



Editorial

The Little Prince is an ecologist

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Abstract

Stories shape the human experience. Fairy tales, fables, and historical stories from many peoples influence contemporary culture and science. The Little Prince is an excellent example of a short tale that highlights the relative importance of living with ecology and connectedness. It also clearly illuminates the absurdity that can emerge when one becomes isolated from even the simple processes associated with the functioning of other natural systems or from ecological interactions. This is one of many excellent stories that can be used in teaching science to frame theory for learners into different and larger novel contexts. This fairy tale provides morals for daily living too—tend to your garden, watch sunsets, and use nature to tame your absurd life and connect to others. We use humour, stories, and current cultural memes from television and movies in many publications and/or their titles and in classroom lessons. Looking more broadly for tales and stories from different cultures and times promotes justice and openness.

Keywords: Fairy tales; stories; narratives; ecology; lessons; teaching

Introduction

Stories are fundamental to human interactions. We use stories to describe patterns, connect to one another and to natural systems, and to teach. We have and always will. Stories not only describe what has happened but what can happen in providing some of the moral scaffolding for ideas and concepts (Turner and Berkowitz 2005) and at times action (Schank and Berman 2002). Science is no exception. Scientific writing implicitly invokes the story and a narrative to communicate. It is

narrative nonfiction (Sills and Miller 2010). These stories in science are more than abstract principles. We use the story to connect to the natural world and its complex processes. We then use the narrative to frame and connect evidence in almost every form of scientific publication from standard experimental reports to reviews to short idea contributions that subsequently explore these connections. A story and a narrative are not necessarily strict synonyms but are closely aligned. Stories are more open and typically describe a series or sequence of events to directly or indirectly represent a set of ideas (Rudrum 2005). The narrative is more explanative but nonetheless similarly structures ideas and at times evidence and observations to organize our experiences of the natural world (Ryan and Herman 2007). Ecology is a story, and I hope a good one. We use narratives as part of our collective tool kit to explain natural phenomenon and even more broadly teach and do social good through ecological thinking (Boyer et al. 2016; Raman 2020). It is a small step to propose that fairy tales and stories from many cultures and time periods can be used to teach ecology (Kubli 2001). Different perspectives and novel observations of nature including the fantastical can provide a powerful lens to magnify and critically appraise the decisions we make that shape our ecological interactions with other natural systems. A contemporary fairy tale is used here as a case study to demonstrate the capacity for tales to teach and transform ecology.

The Little Prince

The premise for this specific ideological narrative note is that The Little Prince is an exemplar that shows how a wider set of stories such as a simple fairy tale can support scientific thinking and inform decision making—not through formal evidence but through ecological

thinking described in a fantastical setting. Many fairy tales have an ecological basis or ecocritical grounding such as the gingerbread house and hunger/crops (Pluskowski 2005), wolves and dark forests coupled with the ecology of interactions between people and ecosystems (Adler 2014), and redux/reinterpretations of stories such as numerous Grimm's Tales to highlight the relevance of shifting ecological equilibriums to new and less desirable sustainable ecological states driven by anthropogenic changes (Thesz 2011). The Little Prince is a direct but tacit fairy tale that frames all interactions associated with the main character ecologically and challenges the narrator to rethink their own decisions within a similar framework. The Little Prince was first published in 1943 in French before the author was shot down in the war (foreword in Saint-Exupéry 2015). There have been many translations with the first English one in 1943 and many more complete and unabridged versions since (Saint-Exupéry 1995, 2015). For those unfamiliar with the tale, there are numerous free, short, and effective online synopses (Bauer and Lohnes 2021). One must nevertheless consider reading the tale in full. Here, the most recent English translation from 2015 is used as inspiration. The author was a pilot as is the narrator in this tale. It begins with a plane crash. This is a poignant story that follows the journey of The Little Prince as recounted by the narrator pilot. The story emerges organically with the journey from his small planet to Earth and the characters he meets along the way. He asks questions about how they see their world and reflects on his own worldview. There are at least three lessons from this tale that speak to ecological living and environmentalism as means to a better life.

First, this is an ecological parable because The Little Prince is mindful of the ecology of his home. He is surprised when others are not so inclined. Daily, he removes introduced baobab trees lest they become invasive and overwhelm his small planet. He recognizes that one must manage this threat early and vigilantly and proposes that discipline facilitates the maintenance of balance and diversity ecologically. To this point, the tale opens with a request to the narrator pilot for a drawing of a sheep by The Little Prince to help him manage this aspect of the ecology of his planet. He works to protect function but always makes time to watch sunsets—many of them. This connection with cyclicity and natural rewards is compelling, and it has been proposed to be a fundamental positive drive for the advancement of life for many of us (Gilbert 2020). He also tends a single rose that emerges on his planet. He loves it deeply; they discuss many ideals both fantastical and ecological such as predation, death, and natural beauty. The rose is however demanding, and this set of imaginary needs to protect the flower leads The Little Prince to leave his home and sever his connection to its ecology. He prepares and departs. Yet, his heart is always connected

to a strong sense of place and nature (Birch et al. 2020; Wilkinson et al. 2014), and he maintains a focus on its ecology throughout his subsequent journey.

