

Assessing the Impact of Coherence-Creating Groups on the Lebanon War

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Abstract

Maharishi's Vedic Science and Technology includes an approach to creating peace by systematically reducing collective stress. High levels of tension and continued armed conflicts in the Middle East and other parts of the world, in spite of repeated military and political interventions, indicate a failure of the conventional realist paradigm in international relations to adequately address the subjective dynamics underlying such situations. Maharishi's approach thus complements traditional approaches to peace-making through identifying and utilizing these subjective dynamics to alleviate accumulated collective stress and systematically promote human development toward more coherent thinking and behavior. The efficacy of Maharishi's technology was evaluated in two studies assessing the impact on war intensity in Lebanon of seven assemblies of coherence-creating groups in the Middle East, Europe, and North America between 1983 and 1985. During each assembly, the mean level of conflict and the mean number of war fatalities per day were found to drop, and the level of cooperation to increase significantly.

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Introduction

This paper integrates three connected themes. First, it considers an approach to peace using techniques for systematically reducing collective stress (equated with enhancing coherence in collective consciousness) and the need to address, through such an approach, the subjective, motivational dynamics of peace and war. Second, it is concerned with empirical assessment: whereas qualitative, “post-modernist” methodologies may be necessary to bring out the real value of most approaches to peace, even the more rigorous quantitative methods may be used in assessing the effectiveness of an approach to peace as simple and as replicable across cultures and contexts as this one. The third theme, considered simultaneously, is the complementarity of different approaches to peace, and the need to move forward on many different paths in parallel.

The Neglected Subjective Dynamics of Conflict and War

The recent Gulf war has been celebrated as a classical military success. It is also proving to be a very limited success, bought at the cost of enormous human suffering. So far, it has done little, if anything, to alleviate the long-term problems of arrested community development and resulting protracted, intercommunal conflicts within Iraq and Kuwait, or elsewhere throughout the Middle East. These conflicts involve the Kurds, the Shiites, the Palestinians, the Israelis, the Sunnis, and various other communities who perceive their ability to progress, or their collective identity and security, as under threat. These communities experience high levels of collective frustration and tension, their severe underdevelopment contrasting sharply with the affluence of neighboring European states, Israel, and the oil-rich states of the Gulf Cooperation Council. Consequently it is here that we continue to see perhaps the greatest threat to our hopes for a peaceful world.

“Threat” has been defined by David Singer (1958) and others as the product of two factors: the objective military capacity to wage war, multiplied by the subjective hostility which can motivate war. If we reduce either factor, we reduce the threat; reduce it to zero, and the threat is removed. In the absence of understanding how to deal with the subjective factor, the traditional debate among people who are concerned with peace building has dealt only with the objective factor: pitting the advocates of superior armament (aiming to minimize others’ capacity relative to our own) against advocates of mutual disarmament.

The superior armament approach, promoted as “peace through strength,” is on the basis that we can only assume the worst intent, as we cannot understand or control the subjective side, the motivations and feelings of others. The “realist” position has been that we therefore have to assume the worst intent and prepare for it, thereby deterring any attack against us. On the other hand, the advocates of “peace through cooperation” have focused on the need for mutual disarmament through negotiation and cooperative engagement. The argument is that even if we do not understand and cannot control subjective hostility, it is not a threat if we take away the means of destruction.

But there are fundamental problems with both approaches that arise from overlooking the subjective element. Creating superior armament and military power in one

country—through increasing its armament and/or destroying the military and supporting nonmilitary assets of others, as in Iraq—exacerbates fear, insecurity, and mistrust in those others who now feel threatened. This in turn motivates arms races; draining of scarce economic resources into military budgets; the spread of nuclear, chemical, and biological weapons; and terrorist activities or low intensity warfare, through which even military superpowers can in turn be threatened. Further, the lack of any role for weapons of mass destruction in responding to such situations [terrorism, low intensity warfare, etc.], and their consequent continued non-use, erodes whatever (subjective) general deterrent value they may have had. Through focusing only on objective issues, the balance of power in a region may be changed in the short term; but if the underlying subjective needs of the communities involved are not resolved, the fear and frustration which motivate conflict are only exacerbated in the longer term.

