Frames, Framing, and Reframing In, and Through, the Mass Media:

Reflection of Four Protracted Environmental Disputes in the Israeli Press

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Abstract

The mass media is part and parcel of modern life. In recent years environmental conflicts have increasingly become part of the public agenda, and they now gain vast media coverage. While all agree that fully functioning media sectors are essential for expanding and supporting democracy on global, national, and local levels alike, many claim that the media's interference, by definition, escalates conflicts. Recent studies confirm that many roles can be attributed to media coverage, including some that lead conflicts toward constructive resolutions. The hypothesis of our research is that through frames, the media is both influenced by and influential with regard to the conflict's dynamics.

This paper presents parts of a research project, aimed at improving the understanding of the framing and reframing processes of intractable environmental conflicts. It introduces a hybrid typology for analyzing the media framing and reframing patterns, and discusses the frames used by the media while covering four Israeli case studies. The paper portrays existing patterns of mutual impact between environmental conflicts, their press coverage, and public decision making, and raises several queries related to interventions in the media's framing processes.

The Study's Subject, Goals, and Methodology

Environmental conflicts gain vast media coverage. This raises many questions regarding the linkage between the media and the conflict. In a way, the public can learn about environmental conflicts via the media, which uses the parties' frames but has no obligation to reflect them. The audience receives a reframed "story" that combines parts of the original frames used by the different actors in the conflict and new frames that are created by the media. That is why media coverage influences the perception of the conflict. Members of different interest groups, as well as individuals whose values differ, might interpret or reframe the accumulated "news," "stories," and other information related to a conflict in ways that are poles apart. Consequently groups and

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[I] Framing is a cognitive process that helps us organize information in patterns that serve as cognitive maps. Framing helps us organize knowledge and sort and predict the meaning of new information, events, and experiences. Parties in a dispute develop considerably different frames about what the dispute is about, who should do what about it, and how and when they should do it. Many processes of conflict resolution include one or more stages during which there is deliberate reconsideration of existing frames.

individuals might react and try to influence the conflict's dynamics. The media's coverage might directly and indirectly (due, for instance, to perceived or feared citizens' reaction) influence politicians in charge of decision making regarding the disputed issue. It might also have a direct or indirect impact on the parties or stakeholders involved in the conflict. That is just an illustration of some of the various possible interactions. No doubt remains that there is mutual influence between environmental conflicts and the media, and proper understanding of those patterns is not only an intellectual challenge. It bears high potential for improved public decision making, and might also influence the "story-telling" patterns.

Our research aims to improve understanding of the framing and reframing processes of intractable environmental conflicts in general and with regard to framing and reframing in, and through, the mass media in particular. Four intractable environmental conflicts in Israel were chosen as case studies for the research. This study integrates knowledge within the overlapping realm of three distinct fields: environmental policy and planning conflicts, mass media, and framing processes. Most of this knowledge has been developed within social, political, and cultural contexts that do not resemble the Israeli environmental, land-use, and development relevant contexts. Nevertheless it creates a solid and diversified ground for this research.

Among the many questions not yet fully answered in the literature are those addressing the following: the way in which the needs and interests of the different parties in the conflict are represented in the media, and the ways frames related to those issues are created and re-created; the relationships between framing in the media and the conflict's development; the linkages among the different agendas (media, political, and public); and the possibility of intervening constructively with regard to the interaction between the environmental conflicts and the media. This research aims to address these issues while focusing on intractable environmental conflicts.

The Study's Goals
The **main goal** of this study is to expand the existing knowledge regarding *(a)* intractable environmental conflicts, their media coverage, and the framing processes that accompany the conflicts and their coverage, and *(b)* the relationships between the political, media, and public agendas.

Secondary goals include

- To integrate knowledge from three distinct fields: environmental policy and planning conflicts, mass media, and framing processes.

- To develop and test a descriptive typology of the environmental-conflicts frames as related to the media's coverage.

- To identify the media's frames and their linkages to the parties' frames and to the political and public agendas.

- To identify possible measures and key interference points with regard to the linkages, toward constructive management, resolution, and provention[1] of conflicts.

- To propose a descriptive model of linkages between the conflict, the media coverage, and public and media agendas.[2]

The Methodology

The study's methodology combines case studies and interviews. The research methods include *(a)* analysis of the frames used by stakeholders during interviews conducted ahead of a workshop on consensus building[3] that addressed four cases of intractable environmental conflicts, *and* of the frames used in the press articles that covered those conflicts during the course of one year; and *(b)* interviews with experts and citizens. This paper relies mainly on an analysis of the reflections of the stakeholders' frames through press articles that dealt with the four cases, and of the journalists' complementary frames that emerged through those articles.

The Research Stages

The research includes four main stages as follows:

Stage A: Theoretical Analyses. Review and critical analysis of the literature regarding media, environmental conflicts, and framing and reframing processes.

Stage B: Empirical Framework. Formulating the research questions, a detailed research methodology, and a tentative typology to be used and tested through the research.

Stage C: Empirical Research. Four case studies of intractable environmental conflicts (including analysis of the frames within the media's coverage of the investigated conflicts and within the structured interviews with stakeholders) and additional interviews with experts (planners, journalists, academics) and with citizens, with regard to the investigated cases and the general research questions.[4]

Stage D: Integrative Analysis, Conclusion, and Recommendations.

<u>The Case Studies</u>

This paper concentrates on four cases of protracted environmental disputes within Israel's controversy-driven arena: the Trans-Israeli Highway–Road no. 6 megaproject; the Tel-Aviv Seashore Development/Preservation dispute; the waste-disposal site of Dudaim Landfill project, in Negev Desert; and the NATBAG 2000 new Ben-Gurion Airport terminal project within the densely populated Tel-Aviv metropolitan area.[5] These are the harshest contemporary Israeli environmental disputes. They exemplify the diversity of local and regional topics and dynamics typical of this country, including influences of its unique attributes, such as its rapid development, high density, internal social cleavages, and the intricate Arab-Israeli conflict. Nevertheless, these cases have much in common not only with one another and with other Israeli cases (which is obvious, considering their occurrence within similar physical, organizational, legal, and cultural contexts), but also with most intractable environmental disputes worldwide. Therefore, insights driven from this research may be relevant and implementable with regard to many other places, systems, and cases.

<u>Framing, Media, Conflicts, and Their Interrelations</u>

This section will browse briefly through the literature related to the media's coverage, conflicts, and framing processes.

<u>Frames and Framing</u>

Framing is a psychological trait and a cognitive process that enables us to receive and organize information in patterns, which resemble cognitive maps. New information is sorted and interpreted while using these frames. Usually, parties in a conflict develop different frames about what is at stake, and what should be done and by whom. Tracing these frames can be a starting point for analyzing conflicts and for creating *conflict maps*. These maps can be designated as tools that promote constructive ways of dealing with conflicts. Indeed most integrative conflict-resolution methods, which aim at joint problem solving and mutual gains, include one stage or more during which there is a deliberate interference in the existing frames, and a consideration of processes of reframing. Framing and reframing, part of most intervention training programs, are established and useful intervention tools for breaking an impasse (e.g., Moore 1986).

Gray (1997) addresses several basic <u>environmental conflicts frames</u>, identified through content analysis of communication exchanges: *loss-gain, characterization, process, outcome,* and

aspiration frames. Kaufman and Smith (1999) adopted this basic list, and proposed the following list of **Frame types** and subtypes: *(a)* **Substantive:** *complete story, zero-sum;* *(b)* **Loss/Gain;** *(c)* **Characterization:** *self-characterization;* *(d)* **Process;** *(e)* **Outcome:** *zero risk, justice;* *(f)* **Aspiration;** *(g)* **Complexity:** *science-as-truth, science-as-deception*. Kaufman and Smith investigated framing and reframing processes of land-use change disputes through this set, and provide examples of those frames as they appeared in the Solon landfill case.

Shmueli and Ben-Gal (2000) and Vraneski and Richter (2000), following the previously mentioned lists, developed a set of four main **categories** or **frame types,** which include together twenty-four secondary categories or subtypes. That list is based on content analysis of the four cases of protracted environmental disputes in Israel – the same cases this paper examines. We will expand on the four cases and on those frame sets in the following sections.

