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Research note

Do destinations have multiple lifecycles?

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1. Introduction

Butler’s (1980) Tourism Area Life Cycle (TALC) model has been recognized as one of the core concepts in tourism. Developed from the product lifecycle model it, or more accurately the interpretation of it by most in the tourism community, implies strongly that destinations move through a single lifecycle from introduction, through growth, maturity and post maturity. The prevailing sentiment for the post maturity stage is a likely end in decline, abetted in part by Plog’s (2001) assertion that destinations hold within them their own seeds of destruction. Butler suggested original rejuvenation is possible but even he thinks it is a short term solution and that “without a complete change in the attractions on which tourism is based” (Butler, 1980, p. 9) destinations are unlikely to recover. Interpretation of the model by scholars endorses the singular lifecycle approach to such an extent that at its most crude, Butler’s work is reduced to nothing more than an S-shaped curve.

But, the inherent subtly of this model is often overlooked for both the \(x\) (time) and \(y\) (volume of visitors) axes are open-ended. Moreover, five possible post maturity outcomes are identified including two growth scenarios, ongoing stability and two decline options. The title of the original paper, The Concept of a Tourism Area Cycle of Evolution, and the opening gambit that states “there can be little doubt that tourist areas are dynamic, that they evolve and change over time” (Butler, 1980, p. 5) are also instructive, for they suggest destination evolution is an ongoing process. Indeed, Butler (2009) reasserted this opinion some 30 years later when he noted “to say that destinations evolve or change is a truism” (p. 248).

Although Butler’s (1980, 2009) work is seminal and informative in its own right, its articulation of TALC is largely based on conceptual improvisation without a strong empirical grounding that could generalize to all destinations. In fact, this stream of work has largely been discussed at a conceptual level. Agarwal (2006), for example, argues some destinations progress through a reorientation stage before continuing on their evolutionary path. Prideaux (2000) has also modeled multiple destination lifecycles influenced by major infrastructure development that leads to the opening up of a destination to new markets and thus propelling it to a further growth stage. Weaver (2000) took a long term view and suggested destination evolution can be interrupted by war, with collapse and then recovery to a new phase. Garay and Canoves (2011) integrate regulation theory to explain that a destination may experience multiple lifecycles through a restructuring process with stages of transformations. Ma and Hassink (2013) use evolutionary economic geography to help interpret the TALC model and to differentiate between lifecycle and evolution; and hence, a destination that experienced multiple lifecycles renders an evolutionary process.

Recent research sheds some light on TALC with evidence demonstrating both convergence and divergence to the S-shape distribution. For example, Kristjánsson (2016) investigated tourist inflow to Iceland and found an exponential growth correlated with economic and city
development such as banks, roads, and the Internet. Garcia-Ayllon (2016) utilized GIS retrospective analysis to illustrate evolution of the landscape of La Manga, Spain through a panoramic view. The study concludes that a declining cycle of the resort was primarily a result of poor city planning and a second-home real estate market boom that ultimately led to overcrowding and a deterioration of the place’s attractiveness. Garcia-Ayllon’s investigation corroborates that of Kubickova and Martin (2020), who found that destinations fall into different stages of TALC due to government involvement and market competitiveness. Singh (2020), however, demonstrated how different destinations may deviate from the hypothetical S-curve based on environmental factors such as climate and geographic locations. In summary, deviation from Butler’s TALC is often observed since destinations are not homogenous; rather they can be conceptualised as a mosaic of elements, each of which can follow a lifecycle that is different from that of the destination overall” (Chapman & Light, 2016, p. 254).

The aforementioned challenges to TALC may reflect the fact that the model was an outgrowth of the Cartesian-Newtonian, systems thinking prevalent at the time, that saw systems as machines that should work in a predictable manner (Faulkner & Russell, 1997). Since then, though complexity theory (Baggio, 2008) has emerged as an alternative theoretical method to consider destination evolution. Complexity theory argues a destination may have multiple lifecycles, whereby an otherwise apparently stable system undergoes phase shift that pushes it into a new lifecycle phase.

