



Hybridity, Adaptive Peacebuilding and Complexity

Cedric de Coning and Lawrence McDonald-Colbert

INTRODUCTION

This chapter introduces Complexity and Adaptive Peacebuilding and considers how it contributes to the contemporary hybridity debate. Following a brief introduction to Complexity theory, this chapter explores the utility of a complex systems perspective to expand our understanding of hybrid peacebuilding. Adaptive peacebuilding is then introduced as an approach that can help hybrid peacebuilding cope with the uncertainty dilemma that is a characteristic of complex social systems, as well as manage the relational dimension of hybrid peacebuilding through a collaborative approach. This chapter thus seeks to explore what hybridity theorists may gain from a complex systems approach to peacebuilding

C. de Coning
Norwegian Institute of International Affairs (NUPI), Oslo, Norway
e-mail: cdc@nupi.no

L. McDonald-Colbert (✉)
Waseda University, Tokyo, Japan

© The Author(s) 2021
Y. Uesugi et al. (eds.), *Operationalisation of Hybrid Peacebuilding
in Asia*, Security, Development and Human Rights in East Asia,
https://doi.org/10.1007/978-3-030-67758-9_3

and begin to build bridges between complexity, adaptive peacebuilding and hybrid peacebuilding.

Peacebuilding is about influencing the behaviour of social systems that have been affected by violent conflict. Insights from complexity science about how best to influence the behaviour of complex systems, how such systems respond to pressure, and how to avoid unintended consequences (Aoi et al. 2007), should thus be valuable for those involved in understanding and undertaking peacebuilding (Ramalingam and Jones 2008). In the context of this chapter, ‘peacebuilding’ refers to all actions undertaken by both the international and local actors that work towards resolving a particular conflict and sustaining the peace in a given social system. Peacebuilding is thus not understood only as something done by international or local organisations that have peacebuilding as their mandate, objective or profession, but as something done by all actors that work towards peace.

Concepts like peacebuilding convey the assumption that actors, such as a United Nations (UN) agency or peacebuilding NGO, possess the knowledge and capability to ‘build’ peace in the same way an engineer builds a bridge. Social systems are, however, unlike a bridge or a machine where its parts have a specified and pre-designed role in the functioning of the whole, operating under a single pre-determined method to achieve that purpose (Morin 2005). When a machine becomes stressed it breaks down and requires repair. Some people working in international conflict resolution approach peacebuilding with a similar mindset; as if it is a tool designed to fix societies affected by conflict (Ghani and Lockhart 2008). However, the insights gained from studies in social complexity, and especially from the processes of emergence and self-organisation, inform us that complex social systems must fix themselves if they are to be self-sustainable (Luhmann 1990).

This does not mean that there is no role for international or external actors. To the contrary, local systems are often trapped in a path dependent conflict cycle that are resilient against change, and they may need external assistance to open-up other possibilities. This is the role that hybrid peacebuilding attempts to fulfil. However, external fixes will not stick if they have not been internalised, and it is thus the internal adaptation process that is the critical element for self-sustainability (de Coning 2016). External intervention may at times be necessary, but it is not sufficient on its own. It is the internal system’s own adaptations, and its own

integration of new attitudes, knowledge and behaviour into its own social institutions, that result in self-sustainable peace.

Hybridity theory has been developed as a bridge that can facilitate the merger between the internal and the external worlds in the peacebuilding context. Over time, peacebuilding as an enterprise has trudged towards standardisation and uniformity, becoming mired in a formulaic and inflexible methodology (Mac Ginty 2008). This ‘flat-packed’ peacebuilding has seen a surge of scholarly criticism in recent years, and one of the by-products of this debate has been the emergence of hybridity as a concern for peacebuilding theorists. Hybridity is designed as the antithesis to the rigidity and standardisation of ‘flat-packed’ peacebuilding. Embedded within the methodology of hybridity theory is an acceptance of the inherent complexity of peacebuilding operations. Hybridity, as an ontological position, can be defined as an observance of the dynamic interchange between all relevant actors in the field (Richmond and Mitchell 2012). This dynamic interchange expresses causal and relational mechanisms that are out of the purview of the principally top-down ‘flat-packed’ methods and highlights the complex multi-directional realities of the peacebuilding arena. As put by Uesugi, “hybridity is a *mandala* which enlightens us about the ‘relational’ dimension of peacebuilding” (2020: 3).

COMPLEXITY

Complexity refers to a specific type of complex system, such as a society, that has the ability to adapt, and that demonstrates emergent properties, including self-organising behaviour. Such systems emerge, and are maintained, as a result of the dynamic and non-linear interactions of its elements, based on the information available to them locally, as a result of their interaction with their environment, as well as from the modulated feedback they receive from the other elements in the system (de Coning 2016: 168; Cilliers 1998: 3).

Social systems are empirically complex (Byrne 1998). This means they demonstrate adaptability and display emergent properties, including self-organising behaviour (Kaufmann 2013). As social systems are highly dynamic, non-linear, and emergent, it is not possible to find general laws or rules that will help us predict with certainty how a particular society or community will behave (Cilliers 2002). It is not possible to undertake a project and satisfactorily predict the outcome. Nor is it possible

to use a project design that performed well elsewhere, for instance the Truth and Reconciliation Commission in South Africa, expecting that it will have the same effect in another context. This uncertainty is an intrinsic quality of complex systems, not a result of imperfect knowledge or inadequate analysis, planning, or implementation. This recognition has significant implications for the way peacebuilding is thought about and undertaken.

