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Emotional Climate, Human Security, and Cultures of Peace

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The objective of this issue is to review the work that has been published on emotional climate and the issues it raises, to present new work that addresses these issues, and to begin the work of relating emotional climate to research on human security and cultures of peace. The issue has three sections. The first focuses on articles that discuss the measurement of emotional climate, how it may be related to a society's peacefulness, and the psychosocial processes involved in its generation. The second involves work on human security and ways it may be restored after societal trauma. The third presents articles that relate emotional climate to cultures of peace.

This introduction begins with a discussion of the concept of emotional climate, a review of what we have learned from past studies, the challenges posed by this research, and how some of these challenges are addressed by the authors in this issue. This review is followed by a short description of the concept of human security and how it may be linked to emotional climate. Then, we introduce the concept of a culture of peace and the articles that begin to relate its assessment to measurements of emotional climate. A final section briefly discusses the relationship between emotional climate, peaceful cultures, and peace psychology.

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Emotional Climate

Unlike emotional atmospheres, which depend on group members focusing on a particular event, emotional climates involve the relationships between group members. They involve feelings such as the collective fear used by a dictatorship to ensure order (or, conversely, the tranquility with which one may speak), the trust essential to the formation of social capital, the security provided by an adequate attention to human rights, or the anger or despair aroused by pervasive corruption. Although such climates are socially constructed and perceived by individuals, they are objective in the sense that they are perceived as existing apart from an individual's personal feelings. They reflect how individuals think the majority of others are feeling in the group's current situation (de Rivera, 1992a).

We know relatively little about emotional climates. How should they be conceptualized, and can they be reliably measured? Are they simply transitory affective perceptions or might they be important aspects of human security and motivators for cultures of peace? Are they so dependent on socioeconomic factors that they have little predictive power, or may they exert crucial influences on the development of security and cultures of peace? Although intriguing, the concept of emotional climate raises immediate questions: What exactly is the "emotional" aspect of climate and what is its locus? How is an emotional climate established? How might it best be measured, and might it have predictive power? If it can be measured and is important, for whom should we be measuring it? We consider each of these issues in turn.

What is Emotional About Emotional Climate?

It seems clear that collective social climates exist. The idea that objective aspects of the social environment affect behavior is a staple of sociological social psychology. In their classic experimental demonstration of different social climates, Lewin, Lippitt, and White (1939) used democratic, authoritarian, and laissez-faire styles to lead boys' clubs and create different types of group climates. They demonstrated that the climate created by authoritarian leadership led most groups to be apathetic. However, in two instances, the groups showed aggressive scapegoating, and the investigators clearly hoped that the results might be generalized to aid our understanding of behavior within nation states, such as the scapegoating that had occurred in Nazi Germany.

In a related vein, Chein (1954) referred to the attitudinal climates normative in different neighborhoods in New York City. He was interested in why 83% of the youth addicted to heroin lived in only 15% of the city's neighborhoods (represented by over 1,400 census tracts). His statistical investigation leads him to argue convincingly that those neighborhoods with high delinquency lack conventional norms and the ability to have such norms respected. In such neighborhoods, he

235

notes there is a social or attitudinal climate of hopelessness and cynicism (see de Rivera, 1986).

In a completely different arena, Tagiuri (1968) and subsequent researchers have shown that some organizational climates are more conducive to productivity. Rather than attempt to predict behavior from motivation, they have used the idea of climate to predict behavior on the basis of the perception of what sorts of behavior would be rewarded or punished. Although some investigators have treated climate as though it were simply an aggregate of individuals' perceptions, others have shown that the group properties involved emerge from social interactions within the group (Schneider & Reichers, 1983), and group level scores of variables such as cohesiveness correlate more highly with personal satisfaction than do individual level scores (Florin, Giamartino, Kenny, & Wandersman, 1990).

Although such social climates imply emotions, investigators have not focused their attention on these emotions or treated climates as organized around emotions. Yet it would seem that some social climates might be organized around emotions or conceived as involving particular emotional processes. Of course, some might argue that there is little point in emphasizing emotional processes when it has become increasingly clear that our emotional concepts are culturally constructed. Different cultures cultivate different emotional relationships, and Rothbaum, Weisz, Pott, Miyake, and Morelli (2000) have shown that something as basic as the security engendered by stable emotional attachments is expressed quite differently in Japan than it is in the United States. Why prioritize emotion if it is not a natural touchstone? There are two responses to this question.

First, even though the concept of emotion is culturally constructed, different cultures have different ways of conceptualizing the relation between thinking and feeling, and cognition and affect may be viewed as aspects of one whole, it seems clear that feeling may be distinguished from thinking and that concepts such as attitude and opinion prioritize rational as opposed to more experiential processing.

Second, it may be noted that Rothbaum et al. (2000) presume the existence of security as a sort of Rosetta Stone that enables us to go between different cultures. Likewise, although anger is managed very differently in different societies and may even be completely avoided in some (Heelas, 1989), the possibility of anger seems inherent in human being. We do not want to argue that there are basic emotions that are expressed the same way in all people, but rather that there are emotional processes (such as angry insistence, fearful constriction, and loving concern) and emotional relationships (such as understanding, acceptance, and rejection) that are fundamental to the fact that human being exists in relationships between people (see Macmurray, 1961). Such processes may be used to describe dimensions of the emotional climate that exist in different societies and are important for the development of a culture of peace.

