

Media's Enduring Role in Times of Chaos

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Abstract

The chronicle of global crises is added to regularly as major natural disasters and man-made conflicts lead to severe loss of life and disrupt populations, from the wealthy West to the poorest quarters of the world's most remote regions. Within these crises, the tourism sector is a major casualty and its plight is exacerbated by the vector of media coverage of the event. This paper forms part of a larger research project that assesses the crisis relationship between tourism and media through four case studies – the 2011 Foot and Mouth outbreak, 9/11, the 2002 Bali bombings, and the 2003 SARS outbreak – significant disasters that were of such magnitude that their impact was global. The cases are assessed using qualitative analysis methods, including ethnographic inquiry, media content analysis and case study analysis. This paper shows how the media acts as a constant element, sustaining its coverage of catastrophic events and their subsequent outcomes while working to a standard news-gathering routine and fixed deadline order. It does so while operating within the evolving turbulence of crisis, initially making sense of seemingly contradictory and paradoxical dynamics released by the disaster, and changing to reflect the emerging conditions which lead to a post-crisis “new order”. While there has been much study of crisis management in tourism, and many models proposed, this research identifies stages in the assessed crises that conform to the principles of Chaos Theory. The findings thus offer a foundation on which the tourism industry can develop strategies for earlier recovery from crisis.

Introduction

The chronicle of crisis is added to almost daily around the world as major new and developing incidents indiscriminately plunge into chaos people from the planet's rich West to its poorest regions. The crises are both natural and human induced and include war, terrorism, plague, earthquakes, cyclones and typhoons, political revolts, mining disasters, systemic crashes in the financial arena and quality control and corruption crises in food supply. Their severity is measured in terms of lives lost, property destroyed, societal capacity reduced and cultures dismantled. At any one time there are hundreds of crises listed in aid agency information data banks and while we live in a technology savvy media age with communication satellite signals spanning the globe there are far more crises than can be featured on the nightly news and too many to absorb in our daily lives. The media's commoditisation of news and capacity to disseminate it 24/7 has homogenised what was once the extraordinary – given the glut of crises, the exceptional has become ordinary as media audiences are overwhelmed by events from around the world.

Some crises are so significant in a global context, however, that it is not possible to regard them as routine because their repercussions generate widespread fear and anxiety and have far-reaching implications and consequences. Crises in themselves are the immediate aftermath of a disaster and result in post-event destruction of landscapes, built environments and societal systems. They disrupt normal activities and force a readjustment in the comfort levels of thinking and living. The media's bridging role as society's Fourth Estate is brought into higher relief in these times as it labours on, gaining access to ravaged physical environments, overcoming disabled utilities such as power, telecommunication links and transport, and trying to get responses from representatives of the 2nd Estate (executive government) to publish details of the severity of a crisis or the continuing risks to its broad constituency, the public.

This study examines four significant disasters that were of such magnitude that they had global repercussions, some of which we deal with today. They happened within a relatively short time span and two were linked by common cause. Occurring at the start of the 21st century, they abruptly changed the way contemporary society looks at itself and have affected how everyday activities are carried out and attitudes are formed. The analysis focuses on two inter-linked industries, the media and tourism, and finds their normal activities were severely disrupted in the immediacy of the crises played out. The four disasters under scrutiny – the UK's foot and mouth disease outbreak of 2001, the terrorist attacks in the United States in September 2001, the Bali bombings in 2002 and the SARS contagion of 2003 – dominated the world's media from the outset and had far-reaching implications for world tourism whose customers' discretionary dollar remained pocketed out of safety concerns for personal well-being.

The tourism industry had dealt with crises in the past but never before in such a globalised media environment. The media's reach had grown in the mid 1990s to early 2000s from the traditional pillars of radio, television and newspapers to include the new platforms of desktop, laptop and hand-held computers and cell phones. The media's capacity was thus enhanced to previously inestimable proportions to deal with the disasters of 2001-2003, the full might of which confronted the tourism industry when disaster struck four times in a sensational manner during this period. Tourism's ability to navigate the media quagmire hinges on analysis of the media operations during these critical periods.

