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THE IDENTIFICATION OF WATER CONFLICT AND ITS RESOLUTION

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Abstract. This paper analzyes a special kind of an environmental conflict – the water disputes over international fresh water resources (rivers). The "strategic versus symbolic" typology of conflicts, derived from Rotham's theory (2001) on interactive conflict resolution, has been used in this study. In order to present a thorough explanation of this phenomenon, the paper discusses the next set of issues: (1) water as a source of conflict, (2) indicators of water stress, and (3) consequences of the type of water conflict to cooperative efforts. It has been shown that knowing the ratio between strategic and symbolic values for any particular water conflict could be useful in order to assess the most appropriate response of the international community and non-state actors.

Key words: water dispute, water stress, indicators, strategic conflict, symbolic conflict.

INTRODUCTION

The call for appropriate conflict identification is a pragmatic one. If one correctly identifies the type of conflict, one can predict the "actors, goals, perceptions, recruitments, structures, and other key political features involved" (Frey, 1993, 59). If true, it could provide a useful tool to understand environmentally-related water conflicts as well as to predict the prospects for cooperation.

Here, I adopt the "*strategic* versus *symbolic*" typology derived from Rotham's theory (2001) on interactive conflict resolution. The essential question is whether water is seen primarily as just a commodity or primarily as a public good, which implies also its sharing. The depth of this gap may vary from case to case. In symbolic conflicts, instead of tangible interests, non-material factors dominate; most frequently those expressed through "images", "perceptions", or "frames". Under this condition, direct cooperation is less likely to occur (Rouyer, 1997, 58-59), and this "dichotomy of perceptions" (Salman and Uprety, 1999, 300) makes water negotiations very difficult.

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WATER AS A SORCE OF CONFLICT

When seen as a subsistence resource water can be regarded as a component of national security and as a "focal point of identity" (Blatter et al, 2001: 34). It is also a property of territorial units — in the case of international lakes, rivers, or aquifers, of nation-states. Yet in many instances, the international regulations dealing with water issues obfuscate its importance to the security and identity and communities. Figure 1 illustrates how the meaning of water, according to Blatter et al, varies as a function of its importance and territoriality.



Fig. 1. New Contingencies in the Meaning of Water; Source: Blatter et al, 2001: 36.

On the horizontal axis, we notice the increasing importance of water as we move away from the modern meaning¹ of water as property. Blatter et al (2001: 32) assert that water – understood as a simple property – may have a rather "peripheral" connection to individuals and social groups because it is regarded as only one possession among many others. When water is incorporated into larger values, tied to national security and community building, its limited association significantly increases.

The vertical axis shows that the modern notion of water as property is weakly linked to territory because the owner — the nation-state — is defined on a territorial basis. The state, as follows from this model, does not possess water to insure its own existence but rather for the sake of its citizens. However, under specific conditions, such as unilateral allocation of important international water resources, states may adopt a perspective in which water is perceived as essential to the survival of territorially defined states. The same is valid for social actors like specific advocacy groups which are not territorially bounded. Thus, water has become crucial for the existence and identity of these non-territorial social factors.

Over the last two decades, a body of literature has grown up calling attention to a strong possibility that many future conflicts, especially in the Middle East, will be over control of scarce resources. Many of these conflicts are perceived through the "hydraulic imperative prism" (Nasrallah, 1990). This concept assumes that states will fulfill their water needs through "forceful acquisition and retention of neighboring territory or by restricting the flow of rivers before they cross national borders" (Rouyer, 2000: 4). Water conflicts between states sharing a water resource are seen in a zero-sum perspective. The early 1990s saw many proponents who applied this approach to a number of disputes (See Table 1).

River/Lake System	Countries Involved	Main Cause of Dispute
Rhine	Switzerland, Germany, France,	Industrial pollution
-	The Netherlands	inter a provide a second
Szamos,Tisza	Hungary, Romania, Yugoslavia	Pollution from mining
Danube	Hungary, Romania, Yugoslavia	Pollution from mining
Danube	Yugoslavia, NATO	Pollution from military activities
Danube	Slovakia, Hungary	Dam, water flow
Danube	Bulgaria, Romania	Agricultural pollution
Drava	Croatia, Hungary	Dam project
Neretva	Bosnia-Herzegovina, Croatia	Flooding, protection of estuary
		and marine areas, water supply
Evros/Maritza/Merec	Greece, Bulgaria, Turkey	Dam, reduced water flow
Nestos/Mesta	Greece, Bulgaria	Irrigation, pollution
Aoos	Greece, Albania	Dam
Axios/Vardar	Greece, FYR Macedonia	Dam, irrigation
The Adriatic Sea	Slovenia, Croatia	Ecological zone

 Table 1. International Water Resources and Recent International Conflicts in Europe (Since 1980).

