

Author bio (73 words):

Maharaj Vijay Reddy is an Associate Professor in Tourism and Marketing at Coventry University. His research focuses on disaster management and sustainable development. (Email: vijay.reddy@coventry.ac.uk)

Stephen W Boyd is a Professor of Tourism in the Department of Hospitality and Tourism Management at *Ulster* University. His research focuses on post-conflict tourism development and heritage tourism.

Mirela Nica is a PhD student at Coventry University, pursuing research on post-conflict tourism development in Northern Ireland.

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Statement of Contribution:

Towards a post-conflict tourism recovery framework

1. What is the contribution of knowledge, theory, policy or practice?

The contribution of knowledge offered is a state-of-the-art review of research on tourism crises, with a particular focus on post-conflict tourism. It adopts a holistic approach, drawing on new ideas of how to better understand post-conflict environments, embracing scholarly thinking (within and external to tourism academe) around chaos and chaotic environments, and theory associated with concepts such as complexity, resilience and vulnerability. It approaches tourism development as being non-linear, and puts forward a new conceptual framework that shows a number of trajectories that regions coming out of conflict can take depending on actions management has taken regarding overcoming resilience and vulnerability. Scope exists for proactive policy to emerge dependent on the path of tourism development that is chosen.

2. How does the paper offer a social science perspective/approach?

The paper has a strong social science perspective as it views tourism as a complex system, involving socio-cultural, socio-economic and socio-political sub-systems. Understanding of these subsystems is based on extant knowledge of tourism scholarships across the social sciences. In particular, research on post-conflict tourism development has been shaped by tourism academics across the social sciences, including sociology, political science, peace and conflict studies, policy and planning. While the framework proposed has the greater utility for managers within a post-conflict environment context, the relationships and linkages between key concepts such as chaotic environment, adaptive capacity, resilience and vulnerability will offer tourism academics, drawn across the social sciences, opportunities to test the wider replicability of the framework and further advance social science knowledge toward a better understanding and management of crises.

Highlights

- State-of-the-art review on crises management for tourism
- Role of chaos, complexity, resilience and vulnerability to understanding crises
- Development of a conceptual framework for post-conflict tourism development

ANNALS OF TOURISM RESEARCH

Towards a post-conflict tourism recovery framework

Abstract (119 words)

While there is an increasingly extant literature on tourism crises and disasters, a lacunae exists regarding robust conceptual and theoretical frameworks for reviving tourism in a post-conflict context. Holistic frameworks that build tourism resilience in post-conflict destinations is still considered an emerging area in crisis management research. This paper aims to address this gap. An in-depth critique of research across leading peer-reviewed tourism journals, involving 102 individual papers; 63 on crises and disasters, and 39 on tourism recovery frameworks, was undertaken to develop a post-conflict tourism recovery framework. The framework proposed synthesizes complex relationships for post-conflict destinations operating “on the edge of chaos”, and enables consideration of key factors that influence their capacity to be resilient, adapt, and recover.

Keywords (5 words):

Post-conflict; tourism; recovery; resilience; framework

MANUSCRIPT (9999 words):

1. INTRODUCTION

Tourism is widely recognised as contributing towards Sustainable Development Goals (Reddy & Wilkes, 2015). By year-end 2018, international tourism receipts annually accounted for USD 1.5 trillion (World Tourism Organisation, 2020) and the growing importance of tourism has been globally acknowledged from an economic, socio-cultural and pro-environmental perspective. Tourism has become a major agent for pro-active change for destinations where impacts are internalised and managed.

However, tourism remains highly vulnerable to crises and disasters (e.g., 9/11 terror attacks, 2004 Asian tsunami, Fukushima nuclear disaster, and Coronavirus pandemic) and this has evoked considerable research that has focused on impacts, changing perception of travel, and

destination image (Armstrong & Ritchie, 2008; Butler & Suntikul, 2013; Faulkner & Vikulov, 2001; Granville, Mehta & Pike, 2016; Henderson, 2005, 2007a; Isaac & Ashworth, 2012; Lanouar & Goaid, 2019; Miller & Ritchie, 2003; Prideaux & Witt, 2000; Reddy, Shaw & Williams, 2006; Ritchie, 2004, 2009; Seraphin, 2018; Woosnam & Kim, 2014; Yang, Zhang & Chen, 2020).

Specifically, scholars have focused their attention on the key aspects related to tourism industry's readiness and responses to crises and disasters. These include: *crisis knowledge and risk intelligence* (Paraskevas, Altinay, McLean & Cooper, 2013; Paraskevas & Quek, 2019); *forecasting* (Page, Yeoman, Munro, Connell & Walker, 2006; Prideaux, Laws & Faulkner, 2003); *destination image* (Avraham, 2015; Ketter, 2016; Zenker, von Wallpach, Braun & Vallaster, 2019); *perceptions of risk and risk management* (Liu-Lastres, Schroeder & Pennington-Gray, 2018; Tsai & Chen, 2010); *crisis indicators* (De Sausmarez, 2007); *post-crisis recovery strategies* (Campiranon & Scott, 2014; Scott, Laws & Prideaux, 2007); *crisis signal detection* (Paraskevas & Altinay, 2013); *stakeholder collaboration* (Hystad & Keller, 2008; Jiang & Ritchie, 2017); *crisis communication strategies* (Henderson, 2003; Liu-Lastres et al., 2018; Möller, Wang & Nguyen, 2018); *terrorism prevention* (Kılıçlar, Uşaklı & Tayfun, 2018; Paraskevas & Arendell, 2007). However, it has been argued that more research is needed on crises (see Ritchie and Jiang, 2019), in particular those caused by conflicts and political instability (Henderson, 2007b; Seraphin, Korstanje and Gowreesunkar, 2019; Sonmez and Graefe, 1998).

The impacts of violence, terrorism, political instability and armed conflicts remain a key challenge for tourism researchers as the vulnerability and resilience of destinations vary as a result of their spatial and functional connections with the physical, cultural, socio-economic, political and technological environments (Leiper, 2008; Scott & Laws, 2005). Consequently, the focus of this review article is, firstly attributed to debating the relationship between conflicts and tourism, their theoretical underpinning and the issues of vulnerability and resilience; secondly, it focusses on conflict destinations and their implications for the development of frameworks for crises management whilst proposing a holistic framework for post-conflict destinations.

For the scope of this article, two methodological procedures were followed. First, a comprehensive review of tourism studies that considered the impacts of natural and human-

induced disasters on tourism over the past 20 years (1999-2019) was conducted to understand their impact on destinations and the attempt made to understand the theoretical underpinning and issues of vulnerability and resilience. The review reflects a growing interest across the academic community in this research area given the major implications that crises have on the tourism industry. The authors acknowledge that extant research may have been undertaken on specific disasters and crisis published in journals worldwide and online, but focus in this review was on 63 tourism studies specifically focused on natural and human-induced disasters that occurred in both developed as well as less-developed countries, and were published in peer-reviewed journals (*see Figure 1 and Appendix 1*).

Second, a structured review of tourism crisis and disaster management models and frameworks applied in tourism research was carried out. Disasters were included given that not all disasters are naturally occurring. This review was purposely limited to the top three academic tourism journals (based on UK's Chartered Association of Business Schools Journal Ranking 2018) namely *Annals of Tourism Research*, *Tourism Management*, and *Journal of Travel Research*. Between 1999 and 2019, some 39 articles (18 in *Tourism Management*, 9 in *Annals of Tourism Research*, 12 in *Journal of Travel Research*) discussed crises management. This was reduced to 14 based on the eligibility of: (1) a specific keywords search for "Crisis", "Management" AND "Framework" in the journal article's title, abstract and keywords; (2) a 1999-2019 time frame; and (3) relevance of the paper to the analysis of tourism crisis management frameworks and models. In order to reflect the wide range of research in the field of crisis management and frameworks applied in tourism, a further six articles were identified from other sources following a "snowball" approach. The identification and selection of these six peer-reviewed articles was realised through a process of screening based on frequency of citations (e.g., McKercher, 2008; McKercher & Tung, 2015) and relevance to the analysis. These included work by Evans & Elphick (2005), de Sausmarez (2007), Scott, Laws & Prideaux (2007), Sonmez and Graefe (1998), Pennington-Gray, Schroeder & Gale (2014) and Jiang & Ritchie (2017) (*see Appendix 2*).