Complex organisations, in this sense, should not be conceived of as functionally uniform input-output machines whose processes can be easily observed, identified and manipulated, but rather should be conceived of as *fields*, in the Bourdieusian sense (Bourdieu 1977), in which the interactions of actors and the onset of events is facilitated. Due to the expansive diversity of fields through which complexity has developed, a truly synthesised theory or methodology of complexity does not exist (Chu et al. 2003; Preiser et al. 2018). However, complexity has been constructed into somewhat of an interdisciplinary umbrella term, allowing for a sketching of the general features of complex systems, including a consolidation of conventional concepts, themes and terminology (Alhadeff-Jones 2013; Preiser et al. 2018).

COMPLEXITY AND HYBRID PEACEBUILDING

Preiser et al. (2018: n.p.) have distilled complexity into a few characteristics that provide a “conceptual typology” based on “an ontological reading... to discern general patterns and underlying causal explanations”. Four are particularly relevant for hybrid peacebuilding: relationality; dynamism; radical openness and contextuality, and adaptivity. These concepts will be used as a “heuristic framework” (ibid.) that will allow us to discuss complexity theory’s relation to hybridity. Relationality entails that the elements in a complex system are flexible and dynamic. For hybrid peacebuilding, this means that research should not focus on actors, but rather on their connections and interactions, and how this changes the peacebuilding environment. Further, these relations are non-linear and dynamic and thus produce emergent properties, meaning that no matter how precisely a conflict is understood at the micro-level, a concurrent macro-level analysis is always necessary. This is exacerbated by complex systems having permeable and indefinite boundaries, so that the system itself interacts both endo- and exogenously. This radical openness entails contextuality in complex systems, where system behaviour is dependent

on its relational interactions in both the local and environmental context. Hybrid peacebuilding must acknowledge therefore that the local context is never isolated from exogenous effects. As elements in a complex system interact with both other elements and their wider environment, they effectively ‘learn’, changing their behaviour to produce optimal outcomes. While this adaptivity may be a source of difficulty when it comes to peacebuilding interventions, it also provides a site of creativity that can help to iteratively improve interventions as they progress. Hybrid peacebuilding should therefore seek to include local populations at all opportunities. The proceeding discussion shall systematically approach complexity and its efficacy for hybridity research by addressing each principle of the “conceptual typology” (ibid.) in turn and discussing its relation to hybrid peacebuilding, further defining key concepts as they are introduced.

Relationality

Relations, here, refers to the interactions between constituent components of the system. The process of giving, receiving, exchanging, influencing or otherwise making contact with other elements is the driving force behind what makes a system complex. Relations between elements therefore take precedence over the elements themselves. Taking insights from relational theory, the ontology of complexity thus conceives of the essential elements in a complex system not as the ‘things’ themselves, but rather as the processes (Rosen 1991). As such, complex systems “are defined more by the interactions among their constituent components than by the components themselves” (Preiser et al 2018: n.p.). A corollary of this therefore is that an analysis of systemic change or evolution is crucial to an analysis of complex systems. By analysing the relations between components in a complex system, what is being analysed is how this system adapts and fluctuates over time.

Hybridity goes to great lengths to explain the multifaceted aspects of peacebuilding and emphasises the importance of including a wide and heterogeneous array of actors into the process (Mac Ginty and Richmond 2013). Complexity helps to emphasise the notion that these actors do not exist independently from one another, by putting the spotlight onto the interaction between these actors (over and above the nature of the actors themselves). In fact, it is the relations between them that define their role in the system. In a complex system, elements are co-constitutive (by way of their adaptivity to feedback), and thereby rely on

the dynamics of the system for the formation of their identity. As hybridity acknowledges the extensive variation and interconnection of actors in the peacebuilding field, complexity emphasises this variation and interconnection as an essential part of the system. Hybridity can help to delineate who actors are and how they behave in the peacebuilding context. Complexity helps to understand how these actors fit into a wider network and how this network systemically functions. Where hybridity highlights which actors are imperative to peace processes, complexity demonstrates the position of these actors within the wider process and how this impacts their identities, as well as the structure and operation of the process as a whole.

However, whereas Mac Ginty and Richmond (2016) cast doubt over the entire enterprise of instrumentalising hybridity, the contention of this chapter is that complexity can help to ‘bridge the gap’ between hybridity-as-theory and hybridity-as-practice. Relationality is one of the preeminent ways in which this can be achieved. For Uesugi (2020: 9), peacebuilding is “a continuous process of negotiation, mediation, arrangement, adaptation, adjustment, coordination, cooperation and contestation amongst divergent stakeholders in a society over their conflicting interests, values and needs”. In line with a complexity ontology, this *process* is the superlative concern in peacebuilding. This moves away from the atomistic, a-temporal and actor-focused approach of contemporary peacebuilding theory, whereby pre-eminence is put on the *who* rather than the *how* of peacebuilding. It is imperative, therefore, to over-rely on who the actors in a system are (institutions, groups, individuals etc.), but how they connect and interact, and how these interactions shape the evolution of the system. This can allow us to codify (to a degree) to what extent, and according to what mechanism, information flows between them.

