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FRAMING AND REFRAMING IN LAND USE CHANGE CONFLICTS

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Proposed changes to community land use frequently give rise to protracted disputes. Cognitive psychology, communication, and decision-making research suggests that frames, which filter people's perception of a problem, can affect conflict processes and outcomes. This paper argues that frames may significantly influence public participation in decisions to change a community's physical space. The kinds of frames likely to be found in such conflicts are examined using the example of a landfill dispute. Recommendations for identifying frames and responding to them are proposed for practitioners intervening in physical change conflicts.

Proposed change to the physical space of a community, whether siting a waste processing facility, redeveloping a neighborhood, or building a community center, can spark multi-party conflicts. These conflicts often escalate beyond the specific proposed change to include past grievances, issues of process, and relationships. Beyond the short-run tangible costs parties to such conflicts incur, there can be long-term costs from loss of mutual trust, dissatisfaction with process and outcome, impaired communication, and an entrenchment of cynical attitudes toward change.

Important, but poorly understood, contributors to change conflicts are *frames* — shortcut devices people use to characterize situations, problems, or adversaries. Frames organize knowledge (Tannen, 1979) in ways that affect individuals' interpretation of a situation and their choices regarding it (Pinkley, 1990). Why should architects and planners involved in a proposed physical change worry about frames? One reason is that frames held by conflicting parties color the content of their perceptions and reduce their need to gather information and examine details. When frames are transferred from one set of circumstances to another, an imperfect match may prompt solutions that do not respond to actual needs and conditions. The key effect of frames is *filtering* the information base of decisions, foreclosing options and obliterating situation specifics.[1]

Interveners in conflicts typically begin by assessing stakeholders, issues, history, relationships, resources, decision rules, and dispute consequences (Dotson, *et al.*, 1989; Kolb, 1994). Planning and design practitioners need to add the task of identifying operating frames. They need to understand frame effects if they wish to promote processes and outcomes rooted in actual, rather than distorted, specifics of each situation. For example, some old structures are historically or architecturally valuable while others are merely old, not necessarily worthy of preservation. A frame that sets value on conservation per se in that case may lead to poor preservation decisions, not driven by a building's architectural or historic merits.

Practitioners also engage in *framing*, deliberately crafting frames for strategic purposes. For instance, planners wishing to attract political attention and economic resources to inner city neighborhoods may argue that a downtown's viability depends on the health of its surrounding neighborhoods. Others, promoting the building of a new stadium, may also argue their case by framing it as a must for a viable downtown.

Effective interveners in change conflicts use *reframing* — seeking to change the way in which parties have initially framed issues — in order to reconcile differences and invent solutions to conflicts. Reframing might entail getting parties to focus on outcome features that serve their interests, rather than on specific preferred outcomes, or positions. In the example above, the stadium debate could be reframed in more general terms of downtown viability, rather than in the narrow terms of building a stadium or not. This might open the field for other solutions to decline, such as revitalizing surrounding neighborhoods or restoring downtown housing and cultural facilities.

While framing and reframing are established and useful intervention tools for breaking an impasse (e.g., Moore, 1986), our interest centers on how frames affect land use change decisions. Although others have investigated frames and their effects on decision processes and outcomes, little attention has been given to physical change conflicts. To date, frame research has consisted mostly of experiments (Putnam and Holmer, 1992) which (by necessity) illuminate highly simplified situations. Some notable exceptions have been Gray and Donnellon's (1989) and Yi's (1992) linguistic analyses of observed communications, and Schön and Rein's (1994) case studies of intractable policy disputes. In contrast to such disputes, space change conflicts are typically site-bound, triggered by specific initiatives, and lacking well-defined decision processes (Kaufman and Smith, 1997). We need to explore how frames affect real physical change decisions, because their complexity is difficult to replicate in experimental situations (Hogarth, *et al.*, 1980).

Our purpose is to probe the meaning and range of frames specific to land use change disputes in order to identify consequences relevant to architects and planners. The first section reviews current knowledge about frames, framing, and reframing. The second section discusses the pertinence of

study of cognitive maps lends support to the possibility that frames distort the basis on which individuals make key decisions about physical change. In that context, frames may drive participants' willingness to act, participate, take a stand, or join a group.

Beyond a measure of broad interdisciplinary consensus over the meaning and mechanics of frame use, current research has branched out, questioning how frames are generated; who proposes them; to what extent frames account for conflicts; and, whether they need to be reconciled for resolution. To answer some of these questions, it is imperative to analyze frame use in real disputes. Gray and Donnellon (1989) pioneered such research. Through content analysis of communication exchanges they have identified six types of frames which Yi (1992) confirmed in his scrutiny of environmental disputes. These tentative categories — substantive, loss-gain, characterization, process, outcome, and aspiration frames — are currently undergoing a recasting that aims to capture the value basis of frames (Gray, 1996).

Framing

While adopting a frame is a party's unilateral move with no direct interactive consequences, *framing* is the act of deliberately crafting a frame for oneself, or more often, for the benefit of an audience such as a counterpart in negotiations, a constituency, or "the public." Negotiators, interest group representatives, lawyers, and politicians engage in careful framing to persuade their constituencies to accept their point of view on contested issues. Based on experience, framers expect their frame will be adopted and will elicit a desired reaction: "Groups ... portray issues deliberately in certain ways so as to win the allegiance of large numbers of people who agree (tacitly) to let the portrait speak for them" (Stone, 1988:171). For example, Schön and Rein (1994:28) observed that parties use "generative metaphors" replete with normative dualisms — "health/disease, nature/artifice, or wholeness/fragmentation" — to lead listeners to a desired conclusion about solutions to particular policy problems. The effects of using such metaphors are evident in recent debates surrounding welfare reform and proposed changes in health policy.