Assessment of both data sets helped to inform the development of an integrated conceptual framework that is presented in the final part of this paper, which recognises three keys tenets of 'adaptiveness', 'vulnerability' and 'resilience'.

2. UNDERSTANDING TOURISM CRISES

2.1 Theoretical and empirical aspects

It is well accepted that there exists a difference between crises and disasters (Faulkner, 2001; Santana, 2004; Scott & Laws, 2005). The former is more often internal and manageable whereas the latter external and less predictable. Both, however, involve the management of risk and the impact that can bring to bear on society. This brings new challenges to the management of crises.

“FIGURE 1 HERE”

The question is thus not whether a crisis will happen but when and how the crisis will be handled (Faulkner & Vikulov, 2001; Kash & Darling, 1998). Crises threaten the existence of any system, “whether it is a nation state, social community, government, organisation, natural environment, eco-system or some other established system (including tourism)” (Ritchie, 2009, p.8). To a certain extent, there is a degree of ‘predictability’ with a crises. In contrast, Prideaux, Laws and Faulkner (2003, p.478) argue that a disaster is an “unpredictable catastrophic change that can normally only be responded to after the event, either by deploying contingency plans already in place or through reactive response”. As a result, in recent years, the response to a disaster or crisis has become increasingly proactive, predominantly focusing on risk reduction mechanisms that aim to reduce people’s vulnerability to natural disasters or conflicts (Hilhorst, 2013).

However, as Faulkner (2001, p.136) highlighted, “one of the reasons so little progress has been made in the advancing of our understanding of tourism crises is the limited development of the theoretical and conceptual frameworks required to underpin the analysis of this phenomena”. An analysis of current crisis management approaches in tourism demonstrates the need for a different perspective in managing tourism crises due to the likely complex and chaotic nature of these events. What is more, tourism seems to behave in a non-linear, non-deterministic and dynamic manner (Baggio, 2008; McKercher, 1999), with a complex set of relationships existing between and within the tourism destinations. Hence, a complexity-based perspective on tourism crises as an alternative to a more conventional approach to tourism destination management may provide a better understanding of tourism crises management and planning.

2.2 Chaos and complexity

Chaos and complexity theory (McKercher, 1999), refers to “a broad set of loosely related theoretical and meta-theoretical orientations to the behaviour of complex non-linear systems” (Seeger, 2002, p.329), and is concerned with “how systems change and evolve over time due to interaction of their constituent parts” (Manson, 2001, p.406). Although chaos and complexity theory have been used interchangeably in the literature (Farsari, Butler & Szivas, 2011; McDonald, 2009), Manson (2001, p.406) argues that complexity theory research contends several perspectives and approaches to complexity with “sometimes conflicting assumptions and conclusions”. The authors argue that those most relevant to the discussion presented in this paper include, ‘deterministic complexity’ (related to chaos and catastrophe theory) and ‘aggregate complexity’ (related to complex system theory and emphasizing holism and synergy resulting from the interaction of the system components). The former relates to chaotic systems that are characterised by features such as the butterfly effect, bifurcation, and feedback (Manson, 2001). The latter concerns complex systems which are determined by the relationships rather than by its constituted components (Farsari et al., 2011; Manson, 2001).

2.2.1 Chaos and complexity theory in tourism research

Traditionally, tourism research has been based on the 19th century Newtonian paradigm or deterministic model which focuses on aspects “that display a tendency toward linear relationships, equilibrium, and structural simplicity” (Faulkner & Goeldner 1998, p.78). This approach follows a reductionist position that perceives small changes in the initial conditions of a system as constantly being echoed in small changes in the final state of that system.

Many tourism academics, however, have argued that it is inappropriate to consider tourism as a stable and balanced system since tourism is in fact subject to constant fluctuation and uncertainty (Baggio, 2008; Faulkner & Goeldner, 1998). McKercher (1999, p. 426) expressed criticism of conventional research and its consideration of systems as “expectable, stable, orderly, and conducive to linear change” and instead viewed them as “complex and uncontrollable, characterized by nonlinear, non-deterministic chaotic behavior”.

Accordingly, advocates of complexity and chaos theory suggest that more attention should be given in tourism research: to explore nonlinear and less linear (or quasi-linear) relationships; to unusual events that may initiate change rather than regular cases and situations; and to “turbulence” (Faulkner, 2000) rather than stability (Baggio, 2008; Farrell & Twining-Ward, 2004; Farsari et al., 2011; McDonald, 2009; Speakman, 2017). A destination is hence recognised as an unstable, dynamic system which is subject to non-linear relationships (Scott & Laws, 2005). Any triggering internal and external events, either natural or human-induced, can challenge the existent structure of the tourism destination and redirect it into new dynamic paths. The characteristics of the dynamic systems thus make it impossible to accurately forecast any long-term future evolution, especially when the system is on the “edge of chaos” or moves from one phase to another (Baggio & Sainaghi, 2011). Additionally, non-linear dynamic systems are capable of demonstrating self-organisation and chaos (Baggio, 2008). This capacity occurs even though these systems are deterministic, which means that their future behaviour is entirely determined by their initial conditions without any random terms or elements involved. This behaviour is called deterministic chaos (or simply chaos) referring to this as “the irregular (chaotic) motion generated by a system whose evolution is governed by dynamic laws that uniquely determine the state of the system at all times from a knowledge of the system’s previous history” (Baggio, 2008, p.7).

In tourism research, complexity theory has been used to address non-linear relationships and complexities that are inherent in tourism destinations (Farrell & Twining-Ward, 2004; Baggio, 2008; McDonald, 2009; Speakman, 2017). Thus, “complexity” as a concept has been explored in relation to sustainable tourism policies (Farsari et al., 2011), and to crisis and disaster management (Boukas & Ziakas, 2014; Faulkner & Russell, 1997; Paraskevas, 2006; Ritchie, 2004; Speakman & Sharpley, 2012). However, there is scope for new insights to be gained from adopting a complexity-based approach to the study of tourism destination development and management in contextual situations involving crises and disasters.

2.2.2 Tourism as a complex and chaotic system

As a complex system, tourism includes sub-systems of people (communities), institutions and organisations and physical elements (attractions, infrastructure, ecosystems) which are interconnected and influence each other (Scuttari, Volgger & Pechlaner, 2016). From a

complexity perspective, a tourism system can be dislocated from its steady state condition by a triggering event and this situation is referred to as chaos, “which is as random and unpredictable as the outcome” (Russell & Faulkner, 2004, p.557). Several features of a chaotic system seem to be relevant to our discussion here, namely the ‘edge-of-chaos’, ‘bifurcation’, ‘self-organizing’, ‘butterfly effect’ and ‘lock-in effect’ (Boukas & Ziakas, 2014; Faulkner, 2000; McKercher, 1999; Russell & Faulkner, 2004).

