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4 (pre-print) **Community Self-determination for Environmental Justice**
5

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7

8
9 Shane Epting, University of Nevada, Las Vegas
10 shane.epting@gmail.com
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13 Corrective measures and remediation efforts aimed at alleviating the conditions of environmental
14 injustice usually depend on federal or state funding. However, such resources could disappear,
15 leaving marginalized communities without the necessary means to mitigate environmental harm.
16 Participatory Budgeting (PB), a process that allows residents to work with municipal
17 governments to decide on community projects, holds promise as a surrogate source of funding.
18 When examining the character of such an enterprise, however, one finds that it does not exactly
19 fit within established paradigms of environmental justice. To account for this condition, one
20 must examine how PB restructures the power dynamics that determine cleanup protocols. The
21 paper ends by highlighting some avenues that municipalities can pursue to incorporate this
22 process into existing budgeting strategies.
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27 **Introduction**
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30 While efforts to combat environmental injustice are found at the federal, state, and municipal
31 levels, the latter can provide immediate relief in certain instances. Yet, one could argue that
32 bureaucracy makes it difficult for communities to eliminate environmental hardships.
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34 Participatory Budgeting (PB), an emerging process that can bolster municipal democracy, holds
35 promise for such cases. This practice provides an efficient and transparent way for communities
36 to connect with their local government in a manner that is consistent with established criteria for
37 environmental justice (EJ). This paper is significant for three reasons. First, in cases wherein municipalities are viewed
38 as antagonistic to marginalized communities, PB can improve the dynamics of their interactions.
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40 Employing PB as a device for improving relationships between municipalities and marginalized
41 communities could ease long-standing tensions. Second, through implementing this approach,
42 local governments can help disenfranchised groups overcome environmental injustice and prevent
43 additional damages. In turn, both parties can combat and prevent environmental harm in concert.
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45 Third, if national or state agencies or policies disappear, lose efficacy, or become hostile towards
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4 marginalized communities, then municipalities can use PB to alleviate or prevent some kinds of
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6 environmental injustice.
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9 To flesh out the claims above, I examine some common accounts of EJ, followed by a brief
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11 explanation of PB's history and protocols. Next, I examine some PB projects that reduce
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13 environmental harm, highlighting the kinds of issues that this practice could benefit. Then, I show
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15 how PB can increase social congruence between communities and municipalities through using an
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17 environmental justice paradigm. Yet, when communities engage in PB, they challenge established
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19 conceptions of EJ because they reshape the dynamics of power that determine the conditions for
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21 justice. After examining this point, the paper concludes by suggesting ways that municipal
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23 governments can implement practices that could facilitate the measures described above.
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31 **Accounts of Environmental Justice**

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33 In accord with US President Clinton's Executive Order 12898, agencies at the federal level must
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35 provide a platform for EJ (Clinton, 1994). Due to this directive, one finds measures for EJ
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37 throughout the national government's offices. For instance, the US Environmental Protection
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39 Agency (EPA) provides a robust explanation of it, including several guides for addressing specific
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41 dimensions of EJ. Other agencies have descriptions of it built into their protocols, often differing
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43 by emphasis and or technical tone. The US Department of Energy (n.d.), for example, includes
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45 provisions for EJ that reflect their work, and the US Department of Transportation's Federal
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47 Highway Administration (2017) has guidelines that are specific to their operations.
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53 Several states in the US also have specialized offices designed for EJ. For example, New
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55 York's Department of Environmental Conservation created the Office of Environmental Justice
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57 (n.d.) to meet the demand of stakeholders, and the State of Minnesota's Minnesota Pollution
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4 Control Agency (n.d.) directs policy towards EJ and supportive efforts. At the local level,
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6 numerous cities have departments that focus on EJ. Portland, Oregon, for instance, includes EJ
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8 for their transit operations, “Trimet” (2017), and the City of Seattle Office of Public Utilities
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10 (2016) includes measures to address EJ concerns.
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14 While the accounts above exhibit the practical application of EJ, those descriptions do not
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16 depend on the EPA or any other office, considering that EJ definitions have roots in activism and
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18 academia. This point is significant because there is no guarantee that any government office will
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20 endure every federal or state administration. The problem is that EJ issues will persist, meaning
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22 that researchers, activists, and communities will need to rely on EJ theory to pinpoint the exact
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24 nature of environmental harm, along with elements such as culpability and stipulations for
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26 corrective measures and remediation protocols.