The specific framing of a space change conflict can foster public participation or lead community members to suspect that participation is unnecessary or even futile. For example, whenever decisions made by politicians or bureaucrats allow for public input, cynical framing of public officials (i.e., they don't care about what citizens have to say) can discourage participation, as can framing that suggests only experts are able to understand the issues. Framing that implies decisions are in the hands of the powerful and the influential might lead community members to seek strong political allies in order to prevail.

Reframing

While framing seeks a measure of control over how a communication will be perceived by others, *reframing* consists of a deliberate attempt to alter someone else's frame. Reframing occurs during negotiations (Putnam and Holmer, 1992), usually to facilitate communication, but also to promote the reframer's preferred outcome. It can shape the course of joint decision making. At times it may be detrimental to some interests, especially when opportunities are lost with unforeseen, long-term, or irreversible consequences. On the other hand, interveners use reframing to foster joint agreements. For example, since mediators cannot alter either the resource distribution or the conflicting parties' behavior (Kaufman and Duncan, 1988), they utilize reframing to help change how disputants see their conflict, which can lead to joint agreements (Moore, 1986). Planners and architects, too, may find themselves having to rely on these devices when they intervene in physical change conflicts (e.g., Susskind and Ozawa, 1984; Dotson, *et al.*, 1989).

If frames, framing, and reframing can affect the quality of decisions, their implementability, and the level of community participation in space change initiatives, they deserve practitioners' attention, especially if it can be shown that different frames predictably yield different outcomes. We focus next on how frames shape individual and joint decision making during efforts to change physical

space. We assume throughout that it is difficult to implement a proposed physical change which is out of tune with situation specifics; that informed public participation, an ingredient of communicative rationality (Forester, 1989; Innes, 1996), contributes to outcome implementability; and that outcomes are only as good as the level of satisfaction of their stakeholders (Dotson, *et al.*, 1989).

FRAMES IN PHYSICAL CHANGE DISPUTES

Complex information, uncertainty of consequences, and intricate negotiation dynamics contribute to intractability in policy disputes (Schön and Rein, 1994), as do fundamental moral conflict and high-stake distributional issues (Burgess and Burgess, 1995). Physical change conflicts, while not necessarily intractable, share these characteristics. Their complexity derives from the numerous parties involved, from the technical nature of pertinent information, and from long-range, uncertain, and possibly irreversible consequences for many. These disputes are also plagued by procedural uncertainty — the lack of a defined, known decision process (Hogarth, *et al.*, 1980). Besides the initiators of change, likely parties to physical change decisions include the host community, people in the surrounding region, regulators, and politicians at all governmental levels, and planning and design practitioners. Planners and architects may be associated with governmental agencies, the community, and/or the initiator of change. At times neighboring communities, environmentalists, or groups formed around some narrow common interest may also enter the fray. Each party has preferences and goals for the decision-making process and the outcome, as well as different perceptions of alternatives, consequences of various unilateral and joint choices, and their likelihoods (Kaufman, 1991). All these decision ingredients are subject to frame effects, as individuals reach for some shared or purposely promoted views that filter the specifics of a case at hand.

Some frames in particular carry a shared, or collective, meaning that can spur the public's engagement. For example, the "not in my back yard" or NIMBY label, originally associated with the siting of perceived high-risk land uses (e.g., nuclear plants, hazardous waste facilities), has acquired frame status. Its use now extends to any unwanted land use, including shopping malls and even parks. In essence, when this frame gets attached to a physical change proposal it can quickly trigger community-wide opposition.

As widely held "packages" of views on recurring situations, shared or collective frames are particularly relevant to physical change conflicts because they transcend individual perceptions and may lead to predictable community reactions. Residents might utilize a prevalent or actively promoted frame, such as NIMBY, to decide whether or not to get involved in a physical change decision, possibly glossing over details which are not always easily accessible. Collective frames can effectively elicit communal opposition where a frame-less issue might not. For example, while there is a growing awareness of brownfields — properties left vacant due to contamination by previous land uses — they do not elicit an immediate response as NIMBY uses do, because the brownfield label still requires extensive explanation. The collective frame effect may be enhanced by individuals' tendency to seek mostly confirmatory evidence for what they believe to be true, neglecting any contradictory information (Tversky, 1996). Public officials may quickly recognize and dismiss citizen opposition to a project as the NIMBY reaction they expected, when in fact the opposition may be sparked by problems specific to the plans or to the implementation strategy. Such misunderstandings stemming from the discrepancy between frame and reality may have dire, conflict-generating consequences for all involved.

Interestingly, there does not seem to be a one-to-one correspondence between frames and the actions they prompt. Several frames may lead parties to subscribe to the same collective action. Those who frame government as interfering and curtailing economic freedom and those who frame economic development as always beneficial, are likely to find themselves on the same side of the fight against environmental regulation. This loose relationship between frames and ensuing collective action may account for the composition, surprising at times, of coalitions emerging on various sides of a dispute.