Media frames are defined as patterns of representation and interpretation of symbols and themes that organize the discourse. They enable reporters to sort and pack the information effectively for their audience (Gitlin 1980). Entman (1993) defines framing in the media as a process through which some aspects of reality are chosen and become more significant in the text. He identifies four factors in this process: the problem, the causes of the problem, moral judgment, and a solution. A sentence might have all four or none. The framing, as Entman sees it, has four stops: the reporter, the text, the audience, and the society. Reporters have to tell a story within a limited time and space. They use certain frames to simplify and give meaning to events, and to maintain audience interest (Valkenburg et al. 1999). Although it is conceivable that journalists can use a multitude of ways to frame the news, the literature seems to point to at least four ways in which news is commonly framed: *(a)* conflict frame; *(b)* human interest frame; *(c)* responsibility frame, and *(d)* economic consequence frame (Valkenburg et al. 1999)

Social Functions of the Media, and the Media's Effects

The media's function in society can be defined on a scale. On one end, it is perceived as a tool to promote social change and to monitor the government, and on the other end, as an agent that reinforces what are considered the accepted norms. By the choice the media makes, it is establishing, in a way, what is accepted and what is external to the popular norms. As a part of society, the media is also influenced by the power hierarchy and by the accepted norms. The effects are circular: The media helps reinforce the norms, and at the same time it is influenced

by them and by the power distribution in society. Conclusively, weak groups might not have access to the media and thus gain no coverage by it. That is particularly important, when bearing in mind that the media's coverage can have an influence on legitimization processes, and on political and public agendas (Neuzil 1996).[6]

Different definitions of "news" include the coverage of conflicts, as these are considered a sequence of social changes. Some of the most salient characteristics of news events[7] can be found in conflicts, and thus justify their coverage. Conflicts are usually negative and potentially destructive, thus they might earn a higher media profile than do positive facets. The linkage between media and conflicts presumes media influence on the conflict, the parties, the decision makers, and the public as a whole. Many times, the media is the prime and only source of information about the conflict and its parties' views. Several theories in mass communication can be seen as having a direct connection to conflict-media relationships, those are:

Construction of the Perceived Reality. In the 1960s, the conflict theory in the social sciences pointed out the emergence and escalation of many conflicts. Sometimes the media plays a double role in conflicts. On one hand, it covers them; and on the other hand, the media's very choice of topics and words reflects a point of view with regard to the conflicts at stake. The more the media covers disputes – the more arrows of public criticism might be pointed at it. As with any other representation of reality, the media's picture of it is, by definition, partial, and does not necessarily reflect it without bias. The more a complex a conflict, the harder it is to agree about its coverage by the media (Caspi 1995).

Spiral of Silence. The media is able not only to construct the perceived reality, but also to create its own "reality." This theory originates from the sociological comprehension that people do not like to be in a minority. The media is the prime source for delivering the impression about the publicly accepted climate, thus creating an atmosphere of false consensus, a new unreal reality that later becomes true (Noelle-Neumann 1974).

Agenda Setting. This theory claims that the media might not tell us what to think, but it definitely can tell us what to think about. The whole process takes place within the broad framework of society's accepted norms (McCombs 1994). In a linear model suggested by Wanta (1997), the types of sway and the extent to which the media influences the agendas of

individuals are determined by a set of variables that include demographic traits, behavioral patterns, and dependence on the media as a reliable source of information. Printed newspapers have an advantage over television because they enable readers to perceive the dispute's depth and complexity, and they allow each reader to process the information at his or her own pace.[8]

The Roles of the Media in Conflicts and the Media's Framing Processes

Different roles are attributed to the media: to report and cover events; to interpret and suggest a broader meaning to events; to monitor the powerful and strong in society; to advance the weak and promote social justice; to mediate between the public and the political leadership; and to enable individuals to practice their freedom of speech. Some expect journalists to report conflicts "objectively." However, the very presence of the media might change the course of the conflict, and in fact interfere in its dynamics.

Sometimes the media becomes an active actor within the controversy. Gamson and Modigliani (1992) stress this idea. In their view, public opinion both influences the media and is influenced by it. Academics and communications experts have begun to study the media's potential for ameliorating conflict and healing the social wounds of war.[9] Academic[10] and non-governmental[11] organizations are exploring this timely question. In a "handbook for journalists," Rubinstein et al. (1994) aim to extend reporters' roles with regard to conflicts. They list similarities and differences between conflict reporters and mediators, and provide examples of cases mediated by reporters' active intervention. In conclusion they argue that broadening the knowledge base of reporters regarding conflict theories as a whole, and conflict framing in particular, might and should be beneficial in the resolution of disputes.

The Voice of America (VOA) has been developing and producing since 1995 a special series of programs about the theory, principles, and practice of conflict resolution. VOA's experience with this project is important for those interested in deploying the power of the media for constructive purposes (Penas and Pirio 1997).

The framing process is a product of reporters' professional norms and the social-ideological structure of society. Dunwoody and Griffin (1993) studied more-pluralistic versus less-pluralistic communities with regard to environmental conflicts. Their findings were that in less-pluralistic communities, the atmosphere is more of a consensus, and conflicts are resolved quietly through personal channels. They found that though conflicts exist in every society, the

characteristics of the society influence the patterns of conflict management, which in turn influence the roles the media plays in conflicts' coverage.

The linkage between conflicts and the media relates to the different frames the media creates and uses while reporting the conflict. Wolfsfeld (1997) states that the media's frames are shallower compared to those that the parties embrace. This is one of the main reasons why sometimes parties to a conflict find it more difficult to promote their ideas in the media, which by definition is interested in concrete and actual affairs as opposed to abstract ideologies. Thus, parties to a conflict will manage to advance their views by providing information compatible with what the media defines as a good story and with the media's favored frames.

Media's Framing in Environmental Conflicts

The study of frames in environmental disputes has been found to have the potential to improve the confrontation with complex conflicts. Dunwoody and Griffin (1993) conducted research aimed at tracing the dominant frames used by reporters to organize information about three "superfund" sites through content analysis of newspaper articles and a set of interviews with reporters, editors, and their sources. They indicate that the process of creating the frames is influenced by both the professional norms and the social-ideological structure, which act together as a prism through which the reporter chooses what is to become news.

Another study in this context, conducted by Cracknell (1993), examines the connections between the media coverage of environmental issues and the decision making process that accompanies them. They conclude that the formal institutions are more accessible to the media, as they are perceived to be neutral. Green groups have the power to initiate coverage by creating events, but their influence over the way these events are framed is minor in comparison with that of other actors.

To conclude this part, we will mention the research of Einsiedel and Coughlan (1993). The two examined the coverage in Canadian newspapers of environmental issues between 1977 and 1990. They looked at framing as both the format and the content. Their main conclusions were: *(a)* At first, environmental coverage was presented in terms of a specific problem and with a local perspective; later, emphasis changed to more comprehensive framing and to the national and even international levels; *(b)* the framing of the concept of "environment" changed from a sporadic and minor one to a more salient and comprehensive one; *(c)* the framing of

environmental issues emerged during the investigated period as an immediate social problem; and *(d)* the media's reports were usually about events, and the media had the power to impose its frames with regard to them.

The short literature review above leads to the conclusion that, as Anderson (1993) points out, there is a need for a dynamic comprehensive model to describe the linkages between public opinion, the media agenda, and the political framework. This study adds a building block toward achievement of that goal.

The Research Layout

The Analysis Framework

In order to examine the frames used by the media in the case studies chosen, and to respond to the research goals with regard to the mutual effects between the media and the conflict, a framework for analysis was drawn. The methodology we developed for the sake of this study combines two typologies, based on typologies developed in the fields upon which our research relies:

The **first typology** is of intractable environmental and land-use conflicts categories of frames (following Gray 1997 and Kaufman and Smith 1999). This typology (Shmueli and Ben-Gal 2000 and Vraneski and Richter 2000) includes four main categories that portray which subjects are the cores of the conflict, which filters are used to interpret it, how the conflict is conceived, and in what process it evolves. Each such category consists of a set of frames.[12] The categories are:

Substance and Meanings — frames that point to the things stakeholders see as the core of the conflict, their interests and aspirations, and their preferred solutions. This category can be used for a quick analysis and assessment of the conflict, as it introduces a kind of conflict map. Analyzing these maps with regard to different parties in the conflict might point to where there could be room for reframing toward a resolution of the conflict, and can help to establish the issues to be discussed and negotiated.