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31 Yet, if we examine different academics’ and activists’ descriptions of EJ found throughout
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33 the literature, they remain consistent with the descriptions above. Typically, theoretical accounts
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35 of EJ define fairness, pinpoint dangers, examine unfairness, show how groups are harmed, and
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37 look at the causes of unfairness (Phillips and Sexton, 1999). Consider the seminal works in early
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39 EJ. Robert Bullard’s (1994) work, for example, examines numerous instances that exhibit unequal
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41 protection through environmental laws and unequal distribution of environmental harms, such as
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43 the issues examined in his essential text, *Dumping In Dixie: Race, Class, And Environmental*
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45 *Quality*. Throughout his work, the cases that he discusses exemplify instances of unjust
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47 distributions of environmental harm (Bullard, 1994).
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53 David Schlosberg (2007), in his influential work, *Defining Environmental Justice*,
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55 illustrates how early versions (e.g. Robert Bullard, 1994) of EJ dealt with the five dimensions
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57 mentioned above, while Robert Figueroa takes on complex notions such as identity and political
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4 recognition. Figueroa's (2006, 361) "environmental justice paradigm" provides a multifaceted way
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6 to identify several kinds of environmental injustice, along with guidelines for how to use it.
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9 Figueroa (*ibid.*) maintains that one must include the distributive aspects that are commonly
10 associated with EJ definitions into a robust conception, but he goes an additional step, making
11 recognition a central provision. He argues that group and individual identities must receive
12 respect, along with appreciation for their traditional beliefs, knowledge and wisdom, experience,
13 and environmental heritage (*ibid.*). Failing to adhere to these tenets suggests that a minority group
14 has been harmed. For Figueroa (2006, 361), we can also label an act as environmentally unjust
15 when marginalized people who lack power cannot weigh in on policy decisions that affect them.
16 Considered altogether, these dimensions compose what he calls "the EJ paradigm."
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28 Thinking about the nature of this approach, the study of inclusive provisions deserves
29 attention because they are neglected when it comes to mechanisms that are designed to maximize
30 such efforts. While Figueroa does not provide such a detailed guide, his paradigm is set up in a
31 manner that is conducive to these efforts. For instance, the spirit of his work favors community
32 self-determination. Highlighting the importance of this notion, Luke Cole and Sheila Foster
33 (2001) hold that democratic decision-making and community empowerment remain central to EJ,
34 along with the idea that communities should strive for self-determination, all of which are central
35 views of several grassroots EJ movements.
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48 For example, during the grassroots meeting of the First National People of Color
49 Environmental Leadership Summit in 1991, delegates put forth 17 principles of Environmental
50 Justice (Principles of Environmental Justice, 1991). Through demonstrating the importance of
51 community self-determination, these delegates reveal the primary role that it plays for how groups
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4 ought to engage in EJ activism. Such actions set the tone for EJ movements, underscoring a
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6 commitment to inclusive efforts for justice.
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9 Within the academy, most EJ researchers implicitly champion community self-
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11 determination. Yet, the literature lacks works that exclusively zero-in on it as a principle line of
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13 inquiry (Werkheiser, 2015). Ian Werkheiser (2015), however, makes the topic a central point in
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15 his research on food sovereignty, remaining consistent with Figueroa’s call for meaningful
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17 engagement. Werkheiser (2015, 40) holds: “Self-determination in this sense includes the ability of
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19 a community to effectively engage in joint projects which are important to the communities’
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21 members, particularly ones which promote the survival and flourishing of the community. This
22
23 concept of self-determination also includes a goal of participatory justice within the community
24
25 for its projects.” Through unpacking self-determination in the context of EJ, Werkheiser reveals a
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27 just way for communities to delve into self-directed endeavors. Through making this point explicit
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29 within academic work, Werkheiser aligns it with the activists’ motivations above.
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36 Community self-determination could benefit from additional research, and the area that
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38 could provide relief to disaffected groups is the mechanism that could facilitate it. One could argue
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40 that answering such a call requires researchers to include this dimension when thinking about the
41
42 scope of EJ. This kind of thinking opens up new possibilities to advance EJ research. For instance,
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44 Isabelle Anguelovski (2013, 160) points out that EJ pioneers such as Robert Bullard and David
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46 Pellow mainly focused on “brown” cases of injustice, instances that involve residents fighting
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48 pollution, toxic spills, and water contamination. While she does not discount the importance of
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50 this work, she advocates for research that brings “green” issues into view, projects that support
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52 better living conditions such as urban agriculture and parks (*ibid.*). Urging researchers to pay
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54 attention to such efforts, in addition to traditional EJ concerns, is consistent with Figueroa’s EJ
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4 paradigm. If one were to view local governments as agents that could support EJ, then residents
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6 could secure additional avenues for fighting against brown issues while pursuing green initiatives
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8 that could encourage community self-determination. To understand how municipal governments
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10 could assume such a position, we will explore participatory budgeting (PB) in the following
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12 section.