“*Edge-of-chaos*” implies an extreme readiness for radical change as the system has reached a point of tenuous equilibrium (Russell & Faulkner, 2004), creating a sense of uncertainty which leads to a ‘bifurcation’ stage of chaos and disequilibrium within the system. ‘*Self-organising*’ involves self-referencing, increased capacity, and interdependent organising (Lichtenstein, 2000) where the system becomes more “suitable” to deal with internal or external difficulties as it benefits from more optimised available resources (Baggio & Sainaghi, 2011). If successful, the crisis enters a resolution stage, returning to a state of ‘business as usual’ (Paraskevas, 2006). However, new and coherent structures and patterns may emerge (Speakman, 2017), and thus a return to normality is not necessarily feasible or desired. “*Butterfly effect*” refers to situations when minor changes can lead to a chain of reaction that culminates in larger outcomes (Faulkner, 2000; Russell & Faulkner, 2004; McKercher, 1999). An example of this being Eyjafjallajökull eruption in Iceland in 2010 and the impact it had on global aviation industry. According to McKercher (1999), in a tourism context, the butterfly effect explains how similar destinations can evolve in different ways, reflecting the unpredictable nature of tourism development where small changes in the initial conditions can lead to completely different outcomes. Lastly, ‘*lock-in-effect*’ relates to the persistence of certain inherited innovations regardless of the changes in the system. For example, why certain heritages in the past have survived despite changes in the original conditions that made them necessary (Faulkner & Russell, 1997; McKercher, 1999). Chaos theory has utility for better understanding the turbulent and challenging relationships that can form during a crisis and disaster (see Boukas & Ziakas, 2014; Speakman & Sharpley, 2012).

There is the need for a multi-disciplinary and holistic approach to crisis management research in tourism (Ritchie, 2004). Santana (2004) and Scott & Laws (2005) emphasised the conceptualisation of crisis and disaster in terms of a systems perspective considering that tourism networks are interconnected. In this context, the influence of unintended events or crises on tourism systems can create tensions that lead to systemic restructuring (Boukas &

Ziakas, 2014; Faulkner, 2000). Although the plausibility of a chaos-complexity approach is still under debate (Speakman, 2017), tourism destinations functioning “on the edge of chaos” could deal with and be better prepared to reduce the impacts caused by crises through “self-organisation”, “learning” (innovation) and “transformation to a more desirable trajectory” (Davoudi, Brooks & Mehmood, 2013, p.307), as a means to improve destination resilience. A ‘desirable trajectory’ is perhaps being over-optimistic here and perhaps one should be approaching resilience from a standpoint of ensuring some future ‘realistic trajectory’. For destinations that have faced long-protracted conflict such as Northern Ireland and Sri Lanka; compared to a short-term period of turbulence such as Egypt during the Arab Spring, that realism is often driven by what is best to save and where the focus must be, namely maintaining a lower level of accommodation stock and protecting heritage assets (Boyd, 2019a). In light of this view, there is much merit in examining the role that resilience theory and thinking offers to facilitate any ‘realistic trajectory’, especially as they offer scope to reduce vulnerability in any given system, in this case, the tourism destination region.

2.3 Resilience and vulnerability

Resilience is a concept that is useful in exploring crises, as it provides a way to improve the ability of a system (i.e., tourism destination) to adapt to stress, cope with change and the effects of crises while retaining integrity and ability to continue to function (Berbés-Blázquez & Scott, 2017; Butler, 2017). It takes on different forms, including engineering, ecological and evolutionary resilience (Davoudi et al., 2013; Folke et al., 2010; Hall, Prayag & Amore, 2018).

Engineering resilience dominated much of early developments in ecology and reflected a rather narrow notion of the stability properties of systems by measuring the speed at which a system returns to its previous equilibrium or steady state after a disturbance. The more resilient the system is, the faster it bounces back (Davoudi, 2012). Engineering resilience focuses on the “attributes of efficiency, constancy and predictability” of complicated systems (Hall et al., 2018, p.41). *Ecological resilience* focuses on the “core attributes of persistence, change and unpredictability” of complex systems and considers the magnitude of the disturbance that can be absorbed by a system before it changes its structure (Hall et al., 2018). This is, how much disturbance a system can take in order to remain within its critical thresholds. *Evolutionary resilience* challenges the entire idea of equilibrium by suggesting that the system can change

over time with or without an external disturbance (Davoudi et al., 2013; Folke et al., 2010). It is based on Holling's (2001) adaptive cycle comprising four distinct phases (*see Figure 2*).

“FIGURE 2 HERE”

After a full cycle, a new growth phase starts where the different configurations and possibilities compete to form something new or a version of the previous cycle (Berbés-Blázquez & Scott, 2017; Hall et al., 2018).

Applying ‘adaptive cycle’ thinking to crises has great utility, namely, the ability to react to external stimuli and modify behaviour accordingly. Shocks, disturbance and changes are seen as important factors in unlocking opportunities for the reorganisation of any system (Biggs, Schluter & Schoon, 2015), where governance and management can enhance resilience and allow adaptive responses to unexpected events. Biggs *et al.* (2015) argue that systems with particularly high levels of diversity tend to be more resilient than those associated with low diversity, although this also implies an increasing complexity and inefficiency that may reduce the capacity to adapt to slower and ongoing change. Accordingly, the application of resilience and resilience thinking offers new opportunities for the management of crises. Destination managers can learn the lessons from those destinations that have faced long-term conflict (wars, terrorism and civil unrest) and apply their decision-making processes including developing crisis communication strategies (e.g., Liu-Lastres et al., 2018; Möller et al., 2018) to rebuild destination image and recover markets.

The framework proposed in this paper illustrates that such action taken by management involves a holistic assessment of the industry and its ability to be adaptive to the crises and accept that some aspects will be lost or reduced and that resilience requires decision-making around key priorities such as protecting a basic level of service provision and attraction offer. Boyd (2016) on Northern Ireland noted that prior to conflict the region had a substantial mix of heritage attraction and that little was lost during the conflict era allowing for new development that was heritage-focused, in particular dark heritage attraction.

The authors make the argument that understanding vulnerability, and its relation to resilience is also important in crises management thinking (Adger, 2000; Calgaro, Lloyd & Dominey-Howes, 2014). Adger (2006) refers vulnerability as the predisposition of a system to disturbances, its exposure and sensitivity to perturbations and its capacity to adapt. In this respect, vulnerability is seen as “a loose antonym” (Adger, 2000, p.348) to resilience. Moreover, Miller et al., (2010) argue that resilience and vulnerability, although linked, are two different approaches to understanding the response of systems and actors to change. The existing differences in approaches come from their origins in ecological theory (resilience) and social theory (vulnerability), respectively. The former being a systemic approach while the latter involves community preferring an actor-oriented approach (Miller et al., 2010). Resilience studies focus on the interaction between slow and longer term changes and drivers of change (e.g., climate change) and rapid changes (political and economic crisis). On the contrary, vulnerability researchers focus on human agency and often short-term threats. More recently, researchers have looked to combine resilience and vulnerability in examining socio-ecological systems (Hall et al., 2018).

2.3.1 *Resilience and vulnerability in tourism research*

Resilience has, of late, received greater attention within the tourism academic community (Lew, 2014; Prayag, 2018). Two aspects of resilience thinking have emerged. The first refers to the use of the ‘adaptive cycle’ (Berbés-Blázquez & Scott, 2017; Cheer & Lew, 2017) and its utility in explaining how tourism systems undergo different periods of growth, breakdown, and reorganisation. However, the application of resilience thinking and adaptive management have been somewhat limited to the ability of a destination to recover from natural disasters (Biggs, Hall & Stoeckl, 2012; Orchiston, Prayag & Brown, 2016), or focused on economic and security-related shocks (Biggs, 2011; Liu & Pratt, 2017) or achieving sustainability (see *Table 1*). Resilience thinking requires further consideration and application to destinations that have experienced crises such as conflicts.