Values — frames that portray the set of values and beliefs that serve as a filter through which stakeholders give meaning to the surrounding reality. People, especially in conflict situations, interpret events through their sets of beliefs and values. For one, an economic point of view is the leading idea in his thoughts and philosophy of life; for another a social, judicial point of view

is most important. Presenting these frames and analyzing them enables the definition of the most important values for the parties and the pushing forward of new frames, through reframing, under the accepted and leading values and perceptions.

Phrasing — concerned with how stakeholders look at the conflict. Do they look at the prospects of both sides to benefit? Are they concerned only with the empty half of the glass and see only the possibility of losing?

Process — frames that deal with the very process accompanying the conflict: the relationships between the parties, criticism or support of the process, the characteristics of the parties, self-assessment as to if and how to affect the dynamics of the conflict, and so on. As some conflicts are basically an outcome of the processes they evolve through, this category is important also for drawing conclusions for future disputes.

The **second typology** aimed at presenting a comprehensive picture of the media's coverage as related to framing and reframing processes (Vraneski and Richter 2000). It integrates aspects of newspapers' coverage (following Pan and Kosicki 1993[13]) and of conflict dimensions (following Vraneski 1994, 2000[14]). This typology consists of five main aspects, each including categories defined by us following a content-analysis process:

— The *tone* that can be inferred from reading the articles. This aspect is the one that colors the coverage. The categories of this aspect include neutral, negative, positive, and criticizing tones. (It is understood that in the same article there could be more than one category, which is true of the other aspects as well.)

— The use of *expressions*. This includes categories of expressions that imply the way the media perceives the conflict and its events: expressions of war, negative, positive, despair, cynical, disaster/an urgent problem expressions, and a category of no special expressions.

— The covered *"environment"* — the context. We identified the different arenas mentioned in the paper's coverage. These include the political, economic, public, judicial, academic, professional, planning, and international arenas.

— The *actors* who participate in the conflict: government offices, planning institutions, courts, green groups, politicians, entrepreneurs, the public, and specialists.

— The last aspect looked at is the *topics and issues* the media chose to mention and cover. This does not necessarily include what the parties consider the issues at stake. The categories were: resources (both concrete and abstract), goals and values, planning attitudes, discourse

between experts/groups, a search for a solution, social policy, environmental policy, the project and its implications, and political relationships.

This framework integrates international interdisciplinary knowledge and characteristics of the Israeli-specific context. It creates a rather comprehensive picture of the frames used by newspapers while covering environmental conflicts. It also emphasizes patterns of newspaper coverage and links to the public and political agendas, as well as aspects of "true" and reflected "realities". The framework has been tested while applied on the investigated cases, with the aim of developing it as a practical tool within the scope of the study. We aim to refine it as a flexible tool, which can be adjusted and applied to meet the features of diverse contexts.

The Data Set and the Process of Analysis

The data set contained articles published during a period of one year (1998)[15], which is parallel to the period during which interviews with stakeholders were conducted in preparation for a consensus-building workshop. The articles are from different types of newspapers: daily, national, local magazines, sectarian papers (religious, economic, etc.).

The analysis itself was both qualitative — looking at the content of the articles — and quantitative — looking at frequencies of frames and categories. It included a review of the articles, and then placement of the sayings under the suitable frame or variable. The sayings were examined also according to a simplified division of the project's supporters, its opponents, and the reporters/writers themselves.

The processing of the data and its analysis focused on three main levels: the first analyzes different frames in each conflict, and compares aspects of the media's coverage within each (in conflict analysis); the second compares frames among the four conflicts (a breadthwise comparison); the third compares the media versus the interviews with stakeholders (a cross data set comparison).

<u>**A Review of the Case Studies**</u>

In the following we briefly introduce the cases we addressed through this study. Although the cases are totally distinct from one another, interconnections among them may exist. Within a small, densely populated country, the effect is an intensification of the regular problems, and the aggravation of already harsh conflicts.[16] See map in Appendix 1 for the location of the cases.

1. The Tel-Aviv Seashore

The dispute around the development of the Tel-Aviv seashore is embedded in the collision between touristy land uses, which had started to develop mainly in the 1970s and 1980s, and the goal of preserving natural coasts. The 1990s brought a rise in the demand for high-standard development along the Israeli coasts in general and in the Tel-Aviv region, where land values are extremely high, in particular. Coincidentally, great damages caused by development to the coastline, and which were not foreseen by previous environmental and risk assessments, were revealed. The result was an escalation of disputes concerning the seashore, and a new demand, presented mainly by environmental NGOs, to reconsider all the development plans along Israel's coast. Our study focused on the marina planned in the mouth of the Yarkon River, one of several highly controversial development projects in that area. This site is unique, since it is the only place on the Tel-Aviv coastline where sea and river unite. Within the Israeli semiarid environment this kind of landscape and ecosystem is highly appreciated. In the past, a fishermen's village was located there. The goals of the plan, initiated by the municipality, were to develop the site for prestigious housing, touristy uses, and maritime sports activities. The Ministry of Environment joined opposition, demanding additional examinations. The project was suspended, at least temporarily, by courts following suits initiated by NGOs.

2. The Waste Disposal Site of Dudaim

The Dudaim site is in the southern part of Israel, in proximity to the city of Beer-Sheba, the capital of the Negev desert region. The original plans designated it as a waste-disposal site for this region. At the beginning of the 1990s, the National Committee for Planning started to consider the possibility of expanding the site and turning it into a national waste-disposal site, replacing among others Khiriya, the existing Tel-Aviv metropolitan area waste site, which was situated in proximity to NATBAG, Israel's national airport. The Beer-Sheba local municipality adamantly opposed this intention, together with an active group of citizens. This group mobilized a strong and diversified lobby to prevent the national plan[17] amendment. The Ministry of Environment was a stern supporter of the Dudaim site project. The case was terminated in court, which ruled that the site would serve, temporarily, as a national waste-disposal site, until a new site was approved within the statutory planning system and developed. The court's decision was stimulated by pressing demands to close the Khiriya waste site, due to the fact that birds' migration around it caused a high risk to air traffic in the vicinity of the NATBAG airport.

3. The New Terminal of NATBAG 2000

The Ben-Gurion (NATBAG) airport, located in the Tel-Aviv metropolitan area, is the main gateway to Israel. It was built during the British Mandatory regime and has been developing ever since. A continuous conflict has been evolving, since the 1960s, between the needs of operating the airport and the communities next to it. Increase in the air-traffic demands and the expected high burden on the airport's facilities triggered, at the beginning of the 1990s, the initiation of a new plan (nicknamed NATBAG 2000) to expand the airport. The plan's files stated that its aims were to develop the airport toward carrying three times as many passengers as compared to the 1990s; to fully exploit its economic potential (regarding tourism, business, and export-import); to advance cooperation between neighboring countries, as related to the peace process; to enable a flexible plan; and to minimize disturbances and environmental damages to the surrounding population. The discussions concerning Israel's aviation problems included an examination of developing an additional airport in the south of Israel to complement the existing national NATBAG airport. This idea emerges periodically onto the national agenda and has been so far rejected. The dispute between the local communities and the Ministry of Environment on one side and the airport authorities on the other concerns mainly noise and pollution nuisances. This causes long delays in the airport's development.

4. The Trans-Israel Highway–Road no. 6

The Trans-Israel Highway is designed to cross the country from north to south. Its goals include to strengthen the transportation infrastructure on the national level; to serve as a main transport route between north and south; to promote economic and demographic objectives; to bring the periphery closer to the center; and to serve as an outer circular road to the Tel-Aviv area. Relating to the peace process, this road is intended to connect Israel to its neighbors. Some even view it as part of a future intercontinental highway to connect the Middle East with the southern and eastern parts of Europe and with North Africa.