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15 16 17 18 19 **Participatory Budgeting's History and Practices** 20

21 PB is a way to let residents work with municipal governments to decide on and fund community
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23 projects (Participatory Budgeting Project [PBP], 2017). The city of Porto Allegra in Brazil is
24
25 generally recognized as one of the first successful instances wherein community members
26
27 employed the PB process, engaging in projects that favored basic infrastructure over prestigious
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29 endeavors that would not benefit most people (Smith, 2009). The PB experiment in Brazil was in
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31 1989; since then, numerous cities across the globe have undertaken similar efforts (Ganuza and
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33 Baiocchi, 2012; Sintomer, Herzberg, and Röcke, 2008).
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38 Having emerged rather quickly during the last three decades, there is not a single, accepted
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40 PB model (Bland, 2017). For example, through examining PB in New York City, Hollie Russon
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42 Gilman (2012) identifies two models that are at odds. One version pays more attention to inclusive
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44 democratic practices and the other favors efficiency and completing PB projects (Gilman, 2012).
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46 When groups focus on efficiently finishing PB projects, Gilman (2012) argues, they do not go to
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48 great lengths to ensure that disadvantaged people can participate in selecting PB initiatives. In
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50 addition to Gilman's observations, Brian Wampler (2012) maintains that within PB practices, there
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52 are essential elements that must be employed. He argues that it is essential to give residents a
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54 voice, allow them to vote on projects, provide oversight on such matters, and these efforts must be
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4 socially just—the primary dimension that separates PB from other participatory measures
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7 (Wampler, 2012).
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9 Adding to these insights, Yves Sintomer et al. (2012) identify three trends within PB
10 practices. The first trend has a strong degree of meaningful participation from residents, as seen in
11 the case of Porto Allegra mentioned above (Sintomer *et al.*, 2012). Such practices involve the
12 highest degree of *real* participation, meaning that people can select and vote on projects (*ibid.*).
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14 These projects have oversight, and they generally promote social justice (*ibid.*). In the second
15 theme, government actors maintain control of PB, but residents are not excluded from participation
16 (*ibid.*). For such practices, the possibility of meaningful social change remains, but within
17 approved limits set by the government (*ibid.*). The last theme hardly qualifies as participatory
18 because inclusion is largely symbolic, providing meager opportunities for serious social
19 improvements (*ibid.*).¹
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33 In most US cities, the PB process typically favors the first theme. For these municipalities,
34 PB projects begin when city councilmembers allocate some of their discretionary funds for
35 community groups to use on projects (Menser, 2012). The organization behind most of these
36 endeavors (in the US) is the Participatory Budgeting Project (PBP). The PBP has brought together
37 84 elected representatives with over 200,000 people, engaging in 440 projects, amounting to over
38 250 million dollars (PBP, 2017). Projects begin with a community-driven steering committee that
39 develops operating procedures, alongside officials, focusing on inclusivity and local concerns
40 (*ibid.*). To identify projects, residents discuss ideas at meetings. Then, they develop proposals and
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56 ¹ It is worth mentioning that Gianpaolo Biocchi and Ernesto Ganuz separate PB into communicative and empowerment
57 dimensions, an effort that provides a highly detailed view that could benefit social justice. However, examining this
58 paper in the current context falls outside of the purview of the present investigation. For more information, see:
59 Biocchi, G. and Ganuza, E. (2014) Participatory Budgeting as if Emancipation Mattered. *Politics & Society*, 42(1),
60 29-50.
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4 talk about feasibility with municipal leaders. After completing this phase, they vote on the
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6 projects, and their elected representatives provide the necessary funding and resources. These
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8 residents and city officials monitor the progress of the projects to ensure their successful
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10 completion.
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14 While PB projects vary, such endeavors usually serve a common purpose or exhibit care
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16 for the neighborhood, such as efforts toward community well-being. For instance, some successful
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18 examples include improvements to infrastructure such as bike lanes. Some groups have used PB
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20 to assist the elderly through meals-on-wheels programs, and other groups installed new
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22 streetlights, playgrounds, and library facilities (*ibid.*). Having a high degree of applicability as a
23
24 problem-solving measure suggests that PB's openness could benefit neighborhoods in myriad
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26 ways. Despite such strengths, PB also faces several criticisms, showing that it requires some fine
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28 tuning.
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34 For instance, Celina Su (2017) points out that making PB a rigorously inclusionary process
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36 faces several challenges, a notion that is consistent with Gilman's research mentioned above. She
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38 argues that marginalized groups are not always included in PB decisions (Lerner and Secondo,
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40 2012; Su, 2017). Often, existing community organizers spearhead efforts to decide on projects,
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42 suggesting that discovering new leadership is a problem (Su, 2017). Another challenge is that
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44 participants often want to address issues that require a substantial budget, goals that exceed a
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46 municipalities' means (Lerner, 2017). Along with these obstacles, the logistics and non-customary
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48 nature of PB challenge municipal administration's willingness and ability to facilitate participatory
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50 endeavors (Jabola-Carolus, 2017).
