Telesafaris, WildEarth Television, and the Future of Tourism

IAN GLENN¹

University of the Free State, South Africa

This article analyzes WildEarth television, a live safari program based primarily in South Africa and Kenya, but broadcast worldwide through a variety of channels, including a major Chinese television network at times. It considers Arthur Clarke's 1976 prediction of telesafaris and the growth of an online community to support this form of tourism, and it looks at some of the historical antecedents for WildEarth and the economic model and sustainability of the program, particularly after the COVID pandemic. It uses actor-network theory to explain what factors enabled an apparently marginal media location to achieve Clarke's vision. This program raises questions about Clarke's role in predicting e-tourism and online communities and his optimistic prediction that telesafaris would not supplant the live experience. It also considers issues that Clarke did not consider: the parasocial relationship of viewers with the guides and animals, and the role of a guiding culture in Africa.

Keywords: Arthur Clarke, online community, e-tourism, WildEarth, Safari Live, safari guides, Graham Wallington, actor-network theory, wildlife documentary, China in Africa, post-COVID-19 tourism, telepresence, parasocial interactions

In 1976, speaking at a celebration of the centenary of the invention of the telephone, Arthur C. Clarke, science fiction writer, futurist, and screenwriter of the 1968 film *2001: A Space Odyssey*, gave several wide-ranging predictions about the future of communication (Clarke, 2011). Later critics have credited him with foreseeing the rise of the Internet, a service like Google, and e-mail (Bawden, 1997; Benford, 2008; Simon, 2002), but many of his other predictions surely deserve more attention from media and communications scholars: his sense that personalized electronic news services would replace traditional news media; the analysis of the rise of mobile phones; and the discussion of the desirability and difficulties of voice-recognition software. Post-COVID-pandemic, another of his apparently outlandish claims seems increasingly reasonable:

We are already approaching the point when it will be feasible—not necessarily desirable for those engaged in what are quaintly called "white-collar" jobs to do perhaps ninety-five percent of their work without leaving home. Many years ago I coined the slogan: "Don't commute—communicate!" (Clarke, 2011, p. 206)

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One of Clarke's other detailed predictions in the essay has received even less attention. After discussing person-to-person communication with visuals available and whether a holograph would provide something indistinguishable from reality, he turns to a new possibility:

What could be done, even with current techniques, is to provide 3D, or at least widescreen Cinerama-type, pictures for a single person at a time. This would need merely a small viewing booth and some clever optics, and it could provide the basis for a valuable educational-entertainment tool, as Dennis Gabor has suggested. But it could also give rise to a new industry: personalized television safaris. When you can have a high-quality cinema display in your home, there will certainly be global audiences for specialized programmes with instant feedback from viewer to cameraman. How nice to be able to make a trip up the Amazon, with a few dozen unknown friends scattered all over the world, with perfect sound and vision, being able to ask your guide questions, suggest detours, request close-ups of interesting plants or animals—in fact sharing everything except the mosquitoes and the heat. It has been suggested that this sort of technology might ultimately lead to a world in which no one ever bothered to leave home. The classic treatment of this theme is, of course, E. M. Forster's The Machine Stops, written 70 years ago as a counterblast to H. G. Wells. Yet I don't regard this sort of pathological, sedentary society as very likely. "Telesafaris" might have just the opposite effect. The customers would, sooner or later, be inspired to visit the places that really appealed to them, mosquitoes notwithstanding. Improved communications will promote travel for *pleasure*; and the sooner we get rid of the other kind, the better. (Clarke, 2011, pp. 210-211)

As someone who had run a business of underwater safaris in Colombo, Ceylon (now Sri Lanka) since the 1950s, Clarke had clearly thought about the possibilities for technological revolution of wildlife tourism, envisaging a financial model in which a few dozen people support an "industry" through a bespoke safari. The group members are strangers, but become friends united by a shared interest—perhaps the earliest vision and most economical and elegant definition of an online community. However, Clarke's foresight has not been recognized in histories of the concept of online communities (Preece, Maloney-Krichmar, & Abras, 2003). The group would be in real time with the camera operator and guide (Clarke is not clear on whether this is the same person) and able to help shape the safari's course and narrative.