“TABLE 1 HERE”

The second aspect refers to the scale of change occurring: slow change (gradual variations and changes over time) and fast change (disasters). Adaptive capacities and the actions required for each type of change needs a tailored response. Consequently, resilience needs to deal with a specific set of issues depending on the type of changes and level of tourism involvement. This is evidenced in Lew's (2014) scale, change and resilience model for tourism and resilience planning. The model is centred on the idea that different groups (private entrepreneurs, local and regional governments) have a different focus in addressing resilience issues. Their perception and implicit management of slow change is different than under sudden major shocks to these systems. This results in the need for different modes of response and planning within affected tourism destinations.

Vulnerability in tourism research has focused on risk perception, safety and security. Liu and Pratt (2017), examined the relationship between resilience, tourism and terrorism, and found that terrorism does not have an adverse impact on tourism demand in the long run. However, they found that a country's political regime, its dependence on tourism and level of national income does have an influence on tourism destination resilience to terrorism. Crouch and Ritchie (1999) outlined a series of determining factors that can affect a destination, usually beyond the control or influence of the tourism sector. These include the location, cost of a destination and dependencies between destinations, as location cannot be changed and cost is largely driven by socio-economic and global forces. The effects of war in one part of the world can affect and disturb tourism industries far from the origin of conflict. Adger (2000) found that the disruption to livelihoods and loss of security for local communities due to war or civil conflict, accentuate social vulnerability.

Prayag (2018, p.135) advocates for a shift in tourism research from crisis management to resilience, considering that "if a system is resilient, it is implicit that it has the ability not only to overcome crises but to better adapt to change overall". Berbés-Blázquez and Scott (2017, p.13) also argue that "resilience thinking" is needed to understand processes of change and stability in social-ecological systems. This involves adopting 'complex adaptive systems lens' and an understanding of tourism systems as combined social-ecological systems.

Certain destinations seem to be more resilient than others both in terms of their ability to adapt to change and their speed of recovery from a crisis. A system's vulnerability to crises and also

the effectiveness of its recovery efforts may differ in ways, and for reasons which are yet to be fully understood (Scott et al., 2007). However, a resilient system adapts to change by building adaptive capacity in the face of unanticipated and anticipated disruptions. This is a critical ability for a tourism system since conflicts, and respectively political instability, unlike natural disasters, impact the tourism industry and the image of a destination more significantly and for longer periods of time (Pizam & Mansfeld, 2005). They affect the capacity of tourism destinations to adapt to changes and ‘bounce-back’ from crises. Hence, it is vital to better understand the relationship between resilience, tourism crisis and tourism recovery in conflict-ridden areas (Issac, Cakmak, & Butler, 2019), concepts that have shaped the development of the conceptual framework are presented later in the paper.

2.4 Crisis management frameworks and models in tourism

Although crisis management has been a recognised practice and concept since the 1962 Cuban missile crisis, emerging from the field of conflict resolution and diplomacy (Frei, 1978 in de Sausmarez, 2004), in a tourism context, crisis management research is more recent and dates back to the 1980s (de Sausmarez, 2004). Over the years, research has mainly focussed on producing prescriptive models describing the stages of a crisis in order to assist understanding in proactive and strategic crises management (Ritchie, 2004). Moreover, Hall (2010) argued that tourism crisis management has concentrated on economic and financial crises, and crisis events such as 9/11 or unexpected oil shocks. This raises the question as “to the reactive nature of tourism research versus the development of greater predictive capacity and theory generation” (Hall, 2010, p.406). While the focus pre 2010 was selective, researchers over the past decade have addressed environmental crises from the standpoint of environmental sustainability, environmental change and adaptation (Kutzner, 2019) and building organizational and enterprise resilience (Biggs et al., 2019). Other scholars have examined particular environmental catastrophes such as oil spills from the Deepwater Horizon (Pennington-Gray, et al., 2011) and the challenges of conservation regarding the Great Barrier Reef (Biggs et al., 2012). The latter evidence of research suggests movement towards being more proactive and predictive.

The early thinking by Faulkner (2001) and Ritchie (2004) who developed more generic and strategic models for tourism crisis management were cognizant of the need for theory and

framework generation that was both proactive and have predictive capacity. Referring to these models, de Sausmarez (2007) recognises their applicability to any destination in the event of a crisis. As a result the framework developed by Faulkner (2001) has been extensively employed, with and without amendment in many differing situations (e.g., Henderson, 2003; Miller & Ritchie, 2003; Peters & Pikkemaat, 2005; Novelli, Burgess, Jones & Ritchie, 2018).

According to general theories, a crisis advances in stages. For instance, Fink (1986) considered that a crisis follows four stages that are categorised prodromal (warning), acute (at the height of the crisis), chronic (aftermath), and resolution. Faulkner's (2001) tourism disaster management framework is a composite set of stages based on earlier research of Fink (1986) and Roberts (1994). The latter identified specific stages of responding to a flood. According to Faulkner (2001), a crisis follows six stages. The process commences with a "pre-event phase", when action can be taken to prevent or mitigate the consequences of a disaster, followed by a "prodromal" state in which the disaster is imminent. The "emergency phase" refers to the time when actions are taken to protect life and property, followed by an "intermediate phase", a "long-term recovery phase" and a "resolution phase" in which routine is restored or a new improved state emerges. His tourism crises management model also includes a list of responses to each of these phases alongside management strategies, updated risk assessment and contingency plans.

Faulkner's (2001) model remains one of the most cited crises management frameworks. Since Faulkner's model, there has emerged a body of scholarly work on frameworks and models that have a broad research focus, addressing a multiplicity of concepts and aspects (see Figure 3). Some of the models analysed consider crises as having a distinct start and finish with a desirable end of a crisis as a return to normality. This idea is supported by the use of crisis stages to divide time into a before (pre-crisis) and after (post-crisis). Scott & Laws (2005) and Scott et al., (2007) argue that an alternative systems perspective offers a better representation of a crisis. A crisis is thus seen as an evolving system where change (both positive and negative) is endemic and not limited to only its immediate temporal or geographic locality. In addition, these changes cannot be planned as part of a strategic management as they also may lead to different stages. As a result, the subsequent system may be different than the previous one and, consequently, a return to normality is not always the required endpoint (Scott & Laws, 2005).

“FIGURE 3 HERE”

Also, crises require a flexible and unplanned response since “routine solutions applied to an abnormal situation tend to aggravate rather than alleviate a problem” (Santana, 2004, p.306). They have what Faulkner (2001, p.137) termed as having “...transformational connotations, with each such event having potential positive (e.g., stimulus to innovation, recognition of new markets, etc.), as well as negative outcomes.” Alternative thinking has been to consider destinations as networks of stakeholders, where these can be reconfigured into more effective structures following a crisis (Scott et al., 2007).

Many of the tourism crisis management models offer only a prescriptive viewpoint, providing check lists or information on what managers should do before, during or after crises (Burnett, 1998; Ritchie, 2004). Their focus is on developing cautionary or preventive capacity as a measure for crisis coping or management (Shrivastava, 1993). Nonetheless, it is important to recognise the fact that considerable advances have been made in order to help the industry overcome crises and disasters by providing pre-planning strategies to avoid or to mitigate future disasters (Scott et al., 2007).

Managing tourism crises as a result of conflicts and political instability poses additional challenges for tourism managers and policy planners. The task here can vary from developing survival strategies during conflicts to finding creative ways for post-conflict recovery. What is more, political instability and the absence of peace challenge the development of tourism as a “conflict-free” environment is often seen as a prerequisite for attracting tourists (Boyd, 2019b; Pizam & Mansfeld, 2005). In order to develop models and a framework that focuses on tourism and its recovery for conflict-ridden destinations, a wider understanding of the relationship between tourism and conflict first needs to be explored.