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55 While the above list is non-exhaustive, it indicates the limits of PB. Despite these concerns,
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57 Josh Lerner (2017) argues that those engaged in PB work can overcome them with practical
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4 solutions. For instance, some of his recommendations include holding meetings in languages other
5 than English, consulting residents from different districts, providing food and transportation
6 services to increase attendance at meetings, and assessing the outcomes of PB projects (Lerner,
7 2017). Despite these shortcomings, one could argue that the high number of successfully
8 completed projects suggest that communities could use the PB process to take on pertinent
9 problems such as mitigating environmental harm. In the next section, I explore this possibility.
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21 **Participatory Budgeting and Environmental Justice**

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23 For EJ, there are select cases in PB's history that suggest that it holds promise for mitigating or
24 preventing environmental harm. For example, community gardens can be vehicles for EJ through
25 increasing a community's control over its food security (Gregory *et al.* 2016). In turn, such
26 measures provide needed nutrition for marginalized groups, combatting unfavorable situations
27 such as food deserts. Vallejo, California, for instance, has used PB to fund numerous community
28 gardens, and their success prompts the city to expand such efforts (City of Vallejo, 2013).
29 Considering that most community gardens maintain organic farming practices, one can argue that
30 they provide an additional environmental benefit.
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43 At present, residents of Buffalo, New York are aspiring to work with local governments to
44 combat environmental injustice (Soto, 2015). Through examining their experience, we can
45 confirm that PB has benefits, but we also see that the process faces challenges. For example,
46 Natasha Soto (2015) describes how Buffalo's minority residents employed the PB process to
47 advance their campaign for environmental justice, proposing projects such as air-monitoring
48 stations, cleaning up a brownfield, and ultimately voting on projects such as a farmers' market,
49 increased sanitation services, and park improvements, among several others. Her experience
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4 supports Sintomer's (2012) view of *real* participatory engagement, a position that is mostly
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6 consistent with Wampler's (2012) essential qualities of PB models. Despite such improvements,
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8 the struggle to implement and normalize the process continues to meet resistance from the
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10 municipal status quo.
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14 For instance, Buffalo's mayor, Byron Brown, initially held reservations about allocating
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16 resources for PB, viewing such efforts as a loss of power (Meyer, 2015). When community groups
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18 sought 5 million dollars for projects, Brown and the Buffalo Common Council compromised,
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20 settling on \$150,000 (Schulman 2015). While this modest amount covered 20 projects, the
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22 following year's budget lacked funds (Williams, 2017). However, Councilmember David Rivera
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24 earmarked ten thousand dollars of his discretionary funds for use (Williams, 2017). This result
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26 supports Jabola-Carolus' (2017) research showing that administrations are not always amicable
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28 towards PB.
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33 Although the projects above focus on improving situations wherein people are not in
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35 immediate danger, there is no reason why we cannot say that initiatives aimed at alleviating harm
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37 should not be considered when other means (e.g. federal or state) are unavailable or non-existent.
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39 These projects differ from typical PB undertakings, ones that sought to eliminate existing harm
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41 rather than promote community well-being or flourishing. Such efforts are of paramount
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43 importance because residents must be free from serious environmental harms in order to pursue
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45 endeavors that will enhance the quality of their lives. These cases underscore the motivations
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47 behind communities' abilities to determine themselves, even if the directions of those
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49 determinations are not to suffer or die from environmental injuries. Several cases have various
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51 historical, social, and political dimensions that highlight the importance of community self-
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53 determination to alleviate environmental harm.
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4 Consider Flint, Michigan's water crises wherein an attempt to save money by switching
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6 water sources resulted in increased exposure to lead-tainted water in poor neighborhoods (Hanna-
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8 Attisha *et al.* 2016; Campbell *et al.* 2016). While this incident received international criticism,
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10 several social and environmental injustices also mark the city's history. For instance, the
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12 automotive industries in and around Flint polluted the air, streams, and the ground with lead and
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14 other toxins beginning in the 1920s (Rosner, 2016). This history of pollution, along with a public
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16 health disaster that resulted in the loss of trust from bad decision-making, provides sufficient
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18 reason for exhausted and strained relations between the municipalities and the communities that
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20 they serve.
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26 However, through employing the PB process to address rebuilding water infrastructure and
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28 cleanup, one could hold that a concerted effort with city leaders and community members could
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30 be seen as the *initial* steps towards making amends to residents. Recalling Figueroa's EJ paradigm,
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32 municipalities that promote community-driven PB to mitigate or prevent environmental harm
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34 remain consistent with the requirement for residents to have a voice in decisions that affect them.