In Chapter 4 of this volume, Deekeling and Simangan discuss the operationalisation of hybridity through a ‘mid-space actor typology’. This typology consists of a classification of various roles and functions that can be played by intermediary actors, referred to generally as ‘gatekeepers’, in the peace process. These ‘gatekeepers’ safeguard the communities they are a part of and oversee the avenues of communication between them. These gatekeepers could either serve as bridge-builders or spoilers to the peace process, depending on the context. For Deekeling and Simangan, the preeminent role of the peacebuilding community is thus the identification and management of these ‘gatekeepers’ so that they stay on-track with the aims of the peacebuilding efforts, and serve to bolster, extend and

fortify the peace process instead of hamper or detach it. This may be done via capacity building or the coordination of interaction and knowledge transfer between communities.

As hybridity has served to highlight the variety of actors in the field, Deekeling and Simangan seek to operationalise this variety, utilising those actor's unique traits, abilities and connections to enhance the peacebuilding programme. This endeavour fits well with the lessons gleaned from complexity. The complexity literature emphasises the importance of peacebuilding's relational aspects. With regards to hybridity, this entails that we identify how actors interact with one another, in what manner these interactions take place, and what commodities are transferred through these interactions. The mid-space actor typology goes some way toward codifying these relationships; it allows us to begin to clarify what kind of relationships are active in the peace process and the manner in which they are interconnected. It is important to emphasise how *definitionally* relational the 'mid-space actor typology' is. The typology is a utilisation of the relationships between actors in the system—not a description of the actors themselves. Via their position in the 'mid-space' gatekeepers shape and manage the relations between elements. As acknowledged by Deekeling and Simangan, it is important not to over-rely on an actor-focused typology. Whereas these actors are defined relationally, and the typology itself operates on relational grounds, the application of this typology can lead to an overbearance on the importance of specific actors in that peace process. While this brings dangers that could hamper system resilience (i.e. through entrenched and over-connected actors turning 'spoiler' and having a needlessly significant impact on system functionality) the main issue with regards to the implementation of a complex peacebuilding theory is an ontological one.

A crucial corollary of the relationality of complex systems is systemic change and evolution. Any analysis of a complex system must have at its heart an appreciation of that system's development over time. Focus or reliance on specific actors leads us toward a rigid and static analysis of the system. Not only may their functions and roles differ, but the very nature of the actors themselves may evolve. Because the elements in a complex system are constituted relationally, their existence is contextual, flexible and dynamic. With complex systems, we must focus on "the process of becoming, rather than static states of being" (Preiser et al. 2018: n.p.). Traditional approaches to peacebuilding focus on how key actors influence the direction of the system (i.e. more or less peaceful). A complexity

lens complements this kind of analysis by emphasising the importance of changes over time; both at the individual and systemic level, which will be discussed in the following section.

Dynamism

A defining attribute of a complex system is its inherent dynamism and perpetual volatility. This dynamism stems from the self-organising capacities of complex systems, which in turn stem from the generative capacity of relational interaction amongst their elements (Heylighen 2001). Self-organisation, in this context, refers to the ability of a complex system, like a society, to organise, maintain and sustain itself without an external or internal managing agent (Mitchell 2009: 13). In this sense, self-organisation refers to “the spontaneous creation of a globally coherent pattern out of the local interactions between initially independent components” (Heylighen 2001: 275). Self-organisation facilitates and modulates the flow and processing of feedback information, for instance through developing shared understandings, participatory decision-making and monitoring mechanisms. Whereas complicated systems—for example an advanced aircraft or super-computer—can be comprehensively described and understood through an observation and analysis of their components and how they work together to produce a specific effect, a system that is complex cannot be understood via an analysis of its constituent elements (Cilliers 1998). In contrast to linear complicated systems, a complex system output is more than just the sum of inputs (Willy et al. 2003). Non-linearity in relational mechanisms in complex systems means that small, localised disturbances can evolve into critical states that impact the entire system (Bak 1999). As such, the system will have properties, and exhibit behaviours or mechanisms that cannot be analysed or traced through an analysis of its elements (Willy et al. 2003). If an alien were to observe humans they may observe men, women and children, and some of their relationships, but they will not be able to easily identify the invisible emergent and self-organising cultural processes that organise them into families, clans and societies. These properties, behaviours and mechanisms are known in the complexity literature as emergence.

Total-system outputs stem from the non-linear interaction processes of adaptive and dynamic elements, and so they are the result of complex causalities; small causes can have large effects, and large effects can have small causes, all originating from disparate sites (Cilliers 1998). As such,

interventions in a system often produce unforeseen consequences and create new problems (Preiser et al. 2018). Complex interactions thus occur where an organisation or system can change or adapt seemingly spontaneously or automatically (Stacey 1992). Whereas a complicated system can be understood holistically and engaged with or manipulated so as to produce some predictable outcome, a complex system is definitively different (Poli 2013). Designing, building and launching a rocket into space is highly complicated, but once it is mastered, the same process can be repeated with a reasonable chance of success. In fact, the most frequently used rocket to send people and goods into space is the Soviet Soyuz rocket, which has a core design that has been in use since 1967 (European Space Agency 2019). In contrast, non-linearity plays a critical role in the emergence and self-regulation of complex adaptive systems (Cilliers 1998: 3). Even if a particular process helped to generate a peaceful outcome in one society, such as the Commission for Reception, Truth and Reconciliation in Timor-Leste, it cannot be repeated in another context with any reasonable expectation that it will have the same outcome. In fact, it cannot even be repeated in Timor-Leste with any expectation that it will have the same outcome. Irreproducibility, then, is a function of dynamic process in complex systems and their emergent properties.