Nearly half a century later, much of Clarke's prediction has been realized, although, surprisingly, his prediction has drawn almost no academic attention from analysts of e-tourism. Perhaps this is because it is a successful example of live broadcasting that has never been managed in the developed world (Gretzel et al., 2020). This article analyzes WildEarth television, a live safari program based primarily in South Africa and Kenya, but broadcast worldwide through a variety of channels. It traces the history and development of this genre or subgenre, then considers what complex agents, agencies, and contexts allowed it to emerge in South Africa, and goes on to consider the effects of the program.

The article concludes by considering the factors behind the fivefold increase in viewership of the program during the COVID-19 pandemic. As the normal safari tourism business remains in crisis, Clarke's question of what happens to tourism when such an impressive digital substitute is available takes on new

importance. Analyzing the appeal of the program may help predict whether travelers will turn back from the screen to the real thing, with its inconveniences and expense, when it becomes available again.

Does Wildlife Documentary Need Theory?

While Clarke's prediction offers a useful introduction to this form of wildlife documentary, actornetwork theory offers the most usefully open-ended way of addressing the complex interplay of interests and forces involved in the development of the genre (Latour, 2005). As this article will show, technological and communications developments, cultural practices, the shifting interplay of broadcaster, guide, animals, and viewers all matter and need consideration. The use of actor-network theory for a program involving wild animals also has a certain aptness, given Bruno Latour's own tribute to work he did with Shirley Strum on baboons in Africa, which helped him develop his thinking about agency, and that the baboon troop in question, nicknamed the Pump-House Gang, became the subject of several wildlife documentaries (Latour, 1993, 2005; Strum & Latour, 1987).

A useful complement to actor-network theory is John Durham Peters' work on what he calls "infrastructuralism" and his attempts to rethink the relationship of media to nature (Peters, 2015). The possibilities of the genre depend on infrastructures: of roads, transport, telecommunications, photography and editing equipment and systems, guiding qualifications, laws about access to land, and many other more or less visible support systems. This article hints at some of these, but a fuller treatment would be needed to develop them more comprehensively.

From Clarke's Vision to WildEarth

In 1977, the BBC seemed to have taken a hint from Clarke's vision; Peter Bale of the BBC's Natural History Unit wrote to Dr. Tol Pienaar, the head of South Africa's Kruger National Park, suggesting a new project:

Our idea is to mount, not a film, but a live television broadcast, perhaps even a series of broadcasts, from a suitable waterhole in one of the Republic's game parks. We would record and transmit pictures by day and by night. . . . The enclosed summary of our infra-red night vision material will explain the technical and scientific advantages of our plans in more detail, but you will see that our special interest lies in the ability to observe wildlife at night in total darkness. It is this aspect of the television program which makes it out of the ordinary and in every sense an experience which is new in all sorts of ways. (Bale, 1977)

Bale suggested that Pienaar meet with a BBC producer Caroline Weaver, who was visiting South Africa to set up the program for the British autumn of 1978, but nothing seems to have come of this.

The leading American wildlife program *Nature* attempted to move to the immediacy of a seasonalbased format in an episode on May 4, 1986, called "Birdwatch from Florida." In this episode, a week's worth of birding in the region was compressed into the segment with commentary from experts added (WNET, 1986). Bill Oddie presented a similarly compressed week's worth of viewing into *Bird in the Nest*, broadcast by the BBC in 1994 and 1995. Oddie himself saw this as the precursor to *Springwatch*, the BBC program that began in 2005 (Oddie, 2008). This program combined cameras set up in bird nests or badger setts with other static cameras, and a mobile presenter along with commentary from presenters in the studio. The success of the program led to *Autumnwatch* and *Winterwatch* in 2006 and 2012, respectively. The programs combine a few weeks of seasonal television viewing with an increasing online presence. Although these programs attempt to reflect seasonal changes and encourage appreciation of them, they are very different from the WildEarth format and feel.

The origins of WildEarth lie in cofounder and CEO Graham Wallington's early success—and failure with Africam, the original African live wildlife television sensation, founded in 1998. At the time, Africam had a high international viewership; however, given the slow Internet speeds in South Africa at the time, it consisted of updates every 30 seconds from static cameras at African waterholes. As Internet speeds have increased, the number of live webcams recording nature has grown exponentially; a recent article pointed to more than 17,000 such sites, many grouped on sites such as Explore.org, EarthCam, and Africam.

