

## Chapter 18

# Conclusion: The Essence of Peace? Toward a Comprehensive *and* Parsimonious Model of Sustainable Peace

Peter T. Coleman

*For every thousand pages published on the causes of war,  
there is less than one page directly on the causes of peace.*

—Historian Geoffrey Blainey, 1988

The purpose of developing this book was to achieve three main objectives. To enhance our understanding of sustainable peace by supplementing the standard approach of studying the *prevention* of destructive conflict, violence, war and injustice with the equally important investigation of the *promotion* of the basic conditions and processes conducive to lasting peace. For in addition to addressing the pervasive realities of oppression, violence and war, peace requires us to understand and envision what alternatives we wish to construct. Second, in the context of this new inquiry, we hoped to help clarify and better specify the meaning of *sustainable peace*. Third, with respect to the ultimate need for multidisciplinary frameworks to best comprehend and foster sustainable peace, we hoped to elicit what contemporary psychology might have to contribute to such a framework.

The good news is that through their many excellent chapters, the contributors to this book have helped make great progress toward meeting the three objectives identifying a wide variety of factors at different levels of analysis associated with the promotion of peace. However we are now left with an embarrassment of riches. The 17 chapters which constitute this book offer a vast array of psychosocial conditions and processes which have been linked to sustainable peace. While a critical first step, this bounty of information leaves us with a rather cluttered state of understanding.

Therefore, this concluding chapter will attempt to offer a synthesis of the research and ideas presented in this book. It has four sections. First, it returns to the discussion of the meaning of a harmonious, sustainable peace broached in the introduction, and highlights the basic commonalities of the construct that underlay the many

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P.T. Coleman, Ph.D. (✉)

International Center for Cooperation and Conflict Resolution,  
Teachers College, Columbia University, New York, NY, USA  
e-mail: coleman@exchange.tc.columbia.edu

aspects of peace described in the chapters of the book. Second, it offers a brief summary of the main components of sustainable peace presented in the book, organized within a nested, multi-level framework. Third, it offers a sketch of a more parsimonious model of sustainable peace, informed by dynamical systems theory (Nowak & Vallacher, 1998) and dynamical minimalism (Nowak, 2004), which conceptualizes the effects of the many component parts on the probabilities of stable dynamics of destructive conflict and peace. And finally, it outlines an agenda for future study and education in this area.

## The Meaning of Sustainable Peace Revisited

Peace is both complicated and simple. For example, a search of the *Thomson Reuters Web of Knowledge* database on articles published in English since 2000 with “peace” in the their title reveals over 40 terms distinguishing different types or aspects of peace (see Table 18.1). This is more than a matter of semantics. Peace can differ in a variety of ways, including by level (interpersonal to international to global peace), direction (internal and external peace), durability (from fragile to enduring peace), source or conditions (peace through coercion, democratic participation, economic incentive, etc.), type (negative, positive and promotive peace) and scope (local to global peace).

**Table 18.1** Types and components of peace. Thomson Reuters web of knowledge database 2000–2011

Agonistic peace	Movable peace
Armed peace	Negative peace
Capitalist peace	Nuclear peace
Cold peace	Overt peace
Commercial institutional peace	Partial peace
Democratic peace	Peace-building
Durable peace	People’s-civil peace
Dynamic peace	Perpetual peace
Enduring peace	Positive peace
Feminist peace	Post-liberal peace
Fragile peace	Precarious peace
Global-world peace	Realistic peace
Hegemonic peace	Relative peace
Holistic Gaia peace	Republication peace
Holistic Inner Peace	Static peace
Holistic intercultural peace	Sustainable peace
Hybrid peace	Technological peace
Imperfect peace	Tyrannical peace
Kantian peace	Uneasy peace
Lasting peace	Unqualified peace
Liberal peace	Virtual peace
Monadic peace	Warm peace

This book is focused on sustainable peace (also known as durable, stable, lasting, enduring, perpetual and unqualified) and has sought to identify its primary psychological components.

What do we mean by sustainable? The science of sustainability has revealed a broad spectrum of differing assumptions associated with this term (Seager, 2008). For some, it simply means longevity—a stable, long-lived peace—and is associated with the preservation of the status quo through sufficient security and protection from alien influence. At the other extreme, sustainability is associated with adaptation and renewal—a creative-adaptive peace—which recognizes that all systems (individuals, relationships, societies, etc.) are in flux and progress through multiple states or stages over time. This form of sustainability requires flexibility and responsiveness to change. The challenge for most social systems is to recognize the need to perform both types of functions effectively: protect and preserve some aspects of the status quo while allowing for resilience and renewal when circumstances require. This more balanced view of sustainability captures our vision of sustainable peace. It is a constructive way of relating to oneself, others and the environment that is both stable and dynamic, resulting in a process that provides a secure sense of integrity and an ability to adapt to change.

