

Environmental Justice and Augusto Boal's Theatre of the Oppressed: a Unique Community Tool for Outreach, Communication, Education and Advocacy

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Our article, *Environmental Justice and Augusto Boal's Theatre of the Oppressed: a Unique Community Tool for Outreach, Communication, Education and Advocacy*, describes this transformative process, explores the theoretical and scientific influences behind the method and unpacks the collaborative dynamic modulating the efforts of community activists, non-profit environmental professionals and academics to achieve and refine their working relationship. The text is accompanied by photos from actual sessions that illustrate how the methodology embodies concepts from environmental and social sciences to promote scientific literacy, and also uses short uncomplicated scenes to show how environmental injustices adversely affect both physical and mental health, and the larger economy of impacted communities. The fact that 85% of these towns and neighborhoods are communities of color underscores the fact that race and class are keys to the struggle for environmental justice. The Forum Theater methodology also provides a dialogic structure for deconstructing these deep-seated, bitterly divisive issues with sensitivity and respect. [Article copies available for a fee from *The Transformative Studies Institute*. E-mail address: <journal@transformativestudies.org> Website: <http://www.transformativestudies.org> ©2008 by *The Transformative Studies Institute*. All rights reserved.]

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In an effort to translate basic research in environmental toxicology into useful information for communities affected by toxic exposures and related health effects, the National Institute for Environmental Health Sciences at the University of Texas Medical Branch/ Galveston TX created Community Outreach and Education (COEP) Cores to function as contact points and informational interfaces. To serve these purposes in a way that activates, entertains and informs, the NIEHS Center COEP at the University of Texas Medical Branch in Galveston TX has developed a unique community outreach that employs Augusto Boal's Theatre of the Oppressed Image and Forum Theatre frameworks for teaching basic concepts of environmental toxicology, risk assessment and to frame community dialogue on environmental justice and regulatory policy issues.

T.e.j.a.s., a community-based environmental justice organization based in east Houston, collaborates actively with UTMB-NIEHS in this process of linking communities with vital information and serves as an interface among community-based organizations, scientific expertise, public health outreach and legal resources. T.e.j.a.s. maintains an active grassroots presence, identifying communities and neighborhoods in need, coordinating and co-facilitating Community Environmental Forum Theatre workshops and public productions. T.e.j.a.s. continues its support for this process giving sustained technical assistance to local groups as they work to strengthen their capacity for local educational outreach and neighborhood organizing. Participating communities become incorporated into the T.e.j.a.s. advocacy network - an affiliation of legal, technical and environmental health expertise - to insure that regulatory, health and land use issues are effectively addressed through science, litigation, if necessary, and ultimately, appropriate changes in public policy.

“Tox, Risk and Stress”: a Theatre-Based Method for Considering Risk, Community Vulnerability & Teaching Environmental Health Concepts

Community Environmental Forum Theatre offers communities throughout the Texas / Louisiana Gulf Coast petrochemical belt an opportunity to use the tools of Image Theater and improvisation to analyze and develop a wide range of useful toxicological concepts, to develop a working knowledge of risk, and to develop analytic tools to understand how toxic exposures, risk burdens, and socio-economic factors contribute to environmental justices that severely impact their

families. This “*tox, risk & stress*” curriculum incorporates basic (qualitative) toxicology, community ethnography, social epidemiology and environmental justice covering concepts such as:

- **Tox:** Preformatted participatory image structures and sociometry exercises illustrate toxicology concepts germane to community needs for information. The “tox” component encompasses exposure pathways, dose response parameters – magnitude, duration, frequency, timing - susceptibility factors, vulnerable populations, bioaccumulation, bio-magnification, fate, transport and bioavailability, biomarkers of exposure and susceptibility, Persistent-Organic-Pollutants (POPs), chemical body burdens and a brief introduction to community-based, popular epidemiology. (Sexton, 2003, pp. 38-45)
- **Risk:** This component stems from an image-based ethnography process in which participants build site-specific snapshots of exposure pathways, risk perceptions, risk & action priorities, personal experience with EJ and environmental health issues, community power dynamics, and create image maps of community assets, and stressors. Sociometry exercises allow participants to determine intra-group safety and toxic abatement priorities, as well as sampling the spectrum of group experience regarding the personal effects of toxic exposures. (ATSDR, 2005, pp. 2(1) – 2(16))
- **Stress:** Facilitator and participants create short scenes and improvisational exercises exploring the human effects of cumulative community stress burdens from chronic toxic exposures, environmentally-induced health effects, lack of access to needed health care and other well documented social-economic indicators of health, opportunity and justice disparities. Stressors originate from various sectors of our social-economic reality and Forum scenes illustrate how these burdens converge upon and oppress our most vulnerable communities. The concept of multiple stressor effects, cumulative risk, and the influence of these factors on a community’s ability to identify, mitigate and ultimately recover from chronic toxic assaults closely guides planning scenes for the public Forum. (ATSDR, 2005, pp. 4(1) – 4 (33)); (NEJAC, 2004, pp.31-33)