Frames derived from collective past experience can encourage or dissuade action. For example, residents in a poor neighborhood might be opposed to replacing a closed factory with a minimum security prison, but may feel hopeless about preventing this change because little attention has been given to neighborhood concerns in the past. The frame held by these residents leads to inaction, based on failed or discounted previous efforts, so they tend to let things happen. In comparison, residents in a middle class suburb, who have successfully used resources to block unwanted land uses in the past, might hold a frame encouraging action, which leads them to challenge obstacles. The consequence of the frame difference in the two neighborhoods is found in the level of readiness for collective action. The inaction frame will likely lead to missed opportunities to participate in, and affect, physical change decisions while the action frame might push residents to fight any development, possibly regardless of its merits. In either situation, transcending the collective frame may not occur until after residents participate in a decision process based on situation specifics rather than frames.

While planning and design practitioners may be well positioned to help surface frame effects, they too may see their own role in a physical change initiative through frames shaped by their education, experience, or political outlook. These practice frames can affect the procedures they follow, the parties they choose to involve, the issues for focus, and the perceived set of solutions. Frames, however, are not simply equivalent to a professional outlook or set of beliefs. Rather, while consistent with a particular set of norms, a frame results from, and leads to, information processing shortcuts, possibly because it provides the detail and causal links of a generative metaphor (Schön and Rein, 1994). For example, a planner with an equity frame might oppose investment in a specific project that does not "provide choices for those who have few" (Krumholz and Clavel, 1994:1), while a planner with an economic development frame might favor this investment, expecting it will benefit the whole community in the long run. Both planners' reliance on frames can obscure situational details that might lead each to a different choice in a specific situation.

Understanding frames may help all parties in physical change decisions to focus on case-specific issues rather than relying on their frame counterparts. The ensuing process may require negotiating not only the issues in dispute but also the frames themselves. In fact, joint agreements may entail a reconciliation, and at times a lasting change, of frames for all involved.[2] Relying on what is already known about frames in general, the next section identifies frame effects pertinent to physical change initiatives.

A TYPOLOGY OF PHYSICAL CHANGE FRAMES

The kinds of frames relevant to spatial change are those which appear to inform parties about issues, other stakeholders, process, options and consequences, the value of information, and about the necessity to act. We begin by using Gray and Donnellon's (1989) typology to describe frame effects pertinent to physical change conflicts. For some of the six initial categories — substantive, loss-gain, characterization, process, outcome and aspiration — we discuss subtypes[3] that capture attitudes and images specific to physical change disputes. We also propose a seventh category, *complexity*, not derived as the others from communications and experimental research, possibly because these rarely reach the informational complexity common to space change disputes. Table 1 summarizes the discussion that follows by offering for each frame type and subtype its definition, a closely comparable familiar term, and an example.

Substantive frames place consequences of proposed change at the core of disputes. Images are apt to take center stage, at times obscuring the nature and magnitude of expected consequences, whether positive or negative. Consider how homes for assisted living are often expected to bring down property values, although they do not necessarily do so. For the proposed nuclear waste repository site at Yucca Mountain, Nevada, the extreme imagery people associated with the consequences of nuclear accidents proved impervious to information (Slovic, *et al.*, 1991). Conversely, the positive

TABLE 1. Frame types with their definitions, lay terms, and examples.

FRAME TYPE & subtypes	DEFINITION	LAY TERMS	EXAMPLES
SUBSTANTIVE	consequences of change are at the core of disputes	doom & gloom	Homes for assisted living will bring down property values.
complete story	includes detail about how the consequences follow actions	scenario	The Wal-mart Script: running mom-and-pop stores out of small towns.
zero-sum	one's gains is necessarily another's loss	fixed pie	Environmental quality is preserved at the expense of economic development.
LOSS/GAIN	uncertain choices are presented either in terms of gains or losses to a party	glass half-full or half-empty	A new policy can be presented in terms of dollars saved or dollars lost.
CHARACTERIZATION	evaluations, often stereotypical, of others' behavior, attitudes, motives or trustworthiness	stereotypes	Environmentalists are extremists always opposing economic development.
self-characterization	perceived own ability (or lack thereof) to prevail in decisions, or sense of justice or entitlement	self-image	Suburban community members may feel empowered by their access to information or to political representatives.
PROCESS	reflects views about steps, decision rules, and participation in conflicts	closed to public input, done deal: business as usual	Locating a new highway interchange results from political pressure rather than need.
OUTCOME	description of conflicts in terms of parties' positions, often expressed as preferred solutions	positions (vs. interests)	A developer insists that only a specific number of housing units is the key to the project's success.
zero risk	no level of risk is tolerable, regardless of costs and likelihood of success	NIMBY	A group of residents requests that all electric wires be buried to eliminate health risks from magnetic fields.
justice	an outcome's value includes distributional concerns	fair share	A community refuses to accept social service delivery outlets as it already has its "fair share" of such facilities.
ASPIRATION	reflects disputants' needs, interests, desires or concerns, in terms of which they evaluate options	interests	Rankings of regional environmental risks reflect participants' desires regarding quality of life.
COMPLEXITY	reflects the value placed on scientifically-based information	science as ultimate truth or as completely relative	The lay public has difficulty in evaluating the quality of science- or technology-based information.
science-as-truth	treats information with undue respect	computers are always right	Some place unlimited trust in scientific facts and their relevance to decisions.
science-as-deception	unduly discounts scientific information	intuition is fine	Some regard any scientific fact as suspect and manipulable because difficult to grasp.

expectations from parks and other recreation amenities are unaffected by the prospect of increased traffic to the sites, which is held against shopping malls and other unwanted land uses.