3. TOURISM AND CONFLICTS

The role of tourism in conflict-ridden destinations and the relationship between conflict (i.e. war, armed conflicts) and tourism have been investigated by the academic community with an

increasing understanding that tourism plays a positive role in socio-economic development and in reconciliation among different communities and cultures (Issac, Cakmak & Butler, 2019; Koleth, 2014; Pizam, Fleischer & Mansfeld, 2002; Upadhayaya, Müller-Böker, Sharma & Upadhayaya, 2011). Thus, tourism acts as a “force for world peace”(D’Amore, 1988). Some researchers, however, have questioned the role of tourism in areas affected by conflict and as a result, two types of research studies have emerged. There are studies advocating tourism as an agent for creating and facilitating rapport between divided communities (Causevic, 2010; Sonmez & Apostolopoulos, 2000) and as a confidence building measure encouraging cooperation (Simone-Charteris & Boyd, 2010). Conversely, opponents to tourism as a contributor to peace argue that tourism is a beneficiary of peace, rather than grounds for peace (Pratt & Liu, 2016). Tourism by itself does not implicitly contribute to tourists’ positive attitudinal changes or prejudice attenuation. This only happens under certain conditions, such as a quality tourist experience (Pizam et al., 2002), a situation that may not be always scalable from individuals to whole nations (Pratt & Lui, 2016).

As for the relationship between conflict and tourism, it has been shown that while conflict usually prevents tourism in the affected areas, it often initiates or even stimulates the development of tourism in areas which are safe from conflict. For example, Sri Lanka (see Butler & Suntikul, 2013; Buultjens et al., 2016). Tourism can also develop, to some extent, during a conflict in areas that are involved but are separated from the conflict itself. For instance, researchers have examined this for Pattaya, Thailand (Suntikul, 2013) or areas that are part of an ongoing conflict, such as Israel (Mansfeld, 1999). Political conflict can occasionally materialise in the creation of new countries and thus provide new tourism destinations (Butler & Suntikul, 2013). Moreover, the resultant political change in the aftermath of a political conflict may recognise tourism as an opportunity and as a newly found source of national income (e.g., Vietnam). In situations when the socio-economic well-being of a destination is under threat from hazardous events or global restructuring, many countries (and implicit destinations) come to realise and appreciate the economic and social contributions made by the tourism sector to their economies (Butler & Suntikul, 2013; Crouch & Ritchie, 1999).

However, research has demonstrated that political instability as a result of war or conflict has a major impact on the tourism industry (Causevic & Lynch, 2013) and can lead to negative effects such as decreased revenues, falling numbers of tourists and overnights and increased

costs. It also often takes decades for tourists to return to a country following a conflict event and some countries never fully recover from perceptions of violence and instability (e.g., Israel, see Pizam and Mansfeld, 2005), whereas others recover quickly through a strategy that downplays their war-torn image (e.g., Croatia and Slovenia, see Naef & Ploner, 2016). A strategy to dissociate the country's image from its war heritage by removing any vestiges of the recent war (Arnaud, 2016; Rivera, 2008) may come at a cost as destinations fail to differentiate from others nearby and may exacerbate political tensions at home.

3.1 Research considerations on post-conflict tourism

Over the years, scholars have focused their attention on several aspects of tourism in post-conflict environments.

First, it has been argued that in the aftermath of a conflict many tourism attractions are reinvented in the form of political, military and physical heritage (Boyd, 2000; Butler & Sontikul, 2013), with some of the political sites and attractions being promoted under a wider umbrella of cultural and heritage tourism (Naef & Ploner, 2016; Boyd, 2019b). For instance, the legacy of the Yugoslavian wars contributed to the production of local cultural heritage through the "touristification" of war memory as found in Sarajevo (Causevic, 2010). In Rwanda, the 1994 genocide memorial sites are increasingly incorporated into the country's tourist product in order to bring a sense of common heritage and a shared purpose between former conflictive parties and help reconciliation and healing (Friedrich & Johnston, 2013). In the case of Northern Ireland, many private sector tourism providers offer educational background to visitors to learn about the conflict and the effects of peace in a divided society (Boyd, 2000; Simone-Charteris & Boyd, 2010; Boyd, 2019b) by connecting the tourist with dark sites and dissonant territory that often divides communities (Boyd, 2016).

Second, research has developed around the phenomena of dark and political tourism (e.g., Lennon & Foley, 2000; Miles, 2002; Cohen, 2011; Simone-Charteris & Boyd, 2011; Stone, 2012; Isaac & Ashworth, 2012), examining them from both supply-side (conflict sites as key attractors) and demand-driven perspective (reasons for visiting including, educational, peacekeeping, rebuilding, commemorative, showing empathy, authenticity, curiosity and thrill of political violence).

Aspects of dark and political tourism that are relevant to our wider discussion, include, how cultural politics has been integrated into the production and consumption of tourism sites (Light, 2017; Logan & Reeves, 2009) and how this “difficult” or “dissonant” heritage (different meaning for different groups) is presented and interpreted (Tunbridge and Ashworth, 1996). Interpretation can shift the attention from the sites, to the experience and the sentiments they evoke, and to solving the dilemma of how to satisfy the competing demands of both remembering and forgetting (Boyd, 2016; Friedrich & Johnston, 2013; Light, 2017; Logan & Reeves, 2009; Rivera, 2008; Simone-Charteris & Boyd, 2010).

Causevic and Lynch (2011, p.783) stressed that “in post-conflict settings it becomes very challenging to achieve a balance between ownership, power and interpretation”. Dissimilar interpretations of the conflict can perpetuate the differences between the affected communities and as a result, Ashworth (2015) raises the question as to the role of heritage tourism in the aftermath of a conflict and to whether political and dark tourism actually contributes negatively or positively to the resolution of a conflict.

Another aspect of research has focused on the immediate stage of recovery in the aftermath of a conflict, resulting in the emergence of Phoenix tourism. According to Causevic and Lynch (2011), tourism in post-conflict areas undergoes a stage of “transformation of the feelings”, the so-called “phoenix” phase that attempts at reconciliation between communities and normalisation of social relationships. This places greater emphasis on local communities and their role in re-creating and deciding how heritage in post-conflict areas is presented (Zhang, 2017). Others view Phoenix tourism as a distinct early stage in post-conflict tourism development, where tourism products are deliberately and commercially developed for economic benefit (Boyd, 2016, 2019a&b). As such “Phoenix” thinking is part of the wider process of tourism development in post-conflict areas, and forms part of a wider post-conflict recovery (Boyd, 2019a&b). Table 2 illustrates how certain development ‘criteria’ change from pre-conflict to post-conflict, where the Phoenix phase has distinct characteristics.

“TABLE 2 HERE”

Key elements are considered including safety and security, destination perception, infrastructure and entrepreneurial climate, attraction mix and the size of the industry. The nature of development changes from an early form of tourism development in the pre-conflict times, to considerable development loss (albeit with some industry resilience) during the years of conflict. Early recovery of tourism centres around dark and political products (post-conflict Phoenix) but overtime ‘normalisation’ of tourism development occurs where product range has diversified beyond that of dark and political (Boyd, 2019a&b).

Tourism crises as a result of political conflicts, like most crises, unfold in ways that cannot be forecast and overcome, which tourism has little influence. As Faulkner (2001, p.137) argued “...good management can avoid crisis to some degree but must equally incorporate strategies for coping with the unexpected event over which the organisation has little control”. Despite the development of research in this area, there remains notable gaps.