A Kinetic Image shows how bioaccumulation impacts neighborhood health and adds to the cumulative burden of environmental justice communities. (Citizens for Environmental Justice; Corpus Christi, TX; 2003)

Defining Problems, Drawing Blueprints for Change: How Community Environmental Forum Theatre Uses Images to Analyze and Inspire:

In addition to this theatre-based approach to teaching environmental and social science concepts, Community Environmental Forum Theatre participant / actors also prepare images and short scenes to perform for an audience of their neighbors and community leaders. These scenes focus on themes and incidents that dramatize the significance of “tox, risk and stress” factors within each community’s unique context. Throughout the course of an intensive community workshop, actors create human body sculptures, or images to represent site-specific toxicological characteristics of each environmental justice community. These images are also used as an ethnographic tool to demonstrate community risk perceptions, attitudes toward activist engagement and

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local social dynamics. Working in small groups, each community actor serves as sculptor in assembling these neighborhood snapshots. Four primary image exercises form the core of a community portrait or ethnography that describes the look and feel of facts on the ground in environmental justice communities. Workshop participants are asked to collaboratively create group sculptures of the following concepts, situations and scenarios:

- “images of our worst environmental fear”
- “images of how my neighbors react when I give them facts about their environmental health
- “images of how it feels to live in my polluted community,” (emphasis on site-specific situations).
- “a wish-based image of what an environmentally healthy neighborhood would look like” (sometimes called “my neighborhood of the future”).



El Teatro Lucha por la Salud del Barrio sets up a an image of exposure pathways in the near north Houston barrio at the top of a Community Environmental Forum Theatre production. (de Madres a Madres, T.e.j.a.s. and

the Sealy Center for Environmental Health & Medicine at the Holy Name Auditorium; Houston TX 2005)

The “image of my worst environmental fear” is an abstraction for most scientists, public health practitioners and middle-class environmentalists. UTMB-NIEHS / T.e.j.a.s. has facilitated numerous workshops at university-sponsored EJ conferences, EPA Community Involvement conferences, NIEHS and PIRG meetings, etc. and the generality of this image is remarkably uniform. Environmental justice communities, however, go right to core of their own site-specific problem and create detailed, recognizable images of *our* hazardous waste site, *our* petrochemical fence-line, or *our* neighborhood cancer cluster. No time-lags, no hesitations, no confusion, here.



“Fire in the Hole”: CIDA Forum actors create image of their worst case environmental scenario – an explosion and fire at a nearby petrochemical facility. (Community In-Power & Development Association; Port Arthur TX; 2004)

The second image structure may also focus on reactions from local businesses, politicians, regulatory agencies or the industrial sector when activists press for substantive pollution abatement, permit enforcement, access to health care or changes in an industry-biased tax framework.

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Used in this way, a reaction image segues smoothly into an overarching image of the local or regional power dynamic with respect to environmental justice. The fourth image exercise uses a special Boal image structure called *Real to Ideal* image. Community actors morph images of their lived reality into ideal images of the community they would choose to inhabit. After creating a series of these images, individual actors alternate sculpting single images that synopsise a spectrum of everyone's ideal characteristics. This procedure, *Image of the Images*, provides a visual picture of possible goals for future actions. Another image structure, *Image of Transition*, may also be used to detail successive approximations of that ultimate goal, allowing the group to move more realistically through various stages of environmental and community reclamation.