The project's planning and approval processes were, and still are, accompanied by various disputes in nearly every context: environmental, social, economic, political, and other. Public and expert disputes with regard to the necessity of the road, as well as many of its related aspects, persist, though its plans have been approved and the construction of its first stages has already begun. The project is geographically spread out over the country. Thus its social, economic, and environmental impacts relate to a large part of Israel's population. The main

theme about which the parties are in dispute is the natural resources that will be sacrificed for the purpose of building the road. This ties in directly to questions related to the road's importance, mainly in light of the feared trade-off between its implementation and future public investments in the development of mass public-transportation systems.

Findings and Discussion

We will now present and discuss selected findings regarding the frames our analysis identified within the eighty-seven articles, which together formed the main data basis for this part of our study. This analysis addresses close to a thousand sayings, distributed among the four case studies of intractable environmental conflicts (table 1)

Table 1. The Media Database—Articles and Sayings

	Tel-Aviv Seashore	Dudaim Landfill	NATBAG Terminal	Road no. 6	**Total**
Articles	12	19	30	26	**87**
Sayings	150	165	328	308	**951**

The Parties

Who are the stakeholders? Table 2 shows the parties mentioned in the articles in each of the investigated cases, and the rates at which they were mentioned. When comparing names and affiliations included in the articles with data from other sources, we easily find that the journalists identified all the relevant groups of stakeholders, although the different actors were not represented proportionally to their actual involvement. There are prominent differences between the investigated cases in this regard, due to their specific characteristics. In NATBAG and Road no. 6, the involvement of institutional developers is particularly prominent (especially the Airports Authority in the first case and the Cross-Israel Road Company in the second). Ministries, and the Ministry of Environment in particular, appear in all cases, while the citizens' appearance is highly significant only in the NATBAG terminal and Dudaim Landfill. The latter, indeed, reveals features characteristic to a harsh NIMBY ("not in my backyard") dispute much more than patterns of an environmental conflict. Experts played significant roles in three cases:

the Tel-Aviv Seashore, NATBAG airport, and Road no. 6, where a public discussion and debate evolved over scientific issues. We find experts on both the opponents' and the supporters' sides of the divide.

In the Tel-Aviv Seashore case, citizens were not mentioned as actors, even though it was primarily a local conflict. They were just related to as "the public who own the coasts, " perhaps due to the high involvement of NGOs that filled the "opponent's role. " Besides appearing in the Tel-Aviv case, environmental NGOs appeared only in articles that reported on the Road no. 6 case. In the NATBAG case, the Ministry of Environment and citizens filled the "opponent's role." All the investigated cases include national interests and address deep values, and therefore the ministries and environmental bodies have a stake in them. Previous research in Israel revealed that similar basic patterns often appear with regard to "regular" local disputes as well (Churchman et al. 1996, Liav 1999). We may explain this in the frame of the highly centralized Israeli governmental system and the relatively low public awareness regarding environmental issues, both characteristic to Israel, and both recently undergoing a process of change.

 Table 2. Rates of Appearance of the Parties

	Ministries	Courts	Planning Authorities	Env. NGOs	Politicians	Developers	Citizens	Experts
Tel-Aviv	****	**	**	***		***		*
Dudaim	****	*	*		**	*	****	
NATBAG	****		*		*	****	**	*
Road 6	**		**	***	**	****	***	**

Legend: ****   extremely high rate: appeared in 76–100% of the articles
               ***   high: 51–75 %
               **   medium: 26–50%
               *   low: 1–25%

Who has a voice? Whose frames does the media reflect? Whose frames does it adopt?
Appearance in articles is not identical with actually having a voice. The content analyses identified three kinds of voices related to each of the four controversial projects: *(a)* the supporters; *(b)* the opponents; and *(c)* the reporters. We found that the voices of the opponents to all the investigated projects were heard in the articles much louder than that of the supporters, as well as of the writers (fig. 1). When looking at the representation of the opponents in different types of newspapers (daily national, local, sectarian) for each case study, the picture is not as

even. Still the opponents' frames are generally more salient than those of the supporters, but sometimes not as loud as those of the writers'—e.g., in the local newspapers that reported on the Tel-Aviv and NATBAG cases, the reporters' frames are more salient than those of the parties.

 An in-depth investigation revealed that besides the fact that the media reflected the opponents' frames more than the supporters', the frames the reporters themselves used were often closer to those of the opponents than to those of the supporters. We will discuss this factor through the following descriptions and deliberations. The higher profile the opponents gain in the media fits with the role the media plays as the promoter of social justice, and with the media's considerations with regard to a "good story," ratings, and so on. This contrasts with the findings of several researchers (e.g., Parenti 1986), which indicate that supporters might get more coverage.

Figure 1   Stakeholders' Representation in the Media
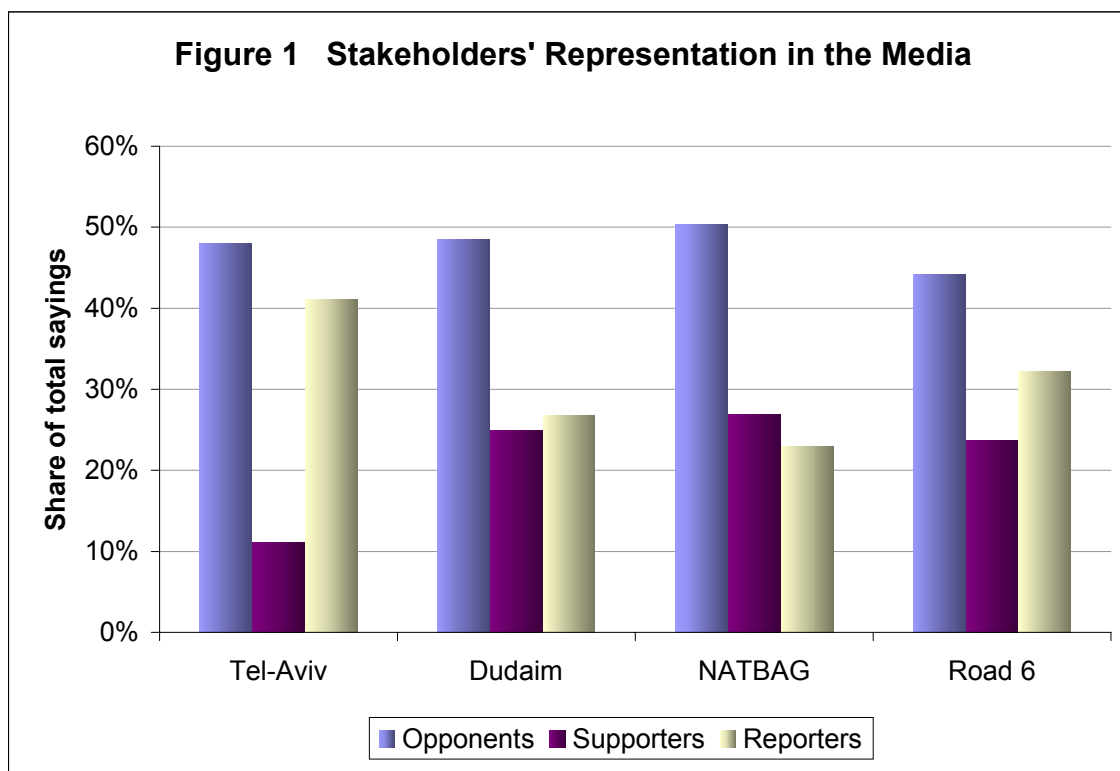
Issues and Frames

What issues does the media choose to cover? The following categories appeared within our data set: *(a)* resources (both concrete and abstract);   *(b)* goals and values; *(c)* planning approaches;

(d) discourse between experts/groups; *(e)* a search for a solution; *(f)* social policy;

(g) environmental policy; *(h)* the project and its implications; and *(i)* political interactions.

Table 3 illustrates the appearance of each of these frames within the investigated articles.

