



Who are the 'public' and what are they 'participating' in?

WUN GISc PPGIS Seminar Series

Richard Kingston & Robin S. Smith Manchester & Sheffield

Outline

- Background
 - what's so special about PPGIS?
 - PGIS vs PPGIS vs PAUGI
- PP history: 1969 2005
 - PP models is there an appropriate PPGIS model?
 - does there need to be one?
- Who are the public?
 - public vs. stakeholders
 - access issues/technological understanding
- What are they participating in?
 - top down vs. bottom up
 - institutionalisation of the process
 - tools for the few
- Summary / further research

What's so special about PPGIS?

- It is spatial
 - there is always a map of some kind
- It is scale dependent
 - in terms of data, the participants' location & 'issues'
- Opportunity to offer a transparent decision making process and set of actions
 - but depends on who is in control!
- It attempts to overcome some of the criticisms of GIS (e.g. Pickles '96 etc.)
 - is this true?
 - have we achieved this yet or is it too early?
 - including ethics PPGIS involves GISers in the process i.e. you!

What is PPGIS?

- The application of GISc to tackle problems faced in 'geospatial deliberative participatory democracy'
 - 'top-down' data dissemination and 'bottomup' public contributions?
- A mechanism to help communicate some location-based problems with nontechnical users
 - issues of map literacy (Kingston, 2007) and access (Smith & Craglia, 2003)

PPGIS or PGIS?

- Is there a difference?
 - does it matter?
- PPGIS
 - tends to work within some kind of institutional framework
 - maybe more 'top-down' than 'bottom-up'
 - technology focus
- PGIS
 - data collection is not necessarily technology led
 - more bottom-up?
 - global south / development
- plus ESF/NSF Agenda for PAUGI (Smith, 2002)
 - support structures
 - participatory technology interaction
 - theory
- Still open to debate...

Some PP history: 1969 – 2005

- Important to remember that PPGIS focus should be about PP not just technology
 - many PPGIS focus too much on the technology
 - it's a socio-technical mix: social shaping and social construction of technology
- BUT

From data to knowledge

 "Knowledge acquisition and sharing will increasingly be technology mediated... the importance of acquiring factual knowledge will decrease, whereas the ability to find one's way in complex systems and to find, judge, organize and creatively use relevant information, as well as the capability to learn, will become crucially important"

Daly (2007)

- The Kronberg Declaration on the future of knowledge acquisition and sharing
- UNESCO 22-23 June 2007 in Kronberg, Germany
- http://topics.developmentgateway.org/egovernment/rc/ItemDetail.do?itemId=1110154

Inherent problems in PP

 "Participation often involves the sorts of interactive meetings which can be alien and intimidating to people unaccustomed to such environments."

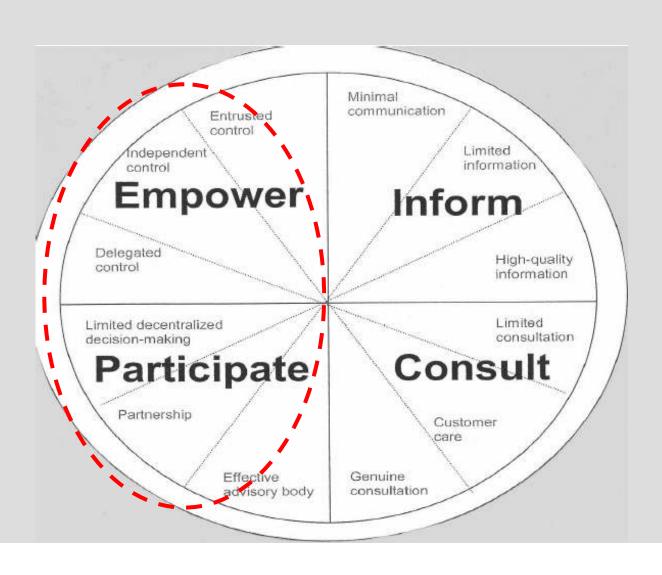
Involve, 2005, p.25.