The second lesson is one of the ecological and fantastical absurd. The journeying by The Little Prince is structured by observation with questioning about purpose and use of humanity to support the function of natural systems. Every person met is absurd because they chase spurious values in life and activity (without a connection to nature) and fail to find certainty or solace in these actions. In contemporary eco-evolutionary theory, people engaged in pursuits to convince oneself that life is not absurd have been termed *Homo absurdus* (Aarssen 2018). The absurd can lead to a disconnect between the environment and our lives. This void can drive us to either produce artefacts that hopefully supplant us or to engage in leisure so as to distract, i.e. legacy and leisure drives (Aarssen 2018). The characters in this tale embody these drives. There is a king that says it must be so when it will be plainly so and thus ensures that all decrees are self-fulfilling and tautological. There is a vain man that seeks only admiration by being the best in a competition of one. There is a man that drinks to forget his shame that he drinks. There is a man that counts stars to own them because he says he owns them by counting them. Then, there is a man with a terrible and repetitive job like that of Sisyphus, and finally, there is a geographer that will not explore and map only the work of others. Geographers are too important to do the geography themselves. The tale from these journeys is framed morally. It helps The Little Prince further consolidate the values most relevant to an ephemeral and beautifully deepening sense of ecology and purpose. He places purpose to connect with and tend for nature as the central value. This lesson is further encoded in the conclusion by The Little Prince that grown-ups are strange and extraordinary because (at least in this tale) the absurd can be avoided to some extent provided we look, listen, and preserve curiosity as a means to see the natural world.

The final lesson is an epiphany to The Little Prince. Nature is special to people insofar as we are able to connect with it. One rose in all the world is as important as a universe of roses if it is your rose at your home and you love it. The Little Prince wept when discovering there was more than one rose in the universe, but a small fox taught him the lesson of connection with nature. The fox proposed that there are rites and rituals to connect with nature. Routine, commitment, and time spent with nature build the bridge. The fox explains that this is how you tame nature and make it special to you. However, nature (or a single flower) also tames your human absurdity by making you more in tune with the wild and giving you purpose and meaning. Trait identification is natural to us. We identify with characters on tv when we 'spend time' with them - sadly likely too much. It is well established that both children (Hoffner 1996) and adults

(Rain and Mar 2021) connect with fictional characters in this way and that we then mirror the positive or negative interactions that we view (Simon and Gutsell 2021). Nature is an antidote to these potentially negative influences. It can support almost every dimension of mental health and well-being emotionally and cognitively (Birch et al. 2020). The more engaged that we are in tending the weeds, nurturing the flower, or walking with the fox, the greater the returns. This has been termed reciprocal restoration because in working to actively restore the natural functions of ecosystems, we restore ourselves (Nabhan et al. 2020). This tale thus resonates now more than ever. Children much more easily connect with other animals and with plants. In exploring what reciprocity and mutualism can mean for you (even as a 'grown-up'), perhaps you can become more wild and nature becomes more tame to the extent that you better understand its needs. The true ecological secret is that "one sees clearly only with the heart" (the fox), and we always need to practice caring with diligence and discipline.

Conclusions

The Little Prince resonates with contemporary ecology and environmental practice because of the profound need for science to support decision making (Fernández 2016). Knowing about the ecology of the natural world is important. Caring about it is however crucial and transformative. This fairy tales provides a set of principles that can be used in teaching and in living more ecologically. The moral scaffolding is more subtle than The Lorax or other stories but nonetheless heartfelt and instructive. Stories and narratives in science can make science more accessible to the public (Dahlstrom 2014). However, this boundary is much more permeable. Science is about connectivity - ecology in particular - and in identifying stories that help us better understand and care about interactions, we promote justice and inclusivity. The stories we tell and are retold can be used to enable scientific co-production, and new (or old and traditional) practices of other peoples (Wyborn 2015) should be taught and tested. With curiosity and respectfulness, there are so many stories that can be used to incorporate accurate scientific knowledge into human experience and combat disinformation (Dahlstrom 2021). We need narratives, more than one, and loyalty to a single flower is a noble ideal.

References

Aarssen, L.W. 2018. Meet *Homo absurdus*--the only creature that refuses to be what it is. *Ideas in Ecology and Evolution* 11: 90–95.