Emotional climate refers to the predominant collective emotions generated through the social interaction of a group's members in a particular milieu. However,

"collective emotions" may be construed and measured in at least four different ways:

- 1. We may speak of the perception of how people in a group or society seem to relate to one another. Do people seem afraid or trusting, apathetic, angry, or enthusiastic in their relationships? This construction stresses the fact that climates are *perceived* and are about emotional relationships, and it is implicit whenever emotional climate questionnaires inquire about how most people feel. Such questionnaires are used in many articles in this issue.
- 2. We may consider people in the society to be primed to feel particular emotions so that their "choice" as to how to interpret a situation is biased toward fear, trust, anger, compassion, and so on. This construction presumes that there is a predominance of certain emotions that people are, in fact, experiencing (or would experience if they imagined acting in a particular way). It leads us to inquire about the probability of people *actually feeling* specific emotions, such as fear, or to ask about the degree to which people avoid or seek situations that might lead to a particular emotion, such as expressing a political opinion. This view of climate is implicit whenever climate is estimated by adding reports of how often the individuals within a collective experience given emotions. It is reflected in the article by Beristain, Cabrera, and Lykes and the articles that estimate climate from national surveys of emotional experience.
- 3. We may consider a climate to be composed of social norms about how people feel or ought to feel. Such a construction stresses conventions about how people should feel or *speak about* emotions rather than the perception or presence of felt emotions. This position is presented in the article in this issue by Fernandez-Dols, Carrera, Hurtado de Mendoza, and Oceja.
- 4. We may view an emotional climate as an emotional field that both affects and is affected by relationships among the members of a society at a given point in their history. This construction assumes the existence of collective affective fields. Since this perspective may be both the most inclusive and elusive, we concentrate on its elaboration.

Viewed as an emotional field, an emotional climate is similar to the "affective fields" described by Valsiner (2001) that affect different people in different ways. For example, the affective field around Christmas that we term Christmas spirit is centered on feelings of giving, love, and joy, and is constructed and semiotically signed with bright red and green decorations, lights, carols, holly, crèches, and the figure of Santa Claus. Individuals react with quite different emotions, some with feelings of excitement and joy, others with nervous anxiety, and still others with depression. Yet all are reacting to a common affective field that everyone knows calls for hopeful anticipation, joy, and the openness this engenders (Leavitt, 1996). Such an affective field establishes the sort of feeling rules described by Hochschild

(1979). Just as one *should* feel sadness at a funeral and airline hostesses should feel welcoming, one should feel a happy excitement at Christmas. However, we want to stress that these norms are not arbitrary and are often reinforced by a common narrative, social discourse about this narrative, and physical settings. At funerals there is a narrative of loss (Sarbin, 2001) and there is discourse about the loss. Some people are sad, and people who are sad do not feel like jumping around and do not like other people to jump around. Further, the physical settings at funerals are more conducive to sadness. Conversely, Christmas offers bright colored lights and affords happy giving. One perceives that giving is rewarded, and people who are not in the mood are a drag. Communities may create behavior settings with music that encourages martial patriotism or relaxed festivity so that people of all ages are encouraged to share concordant feelings.

Such fields of feeling may be based on socioeconomic-political events and may lead to the establishment of emotional climates. Thus, when Pinochet murdered a thousand people and seized power in Chile in 1973, a powerful affective field was created. Páez, Asún, and González (1994) have shown that some people were delighted by the success of the coup and others quite relieved. Yet there was also an overall climate of fear. People were perceived to be afraid because everyone knew that it would be dangerous to say certain things in public, an unexpected knock on the door was more likely to lead to fear than pleasant anticipation, and social norms called for caution rather than trust. Even people with politically correct attitudes knew they should be cautious because the police sometimes made mistakes. This caution affected emotional relationships. People could not speak about relatives who had disappeared or publicly state their political opinions. The fear that was felt when one thought of criticism, and the sense that this fear would be provoked in others, created a social isolation. This prevented people from knowing how others thought and, of course, prevented the organization of a political opposition. This climate of fear had a momentum that lasted until 1988. Although the most important aspect of emotional climates may well have to do with their properties as collective fields of feeling, we are not aware of any work that has begun to measure these properties.

Where is the Locus of the Climate of Emotions?

An emotional climate is based on a collective, so people must interact with one another, either directly or by hearing about events that have happened to others or rumors about what is happening. Although one may question individuals about their perceptions of a climate, or observe the impact of a climate upon individuals, the investigation must always include a collective level of analysis. In the case of a neighborhood, village, or organization, the collective level of analysis may seem obvious. However, even in these cases the collectivity may be complex and one might argue that those with power or status experience a different climate than

josi 506

238 Rivera and Páez

those without. In this issue, Ruíz shows that this is certainly the case in prisons where the emotional climate experienced by guards is quite different than that of prisoners. However, one may also argue that there is also a common climate. At least Ruíz also shows that there are significant differences between prisons. Thus, even when there are significant class differences, one may argue that there is a common global climate that is perceived differently by different classes of people. Some support for this view is provided in this issue by the study by de Rivera, Kurrien, and Olsen. They show that when respondents are asked how "people" feel, their answers are much less affected by social class than when they are asked about how they personally feel.

A collective climate may be analyzed from the perspective of different groups, but we may also speak of the climate at different levels of a collective. Suppose that we want to deal with an entire society or with a nation state, the most common way in which a society is organized in contemporary times. May we really speak of a national climate in spite of the fact that the climate or subclimate within some regions or peoples may be significantly different than others within the same nation? We argue that we can. That is, to the extent to which we may speak of a society with a common government, we may speak of an overall climate that will exist in spite of regional differences. Some support for this position is provided by a study of the national emotional climate as perceived in seven very different regions in Spain. There are few significant differences between region means from all regions. There is one exception that almost seems to prove the rule. In the nationalist Basque region, where there is a separatist terrorist movement, there is significantly less ease about speaking in public (Conejero, de Rivera, Páez, & Jiménez, 2004).

How Are Emotional Climates Established?

Emotional climates are clearly influenced by objective facts, institutional arrangements, and political policies that create shared experiences. The data presented by Páez et al. (1997) suggest that positive aspects of emotional climate are positively related to a nation's social development. In this issue, Ruiz shows how crowding negatively impacts emotional climate within prisons, and Beristain, Cabrera, and Lykes show how massacres created a negative climate in a Mayan community and how a policy of impunity impeded efforts to restore a climate of trust.

Emotional climates are also influenced by how ordinary people behave. The continuity of this behavior appears to maintain the climate so that it persists beyond the objective conditions that were originally involved, affecting its predictive power. Since it is influenced by ordinary behavior, emotional climate is not only related to macrosocial processes but also to psychosocial or microprocesses. In this issue, Rimé argues that they are, at least in part, generated by people's need to talk with others about their emotional experiences and how this social sharing reinforces emotions and helps to construct convergence and similarity in perceived emotions.