This research note tests the proposition empirically that destinations have multiple lifecycles. That said, the contribution of this study lies not only in answering the question of whether or not destinations have multiple cycles, but also in reasoning why some destinations collude to have similar growth/decline trajectories. In essence, it aims to open a forum of new discussion on destination coevolution. It paves the way for a paradigm shift from a singular-cycle model to a symbiotic networked system of cyclical trajectories that coevolve to form a different typology of lifecycles that share similar evolutionary traits.

2. Method

This study adhered to the six operational decisions of TALC proposed by Haywood (1986). First, it used countries/territories as the unit of analysis through secondary data provided by the UN World Tourism Organization (UNWTO). Second, the study utilizes time (y axis) and arrivals (x axis) to replicate Butler’s original model (Butler, 2011). Third, the data set covered the period 1984 to 2017. These data were gleaned from the UNWTO e-library for the period 1995 to 2017 and from various Compendiums of Tourism Statistics published by the UNWTO from 1984 to 1994. The data set was fairly complete, especially from 1995 onward. Some gaps exist prior to 1995, especially among Eastern European countries and former Soviet Union republics which did not gain their independence until after 1989.

Fourth, arrivals for international travel from a total of 202 countries and territories were analyzed. Although there are other units of measurement such as tourist expenditure and hotel bed capacity (e.g., Cole, 2012), most research published to date utilizes tourist arrivals as a proxy for lifecycle patterns (Kubickova & Martin, 2020; Moore & Whithall, 2005). This usage may be attributed to the fact that tourist arrivals reflect tourism demand and hence, the overall attractiveness and value of a place (Garcia-Ayllon, 2016). Fifth, homogeneity was assumed for the relevant market. That is, international tourists were treated as a homogenous segment. Finally, pattern and stages as well as shape of TALC for each specific region were investigated, while categorization was undertaken to better discern lifecycle patterns. In particular, arrivals for each specific country/territory over the 34-year period of analysis were depicted for visual examination, as the figures below illustrate. Phase delineation was based on a visual analysis of the data, coupled with analysis of a two year rolling average of arrivals to control for unique anomalies, such as the impact of the Severe Acute Respiratory Syndrome (SARS) event of 2003.

2.1. Do destinations have multiple lifecycles?

Do destinations evolve through multiple lifecycles? The short answer is yes, as 162 of the 202 countries and territories studied displayed such patterns. Six different styles were observed. Table 1 identifies each and describes the number of economies displaying each pattern, the median number of discrete lifecycles and the median number of lifecycle stages observed, plus the median number of years per lifecycle and lifecycle stage. Butler’s model represents a visual metaphor for the evolution of destinations. The interpretation presented below is also shown visually to emphasise the different types of lifecycles the destinations evolve through. Exemplars of each type are shown below.

Four Pacific island nations could still be classified as being in the exploration phase of their lifecycle, even after 34 years of monitoring. They include Niue, the Marshall Island, Kiribati and Tuvalu. Each attracted 10,000 or fewer tourists a year, with little change noted in arrivals over the entire 34-year study frame. Tuvalu is shown as the example (Fig. 1a). This country attracted fewer than 2000 tourists up to 2008 and has never attracted more than 3000 a year since then. These island nations are located in the middle of the Pacific Ocean and are distanced away from the mainland of Asia, the Americas, and Australia. These paradise-like locales are small in land area and have limited tourism products.

Another 20 destinations have enjoyed a single, unbridled period of growth. They typically progressed through long exploration and discovery phases before visitor numbers rise exponentially. The growth spurt has slowed occasionally, but the trend has been largely upward. Destinations in this cohort recorded the longest duration of individual stages. A total of eight of 20 countries are in Asia, with another five located in Africa. Interestingly, all but Taiwan, Iceland and Japan can be considered as emerging economies or post Soviet economies. Iceland (Fig. 1b) is an exemplar. It progressed through an almost 15-year exploration phase before starting to generate more arrivals in the early 2000s. Growth rates have accelerated since about 2011. As most of the regions are still developing their economies, the same goes for their tourism products. Therefore, the exponential growth of these places may partly be attributed to opportunities availed from regional development and hence, better accessibility and infrastructure for inbound tourists. Likewise, development of tourism infrastructure may also foster outbound travel.