Wallington's ambitions for the program and the ultimate failure of this business model—a saga recorded in the book *The Show Must Go On* by Peter Armitage, who acted as CEO of the company for some time—led to his moving on from Africam to found WildEarth (Armitage, 2003). WildEarth television started on April 27, 2007, at Djuma in the Sabi Sand Game Reserve adjacent to the Kruger National Park, with a control room on site, one vehicle, and a handful of full-time staff. Broadcasting the show required significant technological expertise and a large broadcast tower, but the risk of being out of signal range was a constant. WildEarth has grown significantly since then and has shown its global ambitions through a segment called Dive Live, broadcast from the Cayman Islands in 2018 with underwater sequences.

WildEarth is broadcast on a wide variety of media—YouTube, Periscope, Instagram, and satellite television—twice daily: for four hours during the morning sunrise drive and three hours during the afternoon sunset drive (an increase in August 2020 in the morning from the previous three-hour slot) from various locales in South Africa and Kenya's Maasai Mara.² The vehicles, open Land Rovers or similar four-wheel drives with no roof, have two occupants: a guide who narrates, and a camera operator behind the guide who films the guide and what is being seen. In the early years, only one vehicle was involved, but now views shift from one locale and vehicle to another under the direction of a control room with access to all the vehicles. The guides may leave their vehicles to walk, to identify tracks, plants, or small animals or to go to a hide. The camera equipment is highly sophisticated and includes drones, Steadicams for filming walks, and infrared cameras for viewing in darkness, in addition to the normal high-definition cameras on the vehicles. The guides interact with viewers, who can send in questions via Twitter or a website, and a special children's segment runs at the beginning of each show.

The current show has a control room in Johannesburg, locations around South Africa and, during migration season, in Kenya, and between six and eight vehicles are deployed on any given morning or afternoon. The show depends on a complex technological operation that must overcome connectivity problems in remote rural areas, switch intelligently from one guide and sighting to another, and,

² The easiest way to access the live show and links to archival material is to visit the dedicated YouTube channel: https://www.youtube.com/channel/UCV6HJBZD_hZcIX9JVJ3dCXQ.

increasingly, find ways to broadcast to different countries and manage issues such as subtitling in Mandarin. Clarke's original vision of the technological progress that would enable a telesafari has largely been achieved, though the practical difficulties of time lags and time zones remain. However, the technological progress was only part of what was necessary for the program to work and to interest viewers.

Is Telesafari a New Genre?

Is this mix of traditional wildlife documentary, e-tourism, and reality show a new genre? It is worth trying to clarify definitions because *e-tourism* covers several related possibilities, and many terms are used interchangeably. This is not a virtual reality show or virtual tourism, if by that one means programs for which the user controls action completely and enters a finite universe (whether it is a carefully reconstructed historic site or a hotel being explored by a potential guest), often with the help of a headset. Nor is it a silent contemplative experience in front of a live webcam or suite of live webcams. It differs from *Springwatch* in that no cameras are set up in advance, with the presenters able to switch between them and add comments from a studio. What marks this program is the role of the guides, the open-ended possibilities, and the ability of viewers to send in questions and receive answers from the presenters in real time.

Wallington himself has seen telepresence as a key element of the show's appeal (Armitage, 2003), but this is a complex and much-debated concept (Draper, Kaber, & Usher, 1998; Peters, 2015; Sheridan, 1992; Steuer, 1992). Clearly, the show does not provide the same kind of illusion of being in a different time and space as a full virtual reality experience, in which the viewer shapes the experience haptically, does. However, it does meet Steuer's (1992) definition of having the key features of vividness and interactivity through the answering of questions asked by the online community. It may be that the original experience, with only one vehicle, or smaller forms of subscription safari, like Painteddog.tv, are more likely to produce telepresence than the current show, which switches regularly from one place and presenter to another several times an hour.

An analogy may clarify the difference between watching WildEarth and a normal wildlife documentary, and help define its appeal. It is like the difference between watching an expertly commented live sport event (or perhaps several taking place simultaneously, switching from one to the other), and watching a sports movie that is scripted, usually predictable, manipulative, and overdramatic, or playing a sports video game on a PlayStation or other platform. One thing that distinguishes live sports from highlights packages or sports movies is the viewer's willingness to invest time, or put up with longueurs, in order to enjoy anticipation, to see frustration and unfulfilled hopes as part of authentic pleasure—and that surely relies on a more authentic telepresence than a virtual reality headset provides. On WildEarth, one is along for the ride—learning, taking time to see and understand, able to ask questions and enjoy the experience of being part of the group following.