This vision of sustainable peace narrows the focus of our discussion somewhat, although even this type of peace can still differ by level, direction, source, type and scope, and these differences affect the nature of the facilitating and inhibiting conditions associated with them. For example, the psychological conditions conducive to holistic inner peace are likely to differ dramatically from the conditions which foster sustained international peace.

Nevertheless, all forms of sustainable peace share some basic underlying qualities, reflecting a relative absence of destructive conflict, tension and violence and a presence of constructive conflict, harmony and well-being. Therefore, building on Boulding (1978), we define *sustainable peace* as existing in a state where the probability of using destructive conflict and violence to solve problems is so low that it does not enter into any party's strategy, while the probability of using cooperation and dialogue to promote social justice and well-being is so high that it governs social organization and life.

Thus, the many factors, conditions and processes related to peace presented in the chapters of this book can be understood in the context of their relative effects on (1) decreasing probabilities for destructive conflict, violence and injustice and (2) increasing probabilities for promotive peace. They are summarized below.

### ***A Nested Model of the Psychosocial Components of Sustainable Peace***

The psychosocial components from Chaps. 1 through 17 are summarized briefly and organized below by level (micro, meso and macro) and by orientation (prevention of destructive conflict or promotion of sustainable peace; see Fig. 18.2). Micro-level components include those associated with individuals; meso-level are

those within families, schools, organizations and communities; and macro-level those involving policies and institutions of societies, states and the international community. Many of the factors associated with preventing destructive conflict may also be necessary for promoting positive relations, and visa-versa. However they are each categorized here as oriented toward where they are most commonly employed.

Each of the factors presented can operate in isolation, but typically is nested within a communal system of interlacing forces which affect the relative probabilities of destructive conflict and peace. Whether components operate at higher, macro-levels or lower micro-levels will affect the rate and scope of their impact (Klein & Kozlowski, 2000). Of course, the probabilities of maintaining a culture of constructive conflict and peace increase considerably when multiple factors are operating and aligned across levels. Exactly how best to operationalize this, however, is highly dependent on the particulars of the local situation.

### **Micro-level Factors (Prevention of Destructive Conflict)**

Individuals, particularly when acting in concert, are key agents in processes of transforming and preventing conflict. Of course, exceptional leaders such as Mahatma Gandhi, Martin Luther King, Nelson Mandela, and the recent Liberian Nobel Laureate Leymah Gbowee (co-author of Chap. 10) can have a disproportionate impact on conflict resolution and prevention. However, as many of the chapters suggest, destructive conflict is most likely to be mitigated when all individuals in a society adopt and internalize the following components:

- Awareness of the causes, consequences and escalatory tendencies of destructive conflict and violence.
- Moderately high levels of self-monitoring, restraint and regulation of internal impulses for destructive or violent acts.
- Satisfaction of basic human needs including physiological needs, safety and dignity.
- Values, attitudes, skills and behaviors supporting non-violence.
- Moderate levels of tolerance for uncertainty.
- High levels of tolerance for and openness to difference.
- A capacity for forgiveness.

### **Micro-level Factors (Promotion of Sustainable Peace)**

Individuals also play a foundational role in increasing the probabilities for sustainable peace. They increase when individuals in a society adopt and internalize the following:

- Recognition of the interdependence of all people, similar and different, local and global.
- A strong self-transcendent value orientation committed to the welfare of others and society, with a sufficient self-enhancement orientation to mitigate individual resentment.

- A healthy balance of openness to change *and* conservatism, responsive to changing times and circumstances.
- Values, attitudes, skills and behaviors promoting cooperation and trust.
- Knowledge, attitudes and skills for constructive conflict resolution.
- Higher levels of integrative, emotional, behavioral and social identity complexity.
- Capacities for tolerance, humanization, realistic empathy (understanding how a situation looks to someone else) and compassion for members of one's ingroups and outgroups.
- An appreciation of environmental stewardship and equitable sharing of the earth's resources among its members and with all human beings.
- Language for peace: a large lexicon for all aspects of cooperative and peaceful relations and sufficient use of such terms to foster automaticity.
- A strong sense of global identity with a concrete understanding of the steps that need to be taken locally to act as a global citizen.