First, there is a need for a shift towards a multidisciplinary approach and towards use of descriptive models that better explain how crises can be more effectively managed (Pennington-Gray, 2018). Second, while adaptive systems thinking has been applied to tourism management (Farrell & Twining-Ward, 2004; Ritchie, 2004), it has not been considered in situations of conflict and political instability. Such an approach enables a deeper understanding of the change process. Third, with a few exceptions (e.g., Novelli, Morgan & Nibigira, 2012; Boukas & Ziakas, 2014; Dahles & Susilowati, 2015; Buultjens, Ratnayake & Gnanapala, 2016), there has been a notable absence of consideration of complexity theory and resilience thinking to situational cases of political instability and armed conflict. Resilience from a tourism perspective, has been predominantly linked to natural disasters and economic crises, sustainability and climate change research. There is, however, scope to explore the synergy between the application of complex adaptive systems and resilience theory and then apply these to crises. Fourth, there is a lack of research that examines crises from a nonlinear perspective. Too much emphasis has been on the development of ‘deterministic models’ (McKercher, 1999). Crises involve different stages and are often an unpredictable and evolving phenomena that can cause restructuring of entire tourism systems. This requires a different approach, offering new paradigms and theoretical frameworks to be developed that conceptualise a tourism crises as a dynamic phenomenon. Fifth, there is an absence of crises research that is holistic (supply and demand focused) and integrative (more involvement needed with stakeholders who feel marginalised; e.g., local communities). Finally, while research has

examined the use of the label 'Phoenix tourism', much of this has been descriptive and conceptual allowing scope for more theoretical and empirical research to be undertaken.

3.2 A conceptual framework for post-conflict tourism destination development

In light of the foregoing comments, an integrative conceptual framework is proposed (Figure 4). This framework brings together concepts from chaos, adaptive systems theory, resilience and vulnerability, offering new thinking of how a destination operates on the 'edge of chaos', and has the capacity to adapt, and recover from crises.

“FIGURE 4 HERE”

Tourism destinations are viewed as complex adaptive systems where development and management can be shaped by two contributing factors, vulnerability to crises and resilience to respond. The authors have taken an approach based on adaptive cycle theory (Holling, 2001; Walker, Holling, Carpenter & Kinzig, 2004) that accommodates growth, stability, reorganisation and transformation of any tourism system. The outcomes that can be triggered by major disturbances are characterised as high magnitude and of long duration (e.g., conflicts and political instability). The framework also adopts a systems approach toward understanding a tourism system, its sub-systems (socio-ecological, socio-technical and socio-political) and the interactions between these responding to change (positive or negative) by self-organising. This self-organising can be either through adoption of a Phoenix state directly after conflict has ceased, a state where there is openness to new approaches, innovation and learning or it can be through reorganisation which leads to a tourism system with characteristics that resemble mature destinations that have never experienced conflict (see Boyd, 2019a&b). The self-organising in the framework refers to the system's adaptive response to change in a post-conflict environment.

Previous studies, discussed earlier, have highlighted the importance of capturing and understanding the interconnected relationship between resilience and vulnerability (e.g.,

Calgaro, Lloyd, & Dominey-Howes, 2014). The proposed framework emphasises the necessity to understand both a destination's vulnerability to disturbances and its resilience (Farrell & Twining-Ward, 2004). In the framework, vulnerability is determined by three dimensions: exposure (the degree to which a destination is exposed to disturbances and stressors as a result of its particular characteristics); sensitivity to impact (reflected in the pre-existing economic, human, socio-political capital), and its adaptive capacity (e.g., Adger, 2006; Calgaro et al., 2014).

For many conflict-ridden destinations, building resilience has added particular challenges due to negative perceptions of safety and security and socio-political and economic vulnerabilities, particularly in developing countries or so-called "fragile states" (Novelli et al., 2012) (e.g., Egypt, Haiti). Mapping the complexities of the post-conflict tourism development cycle enables a better understanding of the critical factors that influence a destination's resilience, vulnerability and adaptive response to crises.

The proposed framework addresses the research gap of understanding the dynamics involved in non-linear tourism development, often as a result of conflicts and political instability, and offers tourism authorities of post-conflict destinations a roadmap to assist them in recovery from crises. This framework is designed for destinations that have suffered from long-term crises as opposed to short-term turbulence and unrest, where the interim Phoenix phase of recovery may be more relevant for some destinations over others that have chosen to position recovery around re-development of past tourism assets that the region was known for pre-conflict. The former applies to Northern Ireland where the focus was on development of a dark heritage product of murals and dissonance community heritage that as a product base contrasted with a more diversified tourism offer by tourism bodies, which would later see niche development normalise around food tourism, screen tourism and golf tourism (Boyd, 2019b). A Phoenix phase of development can also be noted for Medellin, Colombia, with its focus on narco heritage, the development of new tourism products such as comuna tours (peripheral neighbourhoods), and the dark romanticism of Pablo tours (Naef, 2018). This narrow Phoenix base contrasts with wider opportunity to develop bird-based (avian) tourism in Colombia recognised to have the greatest bird diversity of any country in the world.

The authors view the framework as having utility for those destinations that look to transition directly from conflict back to a normalised tourism environment that existed prior to conflict. In this instance, post-recovery requires adaptiveness in developing proactive policy that avoids a Phoenix phase, for example, establishing tourism development zones, and a deliberate strategy of niche product branding (e.g. Sri Lanka) (Boyd, 2019a; Buultjens et al., 2016).

Overall, the wider utility of the framework is the potential to highlight the various recovery characteristics involved with post-conflict tourism development whether that involves the interim Phoenix phase or direct transition to a normalised tourism environment.

4 CONCLUSION

Crises, in particular tourism-related, is an area that has received limited attention within the scholarly community. This paper therefore offered the opportunity to first present a review of the scope of this research field, but second to put forward the case to reconceptualise our understanding of the nature of a crises from a multi-perspective, drawing from systems theory, chaos, complexity theory, and utilising concepts from ecological (resilience) and social (vulnerability) theory. Adopting this broad-based perspective offers scholars the opportunity to view a destination that has faced, or is facing, a crisis as an adaptive system that highlights its capacity to respond to change, overcome vulnerability and be resilient.

This new approach has been put forward as a conceptual framework. While it has been specifically applied to one sub-type of crises, that of conflict, it has wider utility to other types of crises. Key here is how a destination adapts (adaptive capacity), moves directly to exhibit the characteristics of mature destinations that have never faced any past major disturbance, or adopts a transitory 'Phoenix' phase of initial recovery. What is important in the framework is the role that vulnerability and resilience play. As discussed previously, the framework offers considerable scope for new research to test empirically the nature of relationships that exist between different component parts. The authors invite scholarly research into investigating casual linkages as well as operationalising the framework in varied conflict-ridden destinations. For instance, those that have faced a long protracted image crises and subsequent conflict (e.g., Israel-Palestine) compared to those that have faced the re-emergence of short-

duration conflict (e.g., Egypt during the Arab Spring, and recent Easter violence and unrest in Sri Lanka). The authors are cognizant that crises vary in their duration and their intensity and that the wider applicability of some aspects of the framework will vary according to the destination and conflict under study. Destinations where conflict has re-emerged but where that has been short in duration can be examined from the standpoint of their ability to be adaptive, resilient to and quickly recover to a condition similar to what they enjoyed prior to conflict. In contrast, for destinations that have been torn apart by protracted civil war, there exist greater scope to research how such destinations began their recovery and the extent to which this relied on an interim Phoenix stage.

A multi-perspective approach to understanding crises has practical implications for many stakeholders involved in destinations that are looking to recover. Policy makers need to be able to explore different strategies of response, where a 'Phoenix' phased recovery is favoured or not. This may involve developing appropriate crisis communication strategies that help to facilitate repositioning as well as evaluating tourist reactions on how successful they see those recovery strategies to be, and how they shape the type of tourism development taking place. Local communities and their voices need better understanding, especially if the recovery strategy is to have some deliberate association with the past conflict. The inputs from these different stakeholder groups will inform researchers of the characteristics of a Phoenix type destination or one that normalises around its recovery and renewal. Crises are unwelcome events facing tourism. Regarding conflicts as crises, adopting a holistic and multi-perspective framework offers researchers with much needed insight into how destinations can develop and manage post-conflict.