A defining outcome of the research is evidence of the role of chaos, a dynamic, disruptive condition lacking order or predictability. To develop a common structure to allow for cross-case analysis, the disaster narratives were organised into a six phase format covering the duration of each event. They start with the Pre-crisis, or normal operational, phase and conclude with the Recovery phase so there is a pre- and post- non-crisis context. The four intermediate phases – Outbreak, Consolidation, Acceleration and End – cover the

periods in which the disaster effects are strongest and the magnitude of the crisis plays out. The characteristics of chaotic change – a condition quite different to common notions of the term – were identified within these four phases at the peak of the crisis. The dynamic effects of chaos caused a radical alteration, or permanent change, in the character of accepted societal and organisational conditions within the disaster environment. The events were unprecedented, therefore creating a vacuum in which the normal order of things no longer existed. It was, however, quickly replaced by a new order. Essential services expertise, for example, such as in rescue, recovery, communications, prevention, etc. that had been aggregated from previous crises and normally would be activated according to a standard operational template in a disaster period, didn't fit. So a new order emerged.

Chaos Theory

Every little thing counts in a crisis.
- Jawaharlal Nehru (1889-1964)

In its scientific context, the word chaos has a different meaning than it does in its general usage as a state of confusion, lacking any order. Chaos, with reference to Chaos Theory, refers to nonlinear complex systems, the behaviour of which exhibit an apparent lack of order. It is thus not a descriptor but rather a characterisation of unpredictable, albeit evolving, behaviour that leads to a new state of order (TechTarget, 2007).

As a complex system, Chaos Theory lends itself well to understanding crises which exhibit complex and nonlinear behaviour (Sellnow, Seeger and Ulmer, 2002). Butz (1997) characterised crisis events as being not predictable, subject to small variances and with the chance of a multitude of outcomes. Thietart and Forgues (1997) suggest that crises, as systems of inter-organisational relations, are chaotic situations, created by the numerous transactions between actors as they attempt to find a satisfactory "outcome".

Applied to social situations such as crisis management and intervention, the theory takes on an evolutionary aspect, seeing systems as dynamic and changing, with new systems emerging out of crisis (Butz, 1997). Postrel (1998: xv) noted the "emergent complex messiness" that characterised chaotic situations would evolve in a self-organising manner even if patterns could not be identified or pre-planning could not be applied to solve the crisis. The principles of Chaos Theory encourage a view of the world as an elaborate system of flux and change (Kiel, 1994). What the actors in a crisis may perceive as unpredictable and spontaneous events in fact result from the interplay of numerous uncoordinated independent factors that form an ever-shifting pattern, which can actually help them to make sense of the crisis (James, 2007).

Murphy (1996) supports the relevance of Chaos Theory as a good model for crisis situations as, typically, a crisis forms as a series of events that seem, over time, to gather volume and complexity with increasing speed. The crisis's dynamic resembles, therefore, that of a chaotic system as it iterates through increasingly complex phases towards a disordered state. At the onset of a crisis an organisation may have the power to influence the situation, but after a certain point it often loses this capacity. The multiplication of voices and solutions follows a dynamic similar to a chaotic system where, during the initial few phases, some order remains, but subsequently complexity overruns the system and it passes beyond control. At that point, Chaos Theory suggests that an organisation cannot manage an outcome but must allow events to sort it themselves out while trying to fit into the emerging aftermath.

In their examination of turbulence in tourism systems, Faulkner and Russell (2001: 332) looked at the role of disasters, crises and entrepreneurial activity as three types of events that tended to inflict turbulence. They

proposed that these events exhibited characteristics that aligned with concepts of a chaos perspective as opposed to the steady state characteristics of order and equilibrium.

They noted both the feasibility of a single event to precipitate major change across a system, as well as the accompanying evolutionary change leading to a new, more complex order. In light of these findings, it was suggested that the predisposition to research tourism in the context of stable systems provided an incomplete picture of turbulent phases in tourism development (C. M. Hall, 1995; Laws, Faulkner and Moscardo, 1998).