Sources: Gleick, 1998; Horsman, 2001; and, Vlachos and Mylopoulos, 2000.

In 1989, the Center for Strategic and International Studies, based in Washington, D.C., predicted that water — not oil — would become the dominant subject of conflict for the Middle East by the year 2000 (Venter, 1998; Chesnoff, 1988, 47-48). Former United Nations Secretary General Boutros-Ghali was quoted as saying: "The national security of Egypt is in the hands of the eight other African countries in the Nile Basin" (Postel, 1992: 73). Starr (1991: 19) predicted that "water security will soon rank with military security in the war rooms of defense ministries. The only matter that could take Egypt to war again is water". Ismail Serageldin, the chairman of the World Water Commission, stated bluntly that "the wars of the twenty-first century will be fought over water" (cited in Villiers, 2000: 13). Finally, Vandana Shiva (2002: 71), a world-renowned environmental thinker and activist, used the term "hydro-jihad" to describe the conflict in the Tigris-Euphrates River Basin.

Yet, the reality is quite different. The contemporary history of armed conflict is somewhat less dramatic than what the "water wars" literature would lead one to believe. In fact, human history records only one war fought over water. In 2500 BCE, the Sumerian city-states of Lagash and Umma fought over the right to exploit boundary channels along the Tigris (Cooper, 1983). Postel and Wolf (2001: 60) have noted that between the years 805 and 1984, countries signed more than 3,600 water-related treaties, "many showing great creativity in dealing with this critical resource".

Despite the compelling nature of the "water war thesis", it provides too narrow an approach in which to interpret international conflicts that involve water issues. Naff (1992) states that the hydraulic imperative hypothesis is too simplistic and, to some extent, verified through coincidence, to be acceptable as a valid explanatory generalization. The strategic reality of water is, as Naff asserts (1992: 25), that "under circumstances of scarcity, it becomes a highly symbolic, contagious, aggregated, intense, salient, complicated,

zero-sum, power- and prestige-packed issue, highly prone to conflict and extremely difficult to resolve". The obsession with water wars, as Postel and Wolf assert (2001: 60-61), obfuscates the more fundamental issues:

> Lost amidst this perennial debate over whether there will be water wars has been a serious effort to understand precisely how and why tensions develop, beyond the simplistic cause-and-effect equation that water shortages lead to wars. First, whether or not scarcity causes outright warfare between nations in the years ahead, it already causes enough violence and conflict within nations to threaten social and political stability. And, as recent events in the Balkans and sub-Saharan Africa demonstrated, today's civil conflicts have a nasty habit of spilling over borders and becoming tomorrow's international wars. Second, water disputes between countries, though typically not leading to war directly, have fueled decades of regional tensions, thwarted economic development, and risked provoking larger conflicts before eventually giving way to cooperation.

Therefore, it is hard to believe that tension over water resources may be the *sole* cause of war in the Middle East and elsewhere. Lipschutz (1992) has observed that cases analyzed as evidence of wars over water seem to be about something else. Barnett (2001: 35) has argued that the critical shortcoming with the water wars thesis is its "impossibility of clearly distinguishing among the many factors which contribute to warfare". Admittedly, the destruction, or threat of destruction, of states does not stem, solely or even primarily, from environmental factors. More often than not, as Lowi (2000: 167) has correctly noted, a "*combination* [emphasis added] of political, structural, and institutional variables is the primary cause".

In the Euphrates River Basin, for instance, the combination of adversarial relations, physical proximity, and resource interdependence magnifies the security perceptions of down-stream countries — Syria and Iraq. Syria is worried that much of the water released downstream from the Turkish territory (as a result of the Turkish GAP project) will have a relatively high content of salt and contaminants that will harm crops and will degrade the quality of soil along the river. Syria is heavily dependent on the Euphrates waters that account for 86 percent of its total consumption (Lowi, 2000: 155).