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36 Although agencies such as the EPA currently have a thorough commitment to EJ, changes in their
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38 administration could stymie efforts to mitigate or prevent environmental harm.
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43 For example, Brentin Mock (2016) argues that most EJ work happens locally, but it usually
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45 requires federal funding and support. EJ pioneers such as Robert Bullard and Eddie Bautista have
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47 recently expressed concerns that EPA regulations and protections could disappear, making
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49 communities susceptible to environmental injustice (*ibid.*). Bautista's primary concern is figuring
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51 out how residents can get the federal government to pay attention to people who must combat
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53 environmental injustice (*ibid.*). Entertaining the idea that most communities would lack federal
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55 recourse, they would need to alleviate and or prevent harm through their own devices. Without
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4 federal assistance, communities that face environmental injustice would also have to do so while
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6 contending with unprecedented circumstances—such as hostile, indifferent, or nonexistent federal
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8 agencies.
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11 In several cases throughout EJ’s history, there were avenues such as Superfunds, legal
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13 pathways, and other taxation plans that could support remediation. Bearing in mind that the current
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15 Executive Branch of the US government is unsympathetic towards many environmental concerns,
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17 grassroots movements must confront the reality that community self-determination could be the
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19 only means available to mitigate or prevent environmental harm (Mazurek, 2017). For such cases,
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21 PB at the local level can serve as a frontline defense. However, one could counter this point,
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23 holding that municipal budgets are not sufficient because they lack the means to effectively deal
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25 with projects that figure into the multi-million-dollar range. Urban Superfund cleanup sites, for
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27 example, typically exceed a city’s financial ability. Arguably, municipalities cannot shoulder the
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29 financial burden of remediation for such cases.
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36 Consider Love Canal. When remediation efforts were complete, costs totaled over 400
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38 million dollars (Nazaryan, 2013). Without federal assistance, such exceedingly expensive projects
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40 might not receive any monetary support, suggesting that residents would continue to receive
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42 environmental harm in similar cases. This is a strong objection, and it reveals a limitation of PB
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44 for EJ. Yet, this problem only applies to instances that go beyond a city’s financial means. It does
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46 not dismiss the possibility that municipal governments can use PB for certain EJ issues. Economic
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48 burdens could hamper cleanup efforts, but such obstacles do not entail that expensive projects are
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50 completely beyond a city’s grasp. Such cases might require additional support from residents
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52 through reallocating municipal monies, but the possibility exists for grand community-determined
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54 initiatives.
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4 Despite these concerns, this objection also reveals the kind of EJ projects that PB is
5 equipped to address. For instance, we know that PB for EJ is best suited for small-scale endeavors
6 that can alleviate some environmental harm. The instances mentioned above, community gardens
7 and air quality monitoring stations, show how PB for EJ benefits neighborhood groups. Yet,
8 through engaging in easy-to-manage projects, municipalities and residents would gain experience
9 in the PB process. They would be better prepared to take on community-led environmental
10 remediation projects that would require significant financing. Such initiatives would need a
11 substantial commitment from municipalities, along with a great deal of trust that resident groups
12 could properly deal with corrective measures.
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26 This idea puts the burden on communities to show that they have the know-how to address
27 environmental problems. For cities such as Flint that are searching for ways to reestablish trust
28 with their residents, such practices could count as steps that might eventually regain that trust,
29 strengthening a once-strained relationship.² Although such measures are somewhat of a departure
30 from customary decision-making protocols, one could argue that damaged cities require
31 unconventional solutions that break away from hierarchical structures, especially considering that
32 such arrangements once led to harm. That is not to say that those structures were the sole cause
33 of injuries, but it is possible that rearranging them could produce a better outcome. Thinking about
34 the theoretical framework that could support such efforts, a slightly modified version of Figueroa's
35 EJ paradigm provides a solution that establishes congruence between municipalities and
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55 ² A point could be raised that some technical projects would require knowledge that must be sought from outside of
56 the community, such as a local university. This is a fair objection, but it seems reasonable to hold that they could
57 bring in an outsider to help with such issues. However, Ganuza et al. exhibit that experts and residents can clash when
58 it comes to the value of expertise, such as witnessed in the first PB case in Chicago. For more information, see: Ganuza,
59 E., Baiocchi, G., and Summers, N. (2016) Conflicts and Paradoxes in the Rhetoric of Participation. *Journal of Civil*
60 *Society*, 12(3), 328-343.
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4 communities. In the following section, I examine how making room for such considerations gives
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6 cities a way forward, exhibiting challenges and opportunities for progress for EJ.
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10 11 **Environmental Justice Frameworks and Community Self-determination** 12

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14 While PB can mitigate environmental harm in marginalized communities, using it as a vehicle for
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16 EJ challenges how we think about EJ's character. Consider that for most EJ cases, a governing or
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18 regulating entity mediates between the offending party and the people who have been wronged.