A fence-line family “circles the wagons” for protection when one of the children is diagnosed with Acute Lymphocytic Leukemia. (Community In-Power & Development Association; Port Arthur TX 2004)

Images may be used to illustrate a community's wealth of assets or need for additional mobilization in response to environmental challenges. Image and improvisational character development structures also provide the basis for performed scenarios that connect environmental toxicity to

real life outcomes. Boal created techniques to “dynamize” freeze frame images, gradually awakening the characters inside the image by giving them personal gestures, then phrases – in an internal monologue – to accompany the gestures, and finally asking them to move beyond the relatively static gestural movements while improvising dialogue. As they begin their unmoored movements, the characters relate to other actors in the original freeze frame and the image begins to resemble an actual scene in slow motion. (Boal, rev. 2000, 176-203) T.ej.a.s. and UTMB-NIEHS riff on these techniques, using a sequence of three images they call “Making a Dramatic Sandwich.” This method begins with a Core Conflict Image, then immediately juxtaposes an image of the Past – *where did the actors in this conflict come from?* – followed by an image of the Future – *where did the characters go immediately after the unresolved conflict?* – to chronologically bracket the Core image. This “sandwich” comprises a complete scene; with some embellishments, this de-mystified process is often sufficient for making Forum scenes.

Interactive image and improvisational structures commonly used in Community Environmental Forum Theater workshops and performances include:

- ***Basic TO Image Structures, Activation Games & Improvisational Exercises:*** This segment of the workshop consists of physical activities: non-competitive games, movement routines, trust exercises, and improvisational character-based acting situations that promote awareness of physicality as an expressive tool, what Boal calls a “retuning of the senses.” These routines are the basis of performance training in Theatre of the Oppressed. (Goodman & de Gay (Eds.), 2000, pp. 32-34)
- ***Co-Piloting the Image:*** This special image technique allows a story-teller and an interpreter to work in pairs, building their own image versions of the same story. The co-pilot often adds image details, or analytic twists to the original story that expand significance for the teller and the group. (Boal (*Rainbow of Desire*), 1995, pp. 87-89)
- ***Cops-in-the-Head:*** An “introspective” image schema in Boal’s dramaturgy, “Cops...” represents the multiple voices and shades of opinion that often cloud environmental issues and make it difficult to decide on competing courses of action. In addition to

determining what these clashing voices say, the protagonist of the image sculpts actors into images of what the source of each voice looks like. If this image is used in performance, spectators may step into the constellation of speakers and propose additional voices and sculptural shapes. The protagonist may accept, reject or modify these proposals to better represent the reality they actually experience. (Boal (*Rainbow of Desire*), 1995, pp. 136-141)

- ***Rashomon***: Based on the central premise of Akira Kurosawa's eponymous film, the same scene is played from multiple-character viewpoints. This is particularly useful in developing a sense of the complexity surrounding efforts to determine the environmental causes of disease, political strife over efforts to regulate polluting industry and the cumulative effects of multiple health and social stressors on life in environmental justice communities. (Boal (*Rainbow of Desire*), 1995, pp. 114-117)
- ***Janaka's Double***: This image exercise, sometimes called the ***Inside / Outside Image***, represents the difference between reactions shown to the world and hidden, inner effects of living with the problems of environmental justice communities. Two actors are sculpted in close relationship to one another, showing how what is externally displayed may be different from what is really felt. This technique is especially revealing in analyzing the toll of living with chronic health effects in toxic neighborhood. (technique borrowed from Sri Lankan Theatre for Development)
- ***Johari's Window***: Deriving from the Theatre for Development – in common currency throughout Africa and South Asia – this image-based analytic procedure shows how community reality is organized in layers: that which is known to us and them, that which is seen only by them, that which is known only to us, and that which is effectively hidden from both them and us. This structure is especially useful in showing how a community's unique life-ways affect patterns of toxic exposure, belief systems and willingness to change environmental circumstances. Conversely, ***Johari's Window*** may also illustrate the futility of environmental efforts imposed on community's from outside the local dynamic. (McCarthy, J. & Galvao, K., 2002, pp. 37-39)