Finally, scholars like Barnett (2000; 2001) and Lonergan (1997) have criticized the hydraulic imperative hypothesis due to its focus on the Middle East. Although the region is very vulnerable to water shortages, the same problems, or worse, appear in other parts of the world including, for example, some European countries like Spain, Greece, and Hungary. Neglecting other regions, as this literature suggests, Barnett (2001: 56) asserts that the "water issue is important not because of an *a priori* concern for those people who may suffer from warfare ..., but because of the problems war in the Middle East might create for Northern interests in the region". In fact, different states in the region are no less prone to water negotiations than others in the world.

Another group of scholars are proponents of an "economic imperative hypothesis". According to economists, the relatively low price of water makes it unlikely that tension over water resources will be the sole cause of war. The economic approach asserts that when water is regarded as a commodity with a monetary value attached, it is not all that valuable. Thus, crops that require large amounts of water are cheaper when purchased on the world market than when locally produced. Considering water as a factor of production like land, labour, capital, and technology would, as Biswas et al (1997, 27) contend, "enhance efficiency in its use and force a search for those agricultural products that yield the highest return".

Applied to the Israeli-Palestinian conflict, one can expect at least one contested issue to be resolved; namely, the total value of the disputed waters in Israel and the Occupied Territories is relatively low: \$110 million a year (Rouyer, 2000). Yet, the water of the West Bank, or of the aquifer below the Gaza Strip is, especially for the Palestinians, a highly emotional issue, and has still not been completely resolved during the long-term process of negotiations. However, this is not a surprising outcome because, following Lowi's reasoning (2000: 167), it would be totally unreasonable to focus attention on resolving the water issue either in an effort to reduce or resolve the larger Israeli-Palestinian conflict, or in the absence of efforts to reduce or resolve it.

WATER STRESS

There are many definitions of water stress. The figure of 1,700 cubic meters of water per person per year has been adopted by most hydrologists as the cutoff between a state being water stressed and a state being reasonably comfortable. If a country has less than 1,000 cubic meters per person per year, water is a scarce resource. One could object to this seemingly high threshold since no one was really using the full 1,700 cubic meters. Moreover, this is only one part of the story. When rain-fed agriculture, for instance, is added to the total water balance, many places approach 1,700 cubic meters.

Nevertheless, water data are, as Villiers (2000: 19) has called it, a "technocratic illusion". A thousand cubic meters a year does not inevitably lead to water stress. For instance, the Israelis, with only 300 cubic meters per year, do not experience a lack of basic needs. On the other hand, in Nigeria, with respectable water resources, more than 50 percent of the population does not have access to safe drinking water. This comparison implies that if a country draws less than its total available resources, it does not mean that it is living without water-related hardships.

The human needs for water depend on definitions. Gleick (2000: 11) suggested that the United Nations should adopt a "human entitlement" of 50 liters per person per day — drinking water, 5 liters; sanitation water, 20 liters; bathing water, 15 liters; and, food preparation, 10 liters. This is a minimum amount of water required for survival. Yet, more than one billion people have no access to clean drinking water, and more than 2.9 billion have no access to sanitation services. Presumably, water stress is to some degree, as Villiers observes (2000: 19), a "management problem, a matter of distribution, and not just a pure problem of supply, although in some regions such as North Africa and the Middle East – it is that, too".

Water stress, therefore, because of its negative impact to the environment, can create a condition for conflicts and cooperation. A number of notorious examples of international water-related conflicts are already mentioned. Here, I disaggregate the term of water stress using a set of causal relations presented in Table 2. The approach is based on the soil DPSIR² framework, developed by the European Environmental Agency (Bridges et al, 2001: 4).

The above discussion of the role of water stress in conflict escalation indicates that one needs to evaluate water as an issue under contention between states because states value water differently, and thus, pressure on water resources varies. Also, as the mechanism in Table 2 shows, water stress has an impact on the economy. Several literature sources indicate when there are ratios of water supply to water demand of less than five, water stress can become a limiting factor in economic development (Lutz et al, 2002: 239).

Table 2. Water Stress Mechanism; Adapted from Bridges et al, 2001: 4.