By contrast, three destinations appear to be in long-term decline. Two are in the Caribbean and one in Europe and include Montserrat, Bermuda and Liechtenstein. Here the pattern tends to be scallop shaped, suggesting a reorientation, but trending downward. While there are occasional rebounds in arrivals, the long-term trend is decline. Such destinations progress through multiple discrete lifecycles, each lasting a median of about nine years, with each phase lasting a median of four years. However, the rebound phase is short, while the decline phase is much longer. Bermuda (Fig. 1c) is a case in point. Its arrivals peaked in 1987. Since then it has evolved through a series of four discrete lifecycles, with each ending with a drop in arrivals. It is now in its fifth phase, showing a modest growth in arrivals since 2015. These destinations represent mini nations that are mostly adjacent to popular world resort locations such as Switzerland and Puerto Rico (both exhibit a full-cycle pattern).

Conversely, 85 countries and territories displayed a scalloped-shaped growth lifecycle pattern. Here, the re-orientation period is short and has led to a revitalisation of the region. Each destination has moved through between two and five discrete lifecycles, with each one lasting about 12 years. They also move through a large number of stages, lasting about five years each. The pattern displayed by the Netherlands (Fig. 1d) is typical. While all regions are represented by this pattern, it is most common in European destinations (25 of the 47 European countries), the Americas (14 of 20 countries) and Pacific island nations (12 of
25 countries) while being less common in Asia, Africa and the Caribbean. This cluster is typified by large economies, such as the US, China, Germany, France, and Brazil, as well as territories that are situated near them. With a few exceptions, correlations among arrivals of these locales are generally high, with significance at or above the .05 level. Their correlations may imply that rise and fall of their inbound travel demands are not isolated instances, but are dependent on the fluctuations of nearby economies.

Another 77 destinations display a more complete multi-lifecycle evolutionary pattern, including a substantial period of decline before rebounding to new periods of growth. Here the reorientation period is rather traumatic. The case of Monaco is typical (Fig. 1e). It has progressed through at least three discrete lifecycles and is in the midst of a fourth one. Destinations that display this pattern are typified by periods of strong growth, followed by periods of equally strong decline. While the overall trend is upward, they have also suffered through multiple years of declines in arrivals. This type of pattern is most likely to been seen in European (17 cases), African (16 cases) and Caribbean nations

| Table 1 | Summary of TALC categories. |
|---------|-----------------------------|
|          | Exploration | Growth | Long term decline | Scalloped growth | Full lifecycle stage evolution | Volatile |
| Cell size | 4          | 20      | 3                  | 85               | 77                          | 13        |
| Median Number of lifecycles | 1          | 1       | 4                  | 3                | 2                          | 4         |
| Median number of lifecycle stages | 1         | 4       | 8                  | 6                | 6                          | 8         |
| Median years per lifecycle | 34         | 34      | 8.5                | 8.7              | 12.0                        | 8.5       |
| Median years per lifecycle stage | 34         | 7.5     | 4.3                | 5.0              | 4.9                        | 4.2       |

Fig. 1. Categories of lifecycle.
(13). They are typified by small to medium sized nations. With a few exceptions such as Switzerland, Egypt, and South Korea, most of them do not have a strong presence in tourism. These locales are dominated by developing/underdeveloped economies that have yet to develop a full range of tourism infrastructure and products. Similar to the scalloped-shaped growth cluster, correlations of tourist arrivals among these places are generally high and significant at the .05 level, suggesting that their lifecycles are not independent.