Mac Ginty and Richmond (2016: 224) describe “the concept of hybridity [as amounting] to a rejection of conflict scientism, or the notion that conflicts can be ‘understood’ if only we have enough data and the correct formula”. Instead, hybridity aims to incorporate the complexity of local realities, allow space for the inclusion of variable perspectives, and recognise the legitimacy of disparate sites of agency. Hybridity accepts that a conflict, and thus any intervention in it, cannot be totally planned and organised from outside. Conflicts, from a Complexity ontology, are thus unknowable in the sense that such knowledge can lead to predicting how a conflict will behave in future. Any methodological tool of engagement must therefore be careful not to over-state its analytical capabilities. The schema of Deekeling and Simangan’s typology, though implicit rather than explicit, is the categorisation and organisation of the conflict ‘field’ through the designation of the relevant parties and their interlinkages and relations. Because gatekeepers are inherently relational, they implicitly depend on the existence of a particular (though potentially flexible) networked system structure. Hypothetically, the typology would allow for

a ‘mapping’ exercise, where participating gatekeepers are plotted in reference to one another by some observational cartographer. However, the dynamic nature of complex systems necessitates that even the most intimate and precise composition of elements of a conflict cannot lead to a holistic understanding of it at a grand scale. There must be a multi-level analysis, then. The typology can greatly benefit the micro-level analysis of system elements and their relations. But this examination must be made alongside, and indeed separate from, a macro-level analysis of the system at a grand scale. To complement the micro-analysis of the typology, we should attempt to understand the dynamics of the conflict at a more global scale. We can emphasise the typology, and of mid-space bridge-builders, as a method for or point of engagement with the system, but we must further assure to operate with an appreciation of the wider state of the system.

Radical Openness and Contextuality

Radical openness is the notion that complex systems are definitively borderless, and any boundaries drawn only serve as a pragmatic choice for studying the system at hand (Chu et al. 2003). As societies are radically open complex systems it is always problematic to draw precise boundaries between distinctions such as local/international or internal/external (Cilliers 2001). Complexity informs us that in complex systems, including social systems, change processes are emergent from within a given system and evolutionary in nature. This system adapts to its environment and its own emergent behaviour through a continuous process of inductive adaptation, regulated by its own self-organising processes. Local or internal in this context thus refers to those processes that are emergent from this internal experience, whilst external refers to the environment with which the elements in the system in question are interacting with (Bargués-Pedreny 2015: 122). In the peacebuilding context, a local system describes a society or community that is affected by conflict. External or international actors refer to outsiders that are engaging with the local system. It is understood that all complex systems are open systems and are thus influenced by their environment, and that in this context it is not possible to isolate a local conflict system, without taking into account the various regional and global influences that have shaped and that continue to influence that society. Manaysay and Espesor in Chapter 6 of this volume discuss how, via external actors, international

norms and practices interact with local-level civil society in Mindanao, the Philippines, blurring their boundaries. Still, there is analytical value, from a complex systems perspective, to draw a distinction, to the degree possible, between what can be perceived as Mindanao society and what can be perceived as external actors, even when it is understood that these are very open and fluid categories. As acknowledged by Manaysay and Espesor, when the essential ingredient is self-organised, locally emergent social institutions, then there is value in trying to identify and support those local institutional processes.

Boundaries in a complex system are thus “permeable and allow for communication... between a system and its surroundings” (Preiser et al. 2018: n.p.). The stark permeability of boundaries in complex systems is denoted by radical openness, as interaction and commodity-sharing between elements can happen both endo- and exogenously. Subsequently, boundary definition can be particularly difficult when it comes to complex systems—it is not always possible to know which elements are ‘in’ the system—or ‘out’. This is further complicated by Cillier’s description of system boundary definition as being largely a function of the perspective of the observer (Cilliers 2001). Each system is a Bourdieusian ‘field’ that structures or brackets the interactions of a variety of elements—yet these systems are themselves part of a larger ‘field’.

A corollary of the openness of a system is system contextuality. Contextuality in this case refers to the impact of the situational or environmental context on the actions of the elements. Elements within a complex system are impacted by occurrences outside the system as much as those within (ibid.). As such, there are two modes of interaction that serve to delineate the “patterns of organization” (Preiser et al. 2018: n.p.) that structure communication mechanisms between elements in a complex system. These are dynamic interactions within the system (between the elements and each other), and without (between the elements and the outside environment). This double-layering of interactional contexts, coupled with the ability of the elements to adapt their strategies, entails a large amount of contextuality. This is illustrated in Chapter 5 of this volume, where Umeyama and Brehm discuss the fluctuating identities of Cambodian monks as they interact with both their local context, and the wider international peace process.

Boege et al. (2009: 15) discuss how a course of “positive mutual accommodation” characterises the peacebuilding process, whereby “there

are no clear-cut boundaries between the realm of the exogenous ‘modern’ and the endogenous ‘customary’ instead processes of assimilation, articulation, transformation, and/or adoption are at the interface of the global/exogenous and local/indigenous”. Hybridity theory thereby references the embeddedness of systems within one another; where a “messy local socio-political context” (ibid.) blurs system boundaries. Mac Ginty and Richmond (2016: 220) further acknowledge that “hybridity is a condition that occurs, in large part, contextually”. As the state of the wider environment ebbs and flows, and influences on the system to fluctuate, the nature of the hybrid context is in constant flux. Hybridity then, is “a constant process of negotiation as multiple sources of power in a society compete, coalesce, seep into each other and engage in mimicry, domination or accommodation” (ibid.). We cannot, therefore, create a simple orrery of our conflicting society; there must be both implicit and explicit reference to the wider cosmos.