- **Hot Seats:** Antagonist, potential Allies and sometimes the protagonist sit in chair surrounded by the other actors and answer questions about beliefs, motivations and intentions to deepen the effectiveness of Forum scenes. This technique is sometimes used prior to audience interventions in the Forum to open up these characters and give spect-actors character details they can use when they stop the action and enter the drama. (technique borrowed from Gestalt)
- **Pairs & Fluid Sculptures:** Pair fluids are kinetic sculptures using actor duos that embody both sides of an issue, or probe complex feelings relative to the issues. These sculptures are effective in representing blockages to effective action: excuses, misgivings, cynicism from previous failures to achieve positive results from environmental justice campaigns. (Salas, 1996, pp. 31-40)
- **Image Playback:** To conclude a show, Forum actors often form group images based on prompts from the audience. These suggestions range from feelings provoked by the performance to concepts such as sustainability, just regulations and accountability, community coexistence with industry, or solidarity in action. Sometimes forum actors will gradually assemble an additive concept sculpture and the facilitator will invite audience members to step into the image and “help it grow.” Another alternative is a **Real to Ideal Image:** audience members are asked to step up and revise a sculpture of toxicity and injustice into “somewhere they would choose to inhabit.” (Boal, rev. 2000, p. 185)
- **“Talking to Power”:** This sequential TO-based process combines a number of applied theatre techniques: the social atom, hot seating, analytic images, improvised dialogues, auxiliary allies, magic screen, enabling workshop participants to strategically choose which “power actors” in the real world dynamic they should engage in a dialogue. Actors experiment with various “readings” of the situation to effectively structure their rhetoric, choose useful allies for support, and magnify their presence (through image- making) to widen and empower their coalition of support. This complex technique allows community actors to make clear strategic decisions - weighing factors unique

to the power dynamic they must work with and evaluating their power actor or ally options in terms of their ultimate environmental justice goals and objectives. “Talking to Power” is usually offered as a stand-alone workshop because it is both labor and time intensive; information gathered from such a session might be later integrated into a Forum scene, but “Talking to Power” is not included as part of a community Forum performance. (technique developed with *El Teatro Lucha por la Salud del Barrio*, 2005)

Representing Injustice, then “Flipping-the-Script”: How Forum Theatre Offers a Rehearsal for Action in the Real World

Scenes and images created by community members in the workshop process are performed for the community as interactive Forum theater. These scenes are “forumed” (or processed) with the larger community, using Boal’s concept of audience members as *spect-actors*. In Boal’s dramatic system, these “open” forum scenes – with no closure and no satisfying solutions to the environmental justice problems represented in the theatre piece – activate the audience to step onto the stage and into the drama with new actions they propose to advance the cause of health and environmental justice. The Forum emphasizes replacing two major types of actors in these scenes: 1) the *protagonist* or central character whose efforts to change the situation in a positive direction are stymied; and 2) the *potential ally* who would – under the right conditions – assist the protagonist in changing external circumstances for the better. *Effective ally* interventions are based on Theatre of the Oppressed scholar, Mady Schutzman’s, concept of the *Invisible Witness*, a character that perceives an oppression but feels disconnected from the consequences, or paralyzed by personal fears or uncertainty over which course of action to follow.

The Forum process gives potential allies the chance to act beyond these normal restraints to develop an effective new rhetoric for presenting information and arguing their case. Rehearsing assertive action on behalf of their neighbors’ health and the community’s environment in the Forum, transforms participants, who formerly accepted toxic assault and chronic social-political neglect as a fact of life in environmentally degraded neighborhoods. Ally / spect-actors also have the opportunity to rehearse networking skills, to practice risk communication with their neighbors, and to question central assumptions of prevailing power dynamic: these activities are all sources of personal

empowerment for the actors, for spect-actors, and even merely witnessing these scenes unfold empowers other members of the audience to do likewise, in the world beyond the Forum. As Augusto Boal claims, “The act of transforming, I always say, transforms she / he who acts. Theatre of the Oppressed uses the theater as a rehearsal for transformation of reality.” (Boal, 2005, *Democracy Now*: radio interview) An “ideal Forum” leaves actors, spect-actors and audience energized, motivated, actively vigilant and dissatisfied with the reality they’ve seen portrayed on stage. Freire calls this a state of “patient impatience,” but Boal is less ambiguous. There is no place for passivity at a Forum; Theatre of the Oppressed primes spectators to apply their powers of critical awareness to deconstruct what they see and “prepare for action in and on the world.”