Although sharing usually involves speech, it may also involve silence. Thus, talking about threats and menaces reinforces a climate of fear, but such a climate often inhibits what is said. By contrast, a climate of security or trust seems related to people feeling free to speak to one another, to publicly discuss issues, and to cooperate (de Rivera, 1992a). Of course, communications in the mass media are also important influences. Exposure to mass media information about collective violence reinforces affect and helps to generate an emotional climate, as studies on the terrorist attacks of September 11 and March 11 show (Schuster et al., 2001; Silver, Holman, McIntosh, Poulin, & Gil-Rivas, 2002).

Emotional climate is also influenced by collective behavior and ways of coping such as demonstrations, ceremonials, and trials. In this issue, Páez, Basabe, Gonzalez, and Ubillos use a longitudinal study of reactions to the March 11 terrorist attacks in Madrid to show that participation in collective rituals influence how a nation's emotional climate is perceived. They argue, as do Beristain, Cabrera, and Lykes, that participation in societal rituals may be costly for the individual because of the reactivation of negative affects yet beneficial for the community. The benefit occurs because participation is associated with the finding of meaning and with positive reappraisals of the reactions to trauma. Participation reinforces social integration and increases the perception of the hope and solidarity involved in a positive emotional climate. In a similar vein, in this issue Kanyangara, Rime, Philippot, and Yzerbyt show that participation in the popular trials subsequent to the Rwanda genocide reinforces negative personal emotions, yet lessens negative intergroup stereotypes between victims and perpetrators. All three studies in this issue show that active coping with injustice is associated with the reactivation of negative emotions. This is true even as social support and positive beliefs are reinforced. It is the collective rather than personal benefits of participation in truth commissions, the symbolic punishment of perpetrators, and the acknowledgment of moral dignity of victims that lead such events to be useful social tools in combating negative emotional climates and constructing cultures of peace.

Later we shall see that aspects of a culture of peace and emotional climate are related to cultural values and emotional norms. However, it should be noted that although emotional climate may be influenced by emotional culture, there are important differences between climate and culture. People from individualistic and relatively egalitarian cultures, such as the United States, report emotional reactions to be more desirable, report a higher level of expressive emotional behavior and greater subjective feelings, and in general display an undercontrolled emotional style. This is associated with both feelings of happiness and higher levels of negative emotion (Basabe et al., 2002; Diener, Diener, & Diener, 1995). People from

josi 506

240 Rivera and Páez

China, a more collectivist and hierarchical culture, report a lower desirability of emotional reaction, lower expressive and subjective reactions, and lower levels of affect in general, revealing an overcontrolled emotional style. Nevertheless, student mobilizations in both countries were associated with a similar emotional climate. In both nations mobilization involved a climate of hope, confidence in the future, and an angry orientation toward collective goals. Thus, a climate of hope and angry mobilization could be used to analyze the social movement dynamics in both countries, in spite of the fact that the students in one country shared an overcontrolled Confucian culture and the other an individualistic expressive emotional culture.

What is the Best Way to Measure Emotional Climate?

Although the idea of a field of feeling presumes that people feel particular emotions, it is possible that they simply think that people feel a certain way or that they *should* feel a certain way. The relationships between feeling, cognition, and behavior are quite complex and not yet understood. One may avoid an action, such as going in a certain neighborhood at night because one is told, or thinks, or believes that it would be dangerous, yet one may not feel at all afraid unless he or she ventures into the neighborhood. In a related vein, when people live in dangerous conditions they usually take precautions that enable them to feel more secure. Further, they may adapt and not report feeling afraid in spite of the fact that an outsider might infer a fearful motivation from the security precautions or from the way people hold their bodies. Conversely, the people of a neighborhood may report feeling much more afraid than seems warranted by the conditions in which they live.

One may infer an emotional climate from behavior. Thus, before the fall of the Berlin Wall, Oettinger and Seligman (1990) compared expressive behavior in East and West Berlin by observing the behavior of men in 31 different *Kneipen* (eating drinking-meeting places). They found that incidences of smiling, laughter, open postures, and hand gestures were significantly greater in West Berlin. In a period of relative social threat or insecurity, where there is an increase in crime, civil disorder, and war deaths, Sales (1973) showed that people register an increased number of attack dogs relative to lap dogs, a finding replicated by Doty, Peterson, and Winter (1994). However, it is difficult to find behaviors that have the same emotional significance across cultures, and most investigators have simply used questionnaires. Thus far questionnaires have been constructed in a number of different ways.

The first studies used Cantril self-anchoring scales, questions about the type of actions that people felt would be rewarded in their society, and the extent to which people trusted the government and other people to care about others and not only themselves. Fernandez-Dols, de Rivera, and Sell (1991) used this instrument to examine the climate in different regions in Spain and de Rivera (1992b) compared the climate in Guatemala and the United States.

Subsequent work by de Rivera used a 24-item scale that attempted to measure each of eight different basic social feelings (security, insecurity, confidence, depression, anger, love, fear, and trust) with three different questions. It was possible to establish that students in the United States felt more secure than students in Spain and Colombia, and that the latter felt significantly more secure than those in Honduras and Nicaragua. Further, data showed that students in Honduras and Nicaragua had less confidence in their opportunities and government than those in Colombia and Peru. Although angry disorder was greatest in Honduras, Colombia, and Nicaragua, there was significantly less fear of speech in Nicaragua. In spite of this success, it was troubling to see that scale reliabilities often dropped when the interitem correlations were examined within different nations. This did not appear to be due to items having different semantic meanings but rather to the fact that they had different social significances because of the society's organization or culture. Thus, fear of speaking in Honduras appeared related to governmental oppression while in Columbia it was more related to fear of groups that were not adequately controlled by the government.

Meanwhile, Páez developed a much simpler scale that assessed emotional climate by using a 4-point Likert scale that asked respondents the degree to which they believed most people felt one of a number of emotions. Usually Páez and his students and colleagues asked about the degree to which respondents believed people felt hope, solidarity, confidence in institutions, tranquility to speak, joy, fear, sadness, and anger. At times they also inquired as to beliefs about how people felt about the economic situation or about the general emotional climate. Crosscultural research revealed two stable factors: one that included all the positive items and one that included the anger, fear, anxiety, and sadness perceived in the social climate. Although it probably lacks the power to reveal as many differences as the 24-item scale, it has the advantage of taking only a moment to administer.