### **Meso-level Factors (Prevention of Destructive Conflict)**

Some scholar-practitioners suggest that mid or meso-level factors play a disproportionate role in determining community dynamics related to conflict, as these forces are situated between both micro and macro forces and thus have an important mediating effect between, for instance, governance and policy and individual beliefs, values and behavior (Dugan, 1971; Lederach, 1997; Kriesberg, 1999). Some of the meso-level factors relevant to conflict prevention and mitigation identified by our contributors include:

- Social taboos against corporal punishment and other forms of violence in the home, schools, workplace and public spaces.
- Norms of gender equity and equality in the home, schools and the workplace.
- Early access to peace education and multicultural tolerance programs in pre-school, elementary and middle school.
- Opportunities for peaceful sublimation of aggression through competitive or extreme sports, occupations, creative arts, etc.
- Functional and accessible venues for constructive, non-violent action to seek recourse and address perceived injustices and other harms.
- Strong norms for procedural and distributive justice in schools, workplaces, marketplaces, and elsewhere in the community.

### **Meso-level Factors (Promotion of Sustainable Peace)**

With regard to increasing the probabilities for fostering and sustaining peace, the following mid-level components were identified as critical:

- Strong norms valuing and nurturing children.
- Early socialization of children oriented toward mutual care and nurturance.

- Cross-cutting structures fostering common interests, activities and bonds across different ethnic and religious groups.
- Structures of cooperative task, goal and reward interdependence in schools, workplaces, and politics.
- Programs and workshops in constructive conflict resolution and creative problem-solving for children, adults, parents and leaders of schools, businesses and politics.
- Shared, accurate and transparent collective memories of past events, conflicts and relationships between groups.
- Common use of peaceful language in popular media and normal daily discourse.
- Strong emphasis on both local and superordinate identities at the ethnic, communal, national and global levels.

### **Macro-level Factors (Prevention of Destructive Conflict)**

Conditions, mandates, regulations and processes operating at the macro-level have the paradoxical effect of being the most distant from individual-level behaviors and yet influencing these behaviors most rapidly once implemented (Klein & Kozlowski, 2000). And although what our leaders do and say at this level may often seem to not have a major impact on our day-to-day lives, they can have a substantial symbolic effect on us as well as significantly alter the social conditions in which our conflicts take place. Thus, our contributors rightly identified the following macro-level factors as important to the prevention and mitigation of destructive conflict.

- Recognition and understanding of the inordinately strong salience of threat and tendencies towards inequality and competition in many societies across the globe.
- Established national political and social institutions that ensure the implementation and follow-through of negotiated settlements.
- Well-coordinated early warning systems operating through local governments and NGOs networked locally, regionally and globally for efficient communication.
- Use of crisis-mapping: an open-source platform for collecting and plotting local cell-phone accounts of the commission of violent atrocities to inform the international community of emerging crises in a timely manner.
- Use of the internet and other social technologies to mobilize broad non-violent movements for social justice and corporate responsibility.
- Coordination between local governments, civil society and international organizations to prevent violent conflict.
- Well-functioning global organizations and institutions such as the United Nations, the International Criminal Courts, Interpol, and the Universal Declaration of Human Rights.
- Developing awareness and knowledge of the Dilemma of the Commons and how to manage it effectively.

### Macro-level Factors (Promotion of Sustainable Peace)

Finally, the chapters of this book also identified these important influences for promoting and maintaining a state of sustainable peace:

- A societal idea of peace that includes an ethic of interethnic unity, care and nurturance of others, which is as strong (or stronger) as the view of peace as something that need be secured and defended.
- Societies that define themselves as internally and externally peaceful.
- A transcultural elite with shared norms of tolerance, cooperation, and creative problem-solving, who model for all the efficacy and value of constructive, non-violent action.
- National governance structures tending towards egalitarianism and democracy.
- A strong community of global citizens engaged locally in initiatives fostering global citizenry and addressing shared global concerns (climate change, poverty, etc.).
- Political and business ethics that are in harmony with nature and environmental stewardship.
- Institutions which reflect and uphold self-transcendent values.
- Gender parity with a proportional number of women in the highest positions of leadership in business, politics and the military.
- Use of the internet and other social technologies to mobilize broad social movements for humanitarian works and global peace.
- Strong communications, trade, and cultural and civilian exchanges between nations.
- Peace-mapping: an open-source platform for collecting and plotting local cell-phone accounts of the commission of peaceful and humanitarian acts to inform and inspire other potential “third-siders”.
- The establishment of peace parks: natural parks located at the borders between disputing nations where development and use of the parks are offered as super-ordinate goals.