Community actors show reactions of neighbors and local government to local cluster of congenital heart defects in Coastal Bend region of south Texas. Actors lying on floor represent the toll of disease on the community's children. (Citizens for Environmental Justice; Corpus Christi TX; 2003)



Citizens for Environmental Justice meet Mr. Industry, Mr. EPA and Ms Texas Commission on Environmental Quality (TCEQ). A Forum dialogue on air quality in the Coastal Bend region of the south Gulf mirrors the frustration of similar, real life encounters. (CfEJ; Corpus Christi TX; 2003)

During the intervention phase of a Forum, the *antagonist* is never replaced by *spect-actors*; Boal cautions against this because such a thing would never happen so automatically in the real world. He calls this gratuitous shift in the antagonist's point-of-view *Magical Thinking*, reflecting Nelson Mandela's belief that "life's good comes **NOT** from the Others' gift." If the antagonist could change so drastically, of his/her own volition, the Forum would be unnecessary. The Forum facilitator assists this spect-actor intervention process, first activating the audience with warm-up games and exercises, leading the audience – after they've watched each scenario once - in voting for which scene they would like to run through the Forum process, and finally de-briefing the spect-actor, the other Forum actors, and the audience after each intervention. During this de-briefing, the facilitator asks four principal questions:

- 1) (*for the spect-actor*) How did you feel during your intervention? This question opens the door for community

members to express their frustration with the antagonist or apathetic potential allies who “just sat there and watched while they crashed and burned.” This moment also allows them to tell their neighbors how empowering they felt while engaged in the struggle for justice, regardless of the outcomes. The facilitator leads with this question because community members are seldom asked how both the negative and positive aspects of environmental justice actions feel, and in Boal’s dramaturgy, feeling is the primary component.

- 2) (*a two part question, again, for the spect-actor*) Why did you chose this specific intervention and how would you evaluate the results?
- 3) (*for the other actors, especially the antagonist*) How did the spect-actor’s intervention force you to change your own actions, or reconsider your beliefs (while remaining in character)?
- 4) (*for audience members*) What do you think of what happened? This gives audience members the opportunity to offer their own evaluation of how effective they think each intervention would be in the real world.

These audience “talk-backs” after each intervention invariably introduce fresh perspectives and often uncover formerly submerged facts about the situation that weren’t mentioned during the workshop. Audience members employed by polluting industries often mention facts associated with accidents, upsets or standard practices with toxic stock chemicals that aren’t common knowledge in the community. Spectators with connections to the public health, social services and political sectors often make similar revelations about official “rationing” of local resources; these facts on the ground accumulate and add to the context and knowledge base for future environmental justice actions. Audience critiques of Forum interventions help the community to establish action priorities and develop a working agenda for a sustained campaign of collaborative advocacy. The Forum often ends with a special reprised performance: the original protagonist of the scene cycled through the spect-actor process is invited to “*flip-the-script*,” synthesizing tactics from all the session’s interventions to find an action strategy that leads to closure.

Wise practice dictates that sponsoring community organizations somehow record the results: the scenes, the interventions and subsequent discussions, and all the added factual details that broaden understanding of the context and subtext of the scenes performed on stage. This is often done with flipcharts, or a note-taker, but the most effective avenue is videography. T.e.j.a.s. encourages this visual stenography and often performs this service – as well as still photography - for organizations hosting the Forum event. Review of videotapes provides the most accurate log of what transpired verbally and visually; this footage most accurately conveys which issues resonate and compel action within the community, and the true depth of audience reactions to statements, proposals and revelations. Clips from Forum performances may also be integrated into a video piece for later use as an informational or organizing tool, thus sustaining and expanding the impact of the original Forum event.