The problem with disarmament, on the other hand, is that people cannot agree on disarmament treaties when there is fear, distrust, and insecurity. If a treaty is made allowing even marginal reductions, there is no trust that the other side will abide by it. As a result, there can be little real progress toward disarmament when tensions are high. The modest gains of the recent START agreement and subsequent unilateral concessions were possible only following a drastic lessening of tension and hostility between the U.S. and Soviet Union. Disarmament naturally follows reduced hostility, rather than precipitating it: it is an outcome of, rather than an approach to, peace.

This overview suggests that the failure of the conventional “realist” or behaviorist paradigm in international relations to generate a viable solution to the problems of war and conflict is due to a failure to adequately address the subjective dynamics that motivate them. The failure is apparent in that we still have, as Dr. Orme-Johnson pointed out (please refer to Orme-Johnson’s second article in this issue), around 60 wars or low intensity conflicts worldwide, and given the instability and underdevelopment continuing in the Soviet Union and some of its former satellites, the prospect of more to come.

It is clear from our definition of threat that any approach to peace requires attention to both elements, the subjective as well as the objective. No approach can succeed—at least not on its own—that does not significantly reduce the high levels of tension, stress, and frustration that undermine social coherence and progress, and directly motivate and fuel violence and war. Stress not only motivates one to resort to violence, but also breeds mistrust, misperceptions, dysfunctional cognitive and decision-making processes, and rigid, short-term perspectives, which provide a fertile ground for random violence and misjudgments that can precipitate unintended wars.

Material Resources Versus Developmental Needs

How do stress and tension accumulate over time? Maharishi’s perspective—and we hear similar views from a growing number of social scientists—is that stress accumulates from blocking of the inherent human need to develop, to progress. It is the frustration of the natural impulse of life to move in the direction of growth—whether on the individual or collective level—that creates stress.

The realists’ idea has been that violence and war are inevitable, because they come from unavoidable conflicts of interest over scarce material (objective) resources. All

states or communities are trying to draw as much as they can of the finite resources of the planet, and what one gains is denied to others—i.e., there is an overall zero-sum outcome in any exchange. When interests conflict, then war or threat of war is one option for rational, utilitarian statesmen to employ in pursuing their advantage. The result is at best zero-sum—one party gets the resource, and the other loses it, or they agree to take a little bit each; or at worst, negative-sum—the resource is destroyed or damaged (as in the case of Kuwait's oil).

More recently, however, theorists are beginning to understand that there is a crucial difference between competitive interests in material resources, and innate human developmental needs. The former may be negotiated, bargained over, denied, given up, traded, or suppressed indefinitely. The latter (ontological needs such as those for identity, security and effective participation) cannot in the long term be denied, suppressed, or traded away any more than life itself. If the nature of life is to grow and develop, then to the extent that this process is blocked over time on the individual or collective level, stress and tension will accumulate, providing fertile ground for protracted conflict and violence.

If we attend to the subjective reality, the needs that are being frustrated, rather than to material resources, then we discover that there is always a strong possibility that positive-sum solutions can be found to conflict situations. Developmental needs are not tied to limited material resources so much as to subjective human and social resources, which are not in limited supply. Recognition of the identity of another group, for example, does not deplete our resources. If one nation, or one group, thus has its sense of identity—or its sense of security, or its ability to be able to freely participate in the larger social environment—enhanced, then these achievements tend to inspire and promote the same values in other groups or nations. This is precisely what is happening now in the countries of Eastern Europe and elsewhere, in what has become a global trend toward recognizing that greater freedom and cooperation are necessary elements for societal development. This is a positive-sum solution to conflict: all sides benefit fundamentally in the long term.