Some physical changes are accompanied by a *complete story* describing how consequences unfold in time, based on how similar changes proceeded elsewhere. In the Wal-Mart scenario, for example, the discount store moves into an area, drives all small shops out of business and then closes down too, forcing community residents to drive great distances to the next closest Wal-Mart. Such story frames matter because through anchoring in past experience they shape expectations for process and outcome in current change conflicts. Someone previously displaced in the name of urban renewal may let that traumatic experience frame any initiative for neighborhood revitalization. Though rooted in reality, the story frames accentuate key consequences and eliminate details. They hamper stakeholders in considering an initiative on its merits, and may obscure some mutually beneficial opportunities. The

consequence in both the Wal-Mart and the revitalization case may be active opposition to any change, including that which might benefit a community or neighborhood.

The *fixed pie* (*zero-sum*) frame is found in many contexts, possibly because our competitive culture tends to reduce stakeholders to winners and losers. Superimposed on the complexity of space change disputes, the fixed-pie frame makes it difficult for some to imagine alternatives that could benefit all. It is especially compelling when physical change is initiated by the private sector because benefits to business are often expected to be a loss for everyone else. The frame of economic development at odds with preservation of environmental quality is also fairly entrenched, thwarting dialogue and creative joint decisions.

Loss/Gain frames refer to the representation of (uncertain) consequences of a choice to a stakeholder as either gains or losses. Note the difference between the framing of an uncertain outcome in terms of the losses (or gains) to one party, and the win-lose or "fixed-pie" perception that one party's loss is necessarily another party's gain. An example of the latter is a community's perception that accepting a landfill hurts it, while benefiting only the landfill's owner; that is, community and landfill owner cannot be simultaneously satisfied — when one wins the other loses. An example of the loss/gain frame is describing a landfill to the local community in terms of dollars saved (or dollars spent) on solving solid waste problems. The loss or gain frame regards consequences to only one party, while the win-lose frame characterizes joint outcomes. In experiments where tasks differ only in frame, individuals tend to be risk-averse with the gains frame and risk-seeking with the losses frame (Tversky and Kahneman, 1981, 1991). Space change consequences framed as losses may prompt stakeholders to engage in "risky" activist behavior, such as challenges and protests against a proposed development, while a gains frame may dull scrutiny and involvement.

Characterization frames account for conflicts in terms of evaluations, often stereotypical, of others' behavior, attitudes, motives, or trustworthiness (Pinkley, 1990). While they may develop from direct experience, these frames also draw on media images, reinforced when consistent with existing beliefs and experience. Frequently unchallenged characterizations that shape the subsequent course of conflict include that: industry is only looking for short-term profits or has deep pockets; business people will do anything for profit, including lying and abusing community assets; environmentalists are extremists always opposing economic development and pursuing the return of all land to its prior natural state.

Disputants also develop *self-characterization* frames, leading them to predict conflict outcomes based on their own perceived ability (or lack thereof) to prevail in the decision process, or on their sense of justice or entitlement. Some community members feel empowered by their access to information or to political representatives (Kaufman and Smith, 1997). When others in the community do not enjoy similar access, their self-characterization is bound to be different and to affect their level of participation regardless of efforts to make the change process inclusive. Developers and planners too use characterization frames to predict the extent to which a community will be indifferent to a proposed change, an effective decision partner or a virulent opponent. When characterization and self-characterization match, they can become a self-fulfilling prophecy.

Process frames reflect views about steps, decision rules, and participation in conflicts. The processes accompanying efforts to change physical space often lack transparency, leaving room for frames to reflect reality rather poorly. The expectations embedded in process frames stem from media reports or past personal experience rather than actual conditions. In situations with high levels of procedural uncertainty, citizens may be suspicious of efforts by government agencies to bring them to the negotiation table, especially if the process is expected to favor business. Such frames lead some to conclude that decisions are always based on the stakeholders' resource level or political position, rather than on the merits of the proposed change. Practitioners should be aware of the effects a *closed-to-public-input* process frame will have on citizens' willingness to engage in dialogue around change initiatives. A *done deal* frame leading to the belief that negotiations are futile might have a similarly chilling effect on public participation. Public agency planning and design practitioners rein-

force such frames when they assume that new initiatives have to follow past patterns, instead of taking a fresh look at each situation and devising approaches that promote inclusion and dialogue.

Outcome frames portray conflicts in terms of parties' positions (Fisher and Ury, 1991), often expressed as preferred solutions. Parties come into a change dispute favoring a particular outcome that can become their frame for the dispute. Those holding that any level of risk is unacceptable, for example, might reject any project that is not risk-free, regardless of costs or feasibility. This *zero-risk* frame is not simply a general preference, since it is project- or change-specific. Those clamoring for zero risk in a contested case may accept or take larger risks in other situations. For example, some of those who call for the complete elimination of the magnetic fields induced by power lines near their homes might smoke and drive cars. Zero-risk frames tend to emerge when the change initiatives carry environmental or health risks, such as proposals to install new waste processing technologies (Kaufman and Smith, 1997), or to site nuclear waste repositories (Slovic, *et al.*, 1991).

