‘I plan, you participate’:
A southern view of community participation in urban Australia

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Abstract  Community participation, an imperative ingredient in any intervention, in spite of all the recent emphasis on, it has continued to remain a form of collective bargaining. Instead of reversing its position in face of community opposition, governments are tempted to reinforce it by seeking the scientific opinion from experts. By favouring this opinion as the rational approach, the government undermines the essence of community participation. To illustrate this point, the paper traces the recent history of M5 East Motorway Tunnel Exhaust Stack located in a residential area of Sydney. I show how, between two modes of knowledge systems of two groups opposing each other, a privileging process subordinates citizens’ preferences and understandings to those held by experts. Thus the process of participation becomes circumscribed by the government’s implicit preferences that are imposed on the community in the name of a more ‘scientific’ view irrespective of citizen opinions.

Introduction

Concepts such as ‘community’ and ‘community participation’ have been intensively problematized in recent decades in both developed and developing countries. There may, however, be many interpretations of what is meant by the terms in these two different contexts. Contexts are indeed different and varied (Guha, 2000). Development planners originating from ‘northern’ countries propose ‘rapid’ and ‘participatory’ appraisals to enable them to

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quickly understand the local perspectives of a poor country context. On the other hand, citizen participation in many developed countries is ensured by legal requirements from the very beginning of a project. For example, Environmental Impact Statements (EIS) are compulsory for many urban or rural development projects. Similarly, the issues necessitating community participation, especially those in the urban context, are different in less developed and more developed countries. For example, it has been emphasized that whereas the ‘local’ environmental problems of survival are most important for subsistence-level societies, economic prosperity draws the attention to the larger scenario in which decisions affecting the environment are taken (see for example Dube and Singh, 1988, and contrast it with Chatterjee, 1986). A look at the Environmental Protection Agency’s (EPA) 1998 paper outlining New South Wales government’s futuristic air quality plan and Shah and Nagpal’s 1997 series delineating air quality management strategies in various metro cities of Asia provides adequate proof.

In many cases, however, government and citizens act as two different groups starting from disparate backgrounds and interests, often clashing with each other. How are the interests of the community articulated in this battle between two adversaries? As the community is essentially diverse and can comprise a wide range of interest groups – a lobby, a pressure group, a religion, a neighbourhood, rural, urban, rich, poor – its preferences can be taken as a system of knowledge that is not institutionalized but does exist nevertheless.

What is community participation? It is an ambiguous term with vague but positive overtones. It implies an interactive process between members of the public, individually or in groups, and representatives of a government agency, with the aim of giving citizens a direct voice in decisions that affect them. Beyond this, the term does not specify the nature of the interaction. Edelman had noted that while ‘political participation symbolizes influence for the powerless . . . it is also a key device for social control. In consequence, liberals, radicals and authoritarians all favour participation, a tribute to the term’s symbolic potency and semantic hollowness’ (1977, p. 120). The term has an omnibus character and potential deceptiveness. Arnstein (1969) defined a ‘ladder’ of public participation procedures ranging from ‘true’ participation, involving a real transfer of some power, to various forms of
manipulation. Pateman (1970) too distinguished between pseudo, partial and full participation. However, as noted early (for example Pateman, 1970, Bachrach and Baratz, 1970), the goal of citizen participation in decision-making and governance is to remedy social injustice through some redistribution of political power. Mathews (1976) too noted that participation is about power as it involves the sharing or taking some part in actual decision-making. The classic definition of participation is the one given by UNRISD (Stiefel and Wolfe, 1984) as ‘the organized efforts to increase control over resources and movements of those hitherto excluded from such control’.

This paper argues that expert ‘scientific’ knowledge is usually given precedence during the decision-making process over local, lay knowledge. The community, in spite of successfully mobilizing resources and information, may not eventually take advantage of their economic or political muscle power. At the end of a community arbitration process, public inputs are invariably subordinated to expert preferences and understandings. In community participation literature, the word ‘consultation’ is often used by international agencies like the World Bank (McMahon and Strongman, 1999). Citizen participation is, however, a lot more than just consulting people for the successful resolution of social, cultural and economic issues related to environmental conflicts. The primary goal of participation is to give proper responsibility to people for, and control over, their lives.