Track Two diplomacy, as discussed by Ambassador McDonald (please refer to McDonald's article in this issue), owes what successes it has had primarily to this emphasis on attending to subjective factors: forestalling the chronic accumulation of tension and frustration by focusing on developmental needs. Because Track One or official diplomacy tends to get bogged down in defending national interests and related policy commitments (bargaining or fighting over how to divide the material pie), it has too often been left to unofficial diplomacy to find mutually beneficial ways of enhancing human development—including economic, political and social development—which, by supporting the natural direction of life and thus reducing stress, help create a meaningful and stable peace.

The need, then, is to be able to attend to the second element, to be able to address the subjective side of the equation. Most fundamentally, the need is for a means of systematically promoting human development and alleviating accumulated stress on the collective level, thus providing a coherent and dynamic ground from which cooperative and creative solutions can be found to the constant flux of problems with which each individual and society is dealing.

This is the focus of the subjective approach of Maharishi's Vedic Science and Technology. A technology of consciousness has evolved within the Vedic tradition, precisely defined by Maharishi in scientific terms, which has been found to alleviate stress and directly enhance the development of more coherent, perceptive, and intelligent levels of human thinking and behavior. This in turn supports collective progress, minimizing the accumulation of frustration and hence the risk of resulting hostility. Through attending to this "deep structure" of the peace process (please refer to Markides's article in this issue), it is possible to support the effectiveness of all the diverse approaches to peace (Track One or Two) which work primarily with the objective "surface structure" of society. There is a freeing of human resources to work for development and the solution of everyday problems, thus creating a positive-sum, dynamic, and stable peace.

Empirical Evaluation in the Context of the Lebanon War

Our interest in evaluating the efficacy of the technologies of Maharishi's Vedic Science that address the subjective factor in world peace, and our concern at the high levels of tension and instability in the Middle East, led us to focus particularly on the potential of these technologies for alleviating violence in the Lebanon War. Since 1975 there has been almost constant civil war within Lebanon among several domestic communities that have been fractionated over religious, economic, and political issues that are only now (following the end of the Cold War) beginning to be resolved. Throughout the 1980s, as regional powers and superpowers were drawn into the conflict, and as issues shifted and became more complex, the war continued to resist the whole range of traditional approaches to resolution of conflict, both military and diplomatic. So this war provided us at that time with an extreme test of whether Maharishi's approach to peace through creating collective coherence can work in the real world.

Our first study on the Lebanon War (please refer to Orme-Johnson's second article in this issue) focused on the impact of a group practicing Maharishi's technologies of consciousness—the Transcendental Meditation and TM-Sidhi program—in Jerusalem, during the period of Israeli withdrawal from Lebanon in 1983. It was found that daily indices of quality of life in Israel, and of war intensity in Lebanon (including number of war deaths) tended to closely track the size of the "coherence-creating" group as it changed over the two-month period of the study, with increases in group size over threshold levels being followed immediately (on the same or the following day), as predicted, by positive change in both Israel and Lebanon.

The results of this study were compelling. The regularity and extent to which events in the Lebanon War responded to changes in group size in Jerusalem were highly significant, both in statistical and human terms (war deaths, for example, being reduced by 76% below expected levels) (Orme-Johnson, Alexander, Davies, Chandler, & Larimore, 1988). No other strategy for peace has been found to have such a profound, immediate, and predictable impact in reducing violence on this scale.

The study was important in demonstrating the value of addressing directly the subjective dimension that drives conflict. Equally important, however, is that for the first time in the social sciences, this study (and a series of similar studies showing an immediate

impact of coherence-creating groups on the behavior of populations spread over large areas) has provided strong evidence for the validity and relevance of the age-old concept of collective consciousness. This is the idea (prevalent throughout the history of Western as well as Eastern thought) that the members of a society are interconnected at a level of reality more fundamental than externally observable behavioral interactions, and that their thinking and behavior are directly influenced by the dynamics of that underlying field. Although this concept of collective consciousness has been out of favor among behaviorally-oriented social scientists due to lack of such evidence, in recent years physicists have pronounced that all bodies and particles are indeed interconnected, not just through their behavioral interactions, but more fundamentally as expressions of the quantum fields underlying them. These discoveries of quantum physics, and more particularly the recent insight that a unified quantum field underlies the whole range of objective and subjective existence, are entirely compatible with Maharishi's description of the field nature of consciousness (please refer to Hagelin's article in this issue).