Cvetkovitch and Earle (1994) found that public participation hinges on how people make justice judgments, suggesting that a *justice* frame — expectations about distributional aspects of outcomes — may affect the level of public involvement in disputes. For example, residents of Parma, Ohio, protested publicly against the court-mandated siting in their community of a prison for non-violent offenders because they believe the community has more than its perceived fair share of unwanted institutions. Interestingly, the proposed facility, which includes a new court and jail space, was labeled during debates a "justice center," in a reframing attempt to emphasize its benefits to the whole community.

Aspiration frames reflect disputants' needs, interests, desires, or concerns in the conflict, in terms of which they evaluate options. A change initiative can open a Pandora's box of unresolved community issues, perhaps because it presents an opportunity to attend to long-held aspirations and grievances with no formal forum. For example, neighborhoods harboring an undesirable land use for years may surprise initiators of change with strenuous opposition to both the proposed change and the land use itself (Kaufman and Smith, 1997). Aspiration frames require attention in subsequent negotiations because solutions that do not address the broader concerns may be unacceptable to the community even if they suit the narrower space change issues. Community representatives involved in an environmental risk-ranking project for Northeast Ohio debated jobs, education, poverty, and racism (Kaufman and Snape, 1997). This clearly exceeded the purview of the project, indicating that participants held an aspiration frame far broader than their environmental risks mandate. Any strategy resulting from this initiative, even if enhancing environmental quality, runs the risk of being judged inadequate if it does not accomplish the broader goals derived by participants from their aspiration frame.

Complexity is a category proposed here to capture frames regarding the role of information in resolving conflicts. A complexity frame leads parties either to treat information with undue respect or to unduly discount it. Those who hold a *science-as-truth* frame place their faith in data and analyses, especially if produced with electronic technology. They tend to believe conflicts could be resolved if only sufficient, preferably scientific, information were available. Others hold a *science-as-deception* frame which declares technical information either non-conclusive and untrustworthy because it is manipulable by both data producers and consumers. This frame may lead the lay public facing technically complex information to switch to a characterization frame for decision purposes. Feeling unqualified to assess the merits of technical information, some will evaluate arguments in terms of their proponents and the motives attributed to them.

The seven types of frames described above are not mutually exclusive. For instance, one can adopt a complexity and a process frame concurrently with any of the frames describing what the dispute is about (outcomes, substantive, or aspirations). However, individuals usually adopt either an outcomes or an aspirations frame to define what the dispute is about. Therefore, intervention may entail reconciliation of both frame type and content, especially since aspiration frames (reflecting interests) may

be more conducive to integrative negotiations and joint agreements while outcome frames (reflecting positions) tend to polarize parties and lock them in distributive exchanges.

To illustrate how these frame types affect the direction and outcome of a physical change decision, we next describe a conflict surrounding expansion of a landfill in Northeast Ohio.

FRAME EFFECTS IN A PHYSICAL CHANGE CONFLICT: EXPANDING A LANDFILL

The dispute began in 1993 when owners of the Cuyahoga County Regional Landfill announced that its Solon site would reach capacity by 1996. At the time, the site served 35 of the county's 59 communities. The landfill's owner proposed to expand the site by acquiring from the Cleveland Metroparks over 60 acres of parkland adjacent to the landfill in exchange for 80 acres elsewhere and a cash payment. Concerned citizens formed the Friends of Shadow Lake group to oppose the expansion plan, which entailed filling in a lake and surrounding park area. Homeowners near the landfill also opposed the plan because truck traffic delivering waste to the site would continue past their homes.

Public officials did not react to this proposal until 1995, when county commissioners urged Metroparks commissioners to meet with the landfill owner to determine the cost of the land exchange. Without meeting with other parties, Metroparks announced it would not sell parkland for use as landfill, citing conflict with their mission to conserve land and protect open space for public use. This response left the landfill owner to seek an alternative site for when the Solon site reaches capacity. Three months later it became apparent that capacity would be exhausted sooner than expected. The landfill owner switched to a new approach and asked the Ohio Water Development Authority (OWDA) to use eminent domain to take the parkland. This request was cast as a "water quality improvement project" since the parkland expansion included the Chagrin River, which was possibly being contaminated by the leaching landfill. The OWDA rejected the request. The landfill continues to operate, having received permission from the Ohio Environmental Protection Agency to expand upward 30 feet, thereby delaying the closing by a couple of years. By then, the 35 communities currently using the landfill likely will have to haul their garbage at higher cost to another solid waste disposal district outside the county.

The outcome of the landfill expansion conflict is what was left after gradual elimination of all other perceived alternatives, rather than the result of a stakeholders' consensus at the end of a joint problem solving process. Table 2 displays several examples of frames active in the Solon dispute, along with their effects on the decision process and its disappointing outcome.

Process frames. There was no clear protocol for initiating a dialogue among Solon landfill stakeholders or for including public input. The decision process and the locus of decisions remained diffuse. County commissioners missed the opportunity to bring all parties to the negotiation table when the landfill expansion proposal was first announced, letting the situation slide for two years, although at the time the county was working on its 10 year plan for managing solid waste. At impasse, when the landfill's closure appeared imminent, the County deferred to Metroparks, contributing to the appearance that taking the parkland was the only possible solution under the circumstances. In this process vacuum the landfill owner operated at first from an interest-based market frame (trade property for payment), expecting a resource exchange. In the face of Metroparks' refusal to negotiate compensation for parkland the owner switched to a rights-based frame (acquire property by justifiable fiat), asking the Ohio Water Development Authority (OWDA) to take the property by eminent domain.