Adaptivity

The contextuality of interactions in complex systems is exacerbated by complex system elements being definitionally adaptive. The elements that make up the system, people and institutions in society, adapt based on the feedback they receive from their interactions relationally with each other and with their wider environment. They act with intent, and others around them, or their environment reacts. In Complexity this reaction is referred to as feedback. Based on their interpretation of the feedback received, the element changes their behaviour the next time they act in order to improve their gain or to avoid losses. This change of behaviour based on feedback is called adaptation. The elements effectively ‘learn’ from their continuous interactions with each other and their system which actions have the optimal effect. As a society we use adaptation to collectively learn what kind of behaviour we should and should not accept to sustain our peace. Systemic evolution is therefore a large part of what characterises a complex system, and adaptation and feedback help to explain how complex system evolve. This evolution develops locally, in piecemeal portions of the system, and progresses bit-by-bit from adaptive interaction at the elemental level and may eventually result in large-scale systemic fluctuations. Of course, as large-scale changes in system properties fluctuate, this affects the contextual environment in which small-scale

elements operate and interact, creating a somewhat cyclical process of change.

Over time, these cyclical processes of adaptive interaction shape into “patterns of organization” (Preiser et al. 2018: n.p.) in sections of a system, which loosely govern the structure of interaction between elements. Patterns of organisation are thus formed and maintained through the self-organisational activities of system elements. These patterns further inter-link with other system areas, generating the adaptive capacities of a complex system (Morin 1999; Levin 2005; Fox-Keller 2008). While not necessarily entailing path dependency, these patterns do suggest some form of road-mapping and structuring of the system’s potential trajectories. This therefore hints at the potential for studying the system and its mechanisms of change and evolution. Adaptivity fuels self-organisation, which in complex systems like a society thus both explains how it maintains its order, hierarchies, and organisation, as well as how it, at the same time, is continuously evolving.

Hybridity theorists acknowledge the power of local actors and environments to subvert and reassemble the structures of liberal peacebuilding (Richmond and Franks 2007; Mac Ginty 2008), developing these structures into “alternative versions of peace” (Mac Ginty 2008: 159). These acts of subversion are instances of adaptation. Hybrid peacebuilding aims to incorporate the “frictions” (Lowenhaupt Tsing 2004) between the machinations of the liberal peace and local imaginaries of governance into the larger hybrid peacebuilding project. The result is a sort of “institutional bricolage” (Cleaver et al. 2013: 168), whereby local epistemologies of peace and governance import and redefine exogenous liberal peace structures. This may initially appear to present a challenge for the would-be peacebuilding practitioner. This “cacophony of thinking” (Mac Ginty and Richmond 2013) fogs the ability of peacebuilders to implement a structured approach to peace. The “sheer heterogeneity of the sources of localised thinking and expression means that there is no neat framework of ideas” that peacebuilders can linearly or simply realise (ibid.). However, this variety of perspectives and approaches can serve as a point of resilience and inventiveness, as the inherent capacity for self-development and self-organisation in complex systems allow for the cultivation and operationalisation of learning and adaptive processes that may generate a different process than what initially envisaged by the peacebuilder, but that may still lead to the same overall outcomes. The added advantage of this process is that the outcome will now be the result

of an indigenous process. This increases the likelihood that the process will be perceived as home grown, have social institutions that feel an ownership towards it, understand the history and processes that generated it, and therefore necessary to sustain it.

Complexity helps to explain why top-down, imposed or borrowed peacebuilding models of social transformation is doomed to fail. Even a complex social system like a society that has been weakened by violent conflict typically has enough resilience to resist externally imposed solutions. Peacebuilders who stimulate and facilitate adaptive processes of a society and encourage the society, subtly with negative and positive feedback, to develop or strengthen the institutions it needs to sustain peace, is likely to be more effective. Boege et al. (2009: 14) emphasise the need to “[take] into account the strengths of the societies in question, acknowledging their resilience, encouraging indigenous creative responses to the problems, and strengthening their own capacities for endurance”. Mac Ginty and Richmond (2013: 780) concur, celebrating that while the “cacophony of thinking” is “messy... it has the capacity to be vibrant and relevant to the communities from which it emerges”.

We have explained how relations between elements are the imperative concern for hybrid peacebuilding from a Complexity ontology. What adaptivity entails is that these relations change and evolve over time as system elements practice iterative learning through feedback processes both with other elements and their local environment. To accommodate this fluidity in identity and function on the part of system elements, the typology itself must therefore be fluid and flexible. But more than simply allowing for adaptivity and accommodating it within the wider functioning of the system, the typology should be structured or utilised so as to actively encourage adaptivity. Owing to the positionality of the elements, and their capacity for engagement and learning—and therefore, importantly, creativity—adaptivity in the hybrid context can lead to innovative problem-solving. The typology instrumentalised by Deekeling and Simangan in Chapter 4 utilises ‘transformative relationships’ as a tool for identifying, shaping and relational progression. Adaptivity is accepted, and indeed encouraged, in the interaction between system agents. The aim however is to ensure that the right kind of relations are taking place between elements. This suggests a new role for would-be peacebuilders, as more of a process facilitator than a direct intervener in the peacebuilding process; stimulating self-organisation in positive directions and influencing the interactions themselves so that they may

produce positive outcomes—where positive is understood as in support of self-sustainable peace. The next section will address one such process facilitation approach, Adaptive Peacebuilding.