Driving Forces \rightarrow Pressure \rightarrow State \rightarrow Impact	
(e.g., population growth) \rightarrow (e.g., water allocation) \rightarrow (e.g., salinization) \rightarrow	
\rightarrow (deterioration of water quality)	

Threat Perception and Water Stress

The problem for outside states and international institutions in deciding whether to respond to a water stress is to assess and evaluate the threat. Will a state or group suffer from the unilateral actions of a neighbor-country? However, uncertainty and ambiguity often hinder the ability of states to perceive a threat correctly, especially in the case of highly contested environmental issues. Falkenmark (1990: 178) asserts that water complexity and man's preference to simplify things lead to great perceptual differences between groups and actors. Nevertheless, the International Relations (IR) literature³ dealing with threat perception focuses on four aspects that can be considered predispositions for threat perception: (1) distrust, (2) past experience (Pruitt, 1965: 400), (3) the perception of the balance of capabilities favoring the threatening state (Cohen, 1979: 87), and, (4) the ability of a state to react to the threat (Jervis, 1976: 374).

These four aspects of predisposition for threat perception relate to the issue of water stress as well. Groups or states with competing claims to water often distrust each other's intentions, particularly given the zero-sum nature of water. This "dichotomy of perception" (Salman and Uprety, 1999: 300) makes water cooperation very difficult. The Israeli-Palestinian conflict is a striking example of this. Although a water dispute is seemingly objective (requiring facts and figures), politics cloud the issue (Rouyer, 1997: 58-59):

Although Israel possesses detailed and precise information on water resources in the region from decades of scientific assessments, including metering all wells in the West Bank since 1967, this information has not been made available to the public because water is considered a national security concern. Almost no data pertaining to water in Israel or the West Bank is available that has not been specifically released by official Israeli government sources. As a result, *Palestinian water specialists and negotiators charge that the officially released statistics are censored and therefore suspect. The Palestinians contend that the Israelis have an interest in falsifying the data to support their case* [emphasis added] ... Because of these differences in perspective, estimates of the amount of water available in the region vary considerably. The Taba Agreement has endorsed the concept of sharing all data pertaining to water and sewage, but actual exchanges of data have not yet taken place.

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When a recurrent dispute over particular water resource exists, states or groups are less likely to trust each other's intentions and actions, particularly if conflict between the parties erupted in the past. For example, the Nile River, and especially the Blue Nile originating in Ethiopia, has been the object of a recurrent water dispute between Ethiopia and Egypt, heightening the distrust between the two countries. The Blue Nile is the main source of water for the Egyptians. In addition, with a water dispute, the balance of military and other capabilities (economic and geopolitical setting, for instance) may discourage and deter unilateral actions of upstream states, especially if the power balance is not in favor of a state or group seeking to allocate common water resources. This model applies to the Egyptian-Ethiopian water-dispute. Although Ethiopia recently showed a significant interest in the hydraulic potential of the Blue Nile, the overall project is stalled. Egypt's relative power in the region, based on military force, economy, and political influence, is overwhelmingly greater than that of all other riparian states. Thus, the Ethiopian government, despite its population growth and food security problems, is not willing to pursue, for now, this highly contested project.

Although the aspects of predisposition for perceiving threats are analytically useful, problems of correct threat perception arise from "ambiguity of intentions and capabilities, leading to misperception" (Levy, 1983: 88). For instance, when a group or state demands a water allocation (a perceived vital interest), and another state misperceives the demand as an extremely hostile act and responds forcefully in an attempt to deter the group or state, an escalation of conflict may emerge. However, in the case of the Egyptian-Ethiopian water dispute, one can ask: What makes Ethiopia suddenly interested in the abundant waters of the Blue Nile? Put differently, does not Ethiopia use the Blue Nile as a power source, striving to come closer to the Middle East region instead of the "politics of Africanization" (Erlich, 2002).

Perception of existing environmental damage can vary as well. The reactions to pollution caused by industrial accidents from neighbors may be stronger than those for the same or similar domestic pollution accidents. Additionally, pollution that results from war activities may be perceived as a part of adversary's intended plans for total destruction of a state, and will thus be judged morally. Recent pollution problems on the Yugoslavia's part of the Danube River basin, in 1999 (during the Kosovo War) and in 2000 (during the "imported" cyanide pollution from Romania), clearly support these statements.

Indicators of Water Stress

Although the problem of correct threat perception is present in regard to water stress, there are indicators (Wolf and Hammer, 2000: 143) to predict the possibility of water-related conflicts (quantity, quality, and allocation problems). These might include:

<u>Water Quantity Issues</u>. A conflict may arise when: (1) water supply and demand curve approach each other; (2) major shifts in supply occur (due to greater upstream use or, in the long range, to global warming); (3) shifts in demand occur (due to new users); and, (4) natural fluctuations occur (for instance, significant changes in the water level of the Nile River, the Caspian Sea, and the Euphrates River).