Edward Lorenz, credited as being the first experimenter in the area of chaos in the early 1960s, described the phenomenon whereby small changes in a recursive system can drastically change the results of running that system (Gleick, 1998). As a result of this sensitivity, the behaviour of chaotic systems appears to be random because of an exponential growth of errors in the initial conditions. Very simple, or small, systems and events can influence very complex behaviours or events. This is known as sensitive dependence on initial conditions. Lorenz's butterfly effect vividly illustrates this essential idea of Chaos Theory (see Figure 1 below).

He drew on the example of a single flap of a butterfly's wings in Brazil as being enough to set off a tornado in Texas by way of disruption to the atmosphere system (TechTarget, 2007). The example of such a small condition as a flapping butterfly being responsible for creating such a large and distant outcome as a tornado in Texas illustrated the impossibility of making predictions for complex systems. Despite the fact that system behaviour is influenced by underlying conditions, precisely what those conditions are can never be sufficiently articulated to allow long-range predictions.

It is not too difficult to recognise that a small, insignificant factor can trigger a crisis. Conversely, it is at times difficult to identify one single cause of a crisis. What often exists is the interweaving of a number of factors and/or variables, any one of which has the potential to alter the course of events. It is therefore deemed impossible to exactly predict the state of a system; however it is generally quite possible to model the overall behaviour of a system. Herein lies another key characteristic of chaos, that of unpredictability. Specifically, long-term projections become problematic because of the multiple variables that may act upon a system as it evolves, yet short term predictions based on anticipation of system behaviour are possible. Further, it also becomes apparent a system could never return precisely to its original state, but instead a new form of order is formed out of chaos.

Moving through a crisis, there are an infinite number of possible decisions, actions or events that could alter long-term outcomes, as well as a myriad of variables subsequent to, and possibly unrelated to, the crisis that may serve to alter the trajectory of a system. While some level of preparation can be accomplished by anticipating behaviour or planning for it, the long-term outcome remains unpredictable.

Identifying Chaos in the Case Studies

The first pattern to emerge from the research findings was the distinct phases of the crises. As events unfolded there was a progression, or shift, through a series of stages that was evident in all four crises. This was further characterised by defining moments in each of them, with triggers altering the course of events. Although similarities were evident across the four crises, each was ultimately a unique train of events, influenced by any one of a multitude of variables. While all four crises were of significant magnitude, their characteristics and lifecycle were able to be influenced by the smallest of factors. It was also clear that a cloud of uncertainty, complexity and disorder hung over events, particularly peaking at the most intense or critical times of the crisis. In each of the crises there was a specific time of extreme disruption. The onset or duration may have differed across the crises, but its presence was clearly apparent in all, emerging at an extremely

critical juncture and yielding similar results. Events, actions and responses were also coloured by a high degree of unpredictability. The structures and behaviour that guided industry before the crises were largely absent. Despite the best laid plans or intentions, actors were reduced to wielding little control over events. The time span of the crises could only at best be estimated. However there were better powers of anticipation concerning short-term developments, both in relation to the crisis itself and intra-industry business developments. Despite this unpredictability, aspects of stability, for example in the form of media behaviour, were evident even in the most critical of times, signifying that despite appearances, an underlying order existed.

Chaos Theory posits that minor changes can cause major fluctuations based on the theory that systems, no matter how complex, rely on an underlying order, and that simple or small systems and events can cause very complex behaviours or events which disrupt that order. This behaviour is known as sensitive dependence on initial conditions and is the central tenet of the theory. Chaos is not a single, isolated event such as a crisis but a system of ensuing events. The resulting changes in the qualitative dynamics of the disturbed system are defined by bifurcations, the time when events escalate, the point at which the course of events is altered. The resulting non-linear system gives rise to a complicated pattern of attractors, points around which other system points oscillate. The attractors move unpredictably and have the capacity to create seemingly contradictory and paradoxical forces and outcomes but also provide the system with a sense of structure. In some cases they can be typified by an organisation's values or culture or a management style.