Table 3. Rates of Appearance of the Issues

	Resources	Values	Planning	Discourse	Solution	Social Policy	Env. Policy	Project	Political
Tel-Aviv	****	**	**	***			****		
Dudaim	**		*		***	**	*		
NATBAG	*				*		***	***	**
Road 6	***	***	*	*		*	**		

Legend: ****   extremely high rate: appeared in 76–100% of the articles
             ***   high: 51–75 %
             **   medium: 26–50%
             *   low: 1–25%

The issues that were most frequently covered by the media when dealing with these environmental conflict cases were, as might be expected, resources and environmental policy, with the Tel-Aviv Marina case rated highest. NATBAG was the only case widely covered with regard to the projects per se, while both supporters and opponents agreed on the necessity for a complementary international airport. The Dudaim Landfill project motivated much debate with regard to possible alternative solutions, and also received relatively high coverage related to the environmental and social injustice its implementation was expected to create.

What frames does the media prefer? What is the relative share of each of the different categories of frames in its coverage? Figure 2 shows the distribution of appearance of the four groups of frames we defined in the typology,[18] within all the investigated media sayings for the four case studies. The frames included in the *phrasing* category received a very low coverage in all the investigated cases. A similar inclination appeared in the interviews with stakeholders. Those frames either have not yet penetrated the Israeli discourse, or are foreign to the local organizational culture. Significantly, the win-win frame hardly ever appeared and, on those rare occasions where it did, was attributed to developers only. Under such conditions,

understandably, project opponents might respond to this kind of frame with suspicion or cynicism. The frames included in the *values* category appeared in forty percent or more of all the sayings we investigated in each of our four cases, reaching the ratio of nearly sixty percent in the Tel-Aviv Seashore case. This might be attributed to the fact that highly controversial, value-loaded environmental issues were disputed. Additionally it might have been caused by the over-representation of the opponents, whose motivation in these kinds of cases tends to be value-loaded, and by reporters' preference to use value frames, aimed at the shaping of "good stories."

Fig. no. 2   Representation of Categories of Frames
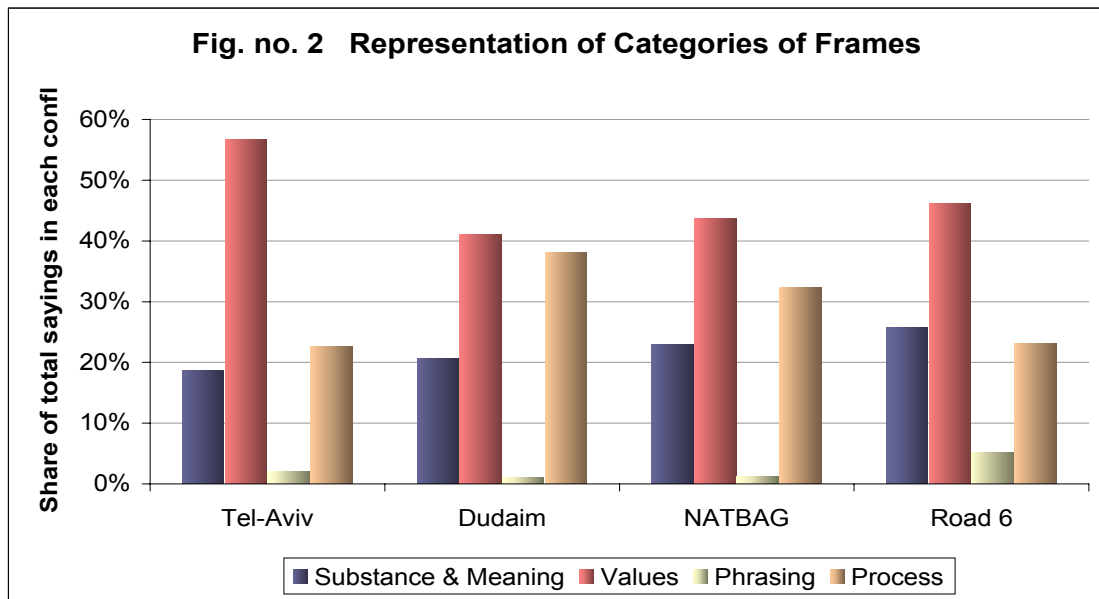
The *process* frames category got relatively high coverage throughout the cases, ranging from approximately twenty percent of the investigated sayings for the Tel-Aviv Seashore and Road no. 6 cases, up to almost twice as many in the Dudaim case study. In three of our four cases (excluding Road no. 6), this frames category rated higher than the *substance and meaning* frames category. We expected the latter to get rates equivalent to the *values* frames category or higher, as a representative of the core of the disputed issues. To explain this we should rely again on the characteristics of the Israeli centralized decision making system, driven by highly complicated and time-consuming processes and procedures. Additionally we should note that land-use–related environmental issues and disputes are treated in Israel within a hierarchical system, which includes appeal rules and processes. Usually courts intervene in disputes of this kind on a process basis only, yet many complex initiatives and projects do reach courts at least once during their

planning and approval process. The studied cases were not excluded from this ritual. In fact, as mentioned in the cases' brief description, the Dudaim Landfill and Tel-Aviv Marina cases were terminated, at least temporarily, through the courts.

What and by whom? Comparison of opponents' and supporters' frames showed that supporters related to positive features of the specific project they were interested in promoting, while the opponents showed a more varied choice of frames. We assume that this relates to the opponents' interest in finding effective tools to persuade the audience *against* an initiative. This in itself broadens space and time perspectives, either due to the search for additional reasons to contradict the supporters' project-focused arguments, or for the sake of creating alternatives.

Our study revealed that reporters sometimes framed disputes within much broader frames than the stakeholders did. The Tel-Aviv case was described by some reporters through comprehensive environmental and social viewpoints, while the Dudaim Landfill case was discussed in several articles within broad socioeconomic and historical perspectives, which linked the controversial project to other injustices the Negev citizens have suffered. The reporters seem to integrate knowledge from different sources with insights from other cases they covered or heard about, thus attributing an educational feature to some articles. Indeed this is functional too from the media's point of view, regarding the creation of "good stories," rating considerations, and functioning in its role as interpreter of the broader meaning of events. Potentially this kind of framing may both escalate the conflict in the short run *and* promote prospects for better options and improved decision making processes in the longer run. There is much need for research and practice to design conflict-resolution and provention processes, and for reframing tools that will enforce positive impacts, not just decrease the negative impacts associated with those frames.

Additional features we wish to mention regarding the reporters' and newspapers' frames might seem obvious to many, yet startling to others: First, the sectarian journals' articles that we investigated used a wide variety of frames, not just the topical ones we might associate with them—e.g., development- and economy-oriented frames for business journals and reporters. Second, we should note that some of the most extreme expressions against the Road no. 6 project appeared in newspapers related to the Jewish religious sector. The reporters reasoned their views within both social and environmental justice frames *and* religious and national frames—"saving the Holy Land and saving the environment." Interviewees and reporters claimed that Rebbis

should oppose the road in order to save human lives (because of the expected higher ratio of accidents). The debated issues did not impact the religious sector's public agenda, however. One reason for this might be that these kinds of issues are located on the lower levels of that sector's priority scale. Additionally, we should keep in mind that the media's primary roles are usually perceived as providing information and news, not necessarily advocating related action. Our research thus far brings forward just a few anecdotal examples with regard to sectarian journals' framing, reframing, and impact patterns. We suggest that questions emerging from those examples should be further investigated in the realms of means of influence, stereotyped visions, and others.

Location and Timing

Where and when are the conflicts located? Where do the reporters locate them? What "stages" do the parties play on? In what "arenas" do they fight? We discussed the geographic location of the projects in a previous section. The dispute itself is often in a remote location—e.g., the district capital or the state capital, inside offices, in courts, or on the streets. The media itself often serves as a virtual stage.

The study's method dictated the timing. We investigated the press coverage in 1998 for three cases and in 1996 for the fourth (the Tel-Aviv Marina). The conflicts' dynamics themselves spread over a much longer period, sometimes for dozens of years. Although the media's reporting was usually stimulated by "news" events—e.g., a demonstration or a court ruling— those served as opportunities for broader coverage, including some related to the dispute's history. Additionally several articles expanded the location and timing to include more than the disputed issues—e.g., when reporting on Dudaim Landfill, the reporters often included problems linked to the whole Negev Desert region over a long period.