The Forum process interrogates commonly held ideas within the community, suggests effective actions that may be used to remedy environmental problems, and generates an agenda of community needs and aspirations that provide the foundation for effective community-based health research and environmental justice interventions. These community-based efforts serve to overturn what Brazilian educator, Paulo Freire, referred to as the *“myth of an unassailable reality.”* (Freire, rev. 2000, p. 72) This situation commonly obtains in communities subjected to decades of toxic assault, racist rationales for social-economic neglect and political stonewalling. The myth translates into a fatalistic belief that nothing substantial will ever change and the progressive degradation of our physical and social environment is a necessary outcome of human action in and on the world. The Forum process effectively debunks this overarching myth but the activation is short-lived without a structure for advocacy and sustained technical assistance. At this juncture, the advocacy role of groups like T.e.j.a.s. becomes truly vital to the health of grassroots EJ efforts. Without strong, immediate support of grassroots campaigns, the energy and resolve dissipate as the local power dynamic mobilizes its own resources to defend vested interests and the imposed version of “unassailable reality.” As Frank Fischer observes, “collective citizen participation is not something that can simply happen. It has to be organized, facilitated, and even nurtured.” (Fischer, 2000, p. 143) Otherwise, the pressures brought to bear on under-funded and easily overextended grassroots environmental justice organizations are almost insurmountable. Honest effort on the part of veteran partner organizations is clearly a strategic

and ethical imperative. Negative outcomes like continued apathy, disengagement, hopelessness, cynicism, and abandonment of the struggle for environmental justice are, just as clearly, unacceptable.



An image of conflict represents deep divisions in the community over environmental justice issues. An animated version of this Core Conflict Image formed the basis for a Forum scene on effective risk communication. (Citizens for Environmental Justice; Corpus Christi TX; 2003)



Community Forum at Bruce Elementary School in Houston TX uses an Image called “Cops-in-the-Head” to demonstrate how conflicting estimates of children’s developmental risk from exposure to heavy metals at the nearby MDI Superfund site confuses neighborhood residents. (Mothers for Clean Air - 5th Ward Chapter / Houston TX, 2003)

Outcomes, Attitudes and Activation: How Community Environmental Forum Theatre Transforms Advocacy

Outcomes of the Forum process translate back into community science that acknowledges and incorporates vital elements of *local knowledge*, which is “knowledge about a local context or setting including empirical knowledge of specific characteristics, circumstances, events, relationships, as well as normative understanding of their meaning.” (Fischer, 2000, p. 146) Environmental science relies heavily on local knowledge – which derives from the community – to validate hypotheses regarding exposure pathways, risk perceptions, qualitative analysis of exposure health effects, and more. This paradigm for collaboration among affected neighborhoods, grassroots EJ organizations like T.e.j.a.s. and institutional science like the Sealy Center for Environmental Health and Medicine / NIEHS melds the concepts of environmental justice into the practices and methodology of Community-Based Participatory Research, or CBPR. This methodology is defined as “a collaborative approach to research that equitably involves all partners in the research process and recognizes the strengths that each brings to the process.” (Katz, D.L., 2004. [serial online]) The practice of CBPR democratizes science and steers collaboration closer to the community-based goals of environmental justice. Additionally, CBPR “restructures the undemocratic expert-client relationship because hypotheses, analysis and interpretation directly affects the social power dynamic...” (Fischer, 2000, p. 172) This radical alteration of the “normal” power relationship between researchers and communities continues the process that begins in the Forum: a movement toward what Boal calls becoming a real citizen, “not merely affected by society but acting to change society.” (Boal, 2005, Democracy Now: radio interview).

The Forum workshop also serves a transformational leadership function as participants receive a solid grounding in basic toxicological concepts and carry a sense of informed activism into their future efforts to recreate their neighborhoods and communities. The multigenerational design of the Forum process bonds children and adults in a stimulating project with a common goal, and provides opportunities for elders to mentor the activists of a new generation. The primary transformational outcomes of the Community Environmental Forum Theatre and Theatre of the Oppressed Process may be summarized in terms of the following algorithms:

- ***more knowledge = more power***: This is a direct outcome of exposure to the technical content, the basic facts of toxicology, risk assessment, and population health. The “tox, risk and stress” curriculum enhances the personal role of each participant in their community as an informal educator and committed advocate, while elevating the knowledge base of the entire community.
- ***more presence = more confidence, more personal assurance***: Exposure to body work and performance techniques promotes greater efficacy in communicating risk and maintaining grace under fire as an advocate.
- ***more awareness of community burden = more effective personal agency***: The Forum process releases the tensions and frustrations of cumulative stressors, and addresses actual environmental health risk factors within the safe container of the TO workshop. Effective communication of this burden – with all its health and socio-economic ramifications fully exposed – broadens the appeal of grassroots organizations to members of their own community, and makes networking efforts toward regional and national groups more credible.
- ***better rhetoric = more effective advocacy for Environmental Justice***: This aspect is direct outcome of “Talking to Power,” risk communication simulations, and the Forum Theatre performance process; “*flipping the script*” levels the playing field if only symbolically and provides a platform for more confident action, allowing the community to strategize better actions and rehearse their implementation under more or less realistic circumstances.
- ***deeper understanding = more effective use of organizational resources***: Understanding the complexity of the local power dynamic overarching environmental justice issues allows grassroots organizations to separate inveterate antagonists from those more open-minded “power actors” who merely disagree, and to choose their allies selectively with an eye toward commonality of goals, convergence of beliefs, overlap of constituencies, approachability, and practical leverage within the power dynamic.