Chaos in the Case of FMD

Determining a trigger for the outbreak of Foot and Mouth Disease is complex and the exact trigger for the change from normality to crisis has not been identified. A routine veterinary inspection at an abattoir led to discovery of the disease, a highly contagious virus spread through contact with contaminated sources by humans and also by the wind. The UK outbreak was deemed to occur as a result of a worldwide epidemic of a virulent strain called Pan Asian Type O, which had reached 60 countries by 1999. Countries are vulnerable to outbreaks because of the large increase in free trade which sees infected meat transported around the world. The UK Chief Veterinary Officer investigated and eliminated all other possible sources of infection and concluded that the likeliest source of infection was meat or meat products contaminated with the FMD virus.

It was further concluded that the virus could have been introduced to animals through the consumption of infected material in unprocessed, inadequately processed or even processed waste food. How it was actually introduced into the animals is a matter of conjecture but at the time more than 200 consignments of illegally imported meat were intercepted on their way into Britain every month (Scudamore, 2002). A consignment of meat labelled for a restaurant was found at the farm at which the outbreak started.

Such was the sensitive dependence on initial conditions existing in a rural environment harbouring the disease and which was bifurcated by its spread through farm animals to a wider area. The accepted order broke down to a non-linear system giving rise to further bifurcations around which a complicated pattern of other system points, or attractors, started to oscillate. The major impacts were: the British countryside was quarantined; rural walks, national parks and tourist attractions were closed; there was massive slaughter and public burning of animals; uninfected neighbouring herds were destroyed, resulting in countryside stripped of livestock; and the image of rural England was spoiled for tourists. As a major crisis marks the loss of an organisation's or system's attractor, to be followed by a period of disorder until a new attractor emerges, the extent to which FMD precipitated systemic chaos can be thus simplified: the farming sector lost its disease-free status, the tourism sector lost the appeal of the rural idyll and the economy lost revenue because of the collateral damage.

The seemingly contradictory and paradoxical forces of attractors moving in the subsequent non-linear chaotic environment included the tourism industry seeking destination image support and restored access to rural areas, farmers seeking an end to the disease and culling, frustrated tourists wanting to book holidays and politicians looking for solutions. A further bifurcation was activated by the turbulence of the international and domestic UK media, the intensity of whose coverage increased to levels deemed to be excessive yet which can be rationalised as groping for a new attractor such as a post-chaos linear system to create a new order. Thus the chaos period in this crisis can be identified as extending from the discovery of the spread of disease to the peak of cases (Figure 2). The chaos stage receded when the number of FMD cases fell as the disease was brought under control, the media coverage dropped back in intensity and the tourism sector looked to the media for support in rebuilding business.

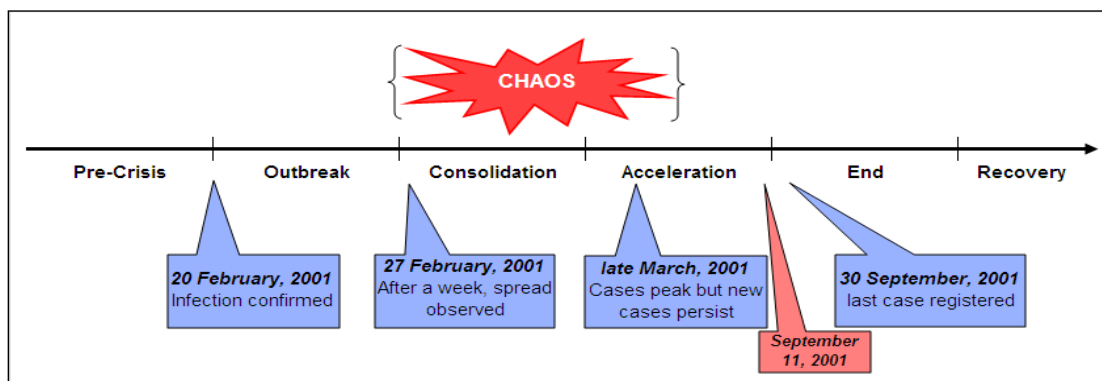


Figure 2: Chaos in the FMD crisis, 2001

Chaos in the Case of 9/11

Various triggers for the terrorist attacks on the US have been suggested in the wake of September 11. These include the motive to strike against the American virtues of freedom and democracy. Investigation and analysis of the attacks also revealed significant support for “blowback terrorism” (Eland, 2006). That is, it has been argued that the reasons al Qaeda committed the strikes were the US’s military presence in the Middle East and support for Israel. Dialogues subsequent to September 11 have assessed the role of religion, politics, economics, psychology and culture as roots of terrorism (Neumann, 2005). Therefore, as for what triggered the September 11 attacks, it can only be hypothesised that it was some combination of the above elements and a willing cast of actors with a plan that set in place the chain of events.

