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# **Grounding Justice in Public Meeting Practice**

Theodore H. GROSSARDT and Keiron BAILEY

Dr. Ted Grossardt, University of Kentucky, Community Transportation Innovation Academy, College of Engineering, Suite 240, Raymond Building, Lexington, KY 40506, thgros00@uky.edu

Dr. Keiron Bailey, University of Arizona, Dept. of Geography and Regional Science, Harvill Box #2, 1103 East 2nd. Street, Tucson, AZ 85641, kbailey@email.arizona.edu

#### INTRODUCTION

John Rawl's A Theory of Justice [1], and Justice as Fairness [2] were originally intended to promote a political structure of liberal democracy. Taken together with Habermas' idea of 'discourse ethics' [3], this work has constituted a fundamental aspect of the communicative approach in the planning discipline over the past 20 years [4] [5]. While their work is quite theoretical, it need not be detached from the reality of dayto-day practice. We agree with O'Neill [6] that the work toward greater justice and fairness is eminently practical, and so should derive from their work. In particular, we are interested in advancing justice/fairness in the arena of public infrastructure planning and design through the careful integration of dialogic group processes, technologies of representation, and the opportunistic use of quantitative analysis and decision support tools for public meetings, so as to better realize Rawls' principles in concrete, day-to-day processes [7]. Translating the combined objectives of distributive, procedural, and access justice into practical public meeting processes requires attention to the nature of trade-offs that arise, and highlights the functional benefits of using Rawls' concept of the Veil of Ignorance.

#### 2 JUSTICE/FAIRNESS AND THE MEETING PROCESS

Rawls and Habermas both begin with the premise that a plurality of views exist over the definition of value, and that these are irreconcilable. From this, two important points follow. First, standard utilitarian approaches to analysing public goods are problematic because measurements of utility cannot be uniformly applied to every individual, and thus cannot be summed to create concepts like 'the greatest good for the greatest number'. This then renders many standard transportation engineering calculations such as 'congestion' or 'level of service' as flawed abstractions.

Second, concensus regarding the appropriate distribution of costs and benefits among the involved parties will be impossible. Consequently, attempts to measure and rectify unjust or unfair distributions of impacts and benefits will be only partially successful. This is especially true of the environmental justice analyses carried out under N.E.P.A. in the United States [8].

Since outcomes will, by definition, be inequitably distributed, Rawls and Habermas then concentrate on the decision strategy itself. Rawls imagines his citizens working from the 'original position' or under a 'Veil of Ignorance': that is, without knowledge of how the decision rules will affect them personally, and derives from that a set of principles that he argues would be generally accepted by a reasonable public. He posits the idea of 'maximin' reasoning, wherein citizens will prefer decision rules that minimize the maximum potential 'damage' that could be imposed on them [9]. Habermas avoids prescribing rules and instead suggests that reasonable citizens would themselve derive, through dialogue, the standards of legitimation that would support their decision-making [10]. While the idea of globally-accepted decision rules has been challenged [11], at the level of the neighborhood or the local community meeting, wildly varying notions of what is reasonable are not likely [12,13]. For that reason, we rely on the more prescriptive work of Rawls as regards an appropriate framework for 'fairness' in the context of public meetings.

#### **Principles of Fairness and Justice** 2.1

Rawls breaks the analysis of justice into three questions: how are impacts and benefits distributed among people (Distributive Justice); how are the decisions about impacts and benefits made (Procedural Justice); and who is eligible to participate in the decision-making process (Access to Justice) [14]. As regards Process and Access, he posits that people in the 'original position' will subscribe to two guiding principles:

- 1. Everyone has the same minimum set of liberties that do not invalidate anyone else's same right;
- 2. Inequalities must meet two conditions: everyone is equally likely to be subject to them, and they must provide the greatest benefit to the least advantaged.

The guidance that arises out of these rather abstract ideas, when applied to the construction of public meetings, is actually quite profound. They become useful as criteria with which to analyze a given strategy or process, current or proposed. They yield, at a minimum, the following set of goals for a public meeting process:

• Solicit participation from as many representative stakeholder groups and public as practical.