Adler, A. 2014. Once upon an Ecocritical Analysis: The Nature-Culture of German fairy tales and its

implications. *University of Oregon ScholarsBank* 1: 1–67.

Bauer, P. and K. Lohnes. 2021. The Little Prince fable by Saint-Exupéry. *Encyclopedia Britannica* 29: 1–5.

Birch, J., Rishbeth, C., and S.R. Payne. 2020. Nature doesn't judge you – how urban nature supports young people's mental health and wellbeing in a diverse UK city. *Health & Place* 62: 102296.

Boyer, S., Lefort, M.-C., and L. Winder. 2016. Rethinking Ecology – Challenging current thinking in ecological research. *Rethinking Ecology* 1: 1–8.

Dahlstrom, M.F. 2014. Using narratives and storytelling to communicate science with nonexpert audiences. *Proceedings of the National Academy of Sciences* 111: 13614.

Dahlstrom, M.F. 2021. The narrative truth about scientific misinformation. *Proceedings of the National Academy of Sciences* 118: e1914085117.

Fernández, R.J. 2016. How to be a more effective environmental scientist in management and policy contexts. *Environmental Science & Policy* 64: 171–176.

Gilbert, O.M. 2020. Natural reward drives the advancement of life. *Rethinking Ecology* 5: 1–35.

Hoffner, C. 1996. Children's wishful identification and parasocial interaction with favorite television characters. *Journal of Broadcasting & Electronic Media* 40: 389–402.

Kubli, F. 2001. Can the theory of narratives help science teachers be better storytellers? *Pages* 6–12 in Bevilacqua, R., Giannetto, E. and M.R. Matthews, editors. *Science Education and Culture*. Springer, Dordrecht.

Nabhan, G.P., Orlando, L., Smith Monti, L., and J. Aronson. 2020. Hands-on ecological restoration as a nature-based health intervention: Reciprocal Restoration for people and ecosystems. *Ecopsychology* 12: 195–202.

Pluskowski, A. 2005. The tyranny of the gingerbread house: Contextualising the fear of wolves in Medieval Northern Europe through material culture, ecology and folklore. *Current Swedish Archaeology* 13: 141–160.

Rain, M. and R.A. Mar. 2021. Adult attachment and engagement with fictional characters. *Journal of Social and Personal Relationships* 38: 2792–2813.

Raman, A. 2020. Ecological thinking and agricultural sustainability. *Pages* 1–35 in V. Venkatramanan, editor. *Global Climate Change and Environmental Policy*. Springer, Singapore.

Rudrum, D. 2005. From narrative representation to narrative use: Towards the limits of definition. *Narrative* 13: 195–204.

Ryan, M.L. and D. Herman. 2007. Toward a definition of narrative. *Pages* 22–36 in D. Herman, editor. *The*

- 1 Cambridge Companion to Narrative. Cambridge
2 University Press, Oxford.
- 3 Saint-Exupery, A. 1995. *The Little Prince*. Woodsworth,
4 Hertfordshire.
- 5 Saint-Exupery, A. 2015. *The Little Prince*. Houghton
6 Mifflin Harcourt, New York.
- 7 Schank, R.C. and T.R. Berman. 2002. The pervasive role
8 of stories in knowledge and action. Pages 287–313 *in*
9 Green, M.C., Strange, J.J., and T.C. Brock, editors.
10 Narrative impact: Social and cognitive foundations.
11 Lawrence Erlbaum Associates Publishers, Mahwah,
12 NJ, US.
- 13 Sills, J. and J. Miller. 2010. Science Education: Narrative
14 Nonfiction. *Science* 329: 748-748.
- 15 Simon, J.C. and J.N. Gutsell. 2021. Recognizing
16 humanity: dehumanization predicts neural mirroring
17 and empathic accuracy in face-to-face interactions.
18 *Social Cognitive and Affective Neuroscience* 16:
19 463–473.
- 20 Thesz, N. 2011. Nature Romanticism and the Grimms
21 Tales: An ecocritical approach to Gunter Grass's *The*
22 *Flounder* and *The Rat*. *Marvels & Tales* 25: 96–116.
- 23 Turner, V. and M. Berkowitz. 2005. Scaffolding
24 morality: Positioning a socio-cultural construct. *New*
25 *Ideas in Psychology* 23: 174–184.
- 26 Wilkinson, C., Waitt, G., and L. Gibbs. 2014.
27 Understanding place as ‘Home’ and ‘Away’ through
28 practices of bird-watching. *Australian Geographer*
29 45: 205–220.
- 30 Wyborn, C. 2015. Connectivity conservation: Boundary
31 objects, science narratives and the co-production of
32 science and practice. *Environmental Science &*
33 *Policy* 51: 292–303.
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