These multiple factors operating across three levels together constitute a *system of sustainable peace*, distinguishing such communities and societies from those locked in *systems of dominance and destructive conflict*. The question then becomes, can we conceptualize how these systems develop, stabilize and change, and how groups and communities can move from one to the other?

### *A Dynamical-Minimal Model of Sustainable Peace*

In *Cultures of Peace: The Hidden Side of History* (2000), Elise Boulding points out that our warlike culture is accompanied with a concurrent culture of peace. This is the view we have taken in this book: that all communities and societies inflicted by destructive conflict and war have a latent potential for peace, and that societies at peace often harbor a latent potential for hostilities. For instance, in *Islands of*

*Agreement: Managing Enduring Armed Rivalries* (2007), Gabriella Blum describes the many examples of cooperation and exchange operating in the context of long-enduring armed rivalries such as between India and Pakistan, Greece and Turkey, and Israel and Lebanon. These havens of cooperation in the context of enmity effectively reduce suffering and loss and allow mutually beneficial exchanges to take place, and are evidence of the latent potential for peace inherent in all societies, even those currently engulfed by war. On the other hand, if we examine the current state of Northern Ireland, we see a somewhat fragile state of peace and often hear the rumblings of what could once again become a dynamic of violence. Both potentials exit.

The trick then is not to simply be able to move from one state (war) to the other (peace) constructively. In fact the international community has gotten quite good at this, seeing a dramatic increase in the number of wars ending through negotiation rather than through unilateral military victory. In fact, these numbers have flipped since the end of the Cold War, with today twice as many wars ending through negotiation versus military victory (Mason et al., 2007). Incredibly, from 1988 to 2003, more wars ended through negotiation than had in the previous two centuries (United Nations, 2004). After peaking in 1991, the number of civil wars dropped roughly 40% by 2003 (United Nations, 2004). This indicates that local, regional and international peacemakers have an increasing positive impact in peace mediation and transitions to systems of peace.

However, over 25% of the wars ended through negotiations relapse into violence within 5 years (Suhrke & Samset, 2007). In some cases, such as in Rwanda and Angola, more people were harmed and died after peace agreements were ratified by the parties and then failed (Stedman et al., 2002). And these failed-peace states seem to begin a new downward spiral. States with civil wars in their history are far more likely to experience renewed violence (Mason et al., 2007). And the longer such conflicts last, the greater the chances of recurrence of war (Collier, 2000). Thus, the priority focus today should fall on sustainability—how to increase the probabilities that once societies transition to peace, they will be able to remain there and navigate the many challenges to peace that can accompany its implementation and maintenance.

A new theoretical approach to understanding and promoting sustainable peace is informed by the efforts of a multidisciplinary research team working to apply insights and methods from complexity science to understanding peace (see Chap. 14 in this book and Coleman et al., 2006, 2007, 2008, 2011; Nowak et al., 2006; Vallacher et al., 2010). They suggest that qualitative differences in the dominant patterns of social behavior (such as those found in peaceful societies versus hostile or warring societies) can be accounted for by a few basic factors. Accordingly, their research attempts to identify, from scholarship and practice, the fundamental factors that promote sustained peaceful dynamics in communities or, put another way, that make societies immune to prolonged destructive or violent conflict.

The basic model centers on the concept of *attractor*, a concept from applied mathematics. In a dynamical system composed of many parts or “elements,” an attractor is a relatively stable state or pattern of behavior that coordinates or integrates the elements (see Nowak & Vallacher, 1998). In a mental system, an attitude or a