Models of Participation - the ladder Arnstein, 1969

O
+
a
_ <u></u>
<u>S</u>
=
T
~
(O
Q
_
4
5
I of participation
<u>—</u>
/e
vel
evel
eve
ncreasing level

citizen control	-1 -
delegated power	degrees of citizen power
partnership	degrees of tokenism
placation	
consultation	
informing	tokemsm
therapy	non-
manipulation	participation

Models of Participation - the wheel Davidson, 1998



Models of Participation - the spectrum



Provide stakeholders with information to assist them in understanding the issues and options Obtain feedback on analysis, options and decisions Work directly with stakeholders throughout the process to ensure their issues and concerns are consistently understood and considered

Partner with stakeholders in each aspect of the decision including the development of options

Final decision lies with the stakeholders

Citizens as partners, OECD 2001

1 Information & transac	tion	government informs citizens (one way process)
Government	Citizens	
2 Consultation Government	Citizens	government consults with citizens (citizen's responses generally predetermined by government via multiple-choice, closed – question options)
3 Deliberative Involvemond	ent Citizens	government engages citizens in consultation process (citizens encouraged to deliberate over issues prior to final response)
4 Government – led acti	ve participation Citizens	government instigates consultation and retains decision-making powers
5 Citizen-led active part Citizens	icipation Government	citizens are actively engaged in decision-making processes, alongside government; citizen decisions become binding; citizens share ownership and responsibility over outcomes

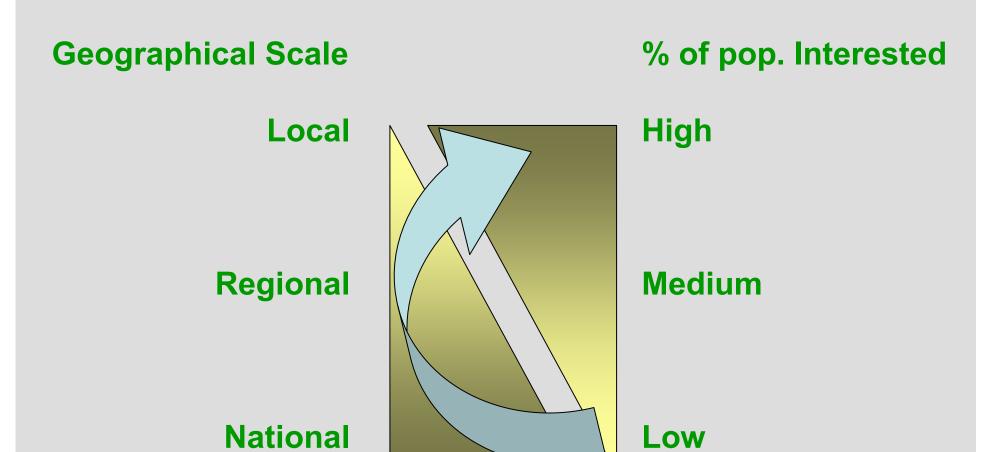
Some theory... what is 'public participation'?

- Although a process, and one that may have a temporal component to it, participation is not 'linear'
- Issues are (frequently) place-based and so are participants (NIMBY-ism & YIMBY-ism)
- 'Participation' can be thought of as a mixture of five components: Notions, Actors, Issues, Outcomes and Methods (Smith 2006)
 - e.g. the relationships between *Notions* and *Methods* result in semantic differences surrounding the intended activity and the method ('theory-builder' and 'theory-identifier' relationships) ICTs and GIS are no different

Is there an appropriate PPGIS model?

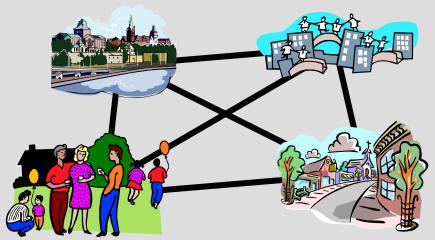
- Historically PP originates from spatial planning and spatial decision making
- GIS is a tool to assist and enhance spatial decision making
- Thus...
 - does PPGIS need a unique model of PP?
- There is some uniqueness to PPGIS in relation to scale...