Community participation leads to a redistribution of power within the society. However, many experts have noted the continued existence of a gap between academic inquiry and development practice (Schuurman, 1993; Slater, 1993; Booth, 1994; Peet and Watts, 1996) highlighting weaknesses in community participation as it happens in the real world3. In this paper I intend to show how the essence of participation becomes a privileging process in which the public preferences and understandings are reduced to data alongside similarly reduced expert preferences and understandings to which the public inputs are subordinated. I trace the recent history of M5 East Motorway Tunnel Ventilation Stack (the Turrella Exhaust Stack or TES) located in a middle class residential area (Wolli Creek) of Sydney. The study shows that the environmental issues that catch citizens’ imagination in a more developed country like Australia are not essentially different to those elsewhere, thus necessitating a rethinking of the popular notion that environmental issues in one place exist in isolation of the other.

The data collected for the inquiry originated partially from field visits and interviews with experts, government officials and citizens during 2000.

3 Probably the strongest critique of the term ‘participation’ has come from Rahnema (1993) showing how it has been coopted by governments as a politically attractive slogan with the potential to pass the economic costs to the poor.
These primary data were supplemented by library work at The Australian National University to understand the wider context as Australia has a complex historical tradition of citizen involvement in the urban planning process. My use of the term ‘southern’ is intended to be purely a tongue-in-cheek reference to the (insensitive) convention of using directional terms ‘north’ or ‘south’ while referring to the more developed or less developed countries of the world (examples are too numerous, but one can refer to Ghai, 1991). As my fundamental argument is that scientific knowledge too is specific to the time and place, I have tried to draw attention to my subjective position here as a ‘southerner’, a subaltern, with respect to Australian studies.

In comparison to less developed countries, where community participation issues in the development process have generated much recent debate (see Ghai and Vivian, 1992 for example), citizen participation in developed countries is more a matter of legal compliance. This gives rise to what Fisher and Urich (1991, p. 252) see as a ‘polarization between a participatory development paradigm and a market-driven development paradigm’. However, these are imperceptibly interlinked, as the primary strategy of government is to reinforce its position by seeking expert opinion. This opinion stands for the ‘rational approach’, and by privileging it, government excludes the generation of common ground and meaning in the community participation process. Munro-Clark (1992) notes that citizen participation in planning might be sought by government as a way of diffusing opposition, managing conflict or spreading responsibility. But, as we will see in this paper, it may not necessarily mean that the knowledge and opinions of local communities will be given precedence over what the state sees as a highly desirable development supported by expert assessment. The ‘official ideology’ of participation, Painter (1992) observes, accepts that for some groups and for some types of decisions, steps could be taken to foster public involvement. According to him, in direct democracy there is a more continuous and active role for citizens, as in contemporary governments elected politicians do not always appear accessible. Thus governance becomes dominated by the non-elected parts of the governing system, notably civil servants, who by their very nature see only the broader picture.

**Citizen participation in urban Australia**

Citizen consultation in urban transport planning in Sydney has been studied previously and its weaknesses recorded (Stone, 1992). Most important is the fact that the entire community is never involved in the participation process. Miller notes that in Australia ‘… the typical participant is a married middle aged, well-educated man who is active in voluntary organizations. His
income is higher than average; he owns his own home and a car; he has resided in the area a long time and is active in local politics’ (1988, p. 133). Those under-represented usually are women, young people, pensioners, industrial and service sector employees and immigrants. In general, Miller believes that groups with a direct economic interest in land use matters are strongly over-represented (p. 36). Lack of education is another factor in the non-participation of relatively powerless groups reinforcing the argument of education for citizenship. This is clearly an area that has much broader implications than just effective community participation.

When and how to implement participation is as important as the ideological issues related to it in Australia. Though public participation in planning is mandatory in Australia, especially in the urban context, the process is beset by problems (Sarkissian and Perigut, 1994) in addition to those mentioned above. These include:

- the late introduction of participation in the local planning process
- a lack of involvement or informed public discussion on the issue of the release of land for development and other major questions of metropolitan and regional growth
- a lack of organized and established structures for effectively obtaining community input
- an avoidance of community participation by state and legal governments by making decisions secretively or leaving little time for public discussion
- the lack of time, expertise or monetary resources for the community to make its voice heard effectively

This last point is especially important with regard to large expensive developments, which have major political importance to governments. Much before these criticisms were made, the Institute for Participatory Planning of Australia outlined in its 1981 handbook, the guidelines of inviting citizen participation. The monograph remains quite popular with public officials and has run into four editions. Thus, clearly, there is a set of standard practices available for government officials in Australia.