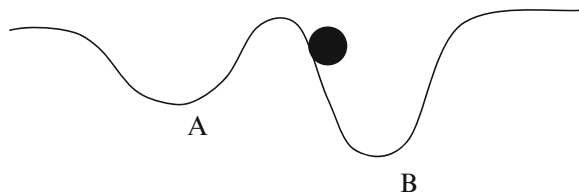
belief functions as an attractor if it integrates and provides common meaning for different events, memories, and pieces of information, even if these mental “elements” by themselves might be interpreted in very different ways. In a social system (e.g., a group or society), an ideology functions as an attractor if it provides a shared reality and frame of reference for collective action, even if the members of the group or society each have divergent needs and interests. Metaphorically, an attractor “attracts” the system’s elements to a common state or pattern, providing coherence and stability in the face of new and confusing experiences (e.g., ambiguous information, unexpected events). Once a system is governed by an attractor, it actively resists threats that would change the way the elements (e.g., thoughts, individuals) are organized. From a dynamical perspective, then, attempts to challenge a person’s firmly held attitude or a group’s ideology are likely to backfire, strengthening rather than weakening the attractor, and thus may intensify rather than reduce antagonism and violence in a situation characterized by conflict (see Chap. 14 for a more detailed discussion of attractor properties and dynamics).

Research on attractors has found that groups (e.g., communities, gangs, societies) typically have more than one attractor governing the way they think about and behave toward other groups. This means that hostile and destructive interaction patterns between groups may co-exist with the potential for peaceful interactions between such groups. At any one time, however, only one attractor (e.g., negative) is likely to manifest, with the other attractors (e.g., positive) virtually invisible to observers, or even to the participants themselves.

The existence of *latent attractors* suggests that under the right conditions, the groups may demonstrate a sudden and dramatic change in their thoughts, feelings, and actions *vis a vis* one another. Thus, the interactions within a community can move from one manifest attractor (such as peace) to another previously latent attractor (such as war), sometimes even in response to a rather minor incident that triggers the latent pattern of thought, feeling, and action. This scenario of *nonlinear change* is evident both in sudden outbreaks of group violence in situations of relative peace (such as has occurred in Northern Ireland) as well as in sudden outbreaks of peace in situations of protracted conflict (such as occurred in the 1990s in Mozambique after 16 years of civil war). Recognition that the current state of communal life can co-exist with other potential but latent patterns of interaction (each with differing degrees of “attracting” power) underlies an ambitious research agenda and provides the foundation for the following set of recommendations for promoting sustainable peace.

- **Be aware that war and peace potentials can co-exist.** As the attractor landscape in Fig. 18.1 indicates, groups and communities typically hold the potential for dramatically different types of interaction patterns simultaneously. One attractor may capture the state of the system for extended periods of time (as is seen during protracted periods of conflict). However, this does not mean that peacebuilding initiatives (peace education, dialogue groups, intergroup cultural exchanges, common community projects, etc.) during this period are for naught. Here, the idea of *latent attractors* provides an important new perspective for understanding peace. In this view, the malignant thoughts, feelings, and actions

**Fig. 18.1** A dynamical system with two attractors corresponding to constructive relations (A) and destructive relations (B)



characterizing a group's dynamics during conflict represent only the most salient and visible attractor for the group. Particularly if there is a long history of interaction with the out-group, there may be other potential patterns of mental, affective, and behavioral engagement *vis a vis* members of the out-group, including those for positive relations. With this in mind, identifying and reinforcing latent (positive) attractors, not simply disassembling the manifest (negative) attractors, should be the aim of conflict prevention in service of sustainable peace. In other words, in addition to attempts at achieving *negative peace* (an end to destructive conflict and violence), and the goal of *positive peace* (establishing fair systems of opportunity and justice) we must also strive to enhance *promotive peace* – the establishment of strong attractors for positive, constructive social relations. These objectives can be accomplished by implementing many of the initiatives summarized in the above multi-level framework.

- **“Reverse engineer” negative, destructive attractors.** When conflicts do arise, the most obvious need is to quell any violence and contain actively destructive processes. This is often done by introducing police support, peacekeeping troops, or other forms of regional or international military interventions. However, even when systems de-escalate and appear to return to a state of peace, the potential for destructive interactions (destructive attractors) still exists. It is important, then, that we work actively to deconstruct and dismantle the negative attractors. In generic terms, the deconstruction of an attractor entails focusing on the elements comprising the pattern of behavior rather than focusing on the pattern itself. In the context of conflict, this means calling attention to specific actions, events, and pieces of information without noting their connection to the pattern in which they are embedded. When decoupled in this fashion, the lower-level elements may become re-configured into an entirely different pattern (e.g., a positive view of the outgroup and a benign or peaceful interaction pattern). The important point is this: attacking the pattern itself is likely to intensify rather than weaken the pattern because of the tendency for attractors to resist change, so one should focus instead on isolating elements and thereby weakening or eliminating the reinforcing feedback loops among them. The chapters in this book present a variety of ways in which this can be accomplished in real-world settings, including: *introducing negative feedback loops (early-warning systems, cross-cutting structures, international monitoring, etc.); institutionalizing more nuanced, alternative conflict narratives (through media, textbooks, official accounts, etc.); and limiting the pervasive spread of conflict by allowing movement of the parties.*