Whatever the underlying motive, the hijacking of four planes by suicide terrorists to instigate an unimaginable disaster plunged the United States into national crisis that tipped the sensitive dependence on initial conditions into instant chaos. By so changing the bifurcation parameters, the terrorists set the United States on a path of retaliation against the perpetrators that took many of its Western allies on a decade of warfare that sustained further chaos. But in the immediate aftermath of the New York attacks, the case study shows bifurcations in national confidence turning to fear and anger; in transport and tourism with airlines grounded, increased security imposed and air wardens installed; in emergency rescue and recovery agencies dealing with catastrophic conditions the likes of which they had never seen; and in the media finding new levels of hyperbole to describe the death and destruction at the Twin Towers. The accepted operational and psychological order of a nation broke down to a non-linear system giving rise to further bifurcations of the initial systemic bifurcations, thus generating a further complicated pattern around which other system points, or attractors, started to oscillate.

The early attractors became the management style of the Mayor of New York City, Rudy Giuliani, who inspired the city to dig deep to rise above the tragedy and “flock back to the city”, the pro-active security controls that were imposed on air travel to demonstrate public safety concerns and the rallying rhetoric of US President Bush against the attackers. An important attractor was the US’s pro-active stance to regard the attacks as exogenous, originating externally, thus maintaining it was not so much America that was unsafe but countries linked to the terrorist attacks. These started to spread a sheath of stability over a state of chaos whose dynamics were being played out by the still unaligned attractors beneath the surface. Thus the period of chaos here, then, was from the impact of the first plane, the consolidation period that followed and into the Acceleration period of the crisis as the reality of the event set in (Figure 3). The contradictory and paradoxical forces would continue through chaos’s most fluid periods – Outbreak, Consolidation and Acceleration – before a semblance of the new order started to form.

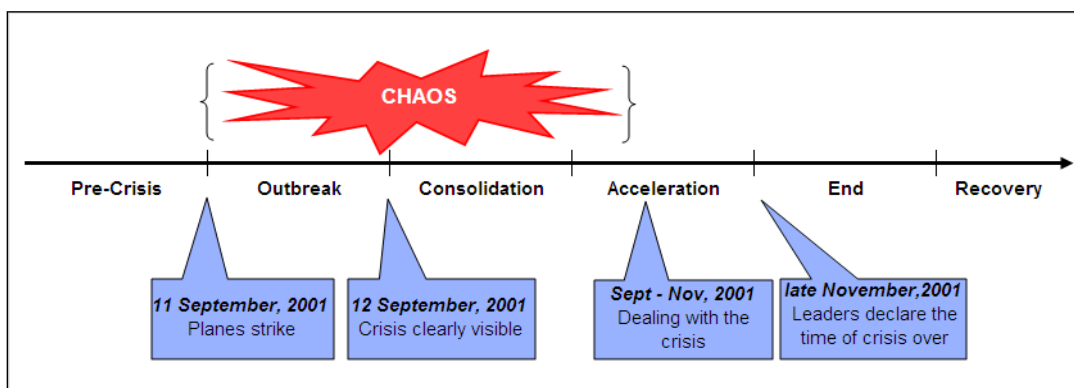


Figure 3: Chaos in the September 11 crisis, 2001

Chaos in the Case of Bali

Prior to the 2002 Bali bombings, Indonesia was not unfamiliar or unaffected by extremist or terrorist activity. However, unlike the general pattern of this activity in the past, the 2002 attack struck the central tourism precinct of Bali which historically had been immune to significant or malignant disruption. Further, tourist nightclub venues were directly hit, indicating that foreigners were the intended targets, an aim subsequently backed by claims from the perpetrators, the Jemaah Islamiyah regional terror group. Although the event was co-opted into the global political agenda and rhetorical paradigm of the US government’s 9/11-promulgated “War on Terror”, the national and local socio-political context in which the attack took place was also recognised as unusual (Reuter, 2003).