An alternative to using either behavioral observation or questionnaires is suggested by the article in this issue written by Fernandez-Dols, Carrera, Hurtado de Mendoza, and Oceja. They demonstrate that it is possible to simply ask people to list emotion exemplars and to then use the order and frequency with which different emotions are given as an indicator of the prevailing emotional climate (at least insofar as climate is construed to reflect conventional norms).

Does Climate Have Predictive Power?

Although we may be able to measure emotional climate, such measures may simply reflect the public's perception of events. We need to know if measures of emotional climate can predict how people will behave. There are some indications that measures of climate may have predictive power. One study of the climate

in different neighborhoods of a medium-sized city shows that voting behavior is predicted by how persons perceive their emotional climate. Although voting behavior is clearly influenced by factors such as age, income, and education, the perception of climate accounts for significantly more variance in the propensity to vote even when the usual variables are taken into account (de Rivera, 2005). In this issue, the article by Conejero and Etxebarria demonstrates that the way people behaved after the terrorist attack on Madrid was associated with their perception of the country's emotional climate. Of course, the behavior of individuals was best predicted by their personal emotional response to the attack. However, even when these personal emotions are taken into account, the prediction of both avoidant and altruistic behavior was improved by adding the individual's perceptions of the countries emotional climate. Although emotional climate seems to add predictive power to accounting for individual behavior, it would seem that emotional climate should be most helpful in predicting collective behavior such as demonstrations, riots, elections, and the success or failure of intergroup collaborations. Unfortunately, we lack the systematic data needed to see if this is true.

Taking into account the type of emotion that is dominant in a climate may be important for the predictive power of emotional climate. If we think of emotional climate as the predominance of certain repeated emotions in a group or society, we may associate the predominant emotion with shared perceptions and beliefs that may permeate social interactions and influence collective action. Recently, various authors have argued that the emotions felt because of group membership are as intense as the emotions related to personal experience and that these collective emotions show a relation with appraisals and action tendencies that are similar to individual emotions. These emotions, felt because of group membership, affect intergroup relations (MacKie & Smith, 2003). At times, such emotions only constitute a transitory emotional atmosphere, but they may also be part of an emotional climate that affects societal functions. Our own focus is not on the individual's feelings of anger, guilt, or hope that are related to a collective self but to the dominant emotions in a society's emotional climate, at least as these are perceived in others. Because we view emotions as having interpersonal and social functions, we can analyze the effects that such dominant emotion may have on collective behavior.

Particular emotions may be analyzed in terms of how they affect perception and behavior. Frijda (1986) has asserted that emotions involve specific appraisals and action tendencies, and de Rivera (1977) has argued that particular emotions involve specific perceptions of the environment, together with bodily transformations and "instructions" about related behavioral goals. Thus, anger may be understood as a perception that there is a challenge to what ought to exist, an enhancement of the body's power, and an instruction to remove the challenge or as a negative appraisal of the other, a positive appraisal of one's strength, and a tendency to attack.

On a group level, data show that anger reinforces and justifies aggression and retaliation, reinforces group values, and improves collective self-confidence so that there is energy to overcome obstacles and attain objectives (Tran, 2004). Páez, Gonzalez, and Asun (1994), using expert judgement on dominant emotions in Chile and objective indicators of collective behavior (civilians deaths, number of riots, army and police killed for political motives), found that the anger perceived in right-wing groups was related to repression against civilians and that high anger with low fear and sadness in left-wing groups was related to strong collectivist violence.

By contrast, an emotional climate in which fear is predominant is associated with the perception of an environment of threat, low control, and uncertainty. Feelings of fear have been associated with defensive and protective ingroup behavior, higher ethnocentrism, and lower political tolerance (Feldman & Stenner, 1997; Skitka et al., 2004). In this issue, Conejero and Etxebarria show how both personal fear and negative emotional climate are specifically related to protective behavior and to avoiding members from suspected groups.

Sadness and grief, with their perceptions of loss and instruction to withdraw and avoid action, are important emotional reactions to collective violence, such as the murders that occurred during the Pinochet repression and the systematic political violence in Guatemala (Beristain, Cabrera, & Lykes, this issue). Also, in this issue, the article by Fernandez-Dols and Carrera shows that in periods and regions that are characterized by higher levels of actual or potential collective violence, nonprototypical emotion words that are related to sadness appear to be primed so they increase in frequency.

Collective violence may also involve positive emotions such as hope and pride (Steinert, 2003). After September 11, resilient subjects reported feeling positive emotions that were associated with the finding of positive meaning and growth as a response to the trauma (Tugade & Fredrickson, 2004). An emotional climate of hope should support a future orientation and sustain group activity. In support of this conjecture, Tran (2004) reports an association between a climate of hope in work teams and the generation of decision-making alternatives. In this issue, Conejero and Etxebarria show how a climate of hope was associated with altruistic behavior after the terrorist attacks in Spain, and Paez, Basabe, Ubillos, and Gonzalez show how perception of a positive emotional climate predicted later posttraumatic growth.

For Whom Are We Measuring?

Potentially, both governments and multinational companies have an interest in the emotional climates and culture of peace in different countries, and some have a genuine concern for the well-being of people living in these countries. However, those in power are sometimes committed to policies involving their

own power, interests, and profits and cannot always be trusted to prioritize the interests of the people in their countries. There are many NGO's, such as OXFAM, Doctors Without Borders, International Peace Brigades, and the Red Cross, that are primarily interested in the welfare of the people they serve and are widely respected. However, they must focus on their special projects and tend to be better known in some geographical areas than others. The most neutral party would appear to be the international academic community, and Singer (1980) has argued that policy research is best directed to "counterelites" who have the competency and freedom to consider major system changes and may become future leaders. For the academic community to be most helpful it may want to work with peace studies programs, and organizations such as SPPSI, UNESCO, the UN University, and the University for Peace.

All of the authors in this issue aspire to conduct research that will benefit the people of the countries that are involved, but it is not easy to conduct research that both addresses local problems and is also of academic interest. We hope that the measurement of emotional climates, human security, and cultures of peace will provide an objective way for those living in different countries to realize the conditions in which they are living, what might be improved, and how they might best solicit help and help others.