Replication of Israel Study

Given the obvious and far-reaching implications of such findings, and the precision which appears to be possible in predicting the nature and extent of the impact of a coherence-creating group of any given size, we were concerned to more thoroughly test the reliability of this mechanism for creating peace. To what extent does it work under different conditions? We were also concerned that any selectivity in assessing the impact of the groups be avoided. For both reasons, we felt it was important to look at all seven occasions (all were in the period from 1983 to 1985) when there had been coherence-creating groups big enough and close enough geographically for their predicted influence to include Lebanon (based on the proposed formula whereby the impact of a group of size n will be felt by a population of about $100n^2$).

Second, we were interested in testing whether these groups can be effective in creating coherence and alleviating violence on any scale of collective consciousness and behavior. Maharishi has talked of collective consciousness as relevant at all levels of social organization, from the family level, through the community, national, regional, and world levels, and indicated that the square root of 1% formula should hold for groups of any size (at least for $n > 100$). We were therefore interested to see whether coherence-creating groups operating at each of these different scales, from community through world level, would be effective in creating coherence and reducing stress, as measured in levels of violence in Lebanon.

Another specific question which had been left untested in the Israel study was whether the postulated increase in collective coherence would be reflected not only in reduced violence, but also in enhanced cooperation among antagonistic parties in the cause of peace. This would also help to evaluate Maharishi's proposition that collective stress or tension (as reflected in violence) is in fact the inverse of collective coherence (as reflected in cooperation and support for peacemaking efforts): the beneficial impact of the groups should be measurable using both positive and negative indices of quality of life in Lebanon.

The seven assemblies with sufficiently large coherence-creating groups to affect Lebanon included:

1. the Jerusalem assembly in the summer of 1983 (evaluated in the study discussed above); and a smaller assembly in Natanya, in northern Israel, immediately following the Jerusalem assembly;
2. the “Taste of Utopia” assembly held at Maharishi International University in Fairfield, Iowa, U.S.A. in December 1983—the first attempt to create coherence on a global scale, with a group of over 7,000;
3. a group brought together by the Lebanese themselves—Christian, Muslim, and Druse—in Broumana, a village in the mountains outside Beirut, which at that time (March 1984) was right in the center of the fighting;
4. an international assembly in April 1984 in Yugoslavia;
5. a second assembly in Fairfield in July 1984;
6. an international assembly in the Netherlands in December 1984; and
7. an international assembly held in Washington, D.C., in July 1985.

To test the predicted impact of these assemblies, Box-Jenkins time series impact assessment analysis was employed, allowing us to control for all systematic influences on the war from other factors. All trends and periodicities in the fighting (e.g., weekly or seasonal cycles), and any impact of holidays or temperature change, were identified and controlled for.

The dates for each assembly (with the exception, for security reasons, of the group within Lebanon) were announced well in advance—typically dates were set about two months in advance, independently of events in Lebanon—and the specific changes predicted to flow from the assemblies were also publicly announced in advance to the media, and in several cases lodged with independent review boards of social scientists. These precautions were important firstly to guard against even the appearance of *ex post facto* selection of dependent variables; and secondly to preclude the possibility (or appearance) that assemblies could have been called in reaction to day-to-day changes in the Lebanon war, thus confusing the issue of whether the assemblies were a cause rather than a symptom of positive changes in the war. In addition, time series analysis was used to confirm that the assembly dates were in fact statistically independent from prior changes in the war. Thus, any systematic correlation between assemblies and changes in the war variables could only be attributable to the coherence-creating groups, rather than to war-related variables, as the causal agent.