Lastly, 13 destinations displayed highly volatile lifecycle patterns that defy easy categorization. More than half are located in Africa. The Gambia is a typical example (Fig. 1f). None of these destinations ever entered a period of stability and none displayed any consistent pattern. Instead, each is typified by a series of messy lifecycles, short duration stages and rapidly changing patterns of growth and decline. These locales are typified by small developing/underdeveloped economies that have yet to support a full range of tourism products and hence, represent unrealized market potential for tourism. Interestingly, these regions are situated near the equator with a rather warm climate.

3. Discussion and conclusions

The findings support the core proposition espoused by Butler that destinations are dynamic entities that change over time. It also supports the inherent, but often overlooked ingenuity of his model whereby both axes are open ended. In doing so, the findings challenge the often misinterpreted conclusion that destinations have single lifecycles. Instead, Butler’s model best depicts individual, discrete lifecycle phases that can then be aggregated to reflect the overall evolution of a destination economy. And so, the study essentially provides empirical evidence in support of Butler’s model. Importantly, though it extends the model to appreciate the inbuilt volatility inherent in destinations.

Destination lifecycle is a visual metaphor that vividly delineates fluctuations of tourist demand over time, Butler’s (1980) work provides clear conceptual guidance on how a place may evolve. Empirical evidence collated from this study suggests that destination evolution does occur and that by and large, destinations evolve through multiple cycles. These symbiotic cyclic patterns can further be classified into six major categories with each sharing similar evolutionary traits. This study reconciles the divide between the one-size-fits-all single-cycle model and the destination mosaic in which “each [place] can follow a lifecycle that is different from that of the destination overall” (Chapman & Light, 2016, p. 254). This discovery is rather salient to the lifecycle studies, as the body of literature has largely acknowledged that “a destination can be seen as a system composed by a number ... of elements that share some kind of relationship. The system evolves by responding to external and internal inputs. It may well be considered as a complex adaptive system” (Baggio, 2008, p. 3). This fundamental premise lays the necessary foundation of tourism through the lens of complexity theory that underlies systems thinking. Yet, this foundational conceptualization of the tourism system is often based on the singularity of a specific destination (Chapman & Light, 2016; Garcia-Ayllon, 2016; Singh, 2020) without considering the broader ecosystem at a regional or even global scale.

As Baggio (2008) asserts, “Most complex systems can be described as networks of interacting elements. In many cases these interactions lead to global behaviors that are not observable at the level of the single elements and that share the characteristics of emergence typical of a complex system ... the collective properties of dynamic systems composed of a large number of interconnected parts are strongly influenced by the typology of the connecting network” (p. 8). Empirical findings from this study echo Baggio’s conceptual notation by showcasing that destination lifecycles seem to follow specific traits commensurate with other destinations to form a typology of networked lifecycles. In other words, we go beyond the single-destination lifecycle paradigm, which focuses on cycles, sub-cycles, and even super-cycles (Singh, 2020) of one resort, to improvise a new research direction that centers on co-occurrence of destination changes that reflect a certain type of lifecycle.

Although we did not test any network assumptions, this study nevertheless provides early evidence that can pave the way for gaining a deeper understanding of why some destinations evolve similarly. The typology of destination lifecycles points to an important but seldom recognized phenomenon, the coevolution of destinations. Coevolution is a phenomenon commonly observed in biology to describe multiple species’ evolutionary journeys; they are correlated, in that one’s evolution affects the other. Our empirical findings illuminate this phenomenon in the tourism context, in that a destination’s progress and decline is not an isolated instance. Rather, its lifecycle falls into a pattern that resonates closely with other destinations, especially those in proximity (e.g., small Pacific island nations that undergo exploration and a number of Asian/European regions experienced radical growth). In other words, a destination may evolve a trait (i.e., progression or decline) in reciprocity with the same trait in others, especially destinations that are geographically close.