This seems a palliative that is recited by all public process managers. In fact it is an outcome of a long-term investment in public participation whereby an organization demonstrates that its meetings will be productive and thus worth attending in the first place. Simply announcing public meetings with a legal notice is inadequate. Additionally, meeting methods themselves must accommodate large numbers of participants without diminishing the participation levels of each individual (see Rawls first guiding principle).

 Facilitate participation of disadvantaged groups through distributed outreach and reproducible, portable processes.

Meeting locations, methods, and technologies that are 'reasonable' to the professional organizing the meeting may not be 'reasonable' to groups or individuals that do not share the same social, cultural, or economic background. Segments of the population that have long experience with official discrimination and exclusion have no reason to believe that the next meeting process will be any different, and thus it is not reasonable to expect them to attend a meeting in the first place. Further, meeting formats that reward those practiced at public speaking serve to further marginalize individuals and reinforce the segregation of ideas and their legitimacy, based on education and public sector exposure. Meeting processes themselves should be 'standardized' so as to yield comparable output from one meeting to the next. This helps guard against the problem of 'underattendance' and decision-making based on too little input. It also allows the information gathering to continue until enough knowledge is gathered to give decision-makers confidence in its reliability.

• Establish the design envelope. This requires an explanation of the legal and financial bounds to the problem (i.e., the domain beyond over which the participants do not exercise direct control).

Our research demonstrates that the public does not desire to control all aspects of planning and design, and they readily accede to a partitioning of the decision environment characterized as 'partnership'. Providentially, so do professionals [15]. Thus the 'problem' of the public taking over a complex planning and design process for which they are not qualified is a fiction. Professionals should structure meetings that clearly define the job of the public and provide useful ways for the public to perform that task. Our experience with a wide range of project demonstrates the public's eagerness to be part of a decision-making process and to contribute in a meaningful way to a solution. On occasion, they will even chide professionals for wasting their participation time at meetings with meaningless 'project updates'.

• Establish an agreed-upon decision-making process among all participants.

Typically the decision-making process is one proposed by professionals that would meet, to the greatest extent possible, the requirements of Rawls as laid out above. While it would be laudatory to develop the process from scratch with the participants, it would consume a significant amount of their valueable meeting time (see principle 7 below) and would signal an abdication of the professionals' responsibility to the public. Professionals should propose a process and then submit it to the attendees for approval or modification, if needed.

• Identify and include all criteria of significance to all parties.

This is a responsibility of the professional to bring her understanding of the project or problem to the public with as much clarity and specificity as possible. In so doing, it will allow two things to happen: the professional will learn the extent to which she in fact understands the full extent of the problem; and it will greatly systematize the process of gaining input from the public by organizing and partitioning the problem to promote understading of it.

• Provide transparency in method and data collection.

This is a logical outcome of the preceeding three principles. If professionals clearly understand the nature of the problem, how it is partitioned, and what they need from the public to proceed, the design becomes fairly straightforward. Transparency becomes a product of process explanation and clarity of input gathering technique. Participants should be able to identify their own specific contributions within the context of the larger meeting process.

• Respect participants' time and input.

This may be the least well understood problem of public participation. It is important that public participation processes be parsimonious with the public's time, especially as it concerns those of limited means who may work hourly or irregular hours. Long meetings, or even long series of short meetings, are both prodigious consumers of time, which may exclude many potential participants, thus seriously violating the idea of access to process. Further, long meetings lead to participant fatigue, which impinges on the consistency of information being gathered. It is incumbent upon professionals that they design time-efficient methods for gathering the maximum amount of useful information from the maximum number of people.

### 3 STRUCTURED PUBLIC INVOLVEMENT<sup>TM</sup>

The goals laid out above challenge all planning and design professionals, as they have us. In this section, we will discuss how we have addressed these challenges, and explore ways that these goals can be better met in the future. This discussion emerges from our development and deployment of the Structured Public Involvment<sup>TM</sup> protocol in a range of public sector infrastructure projects.