Geographical scale and levels of participation



Scale of data

- e.g. using PPGIS for windfarm siting
 - viewshed analysis
 - contour interval effects your TIN... DEM...
- Can produce a variety of viewsheds
 - depends on whose data you use
 - which data is correct?
 - contested 'geographies'
- "Jumping scale"



Who are 'the public'?

- Isn't it just everyone?
 - or anyone with an interest in a particular issue
 - more recently focus on 'hard to reach groups'
- Is often very difficult to engage
 - they often become involved too late in the process
- Representative vs. participatory democracy
 - the varying voice that they have directly or through elected representatives
- Access/technology issues (Kling 1999)
 - social access / the 'digital divide'
 - IT literacy
 - possible difference between PPGIS & PGIS?

What are they participating in...?

- It can be a top-down or bottom-up process
 - depends upon the particular circumstances of the PP process/issue
- Predominantly a top-down process
- BUT...
 - PPGIS/technology can enable a bottom-up approach from grassroots community groups (Seiber, 2000)
 - The 'Google Universe'



- Issues of concern to local neighbourhood are aired through community PPGIS portal
- Geo-referenced discussion thread
- Community group then lobbies City for action
- see Kingston (2007)

Policy in a (European) PPGIS environment

- Information/e-Society policies (e.g. from TENs to i2010)
- Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (1998, the Aarhus Convention)
- Water Framework Directive (2000/60/EC)
- Public Access to Environmental Information Directive (2003/4/EC)
- Re-use of Public Sector Information Directive (2003/98/EC)
- Infrastructure for Spatial Information in Europe (INSPIRE) Directive (2007/2/EC)

Some (UK) policy drivers

- Town & Country Planning Acts
 - Skeffington Report (1969)
- Freedom of Information Act
 - access
- Best Value and Modernising Government
 - performance, joined-up government
- e-Government => t-Government
 - more about efficiency-savings than participation
- Statements of Community Involvement
 - how Local Gov involves citizens in decision making

Institutionalisation of the process?

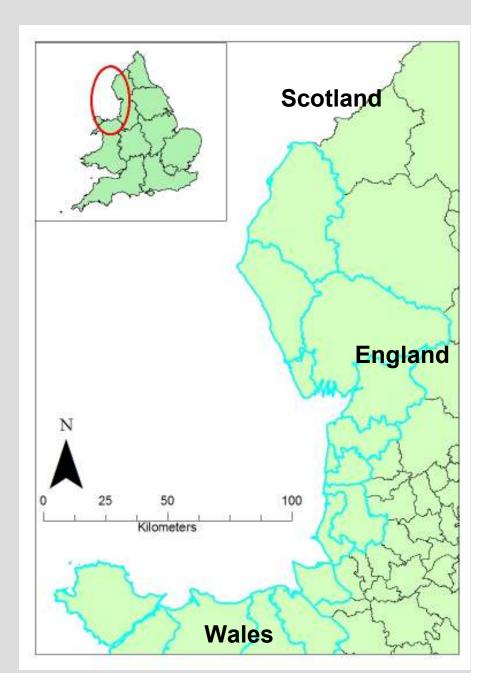
- Is PPGIS becoming mainstream?
 - e-Gov/e-Planning
 - danger of forgetting what PPGIS is about
 - is it becoming too top-down?
- A lot of PPGIS are not about participation
 - tokenism not empowerment
 - informing and consulting not involvement and "active participation"

Tools for the few...

- Batty (2007) notes that most PPGIS have been experiments
 - even with such policy context/incentives
 - very few which have played a major role in real decision/policy making areas
- Some emerging examples
 - Tim Nygeres PGIS for Transportation
 - UCL's Virtual London OS (GB) ©!
 - no doubt you know of many others plus these seminars...