ADAPTIVE PEACEBUILDING

Adaptive Peacebuilding is an approach to peacebuilding aimed at influencing complex social systems where hybrid peacebuilders, together with the communities and people affected by the conflict, actively engage in a structured process to sustain peace and resolve conflicts by employing an iterative process of learning and adaptation (de Coning 2018).

In Adaptive Peacebuilding, the core activity of hybrid peacebuilding is process facilitation. The aim of peacebuilding is to stimulate the processes in a society that will lead to strengthening the resilience of those social institutions that manage internal and external stressors and shocks, and in so doing prevent violent conflict and sustain peace. If a society is fragile, it means that the formal and informal social institutions that govern its politics, security, justice and economy lack resilience. Resilience refers here to the capacity of social institutions “to absorb and adapt in order to sustain an acceptable level of function, structure and identity under stress” (Dahlberg 2015: 545).

Adaptive capacity is defined as the capacity to thrive in an environment characterised by change (Joseph 2018: 14). In the conflict resolution context, it refers to the ability of a society to adjust to disruptive change, to take advantage of opportunities, and to respond to consequences (Engle 2011: 648). As established earlier, local self-organisation is a prerequisite for sustainable peace and the societies and communities that are intended to benefit from a hybrid peacebuilding intervention thus need to be fully involved and engaged in the initiative.

The specific arrangements will differ from context to context, but the principle should be that no decisions are taken about a particular peace process without sufficient participation of the affected community or society. Sufficiency here implies that the community should be engaged in such a way that the diversity and variety of their interests, needs, and concerns inform every step of the adaptation cycle. Adaptive Peacebuilding can therefore not be free or distinct from the dynamics of politics or power. The process is not technical or abstract. It is a process that engages with all aspects and elements of societal change that is needed for self-sustainable peace to emerge, such as reconciliation or

transitional justice, and it lends itself to a relational approach that seeks to account for how power is distributed through and within relationships (Day and Hunt 2020). Whilst actors and their interrelations can influence complex social systems by facilitating and stimulating the processes that enable resilience and inclusiveness to emerge, the prominent role of self-organisation in complex system dynamics suggest that it is important the affected societies and communities have the space and agency to drive their own process (Burns 2007). This is why local adaptation processes are ultimately the critical element for inclusive political settlements to become self-sustainable.

Adaptive Peacebuilding thus requires a commitment to engage in a structured learning process together with the society or community that has been affected by conflict. This commitment comes at a cost, in terms of investing in the capabilities necessary to enable and facilitate such a collective learning process, in taking the time to engage with communities and other stakeholders, in giving them the space for self-organisation to emerge and consolidate, and in making the effort to develop new innovative systems for learning together with communities as the process unfolds.

The Adaptive Process: Variation, Selection and Iteration

Complex systems cope with challenges posed by changes in their environment by co-evolving together with their environment in a never-ending process of adaptation (Barber 2011). This iterative adaptive process utilises experimentation and feedback to generate knowledge about its environment. This is essentially the way natural selection works in the evolution of complex systems. The two key factors are variation and selection. There needs to be variation, i.e. multiple parallel interventions, and there needs to be a selection process that replicates and adapts effective interventions and discontinues those that do not have the desired effect. The analysis-planning-implementation-evaluation project cycle is already well established in the development and peacebuilding context. However, these communities of practice are not good at generating sufficient variation. They are also notoriously bad at selection based on effect, and they are especially poor at identifying and abandoning underperforming initiatives (Rosén and Haldrup 2013). To remedy these shortcomings Adaptive Peacebuilding utilise a structured iterative adaptation methodology to help generate institutional learning.

This adaptive methodology builds on the work of Andrews et al. (2017), who have pioneered the problem-driven iterative adaptation (PDIA) approach as an alternative to the linear causal logic of the log-frame in development planning and evaluation. This adaptive approach consists of iterative cycles of learning, starting with analysis and assessment. Based on the analysis, multiple possible options for influencing a social system are generated. When the selected options are developed into actual campaigns or programmes, their design must be explicit about the theory of change each will employ so that their effects can be assessed. A theory of change should be clear about how it intends to contribute to change in the behaviour of the social system it intends to influence, i.e. how a series of activities are anticipated to generate a particular outcome (Valters et al. 2016).

A selected number of these intervention options are then implemented and closely monitored, with a view to identifying and processing the feedback generated by the system in response to each intervention. The feedback is then analysed, after which those responsible for the intervention, together with the affected communities and key stakeholders, decide which initiatives to discontinue, which to continue, and, in addition, what adaptations to introduce for those that will be continued. The ineffectual ones, or those that have generated negative effects, need to be abandoned or adapted. Those that appear to have the desired effects should be continued and can be expanded or scaled-up, but in a variety of ways, so that there is a continuous process of experimentation with a range of options, coupled with a continuous process of selection and refinement. It is thus important that this process is repeated in regular relatively short cycles. The traditional annual or multi-year planning cycles are too slow for coping with highly dynamic social change processes, and most peacebuilding initiatives will have to employ adaptive planning and assessment cycles that repeat 3 or 4 times a year.

Some form of inductive adaptation is already taking place in most peacebuilding initiatives, but what Adaptive Peacebuilding offers is a clear approach or methodological process that can help to enhance and institutionalise the rigor and effects of the adaptations that are already taking place, or stimulate the uptake of adaptive thinking in others where this type of approach to planning and assessment is new.