The re-definition and decline of the state’s role and increased thrust on community participation in recent times have created new spaces in urban Australia, where air quality remains one of the major environmental issues. Many developed countries have successfully developed effective public policy to contain and control urban pollution from transport, and Australia too is trying to integrate civil society participation in its concerns about the urban environment. The Department of Urban Affairs and Planning (DUAP) has come forward with a strategy plan that emphasizes the need for improved transport infrastructure and services. ‘Action for Transport
2010 – an integrated transport plan for Sydney’ outlines the New South Wales government’s current transport strategies related to urban environmental quality as reducing traffic congestion, improving air quality and reducing greenhouse emissions. The TES project is placed in this context.

The TES project in Sydney

Urban development in Australia has taken place under a cultural pressure to provide as much space as possible. This was fed by a strong anti-city, pro-rural tradition that came largely from nineteenth-century England. In addition to an environmental awareness being built into the urban agenda, Australian cities are distinguished by the significant role played by the state in urban infrastructural provision that has influenced both the patterns of settlement and the political process in fundamental ways. Yet, Australian city-dwellers use cars as much as Americans. The culture of space has given rise to an official concern about the public costs of urban growth and increased car use, accompanied by the goal of making Australian cities economically efficient and competitive. There is also a strong and growing concern over environmental issues that are primarily urban in origin such as air and water quality, noise pollution and traffic congestion. One authority on urban Australia (Troy, 1995) does not believe in ‘urban consolidation’ to create more compacted cities and has suggested multi-centred patterns of growth. However, communication between such centres requires further transport, consequently increasing urban pollution and chaos. Watson (1993) gives a stark picture of a ‘mad society’ and warns that Sydney is on a similar trajectory to the uncontrollable sprawl, dispossession and despair of American cities.

Until the late 1980s, Sydney avoided building extensive motorways, through the development of a sophisticated traffic light systems known as SCATS (Sydney Computerized Adaptive Traffic System) and the use of other traffic control measures such as urban clearways and bus-only lanes. However, metropolitan Sydney has grown significantly and at present has a population of about 4 million and is the largest city in Australia. Much of this urban growth has come from the ‘sprawling out’ of the city into the surrounding areas giving rise to great concern among government circles about urban planning (AATSE, 1997; DUAP, 1998). Such development is in spite of ‘greenspace’, green wedges or green belts that have been made mandatory and perceived as a community resource (Pullen, 1977). Blunden (1978) emphasized the existence of strong public policy in transport matters in Australia arguing that its extensive public transport infrastructure bears testimony to some substantial initiatives.

Besides urban growth, the physical character of Sydney, such as terrain
and climate, impact on the transport-related pollution problem. Air pollution is highest on calm days when there is no wind to dilute it. Another factor is the valley drainage flow as Sydney is enclosed by higher ground on three sides. On calm fine days, the colder, heavier air flows down from the hills of the northern and southern suburbs into the basin and out to the sea. Pollution gets trapped within this shallow layer producing concentrations that are higher than if mixed into a greater thickness of the atmosphere. Such meteorological conditions proved to be a problem for the TES.

The M5 East Motorway is a 10 km four-lane, dual-carriageway, tolled motorway comprising two tunnels:

- the one eastbound and the other westbound mainline tunnels are 4 km in length
- the Cooks River crossing tunnel is 550 m in length.

It is the first set of these tunnels that is the subject of this paper. These have a steep grade descending into and exiting from the tunnels. Vehicles, particularly heavy goods vehicles, ascending slowly to the exits have high exhaust emission rates in these parts of the tunnels.

