awards as symbolic (and material) resources allocated to members of the scientific field
- Technological transfer is scarce due to the structure of the Portuguese scientific system



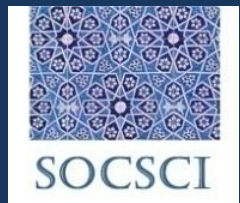


Science promotion

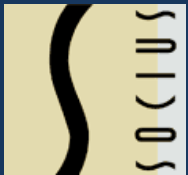
We award mobility grants, we seek to foster the participation of Portuguese scientists in international meetings. On another level, we promote excellence in research in neurosciences, we award prizes for research projects, for scientific articles published in high impact journals (...) the first criterion is always merit, but there's a condition, they have to be members of SPN

(interview with the president of the Port. Neurosciences Soc.)





Internal communication



% of associations performing:

Conferences and meetings	88,5%
Publications	81,0%
Library and information services	78,1%

Source: Survey of scientific societies



Internal communication

- Ways of transmitting specialised information within the community of practitioners but also for generating sociability and cooperation
- Target audience and content of publications undergoing transformation (competition with international publishers)
- Participation in conferences also changing (competition with international associations)

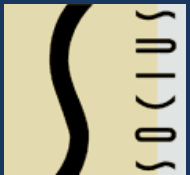


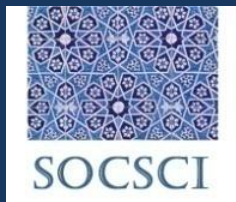


Internal communication

The conferences in which people meet, share their research, get acquainted, that is important, to know the groups that are doing research in the country (...) if the chemists only went to international conferences they wouldn't know the national community, how it is structured, and that is important

(interview with the president of the Port. Chemistry Soc.)





Professional support and representation



% of associations performing:

Training courses	78,1%
Representation of professional interests of researchers	53,3%
Representation of professional interests of other scientific professionals	43,8%
Professional certification	20,0%

Source: Survey of scientific societies

Professional support and representation

- Recent growth of professional associations aimed exclusively at researchers
- In some areas a single organisation functions as scientific society and professional association, in other two separate organisations exist
- Some disciplinary professional associations are evolving into professional bodies (biologists, geologists)



Professional support and representation

We went to a meeting with the Minister for Health (...)

because in health careers there has been some

restructuring (...) we wanted to propose a system of

specialisation or certification of the professionals in

biochemistry, biology and other professions, through an

exam, in cooperation with the College of Biologists

(interview with the president of the National Association of

Biochemists)





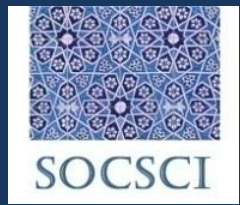
Scientific dissemination



% of associations performing:

Public understanding of science activities for the general public	86,6%
Public understanding of science activities for students	66,7%

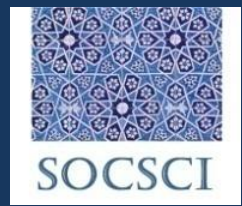
Source: Survey of scientific societies



Scientific dissemination

- Area of strong growth in Portugal in the past two decades
- Carried out by specialised scientific associations (e.g. astronomy clubs) but also by most kinds of scientific societies
- Heavily supported by the *Ciência Viva* (Science Alive) Agency, that funds and publicises many activities



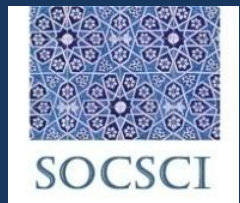


Scientific dissemination

We have workshops and ateliers, it varies much according to the age of the students, in what grade they are (...) for the general population, on Science Week, we always have open doors at the laboratory warehouse, but if we have a group of 10 or 15 people who wants to see the collection, we show them (...) they will see us working, they will experiment on how to clean bones, they will see the clean bones... it's our role, our aim is to be an open, public role

(interview with the president of ALT Natural History Society)





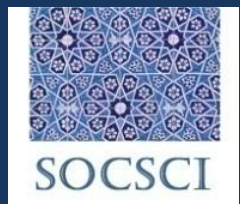
Policy advice



% of associations performing:

Statements or scientific advice for public policy	72,4%
Representation in advisory councils	47,6%

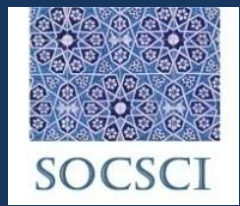
Source: Survey of scientific societies



Policy advice

- More frequent in other areas (education, health, environment) than in science policy
- More frequently by self-initiative of scientific societies than by government request
- Decision makers ask advice preferably from individual scientists or academic institutions, without the mediation of societies

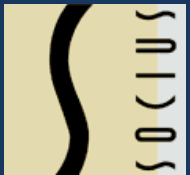


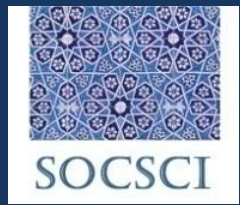


Policy advice

We cooperate with the Educational Evaluation Office of the Ministry of Education, [we belong] to the advisory council, about exams, statements of opinion ... There hasn't been any changes in the curriculum lately, but we have an important history of intervening in the curricular area and reflecting on education, about the programmes, mainly.

(interview with the vice-president of the Port. Philosophy Soc.)

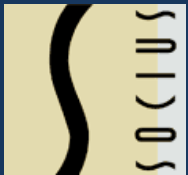
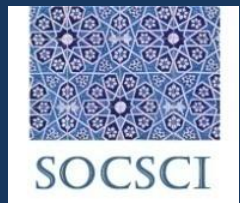




Final remarks

- Scientific societies play several different roles in contemporary science
- Some societies specialise in particular activities, other cover all fields
- The most widespread activities are conferences, publications and public understanding of science initiatives (over 80% of societies)





Questions? Comments?

Please contact: ana.delicado@ics.ul.pt

Check out the project webpage:

<https://sites.google.com/site/projectosocsci/>