Traditional wildlife documentaries obviously have many advantages in pacing, framing, and presenting events, through cutting, the addition of music, and the use of close-ups. But the dramatic structure of the traditional documentary also comes with possible built-in distortions and errors, and considerable manipulation of the audience.

Graham Wallington calls WildEarth an original African reality television show, in which participants may behave unexpectedly, where the appeal lies in the authenticity and unscripted nature of the program. Switching from this to normal wildlife documentaries can make the latter seem overwrought, staged, and artificial.

The Audience and the Time Zone Problem

WildEarth has, at various points, collaborated with and been funded by different broadcasters, including National Geographic, which broadcast the show under the title *Safari Live* for several seasons. The early-morning drive in South Africa suits U.S. West Coast evening viewing, but time zone differences are a major complication for a predominantly North American audience.

Until COVID-19 took effect, WildEarth saw its online audience as largely North American. National Geographic produced research on the typical viewers of *Safari Live*, confirming the pattern of online viewership as predominantly female and often from smaller cities and towns. The focus on children and their questions also led to significant correspondence between producers and schools, as well as children's hospitals in the United States where the show was shown. The typical engagement from a viewer is about 40 minutes.

A significant recent development has been a partnership with the Chinese Government Television Network (CGTN), which has streamed the broadcast live using a variety of channels, including YouTube and TikTok. Broadcasting live to China has involved complex technological innovations, with parallel output streams and a short delay to add Mandarin subtitles. While much has been written about China–Africa relationships, this may in time emerge as an influential development in shaping Chinese attitudes toward wildlife and conservation in Africa, as well as in stimulating Chinese tourism to Africa.

During 2020, the program increased its African footprint significantly. Not only did it find an audience several times a week on the SABC (the South African state broadcaster), but it now has its own dedicated channel on the African satellite television network DSTV. The cost of Internet access in South Africa and many other countries has meant that televised broadcasts typically reached a wider audience than the online channels, another example of the importance of infrastructural supports.

The Medium and the Financial Model

WildEarth has generally avoided advertising in a search for revenue. Instead, it relies on reaching a broad audience through a variety of channels such as YouTube, Instagram, and Periscope, and funding from the broadcasters who use their material. WildEarth is not paid for its material on the DSTV channel, but does not have to pay for the medium.

The ending of the partnership with National Geographic led to some financial pressures and restructuring; viewers were asked for financial contributions to help keep the show solvent, and several wildlife lodges, particularly from the andBeyond group, provided resources in the form of guides, vehicles, locales, and logistic support. This support increased as the 2020 pandemic took hold. The financial support from the audience and lodges suggests that many actors realize the financial possibilities of this digital wilderness experience (Loomis, Richardson, Huber, Skibins, & Sharp, 2018).

The vagaries of different business partnerships and the reliance on collaborations that may end when normal tourism resumes pose significant problems for WildEarth, given its reluctance to rely on conventional advertising. Its position in early 2021 was stated as follows:

WildEarth is now almost entirely surviving on revenues directly from our viewers and in large part the subscriptions from our Explorers. The channel is getting picked up on platforms all around the world (Finland, Middle East, UK, and more). There is also massive growth taking place in the FAST [free ad-supported streaming television] space due to the addressable advertising on Connected TV. This feels like it may be the inflection point finally. (G. Wallington, personal communication, March 10, 2021)

What Allowed WildEarth to Start in South Africa?

Adapting Clarke's vision of a visit to the Amazon or his experience of underwater dives in Sri Lanka to the reality of an African telesafari posed significant difficulties. The American and British precursors took the precautions of having multiple cameras in place or a week's worth of footage to draw on in order to avoid scenes without animal activity. Any self-drive tourist to the Kruger National Park or similar South African park in a closed vehicle expecting to see lions and leopards around every corner will likely meet disappointment. Those accustomed to wildlife documentaries with highly concentrated viewing sequences, often shot over months, if not years, are disconcerted by landscapes that seem to be empty of life and action. Often the animals that are seen during the day are resting or grazing, or, in the case of leopards or other predators, furtive and skittish, allowing only a brief glimpse or a view from a distance. Most visitors to the Kruger National Park leave without seeing all of the "Big 5"—lion, leopard, elephant, rhino, and buffalo—that photographic tourism took over from hunting as the most exciting and dangerous animals.