The peaceful holiday paradise, patronised predominantly by Australians and Europeans, was rocked by the bombings late on a Saturday night when the nightclubs were busiest, turning them into flaming infernos of collapsing structures. The war on terror had heightened the sensitive dependence on initial conditions in Bali given the minority Muslim population’s links with perpetrators of attacks against the West coupled with its popularity among citizens from countries allied with the US fight back. However the bifurcation of the bombs set in train an international recovery and rescue mission for the dead and wounded and trained the focus of Australia on the regional neighbourhood threat to its north, introducing a highly politicised attractor into the newly created non-linear paradigm. In the immediate aftermath of the crisis, the media were prime attractors in seeking a new order which was slow to emerge as local government, national leaders and the tourism industry were laggard in responding to the situation. The aftermath was characterised by a shattered image in

global tourism markets and Bali earned a raft of travel advisories warning tourists to stay away on safety reasons.

In the ensuing non-linear environment, seemingly contradictory and paradoxical attractors could be found in international forums where governments were accused of “taking their eye off the target” with Bali, and foreign leaders vowing to support Indonesia in the “war on terror”. But the Balinese had their own attractors to deal with, including inadequate security infrastructure, poor medical facilities to deal with the seriously wounded and primitive morgues to store the dead. Thus the period of chaos in this crisis can be found in the immediate aftermath of the bombing and the scrambling of authorities to ascertain what had happened and to what extent (Figure 4). Post-chaos, as the authorities began to increase security throughout the tourism precinct, they embarked on a series of cultural and religious strategies to promote harmony.

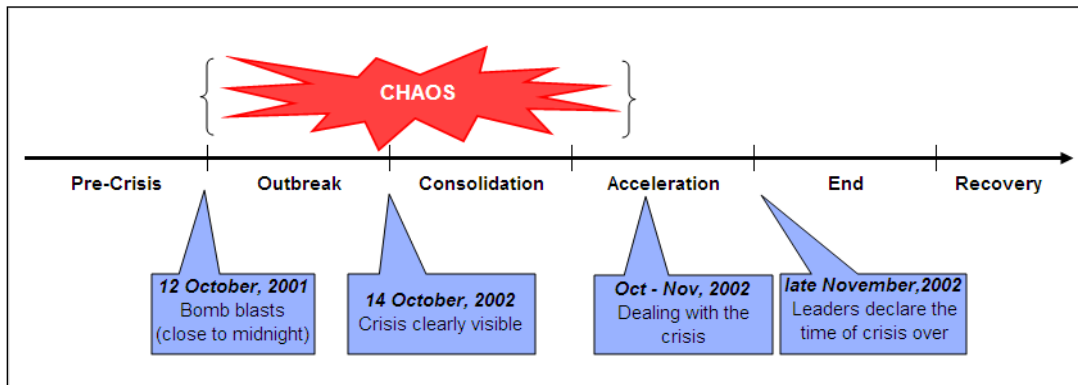


Figure 4: Chaos in the Bali Bombings crisis, 2002

Chaos in the Case of SARS

The Severe Acute Respiratory Syndrome [SARS] outbreak was triggered by a new coronavirus never before seen in humans. It activated a sensitive dependence on initial conditions that led to a series of international and regional bifurcations which promulgated out of a deadly health scare a complexity of non-aligned non-linear systems of attractors. Samples of pathogens identified in the virus looked similar to corona viruses found in animals leading to the suggestion that the virus probably originated in animals and then jumped species through interaction to infect humans (Science Daily, 2003). In 2005, two scientific teams independently identified the Chinese horseshoe bat as the host animal and as a hiding place for the virus in nature (Australian Commonwealth Scientific and Industrial Research Organisation [CSIRO], 2005). In Asia, many people eat bats or use bat faeces in traditional medicine for asthma, kidney ailments and general malaise.