Loss-Gain frames. At the outset, the landfill owner framed the problem as a loss of waste storage capacity. While some communities supported the expansion, this frame did not yield the desired result. Instead, the prospective loss prompted the formation of the Friends of Shadow Lake. It also elicited public opposition from residents hoping that when the landfill reached capacity it would

TABLE 2. Examples of frames active in the Solon landfill case.

FRAME TYPE	EXAMPLE	FRAME EFFECT
SUBSTANTIVE	*Fixed pie:* Landfill opponents saw dispute as their loss of parkland to benefit landfill owner.	*Loss of alternatives:* Alternatives to save hauling costs to 35 municipalities had no salience in debates.
LOSS-GAIN	*Loss:* Expansion initially cast as response to loss of waste storage capacity. *Gain:* Expansion later cast as water improvement project.	*Call to action:* Danger to parkland triggered formation of *Friends of Shadow Lake.* *Passive, residual outcome:* Gains prospect failed to garner active support needed to proceed with taking by eminent domain.
CHARACTERI-ZATION	*Villains:* Solon's mayor called *Friends* short-sighted activists, concerned only with environmental impacts in their own backyard.	*Polarization:* This characterization inspired *Friends* to continue fight until landfill closure, which reinforced the NIMBY image. Present communication is short-circuited; any future communication is impaired.
PROCESS	*Diffuse locus of decisions:* County commissioners did not bring all parties to negotiation table when the expansion proposal was first announced. When landfill closure appeared imminent, county deflected decision responsibility on Metroparks. *Preference for power-based resolution:* Landfill owner asked OWDA to use eminent domain to take property for a water quality improvement project. OWDA rejected eminent domain request as inappropriate use of power.	*Lack of closure:* Situation remained unresolved for 2 years. Regional interests were neglected since those with mandate to protect them deferred to others. Public was led to believe that taking parkland was only solution under circumstances. *The lesser evil as outcome:* Owner switched to public sector approach (acquire) land by fiat) when private sector approach (exchange) failed. Residual outcome prevailed instead of consensus: site will close down when it reaches capacity.
OUTCOME	*Insistence on specific positions:* *Friends* focused on keeping parkland intact, unconcerned about waste disposal. Some residents worried only about preventing odor and added truck traffic to expanded landfill. A few public officials focused on long-term costs of closing.	*Impasse:* Case headed toward impasse. With negotiations, *Friends* and other residents would have talked past each other. Even those on same side, against expansion (*Friends* protecting lake and residents opposing truck traffic) might have failed to form common stand due to differing frames.
ASPIRATION	*Focus on a valued end state:* *Friends* resolved to continue efforts to close landfill even when expansion into parkland was no longer an option.	*Issues with no venue:* *Friends'* activism signaled broader concern with environmental issues that lacked a debate venue and, if unresolved, might hamper future landfill decisions too.
COMPLEXITY	*Technical information as suspicious:* Landfill owners' proposal to OWDA led opponents to question motive rather than debate technical adequacy of expansion as a solution to leakage.	*Evaluation of information by its source, not content:* Rather than discuss complicated merits of expansion to rectify leakage, stakeholders evaluated proposal based on their characterization of expansion proponents, trading accusations.

close. This loss frame encouraged activism and increased opposition to the landfill even after the plan was defeated. In the face of such reactions and of official statements from several communities opposing the plan on environmental grounds, the owner reframed the expansion as a gain to the community — a water quality improvement project to remedy landfill leaching into park water. Some pro-expansion support was reportedly garnered from 18 or 19 other municipalities who adopted the proposed gains framing in terms of cost savings to the county. Neither frame, however, helped stakeholders reach a joint decision.

Outcome frames. The Friends of Shadow Lake focused exclusively on keeping parkland intact, and did not address any waste disposal concerns. The landfill owner focused on expansion as the only

acceptable solution given the cost of finding a new site. Due at least in part to the parties' different outcome frames, the Solon dispute headed toward impasse. Had they negotiated, each would have talked past the other since they framed the problem in disjunct terms.

Substantive frames. Landfill opponents saw the dispute in terms of the consequences of landfill expansion — increased truck traffic, odor, loss of green space, even the possibility that expansion might allow more waste to be shipped in from outside the county because the landfill was near a railroad. All these consequences were seen to benefit the landfill owner at the community's expense. This fixed-pie frame reduced the stakeholders to winners and losers, making it difficult to imagine alternatives that might benefit all. The effect was an elimination from consideration of the long-run cost savings deriving from a solution that would have kept the landfill open.

Characterization frames. Friends of Shadow Lake members believed that their activism defeated the taking of parkland. This self-characterization was questioned by other opponents who noted that the expansion was never possible given its conflict with the Metroparks' mission. Solon's mayor even chastised publicly the Friends of Shadow Lake for gloating, calling them short-sighted activists concerned only with environmental quality in their own backyard, since they had done nothing to stop construction of a nearby waste transfer station which was expected to produce as much truck traffic, odor, and noise as the landfill expansion. This characterization encouraged the Friends to promise publicly they would continue their fight until the landfill is closed. The effect was only to reinforce the Mayor's and others' NIMBY frame of the group's motives.