<u>Water Quality Issues</u>. Any new source of pollution, or any new extensive agricultural development resulting in the saline return flow to the system, can induce water conflict.

Romanian mining waste-water, polluted with cyanide and heavy metals, that entered (January, 2000) the Tisza and Danube Rivers, was the issue over which Hungary and Serbia sought to require compensation from Romania for damages.

<u>Management for Multiple Use</u>. Due to divergent needs of riparian countries, disputes may emerge. For example, when the Turkish plan on the Euphrates River was extended to include irrigation (not only to hydro-power generation), Syrian long-term needs for irrigation came at stake.

<u>Political Divisions</u>. This indicator, according to Wolf and Hammer (2000: 144), refers to shifting political divisions within a region, causing new riparian relations. This may happen after the creation of new, independent states as the last great re-drawing of political borders in the early 1990s. New political realities in Central Europe, the Balkans, and Central Asia significantly increased the number of international rivers, and, hence the potential for water disputes.

<u>Geopolitical Setting</u>. Power relations in a region, as Lowi asserts (1995), may influence the dynamics of a conflict. Regularly, a state with a regional hegemony has an advantage in a water dispute. Also, the perception of larger unresolved disputes with one's riparians magnifies the intensity of water conflicts.

Level of National Development. Low levels of economic development, as in much of the Developing World, impose a number of constraints on some developing countries and prevent them from adapting more effective water management policies. For instance, many states that face water stress are unable to invest in desalination, drip irrigation, or to make a switch from extensive agriculture to industry.

The Hydropolitical Issues at Stake. Mandel (1992) asserts that a border dispute, combined with a water dispute, may be an exacerbating factor in water conflicts. Thus the intensity of the conflict between Hungary and Slovakia is magnified due to Slovakia's change of border on the River Danube. Salman and Uprety (1999) showed this effect in the case of the Mahakali River that divides India and Nepal.

<u>Institutional Control of Water Resources</u>. This indicator refers to the issue of how water is controlled within each of the countries involved in a dispute. The fact that this control may be conducted at the national level (as in Israel and elsewhere in the Middle East), at the state level (as in India), or at the sub-state level (as in the United States), has a significant impact on bilateral and international negotiations.

<u>Level of Civil Society Development</u>. Civic society institutions such as environmental nongovernmental organizations (ENGOs) may, by mobilizing available internal resources, create conditions for radicalizing water-related conflicts, as in the case of the Slovak-Hungarian conflict. Also, international NGOs as well as transnational NGOs can influence an internal environmental conflict. The stronger the connection between these two (internal and external NGOs), the higher the possibility of internationalization of a conflict.

<u>National Water Ethos</u>. This term includes several somewhat ambiguous parameters which determine how a nation "feels" about its water resources, which in turn can help determine

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how it "cares" about a water conflict. Wolf and Hammer (2000: 144) list these three factors of a water ethos:

- "mythology" of water in national history, that is, has water been the "lifeblood of the nation"?
- importance of water/food security in political rhetoric, and
- relative importance of agriculture versus industry in the national economy.

STRATEGIC AND SYMBOLIC WATER CONFLICTS

Taken all together, I assert that indicators of water stress reflect two types of values — *symbolic* and *strategic*. The symbolic value of water, derived mostly from the national water ethos, helps us to understand a group's motivation for participation in a water dispute. That motivation may include the historical experience connected with the water, national identity of the population in a disputed region, and history of recurrent conflict over water (either recurrent pollution, or claims for allocation of water). Most recently, the symbolic value of water may stem from proponents of "deep ecology", "ecofeminism", or some other form of "new environmentalism" as a branch of post-modernist thought (Gandy, 1996).

This symbolic value of water should be related to its strategic, or economic value including its tangible elements such as hydropower potential, fisheries, industrial use, and so forth. Put somewhat differently, tangible elements provide opportunities for a state to increase its wealth and power. Table 3 below compares and contrasts strategic with symbolic conflicts.

Strategic Conflicts	Symbolic Conflicts
Issues are concrete and clearly defined.	Issues are abstract, complex, and difficult to define.
Desired outcomes are defined in terms of tangible interests and resources.	Desired outcomes are intangible and difficult to define.
interpretations of the sources of the conflict and conditions for settlement.	Involve interpretative dynamics of history, psychology, culture, values, and beliefs of groups that are often, at least initially, framed in ways that are mutually exclusive.