Adaptive Peacebuilding are scalable at all levels; the same basic method can be applied to individual programmes, to projects, to regional or national-level campaigns, or multi-year strategic frameworks or compacts.

From a complexity perspective, the feedback generated by various interventions at different levels should be shared and modulated as widely as possible throughout the system, so that as broad a spectrum of initiatives as possible can self-adjust and co-evolve based on the information generated in the process.

CONCLUSION

In this chapter we explored the potential connectivity between Hybrid Peacebuilding, Complexity and Adaptive Peacebuilding. We have heuristically employed four foundational characteristics of complex systems to build bridges between the lessons learned from Complexity theory, and the ideas proffered in the hybridity debate. Complexity emphasises the inherency of relationality in complex systems. From an analytical perspective, the relations between the elements are more important than the elements themselves. The “process of becoming, rather than static states of being” (Preiser et al. 2018: n.p.) must be the preeminent focus in a complex peacebuilding ontology. As far as the instrumentalisation of hybridity is concerned, this aspect of complex systems urges the would-be peacebuilder to take care not to entrench any rigidity in the method of engagement. Their characteristic dynamism means that it is impossible to holistically understand the workings of complex systems through an analysis of their constituent elements, no matter how comprehensive it may be. As such, we should not allow hybridity’s focus on the importance of the local, or any typology’s concentration on the interactions between individual actors, to obscure the necessity of also investing in system-wide analysis. Any micro-level study must be accompanied by a contemporaneous macro-level one, as non-linearity in the interactions of system elements generate whole-system outputs that may be unpredictable and immeasurable at the atomistic level.

The importance of context for complex systems should encourage peacebuilders to appreciate the effects of the wider systemic environment for system functionality and take pains not to instantiate false and unfitting system boundaries. This “process of becoming” (ibid.) implies the necessary centrality of systemic dynamism. So, any methodology or typology must remain open and flexible to allow for the systemic evolution that comes part-and-parcel with the constant interaction of definitionally adaptive complex system elements. However, this adaptivity can serve as a point of strength for complex systems. Their capacity for iterant learning

means that complex system elements are imbued with a nature of ingenuity and creativity in responding to feedback processes. Translated into the hybrid context, this entails the ability of actors to make use of local knowledge, or a combination of local-global knowledge, to problem-solve and imaginatively enhance system progression.

However, ‘system progression’ is a purposefully outcome-neutral term; it can lead either to a measure of societal bonding, or to further bifurcation and an increase in conflict tension. So, what this entails for peacebuilders is the possibility of an existential re-working. As immanently adaptive and inherently relational systems are unable to be coerced, peacebuilders may have to consider themselves more as process facilitators who encourage those interactions that should contribute to peace. Through iterative adaptation, whilst discouraging those that may promote violent or coercive means, peacebuilders are to contribute to nurturing and guiding the system progression, whilst at the same time learning from and being guided by the system, in the direction of peace and stability.

This is where Adaptive Peacebuilding comes in. It offers a specific process that peacebuilders can employ to cope with Complexity. It offers a specific methodology for collaboration among peacebuilders, including local and international peacebuilders. And it offers a specific approach aimed at nudging societal change processes towards sustaining peace, without interfering so much that it ends up causing harm by inadvertently disrupting the very feedback loops critical for self-organisation to emerge and to be sustained.

REFERENCES

- Alhadeff-Jones, M. (2013). Complexity, Methodology and Method: Crafting A Critical Process of Research. *Complicity: An International Journal of Complexity and Education*, 10(1–2), 19–44.
- Andrews, M., Pritchett, L., & Woolcock, M. (2017). *Building State Capability: Evidence, Analysis, Action*. Oxford: Oxford University Press.
- Aoi, C., de Coning, C. H., & Thakur, R. (Eds.). (2007). *The Unintended Consequences of Peacekeeping Operations*. Tokyo: United Nations University Press.
- Bak, P. (1999). *How Nature Works*. New York, NY: Copernicus.
- Barber, O. (2011). *Development, Complexity and Evolution*, Online Blog, available: <http://media.owen.org/Evolution/player.html>. Accessed 14 July 2011.
- Bargués-Pedreny, P. (2015). Realising the Post-modern Dream: Strengthening Post-conflict Resilience and the Promise of Peace. *Resilience*, 3(2), 113–132.