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20 In the US, the EPA or the courts usually weigh in, delivering decisions that dictate the conditions
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22 that are required to set things right. If residents take the place of these institutions by directing or
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24 co-directing repairs (with municipalities), such acts should be differently categorized because the
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26 power structure guiding such decisions markedly shifts (Cabannes, 2004). Under the operational
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28 procedures of socially just and 'full-bodied' PB, residents have the authority to decide on how to
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30 carry out actions, meaning that they could reject something if they found it to be unjust. For
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32 traditional cases in the US, determining the means for justice might also rest with injured groups
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34 to an extent, but the mediator could force a solution that was unjust because they have such power.
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41 The point worth emphasizing is that remediation practices also require an EJ assessment to
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43 avoid committing another act of environmental injustice (Epting, 2015). If one were to assess
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45 cleanup practices to determine if they are just, then Figueroa's paradigm would require that affected
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47 people must be included in the decision-making processes that establish such protocols. Bearing
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49 the above-mentioned points in mind, one must meaningfully include the community's voice for
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51 remediation efforts and corrective measures. This idea should not be too controversial. It seems
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53 rather straightforward to say that injured parties ought to be included in determining the conditions
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55 that pertain to alleviating the harms from which they suffer. At present, this notion is consistent
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4 with the EPA's protocols on EJ (EPA, 2017). The point up for debate is the *degree* of inclusion.
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6 Including this dimension, stipulating that marginalized groups should hold the status of partner
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8 rather than party, adds a restorative component to Figueroa's paradigm. Considering that it is
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10 already pluralistic, there is not a need to change its layout to make room for restorative measures.
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14 For instance, when searching for a way forward for victims, Figueroa (2006) notes that
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16 restorative justice (RJ) shows promise, even though he does not argue that it should be a
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18 component of the EJ paradigm. According to Figueroa's take on RJ, though, victims of
19
20 environmental injustice should be in a dialogue with offenders, arguing that such actions can
21
22 discourage additional offenses and bolster deterrence (*ibid.*).³ In general, this principle works
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24 because its participatory element secures the conditions required for inclusion. When examining
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26 how some activists appeal to restorative justice, for instance, we see how such efforts are applied.
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28 There is evidence of this claim in the Black Lives Matter (2017) movement because it holds RJ as
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30 a fundamental tenet of their platform. Within academia, criminal justice and education scholars
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32 rely on restorative justice, but philosophers largely neglect it (Walker, 2006). This situation is
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34 unfortunate because RJ's fundamental tenets make it applicable to numerous kinds of civil, ethical,
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36 and justice cases (Wachtel and McGold, 2001).
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43 Through appealing to the fundamental structure of RJ, it could supplement an EJ paradigm
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45 for particular cases. Consider, for instance, that criminal justice scholar John Braithwaite (2004,
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47 28) argues: "Restorative justice is a process where all the stakeholders affected by an injustice
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49 have an opportunity to discuss how they have been affected by the injustice and to decide what
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51 should be done to repair the harm." This thinking is relevant to environmentally just remediation
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59 ³ For a detailed account that examines restorative justice's foundations and recent advancements, see: Gavrielides, T.
60 and Artinopoulou, V. (2013) *Reconstructing Restorative Justice Philosophy*. Burlington, VT: Ashgate.
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4 protocols because it includes a provision that preserves the idea that community members' voices
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6 must be included, and it aligns with the PB approach.
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9 For instance, recall that for the PB process, community members decide on projects, an
10 inclusive act that considers the members' voices. The only dimension of RJ that I think should be
11 modified is the provision holding that the injured parties should deal with the offenders. Consider,
12 for example, that one could imagine an instance wherein a company polluted a city, but the
13 company is now defunct. Alternatively, harmed people might not want to face polluters due to the
14 worry and stress that such an encounter could bring. There is not a good reason why an unwanted
15 interaction should be forced on them for the sake of satisfying a theoretical stipulation, a notion
16 that is consistent with criticisms of RJ (Wemmers, 2002).
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28 Aside from these points, there is a shift in the power dynamic when communities directly
29 determine (or co-determine) the conditions for justice as they pertain to corrective measures. Yet,
30 when we examine how PB for EJ alters the dynamics of power, we find that it goes further than
31 the example above does. For instance, due to the cooperative nature of working with the
32 community, municipal governments in PB cases act like a partner instead of an authority, even
33 though it has the power to back out of an arrangement. The municipality does not relinquish
34 power, but it uses it in a participatory manner wherein a degree of its control is given to resident
35 groups. This practice changes the relationship between the people and the municipality such that
36 they can provide meaningful input for corrective measures.