Aspiration frames. The Friends' resolve to continue efforts to close the landfill, even when expansion into the parkland was no longer an option, signals a broader concern with environmental issues that may have lacked a debate venue. This aspiration frame will require attention in subsequent negotiations (e.g., considering whether or not to allow the landfill to expand up or when investigating sites for a new landfill) because solutions that do not address the broader environmental concerns may be unacceptable to the community even if they solve the narrower waste management issue.

Complexity frames. When the landfill owner requested the taking of park property by eminent domain as a water quality improvement project, they reframed the expansion as a technical solution to leakage problems. While this new strategy opened up for consideration the technical issue of containing a potential water pollution problem that needed to be addressed regardless of the dispute outcome, the discussion remained narrowly focused on the landfill owner's motive, which, as opponents speculated, was to conceal leaking of contaminated water into the nearby Chagrin River. This suggests opponents assessed the merits of the proposed expansion by evaluating the credibility of its proponents, which amounts to replacing the initial complexity frame with a characterization frame.

The Solon case illustrates how the frames that stakeholders adopt can affect negotiations and the likelihood of joint agreements. Clearly, interveners must be able to detect, analyze, and possibly alter frames during land use conflicts. The next section explores ways of dealing with frames in planning and design practice

DEALING WITH FRAMES: RECOMMENDATIONS FOR PRACTICE AND RESEARCH

Frames filter the information necessary for decision making, reducing the match between decisions and the situation to which they pertain. At times the community, planner, architect, or politician may actually prefer the direction a dispute has taken because of the prevailing frames. In general, however, the effect of frames and framing on the quality of outcomes for different stakeholders needs to be recognized. Practitioners must understand which kinds of information are useful for counteracting frames detrimental to the decision process (in the sense of filtering situation specifics), and for promoting frames that encourage participation and joint decisions. And, practitioners need to ponder their roles and the ethical dilemmas they face when intervening in conflicts.

Frame Recognition and Change

Some frames are likely to be in place before physical change proposals are made. A challenge for practice is to recognize frames at work in specific situations. Obstacles include lack of access to all disputants; tracking frame changes during negotiations; relying on self-reporting or second-hand data; and case specifics that defy generalization.

Recognizing frames in place and how they might affect a decision outcome depends, in part, on the ability of parties to formulate and willingly share their frames. Easiest to recognize might be institutionally held frames, which tend to be stable over time (Schön and Rein, 1994), as well as frames associated with established groups (e.g. the Sierra Club or homeless advocates). Identifying the less predictable frames held by other, loosely coupled interest groups and individuals is more challenging. Individuals may adopt frames when needed, and shift to other frames in time. In fact, some reach for a handy frame only when queried about their views — a familiar pitfall for those who conduct opinion surveys. Interveners need to exercise caution in their interactions with stakeholders at the outset of a change dispute, since this is when defining frames are likely to emerge. Keeping this concern in mind, interveners may also find that the early stages of a dispute provide the best opportunity to affect process and characterization frames and to encourage public input.

Frames can be counteracted with information. For instance, characterization frames may be susceptible to factual information; substantive frames can be shaped during the negotiation process; gain-loss frames may yield to alternative frames and persuasion. Information can be interpreted in lay terms to overcome complexity frames. Alertness to the presence and effect of frames can serve the planner intervening in a land use dispute. One of the tools to be used in situations where mandate is limited to information supply is reframing. For example, reframing the fixed-pie appearance of a dispute may allow parties to discover some integrative solutions that would otherwise be obscured by the frame. And, parties could be helped to understand that outcome frames are obstacles, while aspiration frames are conducive to agreement.

Johnson and Eagly (1989) found that the persuasiveness of arguments differs depending on individuals' orientation: a values orientation is more resistant to arguments, while an outcomes focus is more amenable to strong arguments. This suggests frames rooted in different orientations may be differentially amenable to change through information. Some types of frames — aspirations, positions, loss-gain, and self-characterization — surround a stakeholder's personal and direct decision ingredients and tend to be stable. Other types — substantive, process, characterization, and complexity — refer to institutions, other stakeholders, relationships, and the physical environment likely to impinge on decisions. These frames may be more malleable, or susceptible to information specific to a conflict, than frames of direct decision ingredients, which tend to be impervious to arguments because they are linked to values. Therefore, counteracting the more malleable frames may amount to presenting stakeholders with case-specific information that is finer-grained than the frame(s) in place. Changing the more stable frames linked to values may require a different strategy, however. Ethical questions arise regarding attempts to alter stakeholders' values in order to resolve physical change disputes.

For example, in Cleveland's St. Clair neighborhood, city planners convened a community meeting to explain the closing of an old elementary school in 1996. Residents received site information and then discussed what alternative uses were feasible, which of those they would prefer, and which could be implemented. Such events, conducted early on — before any decision has been made — can dispel process frames that discourage participation. While St. Clair residents surprised planners with their desire to house a social service in the old building, another community might prefer commercial uses that contribute to the tax base. Faced with strongly held preferences in both cases, planners need to weigh the ethics of reframing to steer either community in a different direction.