Table 4 demonstrates the rates at which different "arenas" were mentioned within the investigated articles, for each of the four cases. These arenas' categories vary among the conflicts. Some arenas, such as the public-civil and political "classical" arenas, gain more reference. Each case is characterized by a unique profile. The Tel-Aviv Marina, a harsh dispute, was the only case that performed on all the stages, with a most-intensified appearance in the courts, the top relevant adversarial arena. The professional arenas received startlingly high coverage. Good news for environment and planning experts: your voice is being heard! The

editors found those parts of the "stories"—environmental and other scientific issues, as well as complex planning issues—worth reporting on.

Table 4. Rates of Appearance of the Conflicts' Arena

	Political	Business Economy	Public/ Citizenry	Judicial	Academic/ Professional	Planning/ Professional	Inter-national
Tel-Aviv	*	**	**	***	**	****	*
Dudaim	***	*	***	**		***	
NATBAG	***	**	**		*	**	
Road 6	***	**	****	*	**		*

Legend: ****   extremely high rate: appeared in 76–100% of the articles
           ***   high: 51–75 %
           **   medium: 26–50%
           *   low: 1–25%

The Language—Tone and Expressions

How does the media tell the story? What is the tone? What expressions does it use? Figure 3 reveals that the tone of the investigated articles was found to be either neutral or negative. The Tel-Aviv Marina case received the highest rates of negative coverage within the investigated articles. No conflict was described in a positive tone in a significant number of articles. This is of
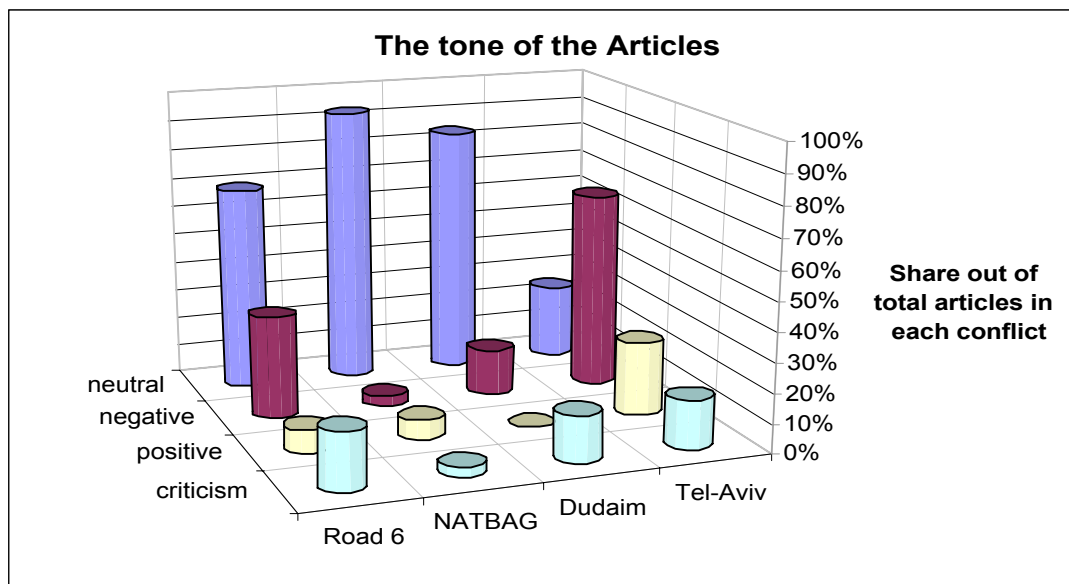
importance if we consider that this category implies the impression people get from the newspapers about the subject. So if most articles were either neutral or negative, the public might interpret and relate to the conflict in the same way.

This feature is stressed even more when looking at the category of *expressions used*. Here, again, the expressions were either *negative, cynical,* or *war/battle* expressions. Nevertheless, almost *no* despair expression appeared. Very few expressions were positive. Only Road no. 6 revealed a minor share of positive expressions (in only eight percent of the articles). Table 5 illustrates this pattern, which was the only one to characterize the entire sample of cases. The harshest expressions were rated highest. Struggle- and battle-oriented expressions appeared in half or more of all articles, including many of the articles that revealed a neutral tone. Supporters, opponents, and reporters alike used struggle frames and military jargon to describe environmental problems and concerns (e.g., in the *Jerusalem Post,* June 26, 1998, an article called "Asphalt Zionism," by Elichu Richter, said, "On route 6 mobility will be owned, rationed, colonialized, monopolized, and denied to the car-less."

Does this finding have any significant meaning? Does this feature have a meaningful influence? Is it "regular" media tension,[19] or old Middle Eastern pressures and frames wearing new costumes? In order to answer these kinds of questions, multilevel, culturally sensible research should be carried out. Our first hypothesis, derived from the former discussion, is that this pattern is related to the general "noisy" conflictual sociopolitical and multicultural arena where our "regular" cases unfold. In order to be heard, the parties and the reporters increase the "volume" of information or voices (see Murrey 1997). This might have a circular, negative influence on the disputes themselves. Regarding the impact considerations, our hypothesis is that in the short run it is minimal, again due to the "noisy" climate. The audience is aware of the general atmosphere, which is traumatic in itself, does not pay much attention to the frames, and puts things "in perspective."

Although, as far as we know, no comparative study addressing the use of expressions has been done (though one should be), our impression is that the Israeli-stressed situation has a tremendous influence on the civil society. Our research deals with "regular" intrastate decision

Table 5. Rates of Expressions Used by Category within the Investigated Articles

	Struggle/War	Negative	Positive	Despair	Cynical	Catastrophe/Urgent Problem	No Special Expressions
Tel-Aviv	***	***			*	*	**
Dudaim	***	*			**	*	**
NATBAG	**	*			*	*	**
Road 6	**		*		**	**	*

Legend: ****   extremely high rate: appeared in 76–100% of the articles
            ***   high: 51–75 %
            **   medium: 26–50%
            *   low: 1–25%

making, not with defense and security issues. Nevertheless, dozens of years of continued uncertainty, crisis, and struggle must have had their impact. Hence the wide usage of Israeli military jargon, highly apparent in reports on environmental disputes as well as in reports on the "fight for peace" and on most other topics. We should be concerned with regard to the accumulating impacts of this kind of atmosphere. Awareness with regard to a problem is the first step to coping with it; understanding it is the second. Finding, adapting, and creating tools for coping with it have to follow.

Reframing processes should be investigated in this regard. The "worlds' frames" and expressions penetrate the environmental discourse. Reframing within environmental and other public-policy fields might have a cyclical influence on the civil society and the individuals within it, perhaps on interstate and intrastate relationships as well. Is it possible to change directions? What role should and can reframing processes have? What might the media's roles be? The planners'? What ethical implications might those bear? These questions should be methodically addressed within interdisciplinary, correlated research and deliberation. Lessons and insights might be applicable to many struggle traumatized regions.

Conclusions

This study is a starting point for the study of the complex interrelations between the mass media, public-policy conflicts in general and environmental conflicts in particular, and framing and reframing processes. It promotes several insights with regard to linkages and mutual effects between the media, the conflict, and the political and public arenas.

The first part of this study identified and integrated knowledge from three distinct fields—environmental policy and planning conflicts, mass media, and framing processes—and created the basis for shaping the study's framework and for further integration with the study's findings. The stage of framework creation included the development of a hybrid typology related to the media's coverage of environmental conflicts. This tool was used and tested within the scope of the empirical stages. Lessons from its development and implementation have been drawn and will serve to adjust this typology as a flexible tool, which can be applied to meet the features of diverse contexts.[20] Understanding and planning is vital for decisions, change, and effective intervention. This typology intends to provide tools for understanding context-related framing and reframing processes. Any intervention has to be based on existing patterns. The typology should also be applied to enable editors, mediators, planners, environmental experts, and decision makers to use it for the analysis of conflicts and prospects of resolving them in a constructive way. There is room for analyses in an environmental context within other cultures, as well as in comparison with other conflict contexts. An analysis over time, to examine how frames change over the course of a conflict, should contribute to a more comprehensive understanding of the subject.