Table 3. Strategic Versus Symbolic Conflicts.

Source: Rotham, 2001: 297.

Knowing the ratio between these two types of values — *strategic* versus *symbolic* — for any particular water conflict can be useful in order to assess the most appropriate response of the international community and non-state actors. In order to gain this type of knowledge, one can look to speeches by policymakers and non-state actors from a variety communities (environmental, scientific, and media).

For Williams (2001: 24), the most important fact about the difference in strategic and symbolic importance is the effect on conflict. Symbolic elements can significantly raise a level of tension between parties involved. Among symbolic values, the historical

importance of water is of particular interest. For instance, Iraq and Syria, in opposing the Turkish GAP project, mostly relied on their historical use of the Euphrates-Tigris Rivers, trying, therefore, to restore the previous pattern of water use and distribution. However, as in the case of territory, historical claims are not sufficient for water control of the entire basin, particularly if the historical claims are in disagreement with the current population composition of states involved in a dispute, with the current dominant practice in irrigation, level of urbanization, and so forth. For example, the Turks argue that both Iraqis and Syrians used the Euphrates-Tigris waters much more than they deserved.

Obviously, determining the water stress indicators and perceptions of states involved in a conflict is necessary in order to predict how states and the international society institutions respond through cooperative efforts.

CONCLUSION

Environmental conflicts, including those related to the management of international water resources, are not, at least, ignored. However, not all environmental issues deserve to be put under umbrella of various security concepts, and a careful examination of any particular conflict is necessary in order to correctly assess its causes and dynamics.

Most of environmental conflicts, as examples used in this analysis demonstrated, are highly contextual — these conflicts possess the differences between disputants not only in terms of *strategic* (material), but also in terms of *symbolic* (non-material) values attached to the subject of a dispute. Among these symbolic elements, it seems that the difference in perceptions between disputants has a decisive influence on the overall dynamic of a conflict and the effectiveness of the involvement of a third party.

More importantly, it represents a challenge for cooperative efforts in order to reduce the impact of "water stress".

ENDNOTES

- 1. Modern meanings imply the control of water resources, through the dominance of law, engineering, and economics.
- 2. DPSIR stands for Driving forces, Pressures, State, Impacts, and Responses.
- 3. The focus on perception in the study of international relations aims to establish the links between the cognitive dynamics of state actors and decision making, foreign policy, interstate conflict, and the like.
- 4. Lowi (1993: 202) identifies for variables of importance in promoting or impeding cooperation in international river basins: (1) the character of riparian relations, or, the impact of the larger political conflict, (2) resource need/dependence, (3) relative power, and, (4) efforts at conflict resolution, and third party involvement.
- 5. Heclo (1974: 305), for instance, acknowledges: "Politics finds its sources not only in power but also in *uncertainty* [emphasis added] men collectively wondering what to do. Finding feasible courses of action includes, but is more than, locating which way the vectors of political pressure are pushing".
- 6. The words *idea*, *ideology*, and *norm*, although sometimes used interchangeably, have different meanings. While ideas are beliefs held by individuals, norms and ideology are historically constructed and often embedded in organizational structures or other shared collectivities; accordingly, they are less sensitive to change (Checkel, 1997: 130).

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IDENTIFIKACIJA KONFLIKTA OKO VODE I NJEGOVO RAZREŠENJE

Milovan Vuković

U ovom radu se analizira posebna vrsta ekološkog konflikta, odnosno sukob oko međunarodnih vodnih resursa (reka). Analiza počiva na tipologiji na strategijske i simboličke konflikte, odnosno na Rotamovoj teoriji interaktivnog razrešenja konflikta. U nastojanju da se predoči potpuno objašnjenje ovog fenomena, rad razmatra sledeća pitanja: (1) voda kao izvor konflikta, (2) indikatori vodnog sresa i (3) posledice vrste konflikta na kooperativne napore. Pokazano je da poznavanje odnosa između strategijskih i simboličkih vrednosti kod razmatranja bilo kog vodnog konflikta može biti od koristi kod procenjivanja odgovarajućeg odgovora međunarodne zajednice i aktera civilnog društva.

Ključne reči: konflikt oko vode, vodni stres, indikatori, strategijski konflikt, simbolički konflikt