REGULAR SESSION INFORMATION

Session: Knowledge Swaraj: Science and Technology in Civil Society

Session Convener(s): C. Shambu Prasad, Xavier Institute of Management, Bhubaneswar

Chair: C. Shambu Prasad, Xavier Institute of Management, Bhubaneswar

Comments: -

I) *Rethinking the Publics of Swaraj: Exploring Collective Self-Knowledge*
Rajni Bakshi, Mumbai

II) *From Knowledge Restitution to Cognitive Justice: What the Swaraj Manifesto Can Teach Western Scientists*
Florence Piron, Université Laval

III) *Rethinking Science Education: The Quest towards Knowledge Swaraj*
Joseph Satish V, Hyderabad
C Shambu Prasad, Xavier Institute of Management, Bhubaneswar

IV) *Ahimsa in Method: Rethinking Swadeshi in the Pursuit of Science Swaraj*
Bhakti Patil, Jawaharlal Nehru University, New Delhi

V) *Knowledge at the Bottom of the Pyramid: Exploring the Politics of Knowledge Swaraj*
Madhulika Banerjee, University of Delhi

ABSTRACTS

Session description

This panel suggests that a contemporary exploration of social science and the publics need to rethink the link between knowledge and democracy. Social science today needs to engage more pro-actively with the science establishment in the way issues of power and hegemony get articulated by a narrow view that favours the scientific expert against the citizen. There is enough indication that citizens and civil society groups have been questioning this view in India recently. The panel suggests that there is much to derive from Indian traditions of 'society speaking back to science' and exploring alternative scientific imaginations. The panel will look at a recent effort to rewrite an Indian manifesto on science and technology seeking inspiration from Gandhi's *Hind Swaraj* suggesting the need for *Swaraj* for farmers, artisans and scientists too from the model of science policy that has in the past advocated *swadeshi* in science and technology but has created several paradoxes within India. The panel will explore the possibility of organizing and planning for science and technology on three frames of plurality, sustainability and justice.

In the crisis that the world faces today, including those of resources, institutions, the state as well as the market, this panel will present a vision that offers alternatives both technical and self-consciously part of a larger struggle. The alternatives rest on the knowledge and practices of those that are victims today, but certainly potential champions of a new and sustainable society. Thus, those that have been seen potentially as the recipients of science and technology are seen as active contributors to the creation and practice of new knowledge. This is seen as the building blocks of knowledge Swaraj, as Gandhi would have envisaged it. It is important to stress the contemporary nature of this exercise, in as much the knowledge being brought to prominence are not simply 'traditional' (though they form a part of this search), but those being actively practiced and continuously being experimented with on the ground.

Papers

I) *Rethinking the Publics of Swaraj: Exploring Collective Self-Knowledge*
Rajni Bakshi, Mumbai

Insights on the sociology of knowledge have often arisen from centres outside the social science universities in India in forms of mass movements that have sought to recapture the space of the citizen as a legitimate actor in the production of knowledge. Ideas of ethnocentrism, western hegemony, decolonization etc. have been transformed through networks that have rooted in local struggles but have been linked to global movements for social transformation. Recent movements such as the hugely popular movement against corruption in India have raised fundamental concerns about the future of democracy and have drawn comparisons to freedom movements and Gandhi. In such a context there is a need to engage with the ideas of "Knowledge Swaraj" and clarify if this is arebellion by erstwhile colonies - a counter to entrenched hegemonies – or a slow, insidious, morally anchored process of changerooted in ahimsa. How does one see Swaraj? Is it a nationalistic term, a sub-altern struggle for gaining recognition for 'lokavidya' -- people's knowledge? Or is it to be understood in universal terms of rule over the self then the striving for knowledge Swaraj is a global process taking diverse forms. What, in this context, could be 'India's' contributions to a global process? Are there manifestations of this in other movements where ideas of Gandhi on an ethical economics, trusteeship finding resonance with current ideas on climate justice and sustainability. This paper seeks to first explore the political space of Knowledge Swaraj and follow this up with an example of contemporary thinking and a movement for a non-violent economics. How has the idea of a collective

self-knowledge expressed itself in these different movements and what might its implications for knowledge Swaraj be?