SARS was found in China’s Guangdong Province a month after the Bali bombings and was diagnosed as atypical pneumonia. But it was not correctly identified by the WHO until February 2003 by which time it had taken a hold, tipping the sensitive dependence on initial conditions into the bifurcation of a worldwide alert. The announcement of a serious, contagious medical crisis of which little was known precipitated a Chaos Theory paradigm with associated bifurcations in Hong Kong, China, Singapore, Hanoi and Toronto and stimulating a wave of separate attractors within their health-threat disrupted non-linear systems. A common attractor was the connection between the spread of the disease and the movement of people, thus creating a separate bifurcation for airlines dealing with customer anxieties hanging over from 9/11 and newly reinforced from a terror perspective by the Bali bombings and the concurrent invasion of Iraq. Adding to the complexity

of this single chaos system was the bifurcation in China which was lax in acknowledging it hosted the majority of SARS infected cases.

Initially reluctant to impinge on the economics of its tourism industry, China eventually came clean and its internal actions provided a major leadership attractor in tandem with the WHO's rigid approach to declaring SARS infection advisories. The period of chaos here is identified as commencing one month after the first alert, once the real magnitude of the situation was revealed. It stretched through to the peak in reported cases, with a shift away from chaotic conditions once cases appeared to recede (Figure 5). It appears that secondary systems of bifurcations in the major infection centres sustained a momentum of their own political, tourism and media attractors which developed typically contradictory and paradoxical forces and outcomes as they sought a dominant attractor to coalesce the new post-chaos paradigm. For all affected populations, this role was taken by the WHO which declared the final major infected country Taiwan SARS free in July 2003.

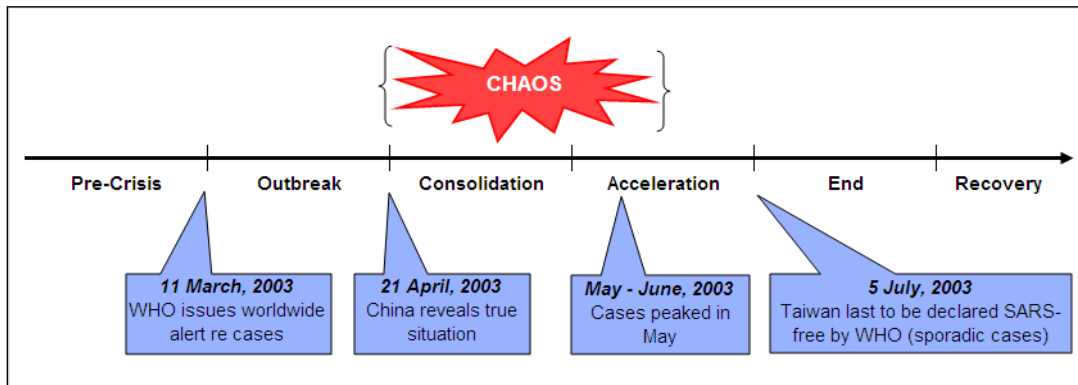


Figure 5: Chaos in the Severe Acute Respiratory Syndrome [SARS] crisis, 2003

Conclusion

The research findings illustrate the effects, actions and responses in relation to media and tourism as they occurred across the phase shifts of the crises. By isolating these categories of findings, a common pattern of media coverage, perceptions of the media and tourism responses across the chaos-afflicted phases can be seen. The research shows that media coverage was consistent with a focus on sourcing comment and images by whatever means, depending on what could be obtained. Certain media characteristics present in early phases carry through to subsequent phases (e.g., saturation coverage), illustrating a consistency in behaviour despite the turmoil inherent in the situation and the unknown elements of the crisis. The intensity of rapidly accelerating media operations coincided with the start of the chaos-afflicted environment (i.e., Outbreak-Consolidation-Acceleration) characterised by lack of information, lack of understanding and a prevailing air of uncertainty. Although similarly affected by the lack of information, media operations nonetheless became global and all-pervasive, often relying on visual information in the absence of words, drawing on both formal and informal sources in their quest for details to inform worried publics. In summary, despite the breakdown of traditional structures and systems of information dissemination, media coverage largely followed normal operating procedures with quality of coverage limited by available sources and resources. From this awareness and understanding of this operation of media during times of crisis comes a foundation on which a protocol for tourism interaction with the media can be built.

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