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List of Tables:

Table 1 A Synopsis of Resilience Research in Tourism

Research Domain	Study/ Reference Author(s) and Year	Context	Summary
Community Resilience	Strickland-Munro, Allison & Moore (2010)	Tourism in Protected Area	Communities resilience and tourism in protected area; focus on a stakeholder-driven approach to assessing protected area tourism
Business / Organisational Resilience	Biggs (2011)	Tourism in Protected area	Business resilience; focus on enterprise resilience in reef tourism i.e. the Great Barrier Reef, Australia; assessing resilience to shocks and disturbances such as climate change and financial crises
Business / Organisational Resilience	Biggs, Hall & Stoeckl (2012)	Post Natural Disaster	Enterprise resilience during natural disaster and financial/political crisis in reef tourism i.e. Phuket, Thailand and in response to 2004 Tsunami and 2008 political crisis; assessing resilience in tourism businesses using financial capital, social capital and reported lifestyle benefits
Socio-Ecological Resilience	Holladay & Powell (2013)	Community-based Tourism	Sustainability and community-based tourism; focus on the resilience and sustainability of community tourism development by investigating the Commonwealth of Dominica communities' perceptions of the social, economic, institutional and ecological resilience
Resilience & Vulnerability	Calgaro, Lloyd & Dominey-Howes (2014)	Sustainability	The relationship between resilience and sustainability; proposes a destination sustainability framework to assess destination vulnerability and resilience
Community Resilience	Lew (2014)	Tourism-focused communities	The relationship between resilience and communities; proposes a model of scale, change and resilience (SCR)

Business / Organisational Resilience	Dahles & Susilowati (2015)	Crises/Disasters	Business resilience; focus on local business resilience in an unpredictable business environment as a result of crisis; the ability to be adaptable and flexible is seen as a paramount for small tourism businesses to absorb and respond to crisis
Business / Organisational Resilience	Orchiston, Prayag & Brown (2016)	Post Natural Disaster	Assessing organisational resilience in tourism industry in a post- natural disaster context i.e. 2010–2011 earthquakes in Canterbury, New Zealand; key attributes of resilience are “planning and culture” and “collaboration and innovation”
Resilience & Vulnerability	Buultjens, Ratnayake & Gnanapala (2016)	Post-conflict	The impact of the civil war/conflict on Sri Lanka tourism industry; local tourism resilience and vulnerability and local government’s post-conflict responses
Socio- Ecological Resilience	Espiner, Orchiston & Higham (2017)	Sustainability	The complementary relationship between resilience and sustainability in nature-based tourism destinations; proposes a model for measuring resilience of a socio-ecological system which is viewed in three potential states: emergent, developing and mature
Resilience & Vulnerability	Liu & Pratt (2017)	Terrorism	The impact of terrorism on international tourism demand and the relationship between terrorism, tourism resilience and vulnerabilities
Business / Organisational Resilience	Brown <i>et al.</i> (2018)	Crises/Disasters	Proposes a conceptual framework for disaster resilience and resilience building for the hotel industry by assessing economic; social; human; physical; natural and cultural capitals (capital-based approach)

Table 2. Destination change over time: pre-conflict to post-conflict

Aspect	Pre Conflict	Conflict	Post Conflict (Phoenix)	Post Conflict (Normalisation)
Concern over safety and security	Limited	Extensive	Reduced	Limited
Perception of destination	Safe	Dangerous	Changing	Greater feeling of being safe
Attraction mix	Established (small)	Natural & cultural heritage dominant	Emergent dark tourism with existing heritage	Diversifying; event tourism, signature attractions (includes dark tourism)
Entrepreneurial climate	Established (accommodation focused)	Resilience (few attractions and accommodation sector)	Opportunity around dark and political tourism (private sector driven)	Public-private arrangements; signature build (public over private sector)
Access	Driven by domestic and GB market	Limited routes facilitating VFR and regional market	New routes open (regional and international)	Changing pattern of route development (overall one of growth of route network)
Market	Local and national	Local (National – VFR)	Local, national (Holiday), growing international	Local, national and international
Investment	Limited	Little - non-existent	Narrow focus (private sector – dark products, public sector - natural and cultural heritage)	New accommodation stock (private sector), event bidding and showcasing (public sector)
Industry size	Small (stable)	Declining, some resilience, slow growth toward peace	Growing (around selective products and services)	Extensive growth (diversified portfolio of products and services)
State of Development	early tourism development	Development loss & industry resilience	Early recovery; new product development	Growth and development

(Source: Boyd 2019a&b)

List of Figures:

Natural Disasters				Human-Induced Disasters								
Tsunamis		Natural Diseases		Wildfires/Bushfires		War and Armed Conflict		Terrorism				
Indian Ocean 2004		UK 2001 Foot and...		Florida		Turkey-Israel 2010		USA 9/11 2001				
Henderson, Joan C 2007	Reddy, ... 2005	Carlse... 2008	Miller, Graham A; ...	Thapa, Br... 2013	Canada 2003	Alvarez, Maria... 2014	Northe... 2011	Nepal (... 2011	Middle ... 2015	Goodrich, ... 2002	Evans, N... 2005	Norway, O... 2014
Japan 2011		Mexico AH1N1 2009		Australia 20...		Sri Lanka (1983-2...		UK London 2005		Indonesia ...		
Rittichai... 2013	Ghaderi, ... 2013		Speakman, Mark; ...	Walters, ... 2010	Australia ... 2008	Buultjens, J W; ... 2016	Israel (1967-1... 1999	Bosnia (1992... 2013	Brun, Wibecke; Wolff, ...	Gurtner, ... 2016		
Robinson, Lyn; Jar... 2008		Brunei AH1N1 2009		Africa Ebola ...		Palestine-Israel		Tunisia (2000-2016)				
Calgargo, Emma; L... 2008		Haque, Tariq H.; ...		Novelli, ... 2018		Isaac, Rami K; ... 2012		Lanouar, Charfeddine; G...				
Earthquakes				Floods		Avalanches		Economic and Financial Crises				
Taiwan 1999		Nepal 2015		Thailand 2005		Tyrol, Au...		Global Financial Crisis (2008...				
Tsai, Chun... 2010	Huang, J... 2002	Ketter, Er... 2016	Japan 2011	UK 1990	Thailand 2005	Tyrol, Au... 2000	Song, ... 2010					
Henders... 2013		Henders... 2013		Roberts, Vaughan	Cohen, Erik	Wilhe... 2000	Page, ... 2012					
China 2008		Italy 1997		Thailand 2011	Australia 1998	Peters, ... 2005	Pridea... 2000					
Yang, We... 2011	Biran, Avit... 2014	Mazzocchi, Mario; Mon...		Ghaderi, Zahed; Mat ...	Faulkner, Bill; Vikulov, ...	Hende... 1999						
Cyclones and Hurricanes		Chile 2010		USA (1979-2004)		Asia Crisis (1997-1...		De Sausmarez, Nic... 2004				
USA (1979-2004)		Pennington-Gray, Lori; ...		Florida 2017		Brazil 1996						
Woosnam, Kyle M.; K...				Seraphin, Hugues		USA BP G... 2013						
Jamaica (1963-2008)				Australia 2015		Japan 2011						
Ghartey, Edward E				Jiang, Yawei; Ritchie, ...		Chew, El... 2014						
						Santana, ... 2004						
						Genocide						
						The Holoc... 2011						
						Rwanda 19... 2013						
						Cambodia... 2014						

Figure 1. Illustration of natural and human-induced disasters studies in tourism research