The event data used to assess day-to-day changes in intensity of conflict and cooperation in Lebanon was generated by an independent Lebanese expert trained at the University of Maryland who was blind to the hypotheses of the study. He employed a set of 16-point conflict-cooperation scales developed by Karen Rasler (1981) specifically for the war in Lebanon, weighted scale values for all events on each day being summed to provide aggregate daily intensity scores. In addition, the total number of people killed, and number injured, in each day’s fighting was recorded, as reported in the same set of local and international news sources that were used for scaling. It was predicted that all four variables would improve significantly during each assembly.

The findings were unambiguous. During each of the assemblies, which varied in length from less than one week to up to two months, within the overall study period of 2 1/4 years, the mean level of conflict dropped from 43.5 per day (weighted total using the Rasler scales) during the control period to 22.6 during the assemblies—almost to 50% of the control period level—after adjusting for all trends, cycles, etc., in the war data ($p = 3 \times 10^{-9}$). A value of 43 would correspond, for example, to one full-scale military battle, and four separate armed clashes or shelling exchanges in one day; 22 would correspond to two armed clashes and a kidnapping. Figure 1 shows the actual means (before adjusting for trends, etc.) for each assembly and the control period.

Similarly, the mean number of war fatalities per day dropped from 12.1 during the control period to 3.5 during the assemblies, again after controlling for trends, cycles, etc.—a reduction to less than 30% of the control period level ($p = 1 \times 10^{-10}$; please refer to Figure 2 for actual means). This finding is particularly significant, as casualties, being more concentrated in fewer, more intense events (such as car-bombs, massacres, attempts to take positions by force) were only slightly correlated with overall conflict scores, and thus provide independent confirmation of the positive impact of the assemblies. A similar pattern was found for nonfatal injuries as for fatalities.

Level of cooperation among antagonistic groups, on the other hand, was higher during the assemblies than during the control period, up from an adjusted mean of 1.2 to 2.0, an increase of a full two-thirds ($p = 4 \times 10^{-7}$). The actual means during the assemblies were even higher (as shown in Figure 3), but even taking the more conservative adjusted means, this represents a shift from, for example, a single expression of good will on a given day, to an actual proposal for reform or for resolution of the conflict. However, given the unevenness in day-to-day levels of cooperation, it is also useful to look at what was actually happening during these periods, in a qualitative sense. What were the ongoing peace processes that were taking place, and what evidence was there that these were supported or enhanced by the coherence-creating groups?

Complementarity of Traditional and Novel Approaches to Peace

It was obvious from the data that throughout the 2 1/4 years observed there were almost constant efforts among at least some representatives of the parties to create peace. However, the brief periods when these ongoing efforts were able to bear fruit in terms of breakthrough agreements and sustained general support tended to occur predominantly during the seven assemblies. The higher level of cooperation achieved during any assembly, however, was typically able to be sustained only until (or shortly after) the group disbanded.

For example, the event summaries indicated that during the Taste of Utopia assembly the Lebanese government finally agreed to a security plan for all of Lebanon, and was able to obtain the support of all the main domestic parties to the conflict, as well as of the Syrian and Israeli governments. During the next assembly—the Lebanon assembly—Syria agreed to a gradual withdrawal of its forces from Lebanon. Also, the opposition leaders attended a reconciliation conference with the government and agreed to a comprehensive cease-fire, and to drop their long-held demand for the president to