# 3.1 Process Clarity and Transparency

A fundamental challenge to professionals is to understand their own design problem and the needed public input for them to proceed. They may be accustomed to assuming the entire design responsibility themselves and then devising means of gaining public approvel of their resultant solutions. SPI<sup>TM</sup> sorts the design problem into proper domains, isolating and focusing on the public's responsibility and how it is to be answered.

For example, a large bridge design project was recently completed using the SPI<sup>TM</sup> protocol. Any bridge design is subject to a set of limiting parameters which includes: 1) construction cost, 2) long term maintenance costs, 3) construction impacts, and 4) aesthetic appeal. Of these, only aesthetics is in the domain of the public. That is, using only the first three parameters, bridge engineers could readily narrow the bridge designs down to a few that minimize the overall mixture of cost, maintenance, and constructability. However, they have no knowledge of which designs hold the greatest aesthetic appeal to the public. That is, althought they can minimize cost, they have no way of knowing which designs actually hold the maximum value or benefit for the public.

The goal of the public process became, then, one of measuring how to create the greatest aesthetic value that was consistent with the other three factors. Once this was clear, the design of the method could proceed. Just as importantly, the public could better understand their role in the overall project. Their role was not to choose bridges. Their role was to provide the information necessary to design the most attractive bridge possible given the project constraints on money, maintenance, and construction impacts.

### 3.1.1 <u>Process Transparency</u>

Once the publics' role in the process is clear, it is important to provide transparency for the process. This generally means conducting the business in a way that participants can verify the legitimacy of the process. SPI<sup>TM</sup> typically uses electronic keypad systems to gather input from groups. Each scoring event is displayed real time on a frequency distribution, so that respondents can verify their own and others' anonymous inputs. This transparency has the additional benefit of instructing participants on the nature of their tastes vs. others in the group, without the intervention of the professional. Also, because the scoring is simultaneous, there can be no 'Delphi' or opinion-leader effect on participants. They must all make their judgements independently.

# 3.2 Process Efficiency and the Use of Technology

As noted above, the principle of Access is served by time efficiency. This is served, in turn, by the appropriate use of technologies of representation and decision support. Each provide important advantages that cannot be realized by traditional facilitation tools and methods.

# 3.2.1 Technologies of Representation

A wide range of representation tools are available for use, from simple charts and graphs through photos, sketches, GIS displays, virtual reality and even 3D and 4D renderings, depending on the capacity of the personnel and equipment. In the case of the aesthetic appeal of bridge designs, the engineering firm used a CAD-based software package that allowed a combination of fixed views for over 30 different bridge design samples to be created and inserted into photographs of the site. This allowed the public to have a better understanding of the aesthetic impact of the bridge designs in their specific context. At later stages a narrower set of designs were rendered to allow fly-throughs and fly-overs, providing the public with more information about a targeted set of options. Thus representation tools were adapted to the stages of the process.

## 3.2.2 Decision Support Technologies

Beyond gathering data through the use of high-speed, anonymous electronic feedback systems, the actual construction of the feedback itself is critical. Participant feedback can be gathered as simple voting (choose the best), ranking, scoring, multi-criteria evaluation, or, in the case of the bridges, a scoring scheme that maps onto a fuzzy-set modeling strategy. This strategy breaks down the bridge design problem into a set of interactive design variables, namely: height, visual complexity, structure type, symmetry, and superstructure shape. These parameters were derived ina collaboration with the bridge architects and engineers as useful descriptors of bridge desiugn they could employ in their design process. Each parameter can assume three or four values, and combine with any combination of any other parameter, so that the sum total of all possible combinations of bridge concepts exceeds 200.

This number of options is clearly too many for a group of citizens to provide consistent feedback on in a two-hour meeting. However, the use of a strategic sampling routine allowed the shape of participants' aesthetic tastes for various combinations of these design parameters, even those not directly tested. Because the number needed could be reduced to about 10% of all possible combinations, the engineering firm could create the needed number with a modicum of resources, and this number could be reasonably evaluated by participants in a two-hour meeting. In fact, the evaluation phase of the meetings actually consumed less than one hour.