The project’s environmental impact assessment was prepared by a private firm, Hyder Consultants, who included some environmental carrots such as a new frog habitat in nearby wetlands and the guarantee of an area of bushland/parkland, free from future encroachment. The Ministry of Urban Affairs and Planning (MUAP) attempted to deal with the exhaust emissions emitted by the stack to which much of the community concerns were directed, and stipulated that concentrations of CO, NO₂ and PM₁₀ would not exceed certain limits. Traffic data, essential in such a case, were provided by the government agency Roads and Traffic Authority (RTA) with figures on both traffic distribution or vehicle type analysis for vehicles using the tunnel, and the number of vehicles using the tunnel each hour and their average speed. These two sets of data along with vehicle age were used to calculate exhaust emissions. The assessment technique utilized background data from EPA, and used aspects of air quality assessment, quantification of emissions from various segments of the roadway, estimation of kerbside concentrations of roadway air emissions, and construction impacts.

**Turning community arbitration into a linear process**

The core of the disputed issue was the disposal of pollution, that is, emissions resulting from ventilation of the tunnel. Clearly, whoever is located near the exhaust ventilation site will have to bear this. The planned exhaust ventilation station and exhaust stack (TES) was connected to the mainline tunnel via a 700 m long-driven ventilation tunnel running south to roughly
the centre of the main tunnels. Originally three stacks were conceived on top of the ridgeline, but that proposal had to be abandoned following vehement local opposition, over their physical prominence and visual obstruction, despite the fact that this would have allowed optimum dispersion of the tunnel exhaust. The TES was to be located in a park described by government as an ‘industrial’ area. There are residential houses around it – mostly low, wooden structures. The park is located within a shallow valley, known as Walli Creek, that brings with it other meteorological problems. The TES was to be of a height of 25 m with an option of going to 35 m. If the height had been 35 m, this would have led to a ‘general improvement in dispersion’ but with the disadvantage of a more conspicuous structure. All these points later become major issues of contention between the community and the government.

During the design analysis and public consultative process toward the end of 1998, the methodology for tunnel air management of TES came under criticism. Initially, the approval process became the subject of intense public scrutiny and a number of court cases were filed and inquiries were held including a Parliamentary Inquiry to which detailed submissions about community concerns were made. However, despite such objections work on the TES continued.

Of the various stakeholders opposing the M5 East Motorway Project, the one that was most concerned about pollution was that comprised of residents from the Wolli Creek area. As public opinion began to crystallize against the motorway, the specific objection of Wolli Creek residents began to focus on the location in their neighbourhood of the TES. Consultations with the public groups were conducted both at formal and at informal levels, and incorporated the views of the community with some minor changes in the project design. One such formal consultation was in the form of committees to which the residents responded with the formation of Community Air Quality Committees. The representations of the community provide an informative insight into citizen participation issues in contemporary Australian urban development (www.parliament.nsw.gov.au/IC/committs/gpur/m5rcp.pdf).

As the local community was raising as matters of concern various pollution issues, government agencies too began to organize workshops such as ‘International Tunnel Ventilation Workshop’ to bring together the warring groups and to assert the legitimacy of expert opinion. Considerable attention was now focused on the TES through the activities of ‘Residents Against Polluting Stacks’ (RAPS) (http://nostack.5m.com). This RAPS group reflects the characteristics of the Australian urban population – they are highly educated (by world standards), articulate and intelligent. Their arguments had three major elements:
• The air quality specification for the TES was seriously flawed, leading to uncertainty and an inadequate pollution specification
• DUAP approval is inappropriate and inadequate for the construction of such a complex environmental experiment, located in a shielded valley
• Non-compliance with New South Wales Government’s 25-year Air Quality Management Plan, ‘Action for Air’, that clearly states (in Paragraph 3 of Minister’s Foreword) ‘Everyone in New South Wales has a right to breathe clean air.’ For this, the residents suggested that the EPA requirement of the ‘removal of the pollutants at the source’ be followed.