Human Security

From the perspective of describing a society's emotional climate, we may speak of a dimension of security-insecurity, and this aspect of climate is an important aspect of the broad concept of human security. Human security, in contrast to national security, is a concept concerned with the security of all people, rather than only those within a given nation state. Further, it enlarges the scope of security to include all the issues that affect personal security and not simply the danger of enemy attack. However, the objective measures of human security that have been proposed ignore important subjective aspects of security. In this issue, the article by Mahoney and Pinedo suggests that we need to distinguish an immediate sense of personal security from a more abstract, future-oriented sense of security. Both of these types of human security appear to depend on the community in which a person lives as well as on the nation itself. Those who are relatively wealthy live in communities that furnish more subjective security than those who live in poorer communities. However, even those living in the wealthier communities of poorer nations experience far less security than those living in wealthy nations.

We would like to focus on national emotional climates as features of society that are relatively independent of personal circumstances. We may then inquire as to the relationship between the human security of individuals, the emotional climate of nations, and a culture of peace. Human security is dependent on personal status and the community in which a person lives within a society as well as on a society's emotional climate. The data presented by Mahoney and Pinedo suggest that the presence of personal security is related to networks of personal support and the relative absence of negative emotional climate, while future-oriented security is more related to perceptions of a positive emotional climate. We may postulate that nations with healthy emotional climates have uniformly high levels of human security because there are less differences between the communities in which people live. This, in turn, is related to the extent to which there is a culture of peace.

When a society suffers repeated collective violence, it incurs group polarization and a negative emotional climate that threaten personal feelings of security. In this issue, the studies reported by Beristain, Cabrera, and Lykes show how political and social violence shatter basic assumptions about the benevolence of the social world and the prevalence of justice, meaning, and control, thus creating an emotional climate of fear and sadness and threatening a basic need for security (Janoff-Bulman, 1992). To the extent political conditions support impunity, it is difficult to improve this climate. However, their work shows how outside assistance may help survivors create narratives that begin to restore some sense of security.

The difficulties in restoring security in societies that have suffered genocide are illustrated by the article by Kanyangara, Rime, Philippot, and Yzerbyt. They investigate the effects of the Rwandan "gacaca" trials, which attempt to reunite the society by providing an opportunity for the public confession of the murders that occurred (along with a minimal amount of restitution and punitive justice). On one hand, they demonstrate that the trials succeed in decreasing intergroup prejudice. On the other hand, the trials do not appear to have succeeded in restoring a positive emotional climate, and one suspects that there is a low degree of human security in Rwanda, as in many economically poor nations.

Although human security is a far more humanistic concept than national security, those working with the concept still tend to confine their focus to what *states* may do to foster security. This focus is broadened when we consider the idea of creating cultures of peace. Such cultures can only be created by the involvement of people as well as elites and involve both the emotional climate of the society and the personal security people experience within the communities in which they live.

Cultures of Peace

We are so familiar with violence that the idea of a peaceful culture may seem unrealistic. However, there are good reasons to believe in its possibility. First, there are extant cultures that are peaceful in the sense that there are no murders, rapes, or warfare (Bonta, 1993). Second, within most societies we find peaceful as well as aggressive subcultures (Boulding, 2000). Third, we may isolate the aspects of society required by warfare with those associated with peace (UNESCO, 1995) and

work toward establishing the base required for the latter. In this direction, the UN General Assembly has passed a resolution encouraging states, nongovernmental organizations, and individuals to promote eight different bases for a culture of peace (UN resolution A/53/243).

Research using objective indicators to assess the bases specified by the UN resolution in over 70 different nations suggests that there are four different dimensions to a culture of peace in contemporary nation states (de Rivera, 2004a). These orthogonal factors might be labeled:

Democratic development (involving indicators for the extent of democracy, press freedom, human rights, literacy, life expectancy, GDP, and gender equality);

Equality (as indicated by a Gini index for income distribution, homicide rates, and to some extent by human rights);

State use of nonviolent means (the inverse of the number of military threats and the amount of military spending—highly related to the percent of citizens imprisoned);

Nurturance (as indicated by the amount spent on education, the acceptance of refugees, and to some extent by the percentage of women in parliament).

It is important to note that these factors are completely independent. Thus, the degree of democratic development, the extent to which equality exists, the use of military threats, and the amount of nurturance are not related to one another. However, some nations may be said to have relatively peaceful cultures in that they score above average on all four dimensions, while others are well below average on a number of dimensions. We may postulate that countries with more peaceful cultures have better emotional climates. In this issue, the study by de Rivera, Kurrien, and Olsen presents data that show Norway, with a peaceful culture, has a significantly better emotional climate than the United States (which scores as peaceful on the first cultural dimension, but is only average on equality and nurturance, and poor on the use of nonviolent means). In like manner, the United States has a better emotional climate than India (which is below average on three of the four dimensions).

How might we further investigate the relationship between cultures of peace and emotional climate? Basabe and Valencia relate the four culture of peace factors (based on objective measures) to the cultural values reported by the people of different nations, as well as to data on experienced emotions. They demonstrate that each of the different factors of a culture of peace is related to different sets of values and emotions. For example, they show that national scores on both liberal development and nurturance are positively related with individualism and a low acceptance of unequal power distribution (as measured by Hofstede's 1991 IBM survey data). However, liberal development is related to lower scores on negative emotionality whereas the nurturance factor is positively related to higher scores on positive emotionality. A nation's climate of trust is positively related to its scores on liberal democracy and negatively related to the extent of its violent inequality,

but not significantly related to either nurturance or state use of violence. This last factor, as well as violent inequality, is most highly related to low scores for Schwartz's harmony values. These findings from modern nations appear related to evidence from far less complex cultures. For example, Ross's (1993) study of preindustrial societies shows that peaceful cultures evidence a greater valuing of children and have more nurturing child rearing practices.