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50 This notion raises a question for environmental justice theory: can we say that a resolution
51 is still just if it lacks federal (or state) intervention? This question deserves attention because cases
52 such as Love Canal show that federal intervention often specify corrective measures and or
53 remediation protocols. If we answer in the affirmative, then that answer suggests that we can
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4 achieve justice that is community-determined or co-determined. This answer would mean that
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6 residents hold the power to qualify corrective conditions as just or unjust. We could say that such
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8 instances are community-determined environmental justice. Simply because the regulatory
9
10 agency fails to properly function (or exist) does not mean that an injustice has not occurred. On
11
12 the contrary, the injuries would be real, but the people who were wronged lack recourse. If these
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14 events were to take place, the injured parties have (at least) three choices.
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19 One, they could become vigilantes, engaging in acts to “even the score.” While such a
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21 response would appeal to some people’s lower intuitions, it would morally compromise the
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23 integrity of the injured group. Two, they could continue to suffer, an act that no reasonable party
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25 would accept without coercion or compensation, which raises additional concerns for EJ
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27 (Figueroa, 2006). Three, they could mitigate the harm on their own terms and through their own
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29 means, on the presumption that feasible ways exist. Considering that they have access to a
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31 municipal government, they could rely on those resources to facilitate the latter option. To ensure
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33 that communities can engage in PB for EJ, local governments can adopt amicable measures to
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35 incorporate such practices.
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41 While this notion is rather straightforward, it challenges the traditional structure of local
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43 democracy and its norms. Foundationally speaking, PB is sympathetic towards approaches that
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45 aim for decentralization, but it does not completely go against municipal hierarchies, opting for
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47 cooperation between residents and city leaders. This compromise suggests that PB for EJ is
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49 feasible because it is realistic in its ambitions. Conversely, we cannot ignore the fact that
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51 incorporating PB into a municipality reshapes its power dynamics, despite its humble effects.
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53 Bearing in mind that this is a relatively nascent enterprise, researchers should give the subject
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55 additional attention. To initiate such a discussion, I examine some of the challenges to PB for EJ,
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4 along with some ways that municipalities can work with communities to provide them with the
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6 means to self-determination against environmental harm in the following section.
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10 11 **Participatory Budgeting for Environmental Justice: Challenges and a Way Forward** 12

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14 While there are several points above that show why and how municipalities should support PB for
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16 EJ, one could hold that counter arguments show that municipalities should preserve the status quo,
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18 foregoing any efforts to support community self-determination in this regard. This position
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20 suggests that city leadership entails making decisions that would cover all corrective measures that
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22 could mitigate environmental harm or prevent future cases of it. Considering the criticism of PB's
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24 shortcomings in the previous section, they could also argue that a painstakingly slow PB process
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26 could hamper necessary remediation efforts, worsening environmental hazards and causing
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28 additional harm.
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34 Moreover, the case of PB for EJ above only carries weight if residents desire it. It could
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36 easily be the case that they would rather not be involved in finding solutions for problems that
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38 might require environmental expertise that they do not have. Ernest Ganuza et al. (2016), for
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40 instance, show how experts and residents clash in certain instances, and these disagreements could
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42 hinder remediation efforts. Along with these considerations, residents could also hold that taxes
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44 should be allocated for such expenses. Elected officials must shoulder the burden of raising and
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46 or shifting monies, and they can be replaced if they fail to adequately perform the necessary tasks.
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48 With these points in mind, there are strong reasons why we should view the arguments presented
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50 thus far as thought experiments that ultimately prove that the tried-and-true methods of top-down
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52 municipal governance are best suited for dealing with environmentally unjust hardships.
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4 In addition to this reason to oppose PB, if urban leadership desires novel measures that
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6 promote inclusive community engagement, PB is not the only way to implement it into an existing
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8 municipality. For example, recent advancements in the literature on practices in local democracy
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10 show how city governments can use online technologies to increase urban residents' participation
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12 in municipal affairs (Accordino, 2103). These technologies exhibit that local governments can
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14 support inclusivity without committing to overly complicated processes such as PB, and they could
15
16 help with environmental burdens. Effectively, municipalities could have the stability of a
17
18 traditional hierarchy with the added benefit of providing residents with the ability to express
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20 concerns. In turn, municipalities and residents win. Considering that municipalities can make
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22 progress toward inclusive community engagement without concessions, PB advocates lose some
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24 of the motivation behind their position.
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31 Yet, while this technology could *generally* improve participation, such a measure excludes
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33 people who lack devices, services, or the knowledge to participate in a high-tech democracy.⁴ If
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35 only technologically equipped people can participate, then such practices would count as weak
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37 attempts at inclusion, leaning toward “non-participation,” as Sherry Arnstein (1969, 217) puts it.