Had WildEarth only had Kruger National Park as example, it never would have worked. While Kruger National Park was (and is) the primary place for tourists to view wild animals in Africa, it never became a prime locale for wildlife filmmaking. Three major reasons for this were found in the park's archives on the subject of requests to film: Filmmakers wanted access to private roads or to go off-road to follow animals; to stay out after hours; and to have the services of a game ranger to help them locate and track animals. The authorities refused these requests for many years.

Turning a live game drive into compelling viewing required applying the experience of what happened in private reserves close to the Kruger and the skills developed there when a few private game lodges in the 1970s in the Sabi Sand Game Reserve transitioned from being primarily hunting reserves to running photographic tourism. A key factor in making the Sabi Sand one of Africa's three primary safari destinations, along with the Maasai Mara in Kenya and the Okavango Delta in Botswana, was the development of a new position: the guide. This role was focused on guests and viewing and photographing rather than on protecting animals, the focus of the game rangers in the Kruger Park. These new lodges offered guests and filmmakers the three things that Kruger National Park did not: personalized and exclusive access; after-hours and off-road experiences; and the presence of a knowledgeable guide (often accompanied by a tracker-spotter).

These local guides, who often had a background in science, became very knowledgeable about habitats, animals, group dynamics, and the best viewing places. The recognition of guiding as a career led to the formation of the Field Guides Association of Southern Africa (FGASA) and a set of certifications based on a mix of scientific knowledge and fieldwork, and testing of skills in the field. In many cases, guides have far more experience with a particular animal or group of animals than any scientist not in the field (Glenn, 2013). An important technological development was also made: Guests were driven in open vehicles, allowing for much better viewing than the closed vehicles that are compulsory for self-drive tourists in the Kruger. The use of open vehicles for game viewing seems to have started at Mala Mala in the Sabi Sand and then spread to Londolozi and more widely; however, open vehicles without roofs are still not permitted in Kruger National Park. The realization that dangerous predators usually regard humans on open vehicles with indifference made it possible to get close to animals.

At Londolozi, one of the prime locations in the Sabi Sand, John Varty started making films. The success that he and other guides in neighboring lodges, such as Mala Mala, had in habituating wild animals, particularly leopards, to the presence of vehicles helped transform the viewing experience for visitors. To habituate the first generation of leopards took literally hundreds of hours of patient following by Varty and his tracker Elmon Mhlongo, a process depicted in the film *The Silent Hunter* (McLachlan, 1986). As one generation of leopards or lions is habituated, cubs grow up regarding vehicles without alarm, and viewing becomes easier (Glenn, 2018). Even in the Kruger, many predators are now so habituated to the presence of vehicles that they may rest in their shade. It should be stressed that habituated animals are not tame and might attack anyone leaving a vehicle; however, as Figure 1 shows, they certainly behave very differently from, say, an animal that grew up in an area where animals are hunted.



Figure 1. A WildEarth vehicle with presenter and camera operator and two lions showing their indifference to the presence of the vehicle and its occupants.

The work of the original guides in the Sabi Sand is still relevant today. Anyone who visits a lodge in the Sabi Sand is almost certain to see the Big 5 and to have guides whose knowledge of a particular leopard or a lion pride extends to the animals' genealogy, territorial status, and current behavior.

Several other factors help the guides in private reserves. The first is that these reserves are divided into blocks surrounded by dirt roads. Using their tracking expertise, guides can determine whether an animal has entered a particular block and whether it is still there or has moved on. Guides also collaborate by using radio contact to alert other guides to the presence of animals and sightings. This can lead to an elaborate staging of sightings because guides have to follow a protocol of not having too many vehicles at a sighting at once; this avoids the kinds of traffic jams common in the Kruger or other public parks. The third is that guides go out when animals are active—early in the morning and later in the afternoon. What is likely to surprise visitors on such a game drive is how close to animals one gets and how indifferent the animals usually are to the presence of vehicles. Guides who regularly see the same animals thus get to know them and their behavior well.