In their article in this issue, Diener and Tov explore the relationship between national data on the four culture of peace factors, and individual data on subjective well-being and peaceful attitudes gathered from the World Values Survey. They use hierarchal data analysis to relate national scores on the different factors and GDP, and individual scores on subjective well-being to attitudes relevant to a culture of peace. They show, for example, that both national scores on liberal development and individual scores in subjective well-being are negatively related to racial intolerance, and that the negative relationship between individual wellbeing and intolerance increases as a nations' liberal development scores increases. People living in nations high on liberal development report more subjective wellbeing and, although there is no direct relationship between liberal development and the endorsement of democracy, there is a small but significant relationship between subjective well-being and the endorsement of democracy. This relationship increases with liberal development. Although some of the data are ambiguous (subjective well-being is negatively correlated with willingness to fight for country at a national level but positively correlated at an individual level), Diener and Tov make a convincing argument that personal happiness may be an important aspect of a culture of peace.

Emotional Climate, Culture, and Peace Psychology

Culture and emotional climate are independent, though complementary, constructs. The UN resolution conceives a culture of peace as involving particular norms, attitudes, and ways of behaving rather than a particular emotional climate. One may assume that a culture of peace helps create a climate of security: Norms to cooperate should foster a climate of trust, norms to help the weak imply nurturance and compassion, norms for equality may mitigate anger, and norms for democracy are incompatible with fear. However, emotional climate also affects culture. Norms may or may not be followed and gradually change. They are in a dynamic relationship with the emotional climate, which to some extent has a life of its own and is influenced by more immediate social and political factors. Since climates involve needs, motivations, and transformations of relationships that affect peace and justice, those interested in peace and justice may want to consider emotional climate as well as culture. A climate of security and trust is probably needed to have a persisting culture of peace, and aspects of emotional climate affect the ways of behavior, norms, and attitudes involved in each of the

dimensions of a culture of peace. Thus, the norms and values that encourage the negotiation that is so important to liberal democracy thrive better in a climate of trust; the achievement of equality requires some anger (or at least the absence of fear and sadness), the minimization of state use of violence appears related to the capacity for emotional expressivity related to security, and nurturance seems to rest on a climate of caring or compassion (rather than hate). Emotions do not simply involve the evaluations implicit in attitudes. They involve needs and motivations that affect behavior along with attitudes and norms. Hence, a description of emotional climate adds a dynamic quality to the analysis of peace and conflict that may help us understand the forces that create or resist changes to culture.

We are only beginning to explore the relationship between emotional climates and the psychology of peace and conflict. Since the emotional climate of a nation is a macrolevel concept, its most direct relationships are with other macrolevel concepts such as a nation's culture of peace. However, since an emotional climate is perceived by individuals, the concept may be useful in linking macro and microlevels of analysis (see Coleman, 1990; Levy, 1997). Kelman (1997) has noted how international conflict appears driven by collective needs and fears, particularly to threats to security, identity, recognition, autonomy, self-esteem, and sense of justice. He argues that attempts to reduce or manage conflict must address these needs in order to influence the possibility of establishing coalitions across the lines of a conflict. This requires developing responsiveness to the needs of opponents and the ability to take their role rather than maintaining negative images. Kelman distinguishes between the normative and perceptual processes that inhibit the ability to do this, and it may be important to also distinguish the emotional processes that are involved, including the effects of climates of fear, hatred, and shame (see Scheff, 1999).

In part, the effects of these aspects of emotional climate involve the ways that public opinion influences public policy. For example, Kelman (1997) suggests that collective moods influence the readiness with which a public accepts the initiatives of leadership. Thus, the shock of Rabin's assassination by a right-wing extremist made new peace proposals possible in Israel, wheras the later Palestinian terrorist bombings made the continuation of peace initiatives quite difficult. In a similar manner, we may presume that emotional climate influences public opinion and hence what war and peace initiatives appear politically possible. Further, one suspects that emotional climate is an important aspect of the context that affects the acceptance of people returning from problem-solving workshops designed to establish dialogue between parties to hostile conflicts (Kelman, 1996a).

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However, emotional climate may also affect leadership more directly by biasing the reference points that influence the loss aversion framing that leads leaders to risk a large uncertain loss rather than accept smaller certain losses (Levy, 2000). Also, one suspects that the general emotional climate may affect the levels of suspicion, rejection, fear, and pessimism that are barriers to the dialogue and open sharing necessary for effective negotiations (Ross & Ward, 1995). In fact, the usefulness of the whole array of methods for managing conflict (such as fractionating conflicts, creating superordinate goals, altering self and enemy images, and reframing issues to address the needs of different parties) may be influenced by the prevailing national climate (which is often maintained by the vested interests of organizations as well as the psychological commitments of individuals).

The prevailing emotional climate and national policy are influenced by the interaction between the needs of individuals, the events impacting their society, and the character and ambitions of its leadership. Threats to a society's identity may either come from external enemies or from disorder and conflicts within the society. Although threats always increase the degree of insecurity in a climate, the resulting climates will be somewhat different. The perception of a common external enemy will involve the intensification of the climate of patriotism and solidarity and the minimization and suppression of internal conflicts (although whatever conflicts are suppressed will reemerge when the external threat is gone). By contrast, in the case of internal disorder, the national climate may often involve anger at the government, fear of speaking, and a general hopelessness. At least, this is the pattern suggested by data from Guatemala (de Rivera, 2004b) and recent unpublished data from Colombia. Since a society has to unite if it is to prevail against an external enemy, leaders may create or take advantage of external threats or reinvoke historic traumas to secure an emotional climate of patriotic solidarity. This solidarity depends on individuals identifying with nations, an identification that Kelman (1996b) suggests unites the needs for self-survival and self-transcendence. The form this identification takes will affect a nation's emotional climate. The love for one's nation may be reflected in either a caring patriotism or a comparative nationalism that involves feelings of superiority and a rejection of criticism (Kosterman & Feshbach, 1989). However, it has not yet been possible to develop climate measures that distinguish these aspects of collective love.

Many conflicts are resolved or deescalate, and we may postulate that these resolutions are more apt to occur in an emotional climate of overall trust and concern. However, some conflicts occasion important structural changes that act to prevent resolution. These include changes in perceptions, norms, and group polarizations that have been described by Rubin, Pruitt, and Kim (1994) and undoubtedly affect emotional climate. In the case of intractable conflicts between groups, Bar-Tal (1998) has described the creation of belief systems that involve a climate of insecurity, a patriotism that rejects internal conflict, and a utopian rather than realistic view of peace. The emotional climate involved in protracted conflicts is probably an important reason why it is easier to mobilize public support for escalatory than deescalatory steps, and it may be particularly important to address possible alternatives or ways to restructure the issue of national identification.