- Boege, V., Brown, M. A., & Clements, K. P. (2009). Hybrid Political Orders, Not Fragile States. *Peace Review*, 21(1), 13–21.
- Bourdieu, P. (1977). *Outline of a Theory of Practice*. Cambridge: Cambridge University Press.
- Burns, D. (2007). *Systemic Action Research*. Bristol: Policy Press.
- Byrne, D. (1998). *Complexity Theory and the Social Sciences: An Introduction*. London: Routledge.
- Chu, D., Strand, R., & Fjelland, R. (2003). Theories of Complexity: Common Denominators of Complex Systems. *Complexity*, 8(3), 19–30.
- Cilliers, P. (1998). *Complexity and Postmodernism: Understanding Complex Systems*. London: Routledge.
- Cilliers, P. (2001). Boundaries, Hierarchies and Networks in Complex Systems. *International Journal of Innovation Management*, 5(2), 135–147.
- Cilliers, P. (2002). Why We Cannot Know Complex Things Completely. *Emergence*, 4(1/2), 77–84.
- Cleaver, F., Franks, T., Maganga, F., & Hall, K. (2013). Institutions, Security, and Pastoralism: Exploring the Limits of Hybridity. *African Studies Association*, 56(3), 165–189.
- Dahlberg, R. (2015). Resilience and Complexity: Conjoining the Discourses of Two Contested Concepts. *Culture Unbound*, 7, 541–557.
- Day, A. C., & Hunt, C. T. (2020). UN Stabilisation Operations and the Problem of Non-Linear Change: A Relational Approach to Intervening in Governance Ecosystems. *Stability: International Journal of Security and Development*, 9(1), 2.
- de Coning, C. H. (2016). From Peace Operations to Sustaining Peace: Implications of Complexity for Resilience and Sustainability. *Resilience*, 4(3), 166–181.
- de Coning, C. H. (2018). Adaptive Peace Operations. *International Affairs*, 94(2), 301–317.
- Engle, N. L. (2011). Adaptive Capacity and Its Assessment. *Global Environmental Change*, 21(2), 647–656.
- European Space Agency. (2019). *Soyuz Launch Vehicle: The Most Reliable Means of Space Travel*. Available at: <http://bit.ly/2vYRRGh>. Accessed 10 October 2019.
- Ghani, A., & Lockhart, C. (2008). *Fixing Failed States: A Framework for Rebuilding a Fractured World*. Oxford: Oxford University Press.
- Heylighen, F. (2001). The Science of Self-Organization and Adaptivity. *The Encyclopaedia of Life Support Systems*, 5(3), 253–280.
- Joseph, J. (2018). *Varieties of Resilience: Studies in Governmentality*. Cambridge: Cambridge University Press.
- Kaufmann, M. (2013). Emergent Self-organisation in Emergencies: Resilience Rationales in Interconnected Societies. *Resilience*, 1(1), 53–68.

- Keller, E. F. (2008). Organisms, Machines, and Thunderstorms: A History of Self-Organization, Part One. *Historical Studies in the Natural Sciences*, 38(1), 45–75.
- Levin, S. A. (2005). Self-Organization and the Emergence of Complexity in Ecological Systems. *BioScience*, 55(12), 1075–1079.
- Lowenhaupt Tsing, A. (2004). *Friction: An Ethnography of Global Connection*. Princeton: Princeton University Press.
- Luhmann, N. (1990). *Essays on Self-Reference*. New York: Columbia University Press.
- Mac Ginty, R. (2008). Indigenous Peace-Making Versus the Liberal Peace. *Cooperation and Conflict*, 43(2), 139–163.
- Mac Ginty, R., & Richmond, O. P. (2013). The Local Turn in Peace Building: A Critical Agenda for Peace. *Third World Quarterly*, 34(5), 763–783.
- Mac Ginty, R., & Richmond, O. P. (2016). The Fallacy of Constructing Hybrid Political Orders: A Reappraisal of the Hybrid Turn in Peacebuilding. *International Peacekeeping*, 23(2), 219–239.
- Mitchell, M. (2009). *Complexity: A Guided Tour*. New York: Oxford University Press.
- Morin, E. (1999). Organization and Complexity. *Annals of the New York Academy of Sciences*, 879, 115–121.
- Morin, E. (2005). Restricted Complexity, General Complexity. In C. Gershenson, D. Aerts, & B. Edmonds (Eds.), *Worldviews, Science and Us* (pp. 5–29). Liverpool: University of Liverpool.
- Poli, R. (2013). A Note on the Difference Between Complicated and Complex Social Systems. *Cadmus*, 2(1), 142–147.
- Preiser, R., Biggs, R., De Vos, A., & Folke, C. (2018). Social-Ecological Systems as Complex Adaptive Systems: Organizing Principles for Advancing Research Methods and Approaches. *Ecology and Society*, 23(4), 46.
- Ramalingam, B., & Jones, H. (2008). *Exploring the science of complexity: Ideas and implications for development and humanitarian efforts* (Working Paper No. 285). London: Overseas Development Institute.
- Richmond, O. P., & Franks, J. (2007). Liberal Hubris? *Virtual Peace in Cambodia. Security Dialogue*, 38(1), 27–48.
- Richmond, O. P., & Mitchell, A. (2012). *Hybrid Forms of Peace: From Everyday Agency to Post-Liberalism*. London: Palgrave.
- Rosen, R. (1991). *Life Itself: A Comprehensive Enquiry into the Nature, Origin, and Fabrication of Life*. New York: Columbia University Press.
- Rosén, F. F., & Haldrup, S. V. (2013). By Design or by Default: Capacity Development in Fragile States and the Limits of Programming. *Stability: International Journal of Security & Development*, 2(2), 46, 1–8.
- Stacey, R. D. (1992). *Managing the Unknowable: Strategic Boundaries Between Order and Chaos in Organizations*. San Francisco, CA: Jossey-Bass.

- Uesugi, Y. (2020). Introduction. In Y. Uesugi (Ed.), *Hybrid Peacebuilding in Asia* (pp. 1–14). New York: Palgrave MacMillan.
- Valters, C., Cummings, C., & Nixon, H. (2016). *Putting Learning at the Center: Adaptive Development Programming in Practice*. London: Overseas Development Institute.
- Willy, C., Neugebauer, E. A. M., & Gerngroß, H. (2003). The Concept of Nonlinearity in Complex Systems. *European Journal of Trauma*, 29(1), 11–22.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