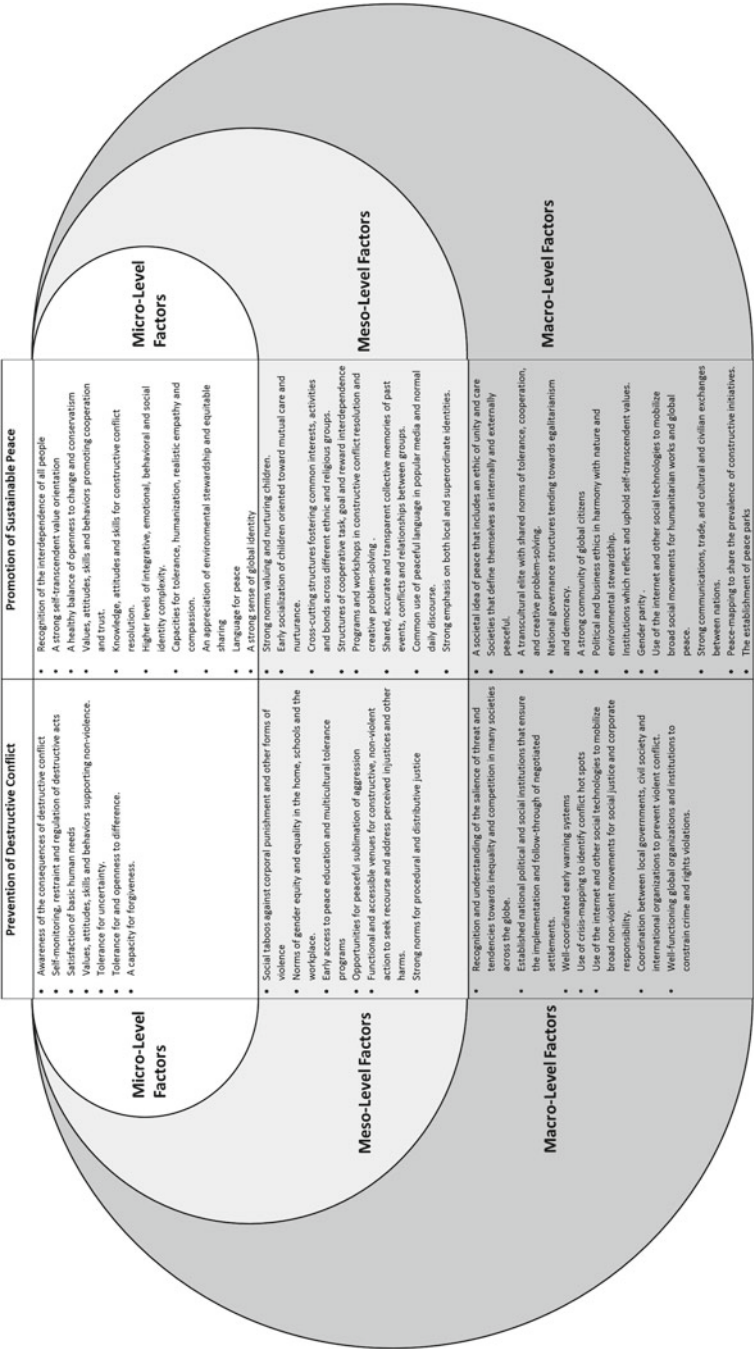


Fig. 18.2 A nested model of the psychological components of sustainable peace

- **Increase complexity for peace.** Research has also shown that constructive social relations are characterized by relatively high levels of cognitive, emotional, behavioral, and structural complexity (see Chap. 14). Such complexity is advantageous when groups face problems or conflicts with other groups. As conflicts intensify, there is a strong tendency for the parties' thoughts, feelings, and behaviors to become more simple and black and white (which is evidence of strong attractor dynamics). If the conflict spreads to the community level and persists, then we see the same polarization occur in social networks, groups, and institutions. However, communities and groups who maintain more complex cross-cutting (intergroup) structures and social networks, who hold more complex (multiple group) social identities, and who display more complex cognitive, emotional, and behavioral (adaptive) patterns, have been found to be more tolerant of outgroups, display less violence when conflicts spark, and engage in a more constructive manner when conflicts become difficult. Thus, *sustainable peace requires structures and processes that foster increased contact and complexity.*
- **Increase movement for peace.** The findings from research support the basic idea that peace is associated with movement (Bartoli et al., 2010). When people and groups get trapped in narrow attractors for social relations, whether in patterns of destructive conflict, oppressor-oppressed dynamics, or even in patterns of isolation and disengagement from others, their well-being tends to deteriorate and their level of resentment tends to build. These traps may be constituted by physical structures such as segregated spaces, or by social-psychological constraints such as norms, attitudes and ideologies. When trapped in such a well, people can be creative at becoming ever more destructive, oppressed, independent, etc., which acts to deepen the attractor and makes it less likely they will be able to escape its pull. Of course, any pattern of behavior may be functional in certain situations; a destructive orientation fits very well in times of armed conflict. But these patterns can become dominant and pervasive, so that when the current situation changes, or when people move to different situations, it is critical for people to *adapt* – to take up different patterns of behaviors that are appropriate to the varied situations they face. From this perspective, *sustainable peace requires the establishment of conditions that allow for movement and adaptation.* At times, even “jiggling” the system – almost random movement – can break patterns and restore flexibility.
- **Peace is associated with a sufficient yet tolerable rate of movement toward justice.** Decades of research on the psychology of justice has found that movement is also central to justice and peace. First, a sense of relative deprivation has been found to be a fundamental source of ethno-political conflict and instability in otherwise peaceful communities. This is the injustice felt when people experience a gap in what they feel their group deserves and what it can achieve—in comparison to similar groups. This experience is typically triggered by change-shifts in the status quo that affect what groups expect, what they can get, and with whom they compare themselves. However, it is the need for procedural justice, or the sense that there exist fair processes for the allocation of goods and for recourse against grievances, that has been shown to be critical to addressing