All these boiled down to the residents’ objections against, first, the **location** (of TES in the valley of Wolli Creek), and second the **height** of the vent stack. This is because, besides the traffic projections, the other important determining factor is the effective dispersion of the exhaust plume out of the valley of Wolli Creek. The shielded nature of the valley makes its air-flow characteristics vastly different to higher atmospheric conditions. The meteorological conditions are such that the pollution plume will tend to rise up the valley slopes and affect the air quality of the residential houses located on the hill slopes. Locating the 25 m stack adjacent to a 40 m hill would result in ‘dusting’ it with exhaust plumes. With a higher stack, the pollution would disperse over a wider area but would create an objectionable visual impact. The issue came down to the ‘equitable dispersion’ of pollution and whether a particular section of citizens should bear the environmental costs of an urban development project meant to improve transport conditions of the entire city. The ‘right to clean air’, it was said, should at least be demonstrated by the government investing in the equitable distribution of unavoidable pollution, based on regional concentrations, if this pollution cannot be eliminated’ (RAPS website). The project, it was claimed, not only ignores the inequality and certainty of higher localized concentrations above the regional concentration levels, but affects ‘sensitive sub-populations’ such as children, older and sick people. It was claimed that clause 73 of the MUAP approval states clearly that the ‘Director General has the responsibility and duty to improve the dispersion of emissions and/or to reduce the potential impact of emissions on the local population’.

RAPS then questioned whether all possible technological options had been explored. For example, RAPS lobbied hard for the installation of precipitators and gas treatment systems that could reduce the pollutants in the tunnel. Other concerns focused on the more toxic trace components of motor vehicle exhaust namely benzene and butadiene, both carcinogens. Finally, RAPS pointed out that the contractor had far too much latitude for
inequitable pollution dispersion and provided an example of how the
design/construct contractor minimized the ventilation requirement. Thus
RAPS exploited the contradiction that on the one hand the state acknow-
ledged their right to less pollution, while on the other encouraging the
design contractor to achieve higher concentrations of pollutants for the
commercial benefit of shareholders.

**Expert opinion**

Looking for a means to get out of the imbroglio, the DUAP recruited in May
2000 experts from the Commonwealth Scientific and Industrial Research
Organization (CSIRO) to mediate by providing the ultimate judgement. In
scientific matters, the opinion of CSIRO is considered to be the final word by
both practitioners and lay people, especially the wider citizenry, rather than
a specific local community, and their support was much needed by the
government to establish the project’s technical excellence. CSIRO advised
that the methods employed by the consultants were appropriate and the
conclusions were credible but sought clarification on a number of points. In
addition, CSIRO did stress that the appropriate stack height should be 35m,
confirmed that plume strike of pollution would hit buildings above 500m
and that height restrictions should be imposed.

The episode opened, in the words of an air quality professional, a ‘can of
worms’ in which many problems related to urban transport planning and
community participation came out. In this TES incident, different factors,
players and interest groups had definite stakes, and therefore there were
different ways of looking at the issue. Yet one specific kind of approach was
allowed to take precedence over others. As a result, risks and uncertainties
in the project were not given due importance or perhaps assumed different
significance for the different players. Indeed the CSIRO report noted the
uncertainties unavoidably inherent in the assessment. For example, atmos-
phere and its conditions, especially in a changeable weather condition area
in the Sydney basin, are difficult to predict. There are uncertainties in the
data regarding projected traffic flows, the number of heavy-duty diesel
vehicles and the level of emissions. Finally, there are inherent uncertainties
associated with the turbulent nature of the atmosphere that limits the pre-
cision of plume-dispersion models permitting them to forecast only on an
average value basis. Other uncertainties, not addressed in the TES assess-
ment, concern the effect on human health resulting from a change in air pol-
lution levels. Indeed this is one aspect that is, perhaps, the most uncertain
of all, being mostly the result of complex epidemiological studies.

The key question throughout centred on the location of TES. Who decided
upon that location was never very clear, but the citizens of Wolli Creek were
never consulted before the technical analyses were initiated. Thus, the TES location was ‘given’ to them as a *fait accompli* when the project was approved in December 1997. Clearly, ventilation of M5 Motorway posed a major community issue, and whether the location of TES was indeed sub-optimal technologically, environmentally and financially was not explored. Similarly, it was clear that internal filtration at source was not perceived as an alternative as it would have been cost-ineffective as the main problem lay with the background pollution levels into which the tunnel exhaust was emitted. Again, why the original plan of construction of three stacks sited on high ground was abandoned was not clear.