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39 If the municipalities' endgame were to create an inclusive democracy, appealing to a technocratic
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41 solution would fall short, creating a “thin” democracy that does not support public justice (Barber
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43 1984).
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48 However, the above arguments against PB mainly apply to cases wherein municipalities
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50 and communities want to adhere to established practices. Although these reasons could persuade
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52 local governments to ignore or abandon participatory measures, they do not eliminate cases
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58 ⁴ It is worth mentioning that technology can also help support PB. For example, see: Miori, V. and Russo, D. (2011)
59 Integrating Online and Traditional Involvement in Participatory Budgeting. *Electronic Journal of E-Government*, 9(1),
60 41.
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4 wherein groups of residents *want* to use an approach that involves community self-determination
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6 to mitigate or eliminate environmental harm. Cases that involve marginalized groups who lack
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8 federal or state recourse fit this category. For such instances, the burden rests on municipalities to
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10 prove that residents should not be permitted to have a voice in the decisions that affect their health
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12 and the quality of their lives, a position that would have to show why this tenet of Figueroa’s EJ
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14 paradigm does not hold.
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19 For instance, one could argue that a municipality that is actively pursuing arguments for
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21 excluding people from civic engagement goes against the inherent interest of the people, a
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23 principle reason for the municipalities’ existence. If this outcome were to occur, then the next
24
25 election cycle might remove these officials from office. Confronted with this possible reality,
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27 there is no need to have such a conversation if municipal leadership takes the lead, showing that
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29 they are willing to create the necessary climate for community self-determination. If they take
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31 these steps, then they could empower the kind of citizenry that could be primed for instances of
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33 environmental hardships. Such an approach challenges the traditions of municipal representation,
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35 but it could be an exemplar of genuine leadership.
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41 Consider, for example, that efforts to implement PB can begin with community groups
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43 approaching and convincing city council members to engage in the process. However, local
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45 governments could approach environmental justice advocates or other community groups,
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47 encouraging them to engage in the practice. While such an approach is unorthodox, it is not
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49 without precedent. For example, city alderman Joe Moore of Chicago’s 49th Ward orchestrated
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51 the first PB case in the US in 2009, and it continues to produce successful outcomes, engaging
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53 13,000 residents with projects totaling over 18 million in public funds (PB Chicago, 2016).
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4 Although PB is still in its infancy, its many cases and examinations can serve as
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6 benchmarks, revealing how municipal leaders can avoid committing offenses and injustices. For
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8 example, criticisms of PB show that municipalities could dictate its terms, which could give the
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10 *appearance* of change, but it would have the opposite effect, essentially curbing any opposition to
11
12 the status quo and preventing meaningful social change (Ganuza et al., 2016; Lee et al., 2015;
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14 Polletta, 2014). Yet, through being aware of such possibilities, and by having an honest interest in
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16 enabling residents to have a means to self-determination, local governments can reduce the
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18 likelihood of future occurrences.
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23 Going forward, municipalities can implement PB through allocating funds for a trial run.
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25 Although such actions are modest, it might be cavalier to begin with an exorbitant sum. This
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27 notion challenges claims that PB advocates make, holding that PB should take on larger initiatives
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29 (Lerner, 2017). For instance, PB has only been implemented in 22 cities in the US (PBP, 2017).
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31 To say that PB has reached a point wherein municipalities should uncritically trust it is premature
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33 at its best and reckless at its worst. However, if modest experiments were to yield favorable results,
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35 then local governments would be justified if they were to develop protocols for PB that would
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37 indefinitely remain active. They could advance them in a manner that is consistent with PB's
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39 success and the community's demand for it. Through establishing a solid participatory process
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41 within a municipality, marginalized groups and communities could have the experiences that are
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43 required to address an environmental hardship.
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53 **Conclusion**

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55 In this paper, I explored the idea that marginalized groups could employ the embryonic process
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57 known as participatory budgeting to alleviate environmental harm. While most projects that
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employ this approach are geared toward community well-being or flourishing, undertakings that aim to eliminate an immediate environmental injustice challenge the scope of participatory initiatives. Due to the degree of cooperation between injured residents and municipal leadership to resolve such cases, we must amend the requirements for environmental justice under established criteria. These changes require us to include restorative provisions that see community groups as partners engaged in determining a solution rather than merely providing input for one.

Although such partnerships seem uncomplicated, they change the power dynamics between local governments and residents (Cabannes, 2004). The benefit for the people is that this modest restructuring provides a partial pathway to community self-determination and safety from environmental injuries. While some municipalities view the process as antagonistic to their standard procedures, a forward-thinking idea is to view it as an opportunity to strengthen relations between them and the people who they serve. Instead of anticipating that marginalized groups will come to them, asking for budgetary allotments, progressive leadership could institute protocols for such practices.

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