injustice, even more so than actually receiving fair outcomes. Furthermore, the rate at which justice is achieved is also critical. Peace scholars have found that minority groups who feel that the channels for fair recourse are blocked or too unresponsive are more likely to revolt (Gurr, 2000). However, they have also found that when particular minority groups ascend to justice and equal treatment very rapidly, this can raise the aspirations, envy, and resistance of other groups (including those in power), and thus destabilize communities (Gurr, 2000; Lederach, 1997). Thus, *procedures of justice that provide a sufficiently steady response to the grievances of all stakeholders are a necessary condition for sustainable peace.*

- **Foster repellors for violence.** Anthropological research summarized in Chap. 12 has shown that communal taboos against violence have existed for the bulk of human history, and were a central component of our ancestors, the pre-historic nomadic hunter-gatherer bands. Indeed, a key characteristic of peaceful societies, both historically and in the contemporary world, is the presence of non-violent values, norms, ideologies, and practices. Although non-violent norms are practiced in many communities around the globe, they are often overwhelmed by more violent ideologies, messages, and social modeling. There are a wide variety of parenting and educational methods for fostering more non-violent, prosocial attitudes and skills in children, such as violence-prevention, tolerance, cooperative learning, conflict resolution, and peace education curriculum, just to name a few. However, *sustainable peace will require a much more concerted effort to teach non-violent values, norms, and practices to young people and to better limit exposure of youth to gratuitous forms of violence and to destructive social modeling by adults and public leaders.*
- **Realize that peace is never achieved.** Peace is a dynamic process, not an outcome. It requires a set of fair processes and procedures that allow all stakeholders to negotiate for their needs and rights, in order to create unity out of diversity. Indeed, peace initiatives uninformed by an ongoing process of reading feedback are destined to do more harm than good. Research has found that the most effective decision-makers are those who are able to continually adapt; by remaining open to feedback, they can reconsider their decisions and alter their course if necessary (Dorner, 1996). These leaders make more, not fewer, decisions as their plans unfold, and ultimately are able to enhance the well-being of the communities with which they work. Thus, effectiveness comes from flexibility not rigidity. In this way, *we can work to increase the probabilities that peace will emerge and be sustained.*

## Conclusion: An Agenda for Sustainable Peace

Today, very few scholars study peace. However, the few that do tell us that today there are approximately 80 societies world-wide who could be categorized as having low-levels of internal aggression, and 70 societies who are peaceful in their

relations with other groups and communities in their regions (Fry, 2006). Unfortunately, our understanding of such groups, and of the conditions that foster prosocial relations, is extremely limited. There is often an unarticulated assumption in research on war and conflict that a thorough understanding of the problem of destructive conflict will provide insight into conditions and processes which foster and sustain peace. This assumption has been found by researchers to be unfounded and incorrect (see Gottman et al., 2002; Losada, 1999; Losada & Heaphy, 2004). Destructive conflict and peace are not endpoints of a single dimension but rather often co-exist as separate dimensions. It is clearly time to champion the study of peace in its own right.