II) *From Knowledge Restitution to Cognitive Justice: What the Swaraj Manifesto Can Teach Western Scientists*
Florence Piron, Université Laval

Knowledge restitution is becoming a standard procedure in many science research projects, especially in qualitative social science. It usually means making a public presentation of the research results to the people that contributed to the research or financed it. However, the choice of the strong legally-connotated word « restitution » to qualify this kind of knowledge transfer activity suggests that something more than a technical courteous information session is at stake. During any research process, is something (words, ideas, feelings, memories, in sum knowledge) being stolen from the informants? Is it possible to « restitute » it or to give back something equivalent? To whom should it be given back: the informants or society in general from whom they « come »? What for? To appease some unexpected moral feelings of debt from the experts towards their informants? To briefly break the wall between science and society by showing that communication is possible – even if it is one-sided? To « silence » informants (and society) by anticipating their possible critique of the way that the knowledge that had been « given » has been reworked by the scientist according to his or her interests, i.e. the scientific rhetoric and discourse in which he or she has learnt to think?

The interpretive violence that standard science imposes on local knowledge, if only to fit it with a « research question», seems to pervade the knowledge restitution issue. The concept of cognitive justice as defined in the Swaraj Manifesto deals much better with it. It clearly names the power relation that is at the heart of the exchange between informants (as members of society) and scientists (professional researchers), whether during data collection or « restitution activities »: the reworking of all local « raw » knowledge, inevitably diverse and heterogeneous, into scientifically orthodox data, supposedly of universal value. Cognitive justice asks that informants (or citizens) participate into such a work on (local) knowledge; that this work be collective and sensitive to local values and issues; that it includes diverse voices: « Cognitive justice recognizes the right of different forms of knowledge to co-exist but adds that this plurality goes beyond tolerance or liberalism to an active recognition of the need for diversity » (p. 22). From that perspective, knowledge restitution becomes the restitution to society of the power to know and to demand that science respects the socially constitutive diversity of voices, even at the price of a less universal scientific discourse. Knowledge democracy is not only a matter of science policy: it involves the making of knowledge.

III) *Ahimsa in Method: Rethinking Swadeshi in the Pursuit of Science Swaraj*
Bhakti Patil, Jawaharlal Nehru University, New Delhi

Essential to the proposed study remains the fundamental interlinkage between two elementary Gandhian categories: Swaraj and Swadeshi. What it seeks to assert as such, is the thesis that true Swaraj must remain necessarily contingent on what Gandhi regarded, an authentic swadeshi, on swadeshi as a social resort to necessarily self-sustaining methods, that Swaraj as ahimsa and Swaraj as satya must make imperative a critical methodological remaking: a fundamental subversion of method in the rethinking of the epistemic as a necessarily non-violent praxis. It is a categorically swadeshi knowing that must make possible an authentic Swaraj: Ahimsa in method that must make possible a moral reformation, a true Science Swaraj. And yet, swadeshi must preclude an epistemic closure, an arrogant inturning in the narcissistic celebration of self-sustenance: for, ahimsa as satya must make swadeshi a

dialogic possibility, a generative authenticity transcending closures of ideation and practice, the obstinate severance of tradition and innovation.

It is this emancipatory monism, the communion of what may be regarded a swadeshi epistemology, that must make inevitable also, a constructive critique, a systematic unmaking for a creative reimagining of the methodical schema of a new science: the elementary ethic of a new knowing. For, while true Swaraj must presuppose the praxis of Swadeshi, it must also, in the realisation of the latter, sustain an elementary conviction, of ahimsa, of a necessarily non-violent, moral order that must unmake for Swaraj, the artificial dualisms of a modern, rapacious scientificity.

Swadeshi as conceptualised in the proposed study, remains a precondition for what may be regarded, an authentic science Swaraj. As ahimsa, as satya, swadeshi remains also, necessarily dialogic, emancipatory in a perpetual transcendence: of tradition, of innovation, of the limits of an acquisitive, colonizing scientism.