The ultimate outcome of the Forum process, as practiced in community-based collaborations such as projects UTMB-NIEHS / Public Forum & Toxics Assistance and T.e.j.a.s., is to upset the equilibrium of power, oppression and constraint that make progress toward environmental justice so tenuous, so painfully slow, so infinitesimally small in a world so apparently dominated by the imperatives of Exxon / Mobil, consumerism and globalized military-prison-industrial priorities. The most profound gifts of the Forum to communities are the mindfulness and energy that stem from Paulo Freire's political-social-philosophical matrix of compassion, belief, knowledge and hope. (Freire (Pedagogy of Indignation), 2004, p. xxxi) Forum opens all of us into an *engaged awareness* of what we must do to reclaim a justly regulated and healthful environment, while involvement in the process activates a hopeful energy to make the effort against long odds and a stacked deck. The rest is up to us.

REFERENCES

- Agency for Toxic Substances & Disease Registry (revised 2005) *Public Health Assessment: Guidance Manual*; U.S. Department of Health & Human Services; Public Health Service (Atlanta, GA)
- Boal, A. (1995) *The Rainbow of Desire* (London, Routledge)
- Boal, A. (1992, revised 2002) *Games for Actors and Non-Actors* (London, Routledge)
- Boal, A. (2000) The Structure of the Actor's Work; in: L. Goodman & J. de Gay (Eds.) *The Routledge Reader in Politics and Performance* (London, Routledge)
- Boal, A. (2005) Radio Interview; with J. Gonzales (Los Angeles, CA, *Democracy Now*; June 3rd 2005)
- Camacho, D. (1998) The Environmental Justice Movement: a Political Framework; in: D. Comacho (Ed.) *Environmental Injustices, Political Struggles: Race, Class and the Environment* (Durham, NC, Duke University Press) pgs. 11-30
- Fischer, Frank (2000) *Citizens, Experts and the Environment; the Politics of Local Knowledge* (Durham, NC, Duke University Press)
- Freire, P. (1971, revised 2000) *Pedagogy of the Oppressed* (New York, New York, Continuum International Publishing Group)
- Freire, P. (2004) *Pedagogy of Indignation* (Boulder, London, Paradigm Publishers)
- Katz, D.L. (2004) Representing your community in community-based participatory research: difference made & measured; *Prev Chron Dis* [serial online]
- Legator, M. & Strawn, S. (1993) *Chemical Alert: A Community Action Handbook* (Austin, University of Texas Press)
- McCarthy, J. & Galvao, K. (2002) *ARTPAD: a Resource for Theatre & Participatory Development* (Manchester, UK, University of Manchester Press)
- National Environmental Justice Advisory Council (2004) *Ensuring Risk Reduction in Communities with Multiple Stressors: Environmental Justice & Cumulative Risks / Impacts*; U.S. EPA; (Washington, D.C.)
- Salas, J. (1996) *Improvising Real Life*; (New Paltz, NY, Tusitala Publishing)

- Sexton, K., Needham, L. & Pirkle, J. (2003) Human bio-monitoring of environmental chemicals; *American Scientist*; 92, pp. 38-45
- Sullivan, J. & Lloyd, R.S. (2006) The Forum Theatre of Augusto Boal: a dramatic model for dialogue and community-based environmental science; *Local Environment: The International Journal of Justice and Sustainability*; Vol. 11, No. 6, 627-646, December 2006
- Sullivan, J. (2004) Community Environmental Forum Theater: a dramatic model for dialogue and participatory research among citizens & scientists; *Stage of the Art*; Winter 2004; pp. 17-23

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