Top-down meets bottom-up

- Initially top down coastal zone management planning
- 16 local, 3 county, 2 regions/countries
- Consult on a range of coastal flood prevention issues
- Involve through examining different scenarios
- Collaborate in management options
- 1st time PPGIS has been the central tool in a UK PP process



Summary

- Participation is important and should be kept at the forefront
 - should not be technology led
 - PPGIS should be a decision support tool
 - PPGIS should be 'shaped' through practice
- PPGIS in principle is much more about how one approaches issues, whose interests are being served, and who is involved in it (or not!), rather than its underlying technology
 - "Consider using spatial information technologies that can be mastered by local people (or local technology intermediaries) after being provided sufficient training - The use of GIS is not a must: it is an option. As technology complexity increases, community access to the technology decreases" (Fox, 2005)

Key questions

- Ask yourself does GIS have a role
 - would GIS add anything that cannot better be achieved through other participatory mapping methods?
- How many people actually participate using such tools?
 - is it still the 'usual suspects'?
 - legitimacy and 'being representative'
- How do decision makers take on board views of participants?
 - what weight should be placed on those views in the decision/policy making process?

and finally... GIS2, Web 2.0 & 3.0

- Sharing geospatial information has links to geospatial ontologies. This is often expressed in Spatial Data Infrastructure (SDI) research but PPGIS could also be a key area to explore. In what ways do/should these two research agendas meet?
- PPGIS is also about e-participation, there are shifts to a Web 2.0 perspective for many data domains. What does this mean for the 'special case' of the (geo-)spatial, both technologically and socially, and what opportunities/ challenges are being opened up by so much geo-referenced grassroots content?







Contact info

Richard Kingston
School of Environment &
Development
University of Manchester

Robin S. Smith
Informatics Collaboratory of the
Social Sciences (ICOSS)
University of Sheffield

richard.kingston@manchester.ac.uk

robin.smith@sheffield.ac.uk

http://www.ppgis.manchester.ac.uk/

http://www.shef.ac.uk/icoss/





References

- Arnstein, A. (1969) A ladder of citizen participation, *Journal of the American Planning Assoc.*, 35(4), 216-224.
- Batty, M (2007) Planning Support Systems: Progress, Predictions, and Speculations on the Shape of Things to Come. CASA Working Paper 122.
- Daly (2007) The Kronberg Declaration.
- Davidson, S. (1998) Spinning the Wheel, *Planning*, 1262, 14-15.
- Involve (2005) *People and Participation: How to Put Citizens at the heart of Decision-Making*, Involve, London. http://www.involving.org/
- Kingston, R. (2007) Public participation in local policy decision-making: the role of web-based mapping. *The Cartographic Journal*, 44(2), 138-144.
- Kingston, R., Carver, S., Evans, A. and Turton, I. (2000) Web-Based Public Participation Geographical Information Systems: An Aid To Local Environmental Decision-Making. *Computers, Environment and Urban Systems*, 24(2), 109-125.
- Kingston, R. (2002) Web Based PPGIS in the UK. In W. Craig (ed.) <u>Community Empowerment, Public Participation and Geographic Information Science</u>. Taylor & Francis.
- Skeffington Report (1969) Report of the Committee on Public Participation in Planning: People and Planning. London: HMSO.
- OECD (2001) Citizens as Partners: Information, Consultation and Public Participation in Policy-making. Paris, OECD.
- Sieber, R. E. 2000. GIS Implementation in Grassroots Organizations. Urban and Information Systems Association Journal 12(1): 15-29.
- Smith, S. (2002) Participatory Approaches Using Geographic Information (PAUGI): Towards a Trans-Atlantic Research Agenda5th AGILE Conference on Geographic Information Science, Palma (Balearic Islands, Spain) April 25th-26th 2002
- Smith, S. (2005) Theories of Digital Participation (Ch. 3). In Campagna M. (Ed.) GIS for Sustainable Development. London; CRC/Taylor & Francis.
- Smith, S. & Craglia, M. (2003) Digital Participation and Access to Geographic Information: A Case Study of Local Government in the United Kingdom, URISA Journal, 15(II).