The concluding article in this issue attempts to show how the research that has been presented has implications for policies that may help societies attain positive emotional climates and human security, better ways to deal with societal trauma, and more peaceful cultures. By positive emotional climates, we mean climates in which an overall concern for others dominates a concern for the self (Macmurray, 1961). Such conditions should promote high morale in Lewin's (1942) sense of people being able to maintain a productive tension between what is ideal and what actually exists. In dealing with societal trauma, the research suggests the benefits of certain collective rituals that incur some personal cost but reinforce positive social beliefs, social integration, and the finding of meaning in negative social events. In regard to the construction of society, the articles suggest that a fully developed culture of peace requires a blending of both competitive and cooperative capability, the valuing of both individualism and harmony, and an emotional climate in which positive emotions predominate without the inhibition of negative emotions.

References

- Bar-Tal, D. (1998). Societal beliefs in times of intractable conflict: The Israeli case. *International Journal of Conflict Management*, 9, 22–50.
- Basabe, N., Páez, D., Valencia, J., González, J. L., Rimé, B., & Diener, E. (2002). Cultural dimensions, socioeconomic development, climate, and emotional hedonic level. *Cognition and Emotion*, 16, 103–126.
- Bonta, B. (1993). *Peaceful peoples: An annotated bibliography*. Metuchen, NJ: The Scarecrow Press. Boulding, E. (2000). *Cultures of peace: The hidden side of human history*. Syracuse, NY: Syracuse University Press.
- Chein, I. (1954). The environment as a determinant of behavior. *Journal of Social Psychology*, 39, 115–127.
- Coleman, J. S. (1990). Foundations of social theory. Cambridge, MA: Belknap Press.
- Conejero, S., de Rivera, J., Páez, D., & Jiménez, A. (2004). Alteración afectiva personal, atmósfera emocional y clima emocional tras los atentados del 11 de marzo. [Changes in personal affect, emotional atmosphere and emotional climate after the March 11 atttacks]. Ansiedad y Estrés, 10(2–3), 299–312.
- de Rivera, J. H. (1977). A structural theory of the emotions. New York: International Universities Press. de Rivera, J. H. (1986). The "objective-behavioral" environment of Isidor Chein. *Environment and Behavior*, 18 (1), 95–108.
- de Rivera, J. H. (1992a). Emotional climate: Social structure and emotional dynamics. In K. T. Strongman, (Ed.), *International review of studies on emotion* (pp.197–218). New York: John Wiley & Sons.
- de Rivera, J. H. (1992b). *Emotional climate and the forecasting of violence*. Paper presented at the American Psychological Association, 100th Annual Meeting, Washington, DC.
- de Rivera, J. H. (1999). *Measuring the emotional climate of a community*. Poster presented at the American Psychological Association, Boston, MA.

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- de Rivera, J. H. (2002). Some problems in assessing the emotional climate of different nations. Paper presented at the 12th Conference of the International Society for Research on Emotions, Cuenca, Spain.
- de Rivera, J. H. (2004a). Assessing the basis for a culture of peace in contemporary societies. *Journal of Peace Research*, 41(5), 531–548.
- de Rivera, J. H. (2004b). El clima emocional en Guatemala. [Emocional climate in Guatemala]. Cuadernos Hispanoamericanos de Psicología, 4(2), 41–46.

O3

Emotional Climate, Human Security, and Cultures of Peace

- de Rivera, J. H. (2005). Perceptions of emotional climate, social class, and reported voting behavior. Unpublished manuscript.
- Diener, E., Diener, M., & Diener, C. (1995). Factors predicting the subjective well-being of nations. Journal of Personality and Social Psychology, 69, 851–864.
- Doty, R. M., Peterson, B. E., & Winter, D. G. (1994). Threat and authoritarianism in the United States, 1978–1987. *Journal of Personality & Social Psychology*, 6(4), 629–640.
- Feldman, S., & Stenner, K. (1997). Perceived threat and authoritarianism. *Politicial Psychology*, 18(4), 741–770.
- Fernandez-Dols, J., de Rivera, J., & Sell, L. (1991). Emotional climate in different societies: Exploratory data on its measurement. Paper presented at the International Academic Symposium on Psychological Measurement, Nanjing, China.
- Florin, P., Giamartino, G. A., Kenny, D. A., & Wandersman, A. (1990). Levels of analysis and effects: Clarifying group influence and climate by separating individual and group effects. *Journal of Applied Social Psychology*, 20(11), 881–900.
- Frijda, N. (1986). The emotions. Cambridge: Cambridge University Press.
- Heelas, P., (1989). Restoring the justified order: Emotions, injustice, and the role of culture. Social Justice Research, 3(4), 375–386.
- Hochschild, A. R. (1979). Emotion work, feeling rules, and social structure. American Journal of Sociology, 85(3), 551–575.
- Hofstede, G. (1991). Cultures and organizations: Software of the mind. London: McGraw-Hill.
- Janoff-Bulman, R. (1992). Shattered assumptions: Towards a new psychology of trauma. New York: The Free Press.
- Kelman, H. C. (1996a). Negotiation as interactive problem solving. International Negotiation: A Journal of Theory and Practice, 1, 99–123.
- Kelman, H. C. (1996b). Nationalism, patriotism, and national identity: Social-psychological dimensions. In D. Bar-Tal & E. Staub (Eds.), Patriotism in the lives of individuals and nations. Chicago: Nelson-Hall.
- Kelman, H. C. (1997). Social-psychological dimensions of international conflict. In I. W. Zartman & J. L. Rasmussen (Eds.), *Peacemaking in international conflict: Methods and techniques* (pp. 191–236). Washington, DC: U.S. Institute of Peace.
- Kosterman, R., & Feshbach, S. (1989). Toward a measure of patriotic and nationalistic attitudes. Political Psychology, 10(2), 257–274.
- Leavitt, J. (1996). Meaning and feeling in the anthropology of emotions. American Ethnologist, 23(3), 514–539.
- Lerner, J. S., González, R. M., Small, D. A., & Fischhoff, B. (2003). Effects of fear and anger on perceived risks of terrorism: A national field experiment. *Psychological Science*, 14(2), 144– 150.
- Lerner, J. S., & Keltner, D. (2001). Fear, anger, and risk. *Journal of Personality and Social Psychology*, 81, 146–159.
- Levy, J. S. (1997). Contending theories of international conflict: A levels-of-analysis approach. In C. A. Crocker, F. O. Hampson, & P. Aall (Eds.), Managing global chaos: Sources or and responses to international conflict. Washington, DC: United States Institute of Peace Press.
- Levy, J. S. (2000). Loss aversion, framing effects, and international conflict. In M. I. Midlarsky (Ed.), *Handbook of war studies II* (pp. 193–221). Ann Arbor: University of Michigan Press.
- Lewin, K. (1942). Time perspective and morale. In G. Watson (Ed.), *Civilian morale*. Boston: Houghton Mifflin
- Lewin, K., Lippitt, R., & White, R. (1939). Patterns of aggressive behavior in experimentally created "social climates". *Journal of Social Psychology*, 10, 271–299.
- MacKie, D. & Smith, F. (Eds.). (2003). From prejudice to intergroup emotions. Philadelphia, PA: Psychology Press.
- Macmurray, J. (1961). Persons in relation. Atlantic Highlands, NJ: Humanities Press.
- Oettinger, G., & Seligman, M. E. P. (1990). Pessimism and behavioral signs of depression in East versus West Berlin. *European Journal of Social Psychology*, 20(3), 200–220.
- Páez, D., Asún, D., & González, J. L. (1994). Emotional climate, mood and collective behavior: Chile 1973–1990. In H. Roqueline (Ed.), Era in twilight: Psychocultural situations under state