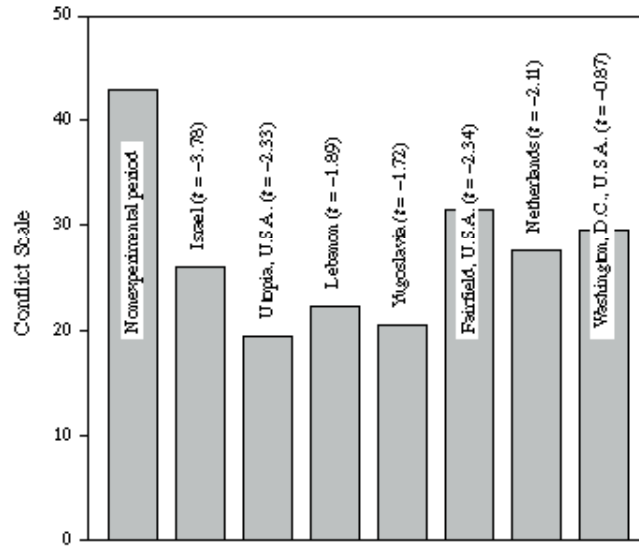


Figure 1. Mean daily level of conflict in the Lebanon War during the nonexperimental and each of seven experimental periods, June 1983 to August 1985. Time series impact assessment analysis indicates significant alleviation of conflict during six of the experimental periods and during all seven combined ($p = 3 \times 10^{-9}$).

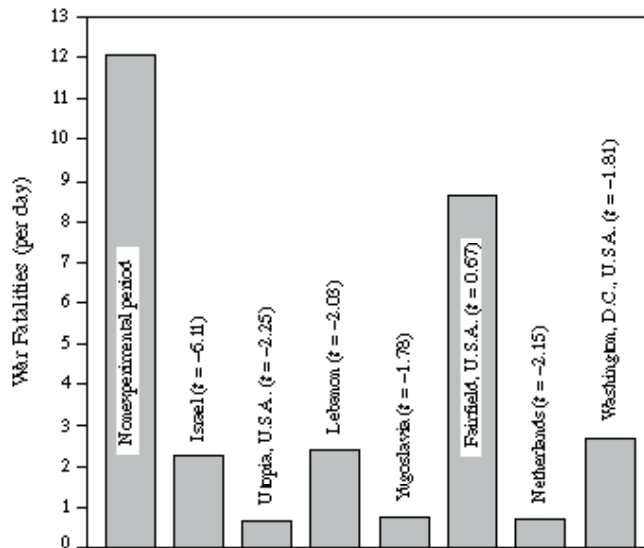


Figure 2. Mean daily number of fatalities in the Lebanon War during the nonexperimental and each of the seven experimental periods, June 1983 to August 1985. Time series impact assessment analysis indicates significant reductions during six of the experimental periods and during all seven combined ($p = 1 \times 10^{-10}$).

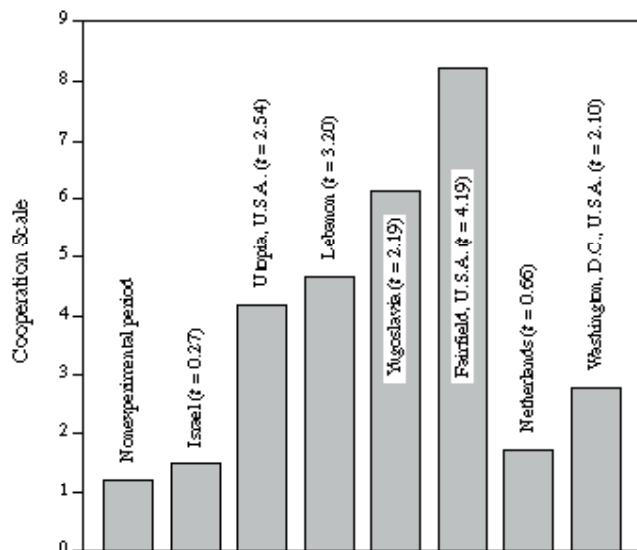


Figure 3. Mean daily level of cooperation among antagonists in the Lebanon War during the nonexperimental and each of the experimental periods, June 1983 to August 1985. Time series impact assessment analysis indicates significant improvement during five of the experimental periods and during all seven combined ($p = 4 \times 10^{-7}$).

resign. During the Yugoslavian assembly a productive summit meeting was held with Syria, following which all the major parties in Lebanon agreed to form a national unity government. They agreed on its structure and related reforms, and allowed some deployment of Lebanese army disengagement forces. The new government was formed, but it was not until the second Fairfield assembly that substantial progress was finally made in actually implementing the security plan for Beirut.