The Sabi Sand has become one of the world's most exclusive and expensive tourism destinations. It is thus no accident that WildEarth's live broadcasts started there; this was the location where exciting sightings were most likely. Their presenters use open vehicles, remain in radio contact with other vehicles in the area, use tracking to determine where animals are, and restrict their sorties to a sunrise and sunset drive. The location of the control studio in the Sabi Sand was thus in large measure a result of successful innovation and a well-established guiding practice.

Role of the Guides and the Parasocial Paradox

Although Clarke did not say anything about who the guide was or how he would communicate, it seems likely that he based his expectations on his own experience as an English-speaking exile in Sri Lanka: someone who would speak English, yet understand the local flora and fauna. In the case of most Southern African lodges, the guides have been White English-speaking South African men, usually from educated middle-class backgrounds and often with university degrees in environmental or scientific fields; however, the composition of guides is changing in racial and gender terms. Guides spend many hours a day with international guests with different backgrounds and navigate complex social and political issues. When interviewed, guides often comment that having travelled internationally helps them deal with foreign clients.

The experienced guides who host the WildEarth drives have also, in most cases, become expert trackers. The best guides are a mix of teacher, naturalist, raconteur, and entertainer. James Hendry, one of the leading guides on WildEarth, is a published novelist. Experienced guides will have dealt with a range of clients with differing levels of knowledge, interest, and sophistication, and they should be able to switch from comments on very basic questions to showing that they keep up with the latest research on, say, hyena behavior. In some cases, researchers are based in the same areas, and guides will refer to their work, putting them at the cutting edge of science. A good guide literally enables guests to see differently, as Harry Wels has demonstrated (Wels, 2020).

One of the impressive things about following the narratives of the various guides is that they are aware of the received scientific expertise on a subject, but they also add their own observations or criticisms. Scientific wisdom may state that aardvarks do not drink, for example, but when a guide has seen photos from cameras at waterholes proving otherwise, he will say so. When it comes to complex issues of social dominance in hyena clans, the guides may adduce what the scientific wisdom says, but add that the behavior being witnessed complicates that view.

The dilemma for the program is that a good guide may help entertain or educate and transform an ordinary sighting or even lack of sightings into something interesting. In doing so, the guide may get viewers to switch their attention and emotional focus from animals or nature to the guide—to make what has been identified as the "parasocial" bond between viewer and screen personality the primary factor (Horton & Richard Wohl, 1956). For Wallington, this is a danger:

It's not that I underestimate the power of narrative, storytelling and presentation. Nor that I do not see value in having a great naturalist raconteur like James Hendry who obviously entertains while he engages and educates. It's more that people become very confused when they see other people on the screen and have a tendency to see those people as the focus of the exercise. I am quite sure that this is an innate instinct in all humans because our focus on other humans will allow for a higher social standing which is what many humans invest the bulk of their energy into. So essentially what I am doing is trying to focus more on the wildlife because I know I don't have to worry about the audience focusing on the naturalists whenever they can, but if WildEarth do so as well then the wildlife will quickly slip into a supporting role and that would be a backwards step. (G. Wallington, personal communication, September 14, 2020)

WildEarth thus must manage this tension, manifest in, for example, comments or complaints on its Facebook pages about the presence or absence of certain guides. The regular switch between vehicles clearly also minimizes the importance of any one guide. Nonetheless, the program also tries to use the strengths of the parasocial bonds by, for example, including inserts introducing particular guides or camera operators, and getting them to explain their passion for conservation or wilderness.

Role of the Animals

If someone is not to have a parasocial relationship with the guides, can one have it with the animals? Derek Bousé has looked suspiciously at ways in which wildlife films use close-ups to establish and claim intimacy with animals and argues that because these animals are usually seen at a distance, it produces a false kind of parasocial bond (Bousé, 2003).

For many African guides and filmmakers, however, wild animals are highly individual. At lodges in the Sabi Sand, territorial leopards may spend their whole lives in one area so that guides may follow them literally from birth to death, and, as seen earlier, much of the viewing is close-up. For a scientist, individualizing or naming animals may be anathema and signify the loss of scientific detachment, but for guides, the scientist may miss the extent to which animals are individuals, are unpredictable, and exhibit new forms of behavior (Glenn, 2013).