terrorism in Latin America (pp.141-182). Freiburg, Germany: Foundation for Children/Inst. Horizonte.

- Páez, D., Ruiz, J. I., Gailly, O., Kornbilt, A. L. Wisenfeld, E., & Videl, C. M. (1997). Clima emocional: Su concepto y medición mediante una investigación transcultura. [Emotional climate: Its concept and measurement in a transcultural investigation]. Revista de Psicología Social, 1(12), 79-98.
- Ross, M. H. (1993). The culture of conflict. New Haven, CT: Yale University Press.
- Ross, L., & Ward, A. (1995). Psychological barriers to dispute resolution. In M. P. Zanna (Ed.), Advances in experimental social psychology, (Vol. 27, pp. 255-304). New York: Academic
- Rothbaum, F., Weisz, J., Pott, M., Miyake, K. & Morelli, G. (2000). Attachment and culture: Security in the United States and Japan. American Psychologist, 55(10), 1093-1104.
- Rubin, J. Z., Pruitt, D. G. & Kim, S. H. (1994). Social conflict: Escalation, stalemate, and settlement (2nd ed.). New York: McGraw-Hill.
- Sales, S. M. (1973). Threat as a factor in authoritarianism: An analysis of archival data. Journal of Personality and Social Psychology, 28(1), 44-57.
- Sarbin, T. R. (2001). Embodiment and the narrative structure of emotional life. Narrative Inquiry, 11(1), 217-225.
- Scheff, T. J. (1994). Collective emotions in warfare. Encyclopedia of Violence, Peace and Conflict, 1, 331-341.
- Schneider, B., & Reichers, A. (1983). On the etiology of climates. Personnel Psychology, 36(1), 19-
- Schuster, M. A., Stein, B. D., Jaycox, L. H., Collins, R. L., Marshall, G. N., Elliott, M. N. et al. (2001). A national survey of stress reactions after the September 11, 2001, terrorist attacks. New England Journal of Medicine, 345, 1507-1512.
- Silver, R. C., Holman, E. A., McIntosh, D. N., Poulin, M., & Gil-Rivas, V. (2002). Nationwide longitudinal study of psychological responses to September 11. Journal of American Medical Association, 288(10), 1235-1244.
- Singer, D. J. (1980). Conflict research, political action, and epistemology. In T. R. Gurr (Ed.), Handbook of political conflict (pp. 490-499). New York: The Free Press.
- Steinert, H. (2003). Unspeakable September 11th: Taken-for-granted assumptions, selective reality construction and populist politics. International Journal of Urban and Regional Research, 27,
- Skitka, L. J., Bauman, C. W., & Mullen, E. (2004). Political tolerance and coming to psychological closure following the September 11, 2001, terrorist attacks: An integrative approach. Personality and Social Psychology Bulletin, 30(6), 743-756.
- Tagiuri, R. (1968). The concept of organizational climate. In R. Tagiuri & G. H. Litwin (Eds.), Organizational climate: Explorations of a concept (pp. 11-32). Boston: Harvard University, Graduate School of Business Administration.
- Tran, V. (2004). The influence of emotions on decision-making processes in management teams. Unpublished doctoral dissertation, University of Geneva, France.
- Tugade, M. M., & Federickson, B. L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. Journal of Personality & Social Psychology, 86(2), 320-333.
- Ubillos, S., Mayordomo, S., & Basabe, N. (2005). Percepción de riesgo, reacciones emocionales y el impacto del 11-M. [Perception of risk, emotional reactions, and the impact of M 11]. Revista de Psicología Social, 20(3), 301–313.
- United Nations Educational, Scientific, and Cultural Organization (UNESCO) (1995). UNESCO and a culture of peace: Promoting a global movement. New York: UNESCO.
- United Nations, General Assembly, (1999). Resolutions adopted by the General Assembly. Declaration on a culture of peace.
- Valsiner, J. (2001). Cultural developmental psychology of affective processes. Invited lecture at the 15th Tagung der Fachgruppe Entwicklungspsychologie der Deutschen Gesellschaft für Psychologie, Potsdam, Germany.

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Queries

- Q1 Author: Scheff, 1999 or Scheff, 1994 (as in reference list)?
- Q2 Author: Please site reference de Rivera, 1999 and de Rivera, 2002 in text.
- **Q3** Author: Please cite reference Lerner, González, Small, and Fischhoff, 2003 in text.
- **Q4** Author: Please cite reference Lerner and Keltner, 2001 in text.
- **Q5** Author: Please cite reference Ubillos, Mayordomo, and Basabe, 2005 in text.
- Q6 Author: Please cite reference United Nations General Assembly, 1999 in text