Analysis of the study's findings sheds light on several patterns regarding the media-environmental conflict linkages in the Israeli context. Those were mentioned and discussed in the previous section. We will deliberate here two outstanding findings and their interrelations, while incorporating insights from previous studies[21] and from interviews included in this study. These findings address the voices and the expressions portrayed, or in other words answer the questions "*what* is framed and *how* is it framed?"

Our findings indicate sharply and coherently that the Israeli press, when dealing with intractable environmental disputes, prefers the opponents' frames over those of the supporters. The media reflects the opponents' frames, and often adopts them, or creates/reframes conflicts with a stronger environmental-justice orientation in comparison to the original opponents' frames. Additionally, reporters often adopt educative roles when reporting on environmental issues. This seems to be positive from a social-justice point of view. It perhaps serves the media's concerns related to "good stories" as well as rating considerations. No doubt this has to do with opponents' lobbying strategies, and the reporters' readiness to hear and reflect those stakeholders' voices. It is evident that the opponents have an influence on the reporters. To what

extent have the reporters an influence on the public? On decision making? We do not have, so far, direct evidence regarding this. Our hypothesis, based on indirect clues, points to a low impact: development keeps on despite the opponents' well-formulated objections, *but* it is delayed and often becomes much more costly, not only financially, but environmentally as well. The adversarial patterns are enforced or even strengthened.

The governmental, administrative system keeps bearing centralistic, top-down decision making features. All sides treat with suspicion any integrative proposals. New "good stories" emerge… This scenario fits well with the "struggle" frames found in more than half of the articles we investigated. The adversarial mind-set, joining the general pressure-loaded atmosphere, pushes stakeholders into extreme positions that "legitimize" extreme expressions. The reporters provide the amplifiers, to help us "hear" the voices. In order to keep us alert, the editors themselves, not the reporters, compose the articles' titles, choosing the harshest expressions their high ethics allow them.

Following an integration of former data and the analysis of this study's findings, we might now conclude that the roles of the media with regard to the framing and reframing of protracted environmental conflicts in Israel presents some kind of balanced influence—both positive with regard to providing coverage to social and environmental justice frames, and negative as related to its influence on the perpetuation and even the strengthening of adversarial patterns within the civil society.

There is much potential for change as related to the adoption of more diversified media roles. Lessons should be learned from systems that have already acquired related knowledge and experience. The mass media does not act in a void. It is influenced and in turn influences its environment. The highly conflictual Israeli system is bound to gain a great deal from systematic introduction of conflict-resolution and provention concepts and means. The mass media might and should be involved in this process, without compromising its traditional roles in democracies. According to the existing knowledge, framing and reframing processes seem to be suitable and applicable as means to this end. Elaboration of those prospects is vital for any society. This is especially true with regard to the Israeli controversial society, and its increased development pressures, high uncertainty, and fragile environment.

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Notes

[1] "The word 'prevention' implies containment and settlement by means of deterrence, coercion or legal power. The absence of a suitable word reflects the fact that prevention of an undesired event by removing its causes has not been a focus of attention of societies or of scholars. We probably need to invent a term, and '*provention*' has been suggested to me." Burton 1989.

[2] This paper does not discuss the agendas' linkages model.

[3] A three-day workshop initiated by the Israeli Ministry of the Environment was conducted in January 1999 by Professor Larry Susskind of MIT, in collaboration with experts from the United States, the Netherlands, and Israel. It aimed at introducing Israeli decision makers, professionals, NGOs, developers and other stakeholders involved in environmental conflicts in Israel with collaborative multiparty dispute resolution and decision making in general and with one consensus building method in particular. More than one hundred people attended this event, which addressed, through simulations and deliberation, the same four cases this paper presents. The workshop's preparation included a stage dedicated to interviews with stakeholders as the core of a conflicts' assessment. The interviews with stakeholders who anticipated the workshop composed the "raw material" of the part of the research that analyzed the stakeholders' frames. That part has been conducted by Dr. Deborah Shmueli and Michal Ben-Gal of Haifa University. Our team (Dr. Ariella Vraneski, Ravit Richter, and Elior Liav of the Technion) analyzed the media's coverage. The development of the analysis framework and the comparative stage were conducted collaboratively by the two teams.

[4] This paper's focus is on findings and conclusions from the media frames study. Other parts of the empirical study are addressed only when closely related.

[5] In contrast to the system in the United States, and many other Western countries, the Israeli planning system is ultracentralized and hierarchical. The system is governed by numerous bodies with the power to decide on the majority of development and environmental issues (Alterman 2000). Besides the planning authorities, the Ministry of Environment and other governmental ministries and public agencies are involved in all environmental issues. The mandated participation of affected communities and individuals is minimal, yet they penetrate decision making processes through a variety of formal and informal channels (Vraneski and Alterman 1994; Vraneski 2000). The Planning and Building Law enacted in 1965 regulates planning in Israel in one comprehensive enactment. The law applies to the entire country, with a hierarchical system of planning agencies that are responsible for the preparation

and approval of a hierarchic network of national, district, local, and detailed plans. At the top of the planning system is the Minister of the Interior, responsible to the government and the Parliament (Knesset) for the implementation of the law and policy in land-use planning matters. There are three main levels of agencies; the National Planning Board, six District Planning and Building Commissions, and some hundred local commissions. Appeal rights are included within the system's hierarchy. The courts' intervention with regard to planning and environmental considerations is relatively low. Each of the four cases our study addresses has been disputed within many political, administrative, and public arenas.

[6] Our research indicated a totally different direction. The press brought forward the voices of the opponents and the citizens, and embraced their opinions, much more than it did with regard to the voices, views and opinions of the authority and the developers. This matter will be discussed towards the end of this paper.

[7] E.g., Galtung and Ruge (1970) suggested several characteristics that make events newsworthy. Between the salient characteristics of news events that justify their coverage, we can count the following: conflicts are intensive events that attract the attention of different groups; they are relatively simple that is, the conflict itself is complex, but the events and topics create a relatively simple story; conflicts usually involve the public and many stakeholders; conflicts are a common phenomenon, but still, each conflict is unique, and thus interesting from the media's point of view; and, last but not least, conflicts are usually negative and might earn a higher media profile than do positive facets.

[8] We considered this idea while designing the research methodology. Due to efficiency considerations, we investigated the press coverage only.

[9] "The Media's Role in Conflict" identifies three roles that the media can take in conflicts; these are *(a)* Media as Mediator, as demonstrated in the Pulitzer Prize–winning *Akron Beacon Journal*'s "Coming Together Project" that brought black and white community members together to discuss race relations in the wake of the Rodney King trial; *(b)* Media as Social Educator, as demonstrated by the UNICEF-funded "Radio Voice of Peace" in Ethiopia; and *(c)* Media as Pro-Social Propaganda, as demonstrated by UN Peacekeeping Radio in Namibia, Cambodia, and elsewhere (Gordon and Raj, in Penas and Pirio).

[10] New York University's Center for War, Peace and the News Media, and the Institute for Conflict Analysis and Resolution at George Mason University.

[11] E.g.., the Media Peace Center in South Africa and Search for Common Ground based in Washington, D.C., are using the mass media to broadcast messages of peace and reconciliation in such diverse settings as South Africa, Burundi, and Macedonia.

[12] The interviews' analysis employs this typology. Therefore, our comparison of the media's and the interviews' frames addressed merely those frames.

[13] This model classifies four categories of framing in news texts: *(a)* the *syntax* structure – how the text is organized in paragraphs, headlines, citations, and so on; *(b)* the *scenario*, that is the story — who, what, where, when, how and why; *(c)* the *subjects/topics* structure, which relates to whether the report is on many incidents, a continuous one, a cause and result and so on; *(d)* the *rhetoric* structure is the last category, tracing the use of metaphors, images, examples, etc.

[14] A dynamic model of the linkages between the conflict's characteristics which looks into the interrelations of four basic groups of dimensions: *(a)* the *context of the conflict* — its environment or stage (physical, social, historical, organizational etc.), which shape the pre-conditions for the conflict; *(b)* the *substance of the conflict* — the conflict's sources, type and topics/issues; *(c)* the *actors in the conflict* — the parties participating in the conflict, affecting it and affected by it, their interrelationships and the power structure; *(e)* the *dynamics of the conflict* — its development, as well as changes, influences, and interventions through its continuum.