Further, since the set of samples was standardized, the same 'meeting' was repeated on different days in different locations, steadily building a database of participant preference from all over the urban area until the engineering firm and the state sponsors were satisfied that they had a clear understanding of public preferences for the region.

Because there was a broad range of samples, and because participants were cautioned that these were being used to create the subsequent, smaller set of designs, there was no opportunity for 'interest groups' to form around one or another of the designs. In fact, interest by participants was focused on exploring similarities and differences across a broad range of design questions and on using the visual samples to clarify to themselves and to professionals the exact nature of desirable and undesirable designs. Professionals' fears that the public would 'choose an ugly bridge' were unfounded, both because no pre-existing definition for 'ugly' existed, and because the public was not 'choosing' a bridge anyway. That is, there were behind Rawls' Veil of Ignorance, in that they were expressing aesthetic tastes, not making decisions for professionals.

At the conclusion of the data-gathering phase, the total set of participant data was used to construct a fuzzy-set model of aesthetic preferences for the complete set of design combinations. Once this model was built, it was queried interactively with the bridge architects and engineers to understand how the facet of aesthetic preference interacted with considerations of cost, constructability, and maintenance for various potential designs. At all times, aesthetic preference was an important consideration, but at no time was it the only consideration in a design. The design process was thus not hindered by public input, but enhanced in that aesthetic value became a component of the overall design equation.

As the process advanced, various designs were included with different complexes of properties so as to preserve decision options. Even designs that had perhaps moderate appeal were included because of cost advantages, in the event that estimated costs and budgets changed. Public aesthetic taste has some unique properties: the agreement about unappealing designs is much more uniform than that about appealing designs. Thus standard deviations narrow for low-appeal designs, and widen for higher-appeal designs. Making it possible to score each design through the entire range of numbers is critical, because some design elicit bi-modal responses: strong positive and strong negative opinions. This is important because, if the strong negatives cannot be eliminated, the design in question is destined to elicit controversy. Unless there are other mitigating factors for such designs, there seems little reason to defy public taste when other design options carry more appeal and meet all the other necessary criteria.

# 4 CONCLUSION

The discussion and example given above demonstrate how a consistent philosophical approach to justice informs real public design processes. The careful design of the process responds both to the needs of the professionals and the rights of the public. The use of electronic feedback technologies to enhance the efficiency and transparency of the processes responds to basic fairness doctrines as well, by allowing greater access in terms of numbers of people, ability to participate, and equality of voice. This in turn is an advantage to the professional by helping to ensure an accurate view of public preference is being obtained by making the sample size scalable. In this project, the initial meeting only included 20 designated advisory board members. Once the state clients realized how efficient the process was, they agreed to allow open public meetings where the same process could be pursued in a similar time frame. Participant groups as large as 70 subsequently attended and provided comparable input.

Representation technologies allow participants to be more specific and efficient in their input. In this example, their role as aesthetic value providers was clarified for them, so that they were not confused with the responsibility of making fiscal judgments. This helped 'partition' the input so that it could be used by professionals who, after all, wanted to acquire the greatest value possible from a budget situation that is constantly in flux.

Decision support technologies allowed a complex design problem to be simplified, both in terms of the design properties and the sampling itself, so that the entire logic of the process, in concert with efficient data gathering and focused visual representation, could be encompassed in a two-hour meeting format. This again maximizes access to the process by allowing many more people to fit it into their schedules.

Finally, as evidenced by very high evaluation scores, the public verifies that the SPI <sup>TM</sup> process is of high quality [16]. Individuals frequently approach team members after meetings, congratulating them on the quality of the process. We take these evaluations and comments to be the real test of the validity of the SPI<sup>TM</sup> process, and so make it a point to always gather such ratings. However, there are occasions where the public sector client is unwilling to gather such data and subject themselves to actual, objective evaluation by the public. We hope this research and example will make such situations increasingly rare.

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