In dynamical systems terms, the co-existence of malignant and (potential) peaceful possible relations is tantamount to the co-existence of two attractors constraining the dynamics of the parties to a conflict. Although effort should be devoted to the deconstruction of the negative attractor, attention should also be devoted to strengthening the positive attractor for inter-group relations. There may be little immediate effect of fostering opportunities for positive relations between the groups, but such efforts plant the seed for a possible transformation should conditions change in a way that destabilize existing mental, affective, and behavioral patterns. If such a seed is not planted, it cannot take root even if the negative attractor is somehow discredited or otherwise destabilized. A dynamical system does not change unless it has a new space to occupy. A latent attractor essentially represents a new space for inter-group relations.

Therefore, the approach to the study of sustainable peace we advocate includes the following components:

- Movement beyond the primary focus on destructive conflict, violence and war (problems) to the equally important study of sustainable peace (*solutions*).
- Movement away from simple, linear models of cause-and-effect toward more complex, *holistic* models of sustainable peace situated within constellations of ecological, biological, psychological, social, economic, and other structural forces.
- An enhanced capacity to work collaboratively across a variety of disciplines to better understand and foster sustainable peace through *multiple perspectives* and complementary approaches.
- A shift in emphasis away from achieving particular short-term outcomes (peace treaties, agreements, etc.) toward establishing and maintaining the conditions for *sustainable* peace processes in communities over time.
- An enhanced capacity to communicate and build *partnerships* from science to policy/practice and from policy/practice to science.
- The establishment of local, regional, and global *networks* of support and information on best practices for increasing the probabilities of sustainable peace.

What is required at this stage is an investment in a concerted effort to bring together scholars, practitioners, and policy-makers from a variety of disciplines to

work to understand sustainable peace beyond the level of case-based descriptions, to get at the essence of their underlying dynamics. This could include initiatives such as:

- **Support for the development of basic theory and research on sustainable peace.** There are few scholars conducting basic research on the fundamental (necessary and sufficient) conditions and processes for sustainable peace (Doug Fry and Marta Miklikowska are exceptions). However, it is critical that the applied frameworks which inform practice be informed by basic, sound, empirically-tested theoretical models, in order to foster peace most effectively.
- **Graduate-level, multi-disciplinary, theory-practice courses on sustainable peace.** Courses which involve a core group of faculty from different disciplines that are committed to working together to weave and develop the ideas and practices of sustainable peace. These courses could move from basic theory through applied models to strategies and tactics for intervention, and involve academics and UN/NGO practitioners and policy-makers as guest lecturers.
- **The development of a data-based index for annual reporting on state and regional levels of sustainable peace.** This project could build off the Global Peace Index and other such resources (FAST International, International Crisis Group, Human Security Report) and could involve the business and academic communities in developing a comprehensive methodology (beyond early warning and violence prevention) for measuring and reporting on sustainable peace worldwide. This initiative could be informed by such initiatives as the Gross National Happiness Index (Jones, 2006), the eight bases of a Culture of Peace (UN Resolution A/RES/52/13), the Peace Scale (Klein et al., 2008), and The Universal Declaration of Human Rights. Another possible step would be to develop a dynamical computational model with variables from multiple disciplines that have been shown to predict violence and peace and then try to keep a “Violence Watch” as well as a “Peace Watch” on countries by plugging data in to see if we can identify nations susceptible to outbreaks of violence and outbreaks of peace (latent attractors).
- **An annual theory-practice-policy forum on sustainable peace.** There is currently a need for an annual gathering of policy-makers, peace-practitioners and scholars, where leading-edge research on sustainable peace could be translated and provided to policy-makers.

Collaborative, multidisciplinary work of this nature requires a common language based on an integrative platform to facilitate communication and coordination across the legendary disciplinary and theory-practice divides. The approach of dynamical systems, a scientific paradigm widely employed across scientific disciplines, provides such a platform.



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