The finding that ongoing peace efforts seemed to bear fruit during the assemblies strongly indicates the complementarity of the different approaches to peace: traditional negotiations are more effective when collective stress is concurrently being alleviated. The same conclusion flows from the observation that the momentum from each breakthrough typically could not be sustained once the assembly ended. For example, after the Taste of Utopia assembly, parties began to place substantial preconditions on their acceptance of the security plan; a few days after the Lebanon assembly, the national reconciliation conference collapsed without a resolution to the conflict; and after the second Fairfield assembly, no further progress was made in the disengagement of forces in Beirut.

A composite quality-of-life or “peace/war” index was also constructed from the combination of these three largely independent indices. As illustrated in Figure 4, every assembly had a highly significant positive impact on the war, without exception ($p < .01$ for each assembly; $p = 9 \times 10^{-20}$ for all seven combined). This means that the probability

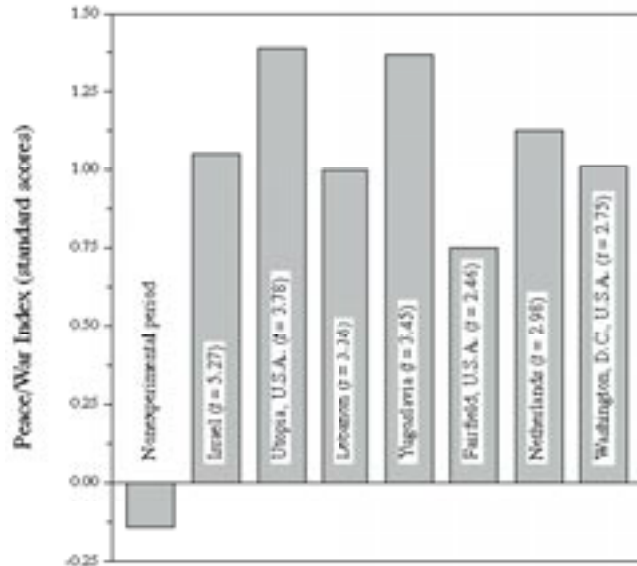


Figure 4. Estimated daily level on a Peace/War Index for the Lebanon War for each of seven experimental periods between June 1983 and August 1985. Time series impact assessment analysis indicates significant improvement during each experimental period and for all seven combined ($p < 9 \times 10^{-20}$).

that these results could have occurred by chance is something less than 1 in 10 million trillion—far beyond the 1 in 100 usually accepted as conclusive in the social sciences.*

Concluding Remarks

These results indicate that the assemblies were consistently effective in reducing collective stress and violence, and also in improving collective coherence and peace building, across a wide range of conditions and for populations influenced on a local, regional, or even global scale. Given the absence of any plausible behavioral mechanism to account for the observed immediate impact of the groups across thousands of miles, the findings also confirm the reality and relevance of the age-old concept of collective consciousness, of society held together by, and rooted in, a more fundamental but abstract field of natural law such as described both in Maharishi's Vedic Science and in quantum physics. And so, if we feel subjectively during Transcendental Meditation that our awareness is expanding beyond the boundaries of our body and feel

*For a more detailed presentation and analysis of these findings, readers are referred to the full report of this study as presented to the annual conference of the American Political Science Association in 1989, or as currently being revised for publication, available on request from myself or from Charles Alexander at Maharishi International University, who has co-authored the paper.

a connectedness with the larger universe, we should not dismiss the experience as mere subjectivity. The evidence indicates that it is a reality that nourishes and supports the coherence not only of the individual organism, but also of the larger social environment, sustaining its collective integrity, security, and ability to progress.

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