

# 7

## Tourism as a Complex System

**By the end of the chapter, the reader will be able to:**

- Describe why existing lifecycle models are deficient
- Appreciate that tourism, by its very nature, is inherently volatile
- Explain how and why tourism functions in a nonlinear manner
- Explain the key features of a complex system.

### Introduction

The last chapter examined Butler's and Plog's lifecycle models. They suggest that tourism works as a linear, predictable manner, moving logically through a pre-determined lifecycle. While the speed of change may be variable, progression through the stages up to, and possibly including, decline seems inevitable. These models and the models identified earlier in this book share a number of features in common. They recognise that any tourism system begins with the tourist and that any system needs some destination features and a linkage between the tourist and the destination. The models all have a number of advantages helping us understand the constituent parts of tourism and some of the simple linkages between elements. They are also deficient in a number of areas, though, for they do not work in practice.

This chapter takes an alternative view to the evolution of tourism by looking at complexity theory. In the last 20 years, complexity theory has made strong inroads into management disciplines, but has only recently gained interest in the tourism sector (Altinay & Kozak, 2021; Baggio, 2008; Hartman, 2023; Sainaghi & Baggio, 2017; Scott et al., 2008).

## Existing tourism models

The idea of examining tourism from the perspective of complexity theory was mooted first by Faulkner and Russell (1997, 1998) and McKercher (1999) who questioned the utility of existing models to explain how destinations change over time. They argued that most models proposed a reductionist approach to tourism where one could understand how it worked by disaggregating it into its component parts, identifying the relationships between parts and then re-aggregating it. Such models make it easy to study tourism's components, but do not necessarily explain how tourism works. Moreover, they tend to be written from the perspective of an overarching public sector tourism organization with the implicit understanding that somehow tourism can be controlled from above by planners, as the World Tourism Organisation asserted 30 years ago (WTO, 1994) and continues to assert.

And yet, they do not explain why it is so hard to control the genie of tourism once the development process starts and why, as Pearce (1989) stated, spontaneous, catalytic and extensive development are the most common types of development observed, especially in emerging economies. It also does not explain why, after almost 70 years of concern about and research into the social, cultural and environmental impacts of tourism, over-tourism continues to remain a vexing problem today. If, indeed, tourism can be controlled, then one would have expected these issues to have been resolved a long time ago.

### ■ Why existing models do not work

Why do existing models not work? Models represent simplified versions of reality in order to help make sense of complicated ideas. By design, they are selective as to which elements they include and therefore exclude. They tend to focus narrowly on selected destination variables and argue that simple cause and effect relationships exist between these variables. As a result, most of the models cannot appreciate the independent, yet complex interrelationships that exist among the multitude of players involved in tourism, where any tourism business must both coexist with and compete fiercely against other businesses to survive.

The models further fail to reflect the dynamic nature of tourism, where hundreds or thousands of businesses, depending on the size of the destination, enter into and exit the marketplace, change ownership or reposition themselves radically each year. And so, instead of representing a stable, closed system, the tourism system can be seen as an open system subject to constant dynamic interactions with a whole series of internal and external agents (McDonald, 2009; Brouder & Eriksson, 2013). Hartman (2023) adds we must consider tourism simultaneously at multiple levels, including the individual, emergent structures and agency interface that all influence the process of adaption, especially in times of change.