Because lions and leopards are highly territorial, guides are inevitably aware of battles for dominance and the rise and fall of certain individuals and groups. What does the incursion of new male lions mean for the existing pride and the ageing dominant male? Will the young male leopard survive into adulthood and succeed in establishing a home range? The importance of a powerful group of lions can be felt and recorded across the whole range. This is shown in the film *Brothers in Blood: Lions of the Sabi Sand* (Huertas, Holloway, Huertas, & Lamberti, 2015), where many lodges and guides collaborated in providing footage to build up a sense of the impact of a dominant pride in the whole area. Animal behavior is thus often invested with the kinds of narrative interest one might only expect for sagas like *Game of Thrones*. We move closer to Latour's view of society (originally baboon society, and then more generally) not as a set of fixed rules and immutable patterns, but as a result of individual decisions and behavior.

In having repeated interactions with individual animals, particularly the charismatic mega-fauna, the guides can get viewers to share their interest and concerns. Certain leopards and lions thus have the status of stars in the show, with their own Facebook pages, for example, and a keen following among viewers. In some cases, devoted viewers can identify a particular leopard, for example, and text in the identification to help a new guide uncertain about which it is.

Here, it seems that the primary parasocial bond is with the animals; far more of the program's Facebook posts are about animals or sightings than guides. For Wallington, getting viewers to care about specific animals is the basis for conservation success, and it may be that live telesafaris could be more successful than traditional wildlife documentaries have been in driving conservation action. Moreover, the show manages to get viewers to care about animals other than the Big 5 and to understand the bigger ecological picture, arguably building stronger support for conservation (Skibins, Powell, & Hallo, 2016).

The Viewing Community

Clarke's original definition of the viewing community for the telesafari as "a few dozen unknown friends scattered all over the world" may not seem relevant for a program now broadcast on a variety of media to hundreds of thousands of viewers at once. Though the screening of questions from viewers may allow others to feel as though they are part of the live experience, there is obviously a loss of involvement when so many viewers who are not logged in or registered are watching. Regular Facebook postings for those registered are made in an effort to keep up a sense of community, and in its Explorer option, the program offers ways for people to subscribe to get extra viewings and other benefits, and the program has used registered viewers to appeal for funds.

Other versions of telesafari, such as Painteddog.tv, run by a former WildEarth guide, have sprung up in South Africa; these work on a model that is closer to Clarke's original vision. These usually involve a limited number of seats, with guests paying. Many of these guests are "regulars," and these programs allow for chat among participants; this makes for a greater involvement, drawing guests into a relationship not only with the guide and the animals, but also with one another. It may be that this kind of intimacy has been particularly valuable during the isolation of the COVID lockdowns experienced in many countries, and the intriguing question for the WildEarth model is whether this has been lost or diluted because of their greater reach and larger number of guides.

Effects of the Program

A vast body of research has set out to show that nature is good for humans (Bragg & Atkins, 2016; Kaplan, 1995; Ulrich et al., 1991; Wilson, 1984). Here, however, we have a particular kind of digital experience of African wilderness with narration, raising a host of questions about the effects on various viewers, perhaps particularly children.

One survey of research suggests that indoor experiences of nature can be beneficial (Jo, Song, & Miyazaki, 2019). Once again, WildEarth is a complex form in that it combines what we may see as the instinct or sublimated pleasures of the hunt (where the animal is tracked, "shot" with the camera, and captured in some form) with the pleasures of more serene forms, like *shinrin-yoku*, or Japanese forest-bathing. Typically, a WildEarth show will move from the excitement of finding animals to emphasizing the beauty of the landscape, often at sunset, or even of animals in repose. More research might reveal whether it is the former, the latter, or a combination of the two that is most likely to be beneficial.

Other anecdotal claims about nature viewing on children deserve more exploration. Several teachers have written to WildEarth to say that classes watching the program together show heightened focus and concentration, perhaps giving some weight to Louv's popular notion of nature-deficit disorder (Louv, 2008). Other reports from hospitals suggest that watching television can help distract or relax children undergoing painful and intrusive procedures, but here again, more research on this program is needed (Koller & Goldman, 2012).

More focused research on watching wild animal webcams shows, promisingly, that it can, in many ways, equate to the real thing and help promote conservation awareness and ideals while reducing environmental pressures on wilderness (Skibins & Sharp, 2019). This issue has become more prominent during the COVID lockdown, when critiques of traditional tourism and its environmental cost emerged. The telesafari also offers options not available to those who are ill, frail, or unable to afford a real safari.