[15] For one case — the Tel-Aviv Seashore — the articles analyzed are from the year 1996, when the project upon which our investigation focused (the proposed touristy port development at the mouth of the Yarkon River) was discussed.

[16] The surface of Israel is about 20,000 square km; its current population is approximately six million inhabitants. In this regard it can be compared with New Jersey, one of the smaller and most densely populated states in the United States. Half of Israel is almost uninhabited due to desert conditions. The country has a high population growth rate. Environmentally and on many other levels, Israel is connected with the Palestinians territories—the West Bank and Gaza, which cover 7,000 square km, contain three million inhabitants, and exhibit the highest population growth rates worldwide.

[17] Within the Israeli planning system, comprehensive state and district plans, and sector plans (e.g., roads, national parks, waste disposal systems, etc.), as well as highly influential site-specific plans such as power plants, are considered national plans, and are discussed and approved accordingly.

[18] See lists regarding the frames included in each group/category in the section on the analysis framework.

[19] The role of the media in conflict situations is a topic that may conjure two negative images. The first is one of nationalistic propaganda aimed at heightening tensions among ethnic and religious groups, which serves as a catalyst for violence—as in Bosnia and Rwanda. The second is of CNN-TV quickly rushing to a scene of conflict in order to provide extensive and graphic minute-by-minute reporting—only to quickly leave the scene once the bloodshed is over (Penas and Pirio 1997).

[20] This hybrid typology originated partly in previous research conducted mostly in the U.S. organizational and political culture, which sharply differs from that of Israel. Conclusively, flexibility measures have to be developed and incorporated to make the typology applicable for conditions and variables.

[21] E.g., Liav (1999) found that cases where harsh disputes between Town Hall and citizen groups appeared received high media coverage. The impact of the citizens' opinions on decisions in those adversarial cases was minimal or inverse, though the media amplified the citizens' voices. In contrast, cases where cooperative problem solving between citizens and authorities occurred got little or no media coverage. In the "silent" cases, the citizens' views had a high impact on decision making, and integrative, mutual-gain solutions were reached.

Reference

Alterman, R., ed. 2000. National-Level Planning in Israel: Walking the Tightrope between Government Control and Privatization. In *National-Level Spatial Planning in Democratic Countries: A Reexamination.* Town Planning Series. Liverpool: Liverpool University Press.

Anderson, A. 1993. Source-Media Relations: the Production of the Environmental Agenda, in *The Mass Media and Environmental Issues*, edited by A. Hansen. Leicester: Leicester University Press.

Burton, J. W. 1989. On the Need for Conflict Prevention. Occasional Paper #1. Fairfax, Va.: Institute for Conflict Analysis and Resolution, George Mason University.

Burton, J. W. 1990. *Conflict: Resolution and Provention.* London: Macmillan Press Ltd.

Caspi, D. 1995. *The Mass Media.* Tel Aviv: The Open University, Unit 6. (Hebrew)

Churchman, A.., R. Alterman, and A. Vraneski. 1996. *Public Space and Public Facilities—Conflicts and Dispute Mitigation Approaches and Methods*. Haifa, Israel: Technion. (Hebrew).

Cracknell, J. 1993. Issue Arenas, Pressure Groups and Environmental Agendas, in *The Mass Media and Environmental Issues*, edited by A. Hansen. Leicester: Leicester University Press.

Dunwoody, S., and R. Griffin. 1993. Journalistic Strategies for Reporting Long-Term Environmental Issues: A Case Study of Three Superfund Sites, in *The Mass Media and Environmental Issues*, edited by A. Hansen. Leicester: Leicester University Press.

Einsiedel, E., and E. Coughlan. 1993. The Canadian Press and the Environment: Reconstructing a Social Reality, in *The Mass Media and Environmental Issues*, edited by A. Hansen. Leicester: Leicester University Press.

Entman, R. 1993. Framing: Toward Clarification of a Fractured Paradigm. *Journal of Communication* 43 (autumn):4.

Gamson, W.A., and A. Modigliani. 1989. Media Discourse and Public Opinion on Nuclear Power: A Constructionist Approach. *American Journal of Sociology* 95, no. 1 (July).

Galtung, J., and M. Ruge. 1970, The Structure of Foreign News, in *Media Sociology*, edited by J. Tunstiall. London: Constable Publishers.

Gray, B., 1997. "Framing and Reframing of Intractable Environmental Disputes", IN Lewicki, R. Bies R. and B. Sheppard, (eds.), *Research on Negotiation in Organizations*, 6.

Gitlin, T. 1980. *The Whole World Is Watching: Mass Media in the Making and Unmaking of the New Left*. Berkeley: University of California Press.

Kaufman, S. and J. Smith, J., 1999. " Framing and Reframing in Land Use Change Conflicts", *Journal of Architecture, Planning and Research*, 16(2), Summer, 164-180.

Liav, E. 1999. Citizen Organizations in Response to Urban Projects—Action Strategies and Success Criteria. Master's thesis, Technion - Haifa. (Hebrew).

McCombs, M. 1994. News Influence on Our Pictures of the World, in *Media Effects Advances in Theory and Research*, edited by J. Bryant and Zillmann.

Moore, W. C. 1986. *The Mediation Process: Practical Strategies for Resolving Conflict*. San Francisco: Jossey-Bass Publishers.

Murray, John S. 1997. The Cairo Stories: Some Reflections on Conflict Resolution in Egypt. *Negotiation Journal* 13:39–60.

Neuzil M. 1996. *Mass Media and Environmental Conflict—America's Green Crusades*. Thousand Oaks, California: Sage Publications.

Noelle-Neumann, E. 1974. The Spiral of Silence: A Theory of Public Opinion. *The Journal of Communication* 24, no. 2:43–51.

Pan, Z., and G. M. Kosicki. 1993. Framing analysis: An Approach to News Discourse. *Political Communication* 10:55–75.

Parenti, M. 1986. *Inventing Reality—The Politics of the Mass Media*. New York: St. Martin's Press.

Penas, T.C., and G. Pirio. 1997. Lessons Learned: Conflict Resolution and the Media, The Voice of America Experience. ICAR Newsletter. (George Mason University, Fairfax, Va.)

Rubinstein, R. E., et al. 1994. *Framework for Interpreting Conflict. A Handbook for Journalists*. Fairfax, Va.: Institute for Conflict Analysis and Resolution, George Mason University.

Shmueli S., and M. Ben-Gal. 2000. Frames, Framing and Reframing of Protracted Environmental Disputes. Interim Report. Haifa: The Ministry of Environment and Haifa University. (Hebrew).

Susskind, L., McKearnan, S. and J. Thomas-Larmer, (1999) The Consensus Building Handbook: A Comprehensive Guide to Reaching Agreement, Thousand Oaks, CA: Sage Publications

Valkenburg, M. P., et al. 1999.   The effects of new frames on readers' thoughts and recall. *Communication Research,* October.

Vraneski, A. 1994. *Conflict Resolution in Urban and Regional Planning: The Applicability of Alternative Dispute Resolution* . Haifa, Israel: Technion. (Hebrew).

Vraneski, A., with N. Schori and P. Plaut. 2000. *Planning Together? The Community and the Urban Development Arena—Research Conclusions and Proposed Action Models*. Haifa and Jerusalem: Technion and Zippori Center. (Hebrew).

Vraneski, A., and R. Alterman. 1994. Who is (Not) Afraid of Public Participation? *Town and Region* 23:123–150. (Hebrew).

Vraneski, A.., and R. Richter. 2000. Frames, Framing and Reframing: Reflection of Protracted Environmental Disputes through the Media. Interim Report. Haifa: The Ministry of Environment and the Center for Urban and Regional Studies. (Hebrew).

Wanta, W. 1997. *The Public and the National Agenda—How People Learn about Important Issues*. Mahwah, N.J.: Lawrence Erlbaum Associates.

Wolfsfeld, G. 1997. *Media and Political Conflict—News from the Middle East*. Cambridge, England: Cambridge University Press.

Appendix I - Location of the Four Investigated Projects