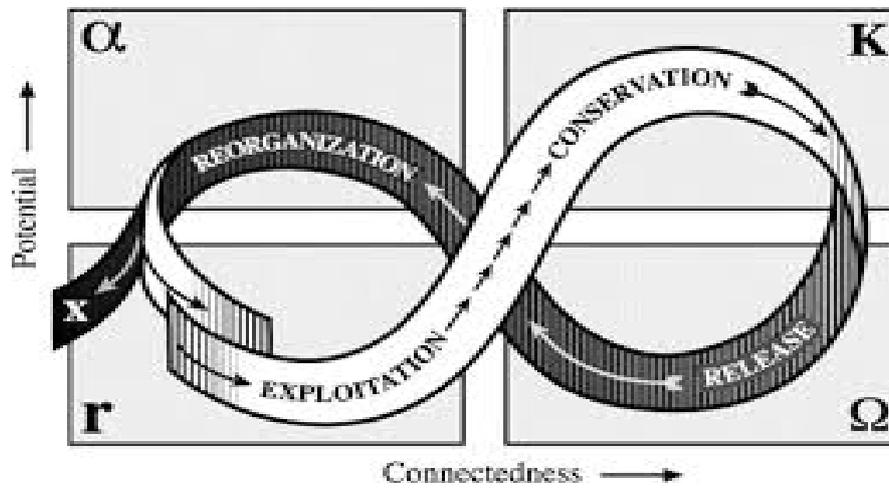


Figure 2: The Adaptive Cycle

Source: Holling, 2001

Weaver, David Bruce; Lawton, Laura Jane 2007 Qualitative Natural disaster Inclusive	Russell, Roslyn; Faulkner, Bill 2004 Secondary Data/Archival Data Disasters and Crises Inclusive	Paraskevas, Alexandros; Quek, Mary 2019 Secondary Data/Archival Data Human-induced disaster Political crisis	Page, Stephen John; Yeoman, Ian; Munro, C... 2006 Mixed Methods Natural disaster Natural disease	Faulkner, Bill 2001 Conceptual Paper Applicable Applicable	Evans, Nigel; Elphic... 2005 Qualitative Human-induce... Terrorism
Wang, Jie; Ritchie, Brent W. 2012 Quantitative Disasters and Crises Inclusive	Ritchie, Brent W. 2004 Conceptual Paper Applicable Applicable	Paraskevas, Alexandros; Arendell, Beverley 2007 Qualitative Human-induced disaster Terrorism	Jiang, Yawei; Ritchie, Brent W. 2017 Qualitative Natural disaster Cyclones and hurricanes		
Sonmez, Sevil F.; Graefe, Alan R 1998 Quantitative Human-induced disaster Terrorism	Prideaux, Bruce; Laws, Eric; Faulkner, Bill 2003 Secondary Data/Archival Data Disasters and Crises Inclusive	Paraskevas, Alexandros; Altinay, Levent; McL... 2013 Qualitative Disasters and Crises Inclusive	Hystad, Perry W.; Keller, Peter C. 2008 Mixed Methods Natural disaster Wildfire/bushfire	De Sausmarez, Nicolette 2007 Qualitative Human-induced disaster Economic and financial crisis	
Scott, Noel; Laws, Eric; Prideaux, Bruce 2007 Conceptual Paper Applicable Applicable	Pennington-Gray, Lori; Schroeder, Ashley; G... 2014 Secondary Data/Archival Data Natural disaster Earthquake	Paraskevas, Alexandros; Altinay, Levent 2013 Qualitative Disasters and Crises General	Henderson, Joan C 2003 Secondary Data/Archival Data Human-induced disaster Technological crisis	Bronner, Fred; De Hoog, Robert 2012 Quantitative Human-induced disaster Economic and financial crisis	

Figure 3. Tourism crisis management frameworks and models reviewed: empirical approaches

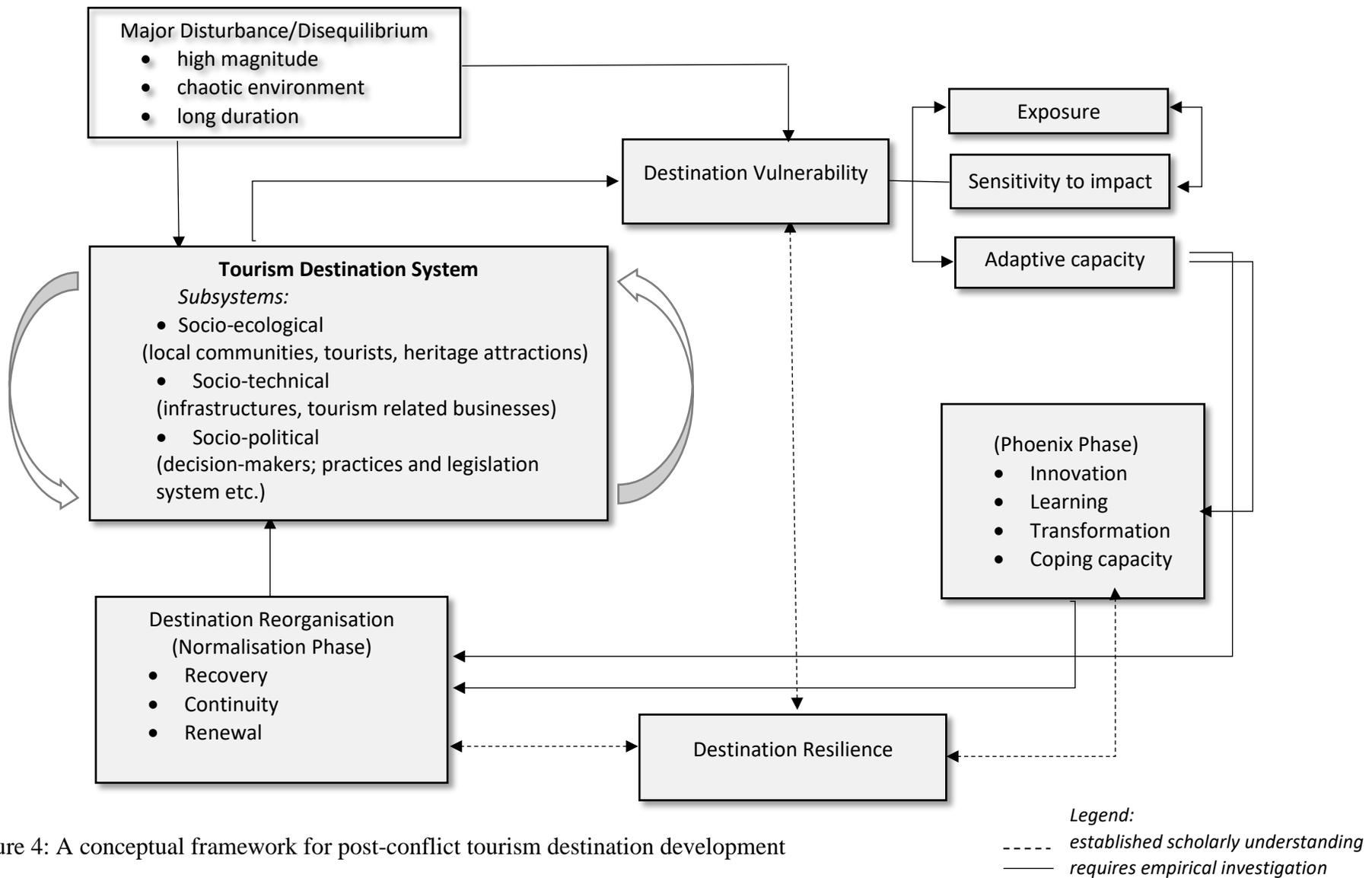


Figure 4: A conceptual framework for post-conflict tourism destination development

(Adapted from Boyd, 2019a&b; Calgaro et al., 2014; Davoudi et al., 2013; Holling, 2001; Scuttari et al., 2016)