While identifying frames may help understand the community side of space change disputes, interveners must remember they too may reach for frames when struggling with complex situations. For

instance, planners may lean toward the science-as-truth complexity frame, prescribing that information can, and should, be brought to bear on any disputed issue. This may clash with a community's science-as-deception frame, resulting in damage to communication and to the negotiation process. Characterization frames about various classes of stakeholders are also apt to affect planners' suggestions for process steps and solutions. And, planners may hold self-characterization frames reflecting either inflated or overly modest perceptions of their mandate.

PLANNERS' FRAMING ROLE

A range of practitioner roles mirrors the continuum between malleable and stable frames. At one extreme, intervening practitioners may seek only to bring the more malleable frames in synch with dispute specifics, supplying information and helping parties to interpret it. For example, planners might explain to residents the design review process or how the zoning board considers a variance request, to counter a frame that depicts the process as a "done deal" or "going through the motions," At an intermediate intervention level, practitioners might reframe malleable frames, to actively foster public participation, or to assist negotiations. This might include helping stakeholders devise *integrative* options and negotiate trade-offs that effectively "enlarge the pie" for all, countering the fixed-pie frame whereby satisfaction for one stakeholder comes necessarily at another's expense. For example, in Solon the threatened parkland adjacent to the landfill is either currently contaminated or threatened, with limited potential because of its location. Another piece of property environmentally and recreationally superior might have become acceptable as compensation, satisfying the environmental concerns of some opponents as well as the landfill owner and the municipalities depending on this landfill.

At the other extreme of this frames continuum, practitioners may attempt to reframe both malleable and stable frames. A planner might try to persuade a party to switch from an outcomes to an aspirations frame and even try to affect aspirations (e.g., instilling civic or environmental concern in a stakeholder preoccupied only with economic impacts of an initiative). Such reframing has been associated with *transformative mediation* (Bush and Folger, 1994) which seeks, beyond a settlement, to effect a durable improvement in the relationships between conflicting stakeholders — a worthy goal with its share of ethical dilemmas.

While contingent on each case, the choice of role also hinges on practitioners' framing of their mandate, whether as technical advice, advocacy, activism, or third party intervention. Eagly's (1992) findings about links between attitudes and persuasion suggest that each role considered here would require different tactics, depending on the circumstances and frames in place.

FRAMING ETHICS

What goal should practitioners pursue in physical change conflict? Choices include: dispute settlement; synchronization of stakeholders' frames with case specifics through technical advice; pursuit of some particular outcome; fostering outcome qualities such as durability, efficiency and equity; protection of underrepresented, or non-represented interests; or, advantage to some stakeholder, such as the host community. Each goal requires different mandates, strategies, and levels of reframing. Equipped with frame recognition and framing ability, practitioners should also know that their choice of role in a physical change conflict will likely give rise to some ethical dilemmas. One such concern is the extent to which practitioners' goals and mandates are transparent to stakeholders. This is especially important for practitioners in public agencies, who command attention and a measure of trust by virtue of their position, but who may not be neutral by their very mandate.

Reframing poses some particularly difficult political and ethical dilemmas for intervening practitioners, not easily addressed within the scope of this article. Is there a range of reframing activities sufficiently consistent with current practice, mandate interpretation, and ethical norms to garner con-

sensus among planners and architects working in public agencies? Answers to this question hinge on the on-going debate surrounding planners' roles, and even the standards for ethical behavior (see, for example, Hendler, 1995; Howe, 1994). Therefore, the following suggestions are purposefully kept at a general level, recognizing that practice continues despite the lack of consensus on role and ethical norms. At the very least, a practitioner intervening in a physical change dispute could:

- identify and counteract individual frames that discourage participation in change decisions, with mediation tactics such as asking probing questions that elude framing, encouraging parties to respond to the problem outside a set frame, and setting agendas; and

- actively shape process and other malleable frames operating in a specific conflict, to ensure they do not limit key aspects of decision making such as access to information, a place at the negotiation table, and the solution space.

Underlying the first proposition is the assumption that characterization, process, outcome, and complexity frames, which affect the level of community participation in space change decisions, can be altered. The second proposition assumes planners and architects working in a public capacity are well-positioned to reframe issues, process, and characterizations so decision making responds to the conditions and issues at hand rather than to frames of it. These assumptions require, of course, further inquiry and validation. So do our earlier assumptions that informed public participation contributes to implementability of agreements, and that good negotiated outcomes are those that satisfy their stakeholders. Derived from other negotiation contexts, these assumptions require testing in physical change conflicts. In addition, there is need for both research into how frames affect joint decision making and how this knowledge can improve planning practice.

NOTES

1. The effect relates to individuals' reliance on judgmental heuristics, or shortcuts, shown experimentally to affect the content and quality of decision outcomes (Tversky and Kahneman, 1974; Kahneman, 1992; Kahneman and Lovallo, 1993; Tversky and Koehler, 1994). Requests for choice rationales which confront individuals with situational details tend to counteract such frame effects (Miller and Fagley, 1991).

2. This does not mean either that a change of frames will reveal an underlying truth, or that planners and architects can offer a best frame in the sense that it leads to agreement. Rather, practitioners can assist stakeholders in exploring their own and the others' frames as a means for enabling negotiations over alternative strategies and futures that might otherwise remain hidden from view. This process may have a transformative effect on the parties' frames, with consequences beyond the conflict at hand.

3. While each subtype fits into one of the six categories, some can arguable fit in more than one (e.g., the zero-sum or fixed-pie frames, subtypes of the substantive category, might also fit the outcome category).

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