**Conclusion and questions for further exploration**

The TES case highlights some harsh realities of citizen participation in matters of urban governance. Whereas public involvement and consultation processes remain far better than elsewhere, and the citizens (as well as the government) more aware and resourceful, all this may still come to nothing if the impact of citizens’ opinion on public policy-making is insignificant. However, we need to establish what we mean by ‘citizens’. Who exactly constitutes a stakeholder – does the local community have the only say or does the wider public interest count too? For strategic reasons, governments usually undertake large infrastructure developments in cities. Those benefitting from such projects, provided they are soundly based, usually outnumber the objectors, who are those usually adversely impacted. To what extent, in a democracy, can the minority views be accommodated? Again, in a plural society, how can just numbers decide whether a project is indeed beneficial or not? How is the common or public good assessed and evaluated?

Efforts in incorporating public participation in urban transport planning have consistently demonstrated that making provision for participation is not sufficient to ensure that it will take place in a fair and even manner. Participation means that the state pays attention to local opinions about projects and plans, and if there is a conflict between the greater common good and local interests, resolves it in the best possible manner. In this case, we noted how the two modes of knowledge held by the two opposing groups could not find common ground. As a result, the creative possibilities in TES were circumscribed by the lack of flexibility in articulation. The scientific view had the ultimate say and was upheld as being ‘objective’ and rational.

An uncritical acceptance of science as necessarily being ‘good’ inevitably works against the common interest of the ordinary citizens. Science is a social enterprise, and as such is tied to specific interests, and what appears best from a scientific point of view may actually not be the best for society
and for achieving social objectives (Parthsarathy, 2001). As a state ideology, science can take up a hegemonic form of knowledge, falsely confirming that as a method science is true and neutral. A belief is created that it is ‘good’ or potentially so and the available corpus of scientific knowledge, if well used, can solve all the problems of society. However, to claim superiority on the basis of inadequate and incomplete evidence leads to a kind of pseudo-rationalism that is harmful. Rationality needs to be applied as much to ultimate goals and objectives as to choices and decisions that people make. ‘Because it is the scientific view’ is not reason to adopt scientific means to an end. What is needed here is to encourage debates, and understanding about how knowledge can contribute to the larger common good. Also needed is an openness to different knowledge forms, a readiness to evaluate them on an objective, democratic basis and a willingness to subject oneself to democratic evaluation and criticism without hiding under the cloak of science.

Any developmental change can have adverse impacts on sections of the community. In India, often as not, it is the poorer, less educated, parts of society that have to bear the brunt. In Australia, the impacts are less discriminatory. But the one common factor is how to recompense those affected in an acceptable manner. The objections to the TES were argued in terms of health impacts and model uncertainties, but the suspicion remains that they were related essentially to the aesthetics and potential for lowering house/land prices in the immediate vicinity. Probably most objections could have been dealt with by making adequate compensations to the affected householders. Was this then a case of Not In My Back Yard (NIMBY) syndrome? Why did the residents then allege ‘clear breaches of trust, violation of codes of equity, due process and some of the project approval conditions’? Or was it a case of ‘expert knowledge’ superceding local opinion? It is common to look down upon such local objections, but it does seem that the residents had some valid points in this case. What could be the ultimate solution in a case like this – what amount of compensation would be adequate for residents’ declining property values because of TES? The issues involved, as we can see, are in fact much larger and go beyond a simple antithesis between scientific and non-scientific worldviews. The larger context in which knowledge gains and loses validity, and the social goals and objectives, which give it credence need to be considered. In colonial India, science was used as the basis of claims to legitimacy by the British and then by the nationalists (Zachariah, 2001). The process continues to operate but in a different place and time context.

Finally, we face the question: can there really be a mechanism to ensure effective citizen participation? Can there really be a ‘win–win’ situation for two groups opposing each other who do not speak the same language or
control equal power in society? Is there a lesson for less developed countries from this case? The study reveals that in spite of all precautions to ensure effective citizen participation, local opinion is subordinated to outsider knowledge that is taken as being ‘expert’ opinion. What in reality constitutes such an expertise? The paper, therefore, brings to the urban transport and environmental policy debate the issue of which and whose knowledge should be privileged. The incident that took place in Sydney is not uncommon for those living in developing countries; only the specific context and some contents were different, for example in the recent judgement on the Sardar Sarovar Project on the Narmada by the Supreme Court of India.

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