Also, similar to the ideas mooted in complexity theory, two primary destination lifecycle categories (i.e., scalloped growth and full cycles) stand out to dominate the destination eco-system. While these two forms of lifecycles only seem to deviate based on the volatility of each cycle—perhaps attributed to how each category of destination interacts with the broader tourism environment, in general, destinations do have multiple cycles and they seem to mutate from Butler’s “singular” lifecycle model. To this end, this study sheds new light on the research area not only by demonstrating that destinations encounter various lifecycle, but by introducing the concept of destination coevolution as an analogy to describe lifecycle reciprocity among a cluster of destinations that undergo a similar evolutionary odyssey.

By showcasing that destinations do evolve and coevolve in multi-cyclic trajectories, this study hints at plausible conditions, such as globalization, crisis, and changes in tourist behaviors, associated with transformation to a broader ecosystem that may ultimately bring temporary or long-lasting effects to destinations. Although the exact cause of such impacts may require further investigation, they open a window of opportunity for future research. First, as fluctuations of lifecycles are not isolated instances, concerns arise as to why destinations coevolve. The underlying mechanism may hint at different forms of coevolution. For instance, the emergence of major world economies and travel outbound source markets, such as the US, European Union nations, Japan, China, and other BIRCS countries, have brought seismic changes to the travel ecosystem and helped to cultivate a wide array of popular travel destinations that heavily rely on these origins. Such a host–parasite coevolutionary relationship may help to explain why the rise and fall of a major economy (e.g., Japan and China) could ultimately affect certain destination clusters (e.g., Australia, New Zealand, Hawaii, Fiji, and Hong Kong) that heavily rely on such a host. This phenomenon also relates to a second future research stream that points to stability and volatility of destinations. This line of inquiry may add to McKercher and Mak’s (2020) concept of destination health/risk to better explain why certain markets/market clusters are more (vs. less) valuable to others. As COVID-19 brought immense devastations to the travel industry, it is time to reframe our understanding of TALC to adhere to a more systems thinking approach in seeking means for destinations to co-adapt to the “new normal” under this unprecedented global pandemic.

3.1. Research limitations and future research

This research follows the tradition in assessing TALC by drawing data from tourist arrivals. Although there may still be debate on what constitute a lifecycle, most researchers believe that what we have demonstrated in this investigation goes beyond a cycle and points to the evolution of destinations (Chapman & Light, 2016; Garcia-Ayllon, 2016; Kristjánsson, 2016; Ma & Hassink, 2013; Singh, 2020). This research, however, moves beyond the concept of evolution to lay the grounding
for future research on destination coevolution. It does so by heeding the call from Singh (2020, p. 1) that “a theory of evolution is necessary to understand tourism … unless a fresh perspective on time is considered.” The real question for future inquiry, however, should not be centered on the distinction of lifecycle versus evolution; rather new insights should be sought for why some destinations follow similar growth trajectories, while others do not. As scholars delve further into the coevolutionary stream of work, we hope to see that the TALC model is not simply a two-dimensional model that is determined by x (time) and y (volume), but also by z (space or other spatial locales). Here, the model could be rendered in three dimensions, or in two dimensions with the third aspect (z) to reflect fluctuation of a destination relative to other locales. It would also be interesting for future studies to consider both the causes of coevolution as well as destination ties to better understand the centrality, for example, of the broader networked ecosystem.

Impact statement

This research note tests the proposition empirically that destinations have multiple lifecycles. The findings support the core proposition espoused by Butler that destinations are dynamic entities that change over time. It also supports the inherent, but often overlooked ingenuity of his model whereby both axes are open ended. In doing so, the findings challenge the often misinterpreted conclusion that destinations have single lifecycles. Its contribution lies in reasoning why some destinations collide to have similar growth/decline trajectories. In essence, it aims to open a forum of new discussion on destination coevolution as an analogy to describe lifecycle reciprocity among a cluster of destinations that undergo a similar evolutionary odyssey.

Declaration of competing interest

None.

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1 For a detailed description of changes of actors in a social network, see Borgatti, Everett, and Johnson (2018).