Changes During the COVID-19 Lockdown

The program has been in existence for 14 years, but its popularity during the COVID-19 pandemic, when viewership worldwide increased sharply, has seen it draw increasing media attention from leading newspapers such as *The New York Times*, the *Daily Telegraph*, and *Le Monde*, and international television stations such as the BBC, CNN, and NBC.

The COVID-19 pandemic has had a devastating effect on tourism globally, and the continuing ban on international travel has hit the African luxury tourism market particularly hard. Yet in some ways, this was an opportunity for WildEarth, particularly given that it had already started moving to collaboration with lodges. Not only did the new partners help financially, but they also offered more diversity in landscape, animal viewing, and guides. The show is now able to use half a dozen locales and offers a far more eventful range of viewings than was previously available with only one or two vehicles and one locale.

The company's own tracking of viewership shows that during the pandemic, it saw a fivefold increase in its online viewership, with the biggest growth (15-fold) being in the local South African market. Wallington surmises that much of this increase in South Africa was driven by changing viewership patterns during a severe stay-at-home lockdown period, when families were confined at home together. Parents found that they could watch this show with young children and saw it as an acceptable complement to homeschooling material. Wallington says that a WhatsApp message shared among groups of parents in schools seems to have gone viral and helped increase viewership, while a viewership slot on the national broadcaster, the South African Broadcasting Corporation, drew in many new viewers. Many families confined to unnatural environments may have found that the live-time natural images offered a way of punctuating the day, as live sport previously had within South Africa.

In August 2020, the show was given a three-month experimental window (from August 25, 2020, to November 25, 2020) on a dedicated channel (183) on DSTV, the African satellite television service. It uses this channel to repeat the daily offerings but also to experiment with footage with no narration but complementary music in what seems to be an attempt to offer the calming effects of nature. At the end of the experimental period, the channel period was extended.

How Will Tourism Change After COVID-19?

Several early commentators on the effects of the pandemic on tourism have seen the global slowdown of tourism as a possible benefit for finding more sustainable models that place less stress on the local and global environment (Gössling, Scott, & Hall, 2020; Harvey, 2020; Higgins-Desbiolles, 2020; Niewiadomski, 2020).

Viewed positively, WildEarth could be seen as an ecosystem preserver, offering the benefits and experience of safari without the expense and inconvenience Clarke mentioned, and without the damaging environmental pressures of long-haul tourism. The research on bear viewing and its effects does suggest that viewers may emerge from a virtual experience with heightened environmental awareness and commitment (Skibins & Sharp, 2019).

The paradox of WildEarth television is that it at present relies in part on the spare capacity of lodges and their wish to use the WildEarth platform to brand themselves for the future. If lodges reopen successfully and draw tourists when the effects of the pandemic wane, the guides and vehicles dedicated to WildEarth would earn much more for the lodges in servicing clients in person, suggesting that the lodges will have to decide whether the stimulus for tourism and the value to the brand outweigh the expense and loss of revenue.

Other models may be emerging. Some of the lodges involved offer bespoke offerings for clients who want to have special meetings with guides or go behind the scenes of the program. Another option may be to offer spaces on limited virtual outings as part of a loyalty reward for guests who have visited the lodge in person. Perhaps this kind of complementary offering—with special interests such as birding, antipoaching work,

or on-foot tracking—will in time achieve the success of bespoke guided tours, such as the highly successful virtual tour to see the abandoned dogs of Chernobyl (Richard, 2019). At present there are, Wallington points out, still technological difficulties, including time lags, that make immediate verbal communication with the guide in the field difficult—meaning that Clarke's original vision is still not quite a reality.

Conclusion

This article has resuscitated Clarke's prediction to suggest that he is a neglected pioneer of both e-tourism and online communities. It also suggests that he underestimated the power of guides and narratives, and the agency of animals in what was to follow—perhaps because he had a more static view of science as looking at orchids, reefs, and trees rather than complex and dangerous mammals. This article has tried to start teasing out the complex set of actors and networks that have made the program possible.

Although large claims have been made about the value of nature and television viewing of wilderness, further research should explore issues such as the effects of this program on wellness, children's concentration, and attitudes toward conservation. The latter is particularly important given that WildEarth television seems to be a major force shaping the future of wildlife documentaries and global interest in the genre.

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