IV) *Rethinking Science Education: The Quest towards Knowledge Swaraj*
Joseph Satish V, Hyderabad
C Shambu Prasad, Xavier Institute of Management, Bhubaneswar

Recent times have generated greater awareness towards the wealth of benefits accorded by native and indigenous knowledge systems to the construct of Euro-American science, infamously referred to as "Western science". This shift, however, has not been given a red carpet welcome. The worldview of Western science is generally considered to produce knowledge only for the sake of economic progress, while indigenous knowledge production is believed to be for the cultural maintenance of society. This dichotomous viewpoint has lead to an essential "science war" where one school romanticizes indigenous knowledge and the other exalts Western science, each claiming that one is superior to the other.

This paper tries to explore efforts towards bridging the gap between these two seemingly warring factions. Specifically, it looks at the effort on including indigenous knowledge systems in science education. The author presents recent attempts to look at science education from a cultural perspective and the debates surrounding the same. This will include examples of policy changes by various governments to include indigenous knowledge in science curriculum and reactions to this. Contrary to popular perception, Mahatma Gandhi himself was not Luddite and his view of a people centric science was echoed by unconventional Western scientists like Sam Higginbottom and Albert Howard among many others. This paper will attempt to show that a new social contract towards science, society and culture as envisaged by Gandhi will have to stem, among others, from a rethink of how science education is imparted in educational institutions. As one educationist points out, it requires a "cultural border crossing between school science and indigenous knowledge". This author will also explore if an appreciation of the distinctions and similarities between these two seemingly diverse systems can lead to a mutually beneficial interface between them. This quest will hence argue that an educational curriculum borne out of this exploration may not necessarily be a risk to scientific objectivity but can possibly lead to an emergence of a Knowledge Swaraj based on the three pillars of plurality, sustainability and justice.

V) *Knowledge at the Bottom of the Pyramid: Exploring the Politics of Knowledge Swaraj*
Madhulika Banerjee, University of Delhi

This paper aims to bring two kinds of discourses to talk to each other. One discourse is that of the debates on technology and knowledge for development, in terms of who has the knowledge for development and how it is going to acquire wider access. This debate has pointed out that people at the bottom of the pyramid can be seen as

potential consumers for rapidly expanding markets, or as producers for the market and for themselves, who carry the knowledge-base of their production with them. This shift to the poor as knowledge-carriers, privileges what they know as being valuable to contemporary development.

The other discourse is from the debate within the arena of non-modern knowledge. In debates over which of these are capable of or ought to play a significant role in contemporary development, it reflects the hierarchies within it. The earlier debate on science, swaraj and development was often between 'modern' and 'traditional' knowledge, that later has got modified to local and 'indigenous' knowledge. There is however another tension between different levels of local and indigenous knowledge, between the textual and non-textual traditions, between those that were codified in the pre-modern era and were able to cast themselves in terms of modern codification, while the other was not. This is evident in a context like that of, for example, Indian medical systems between Ayurveda and local health traditions for instance or globally between Chinese medicine and the medical knowledge of Brazilian indigenous people.

In bringing these together, this paper will argue, extending the recent thinking in economics, that the 'poor' are 'rich' in terms of knowledge and there is a 'fortune' to be explored at the bottom of the pyramid if we understand how to use it. At the same time, this paper is also going to argue very strongly that unlike the earlier proposition of fortune at the bottom of the pyramid, this fortune is to be harvested by the poor themselves. Several interventions around the world have focused on the knowledge of the poor and have attempted to strengthen it for better productivity, addressing health issues or enabling livelihoods. This now requires a systematic endorsement by those in power, which can only be realized when an understanding of this potential is crafted by those on the ground in terms economic, epistemological and political. This needs to be done by a political mobilization of these ideas, though it cannot be said that the received wisdom on political mobilization, whether through political parties or the "new social movements" could possibly provide the frame for this. A fertile breeding ground for this mobilization exists – whether in terms of older social movements grappling with new challenges, existing Gandhian interventions in livelihood development that is self-consciously non-violent in the relation between humans and nature or in the angry mobilizations by people against dominant business interests round the world. This is what I call the politics of Knowledge Swaraj and argue for that it holds far greater and more creative possibilities for a more sustainable economic and ecological future.