

# Exploring the Potential of Edges for Regenerative Work

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**Abstract-**This paper delves into the concept of edges as spaces of potential regeneration across ecological, social, and psychological domains. By examining examples such as riparian buffers and sociocultural boundaries, the paper elucidates how edges serve as sites of increased biodiversity, cultural diversity, and psychological transformation. Drawing on insights from ecotones, sociotones, and psychotones, the paper highlights the importance of understanding and harnessing the dynamics of edges for fostering resilience, innovation, and healing. Ultimately, it advocates for a holistic approach to regeneration that embraces the interconnectedness of ecological, social, and psychological systems, offering pathways toward a more sustainable and harmonious coexistence.

**Keywords:** edges; regenerative work; biodiversity; ecotone; sociotone; resilience; interconnectedness.

**Resumen -** Este artículo profundiza en el concepto de los límites como espacios de potencial regenerativo en los ámbitos ecológico, social y psicológico. Al examinar ejemplos como los buffers ribereños y los límites socioculturales, el ensayo aclara cómo los límites sirven como sitios de mayor biodiversidad, diversidad cultural y transformación psicológica. Basándose en los conocimientos de ecotonos, sociotonos y psicotonos, el artículo destaca la importancia de comprender y aprovechar las dinámicas de los límites para fomentar la resiliencia, la innovación y la curación. En última instancia, aboga por un enfoque holístico de la regeneración que abrace la interconexión de los sistemas ecológicos, sociales y psicológicos, ofreciendo vías hacia una convivencia más sostenible y armoniosa.

**Palabras clave:** Límites; trabajo regenerativo; biodiversidad; ecotono; sociotono; resiliencia; interconexión.

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## Bursting of Life on Edge Ecosystems— Ecotone

Walking by a stream or river, you may notice shrubs, perennial plants, and trees growing on either side. Inhabiting the place where water meets land, these plants collectively balance a fragile yet important edge ecosystem, the riparian buffer. One example is the Redbud Tree (*Cercis canadensis*).

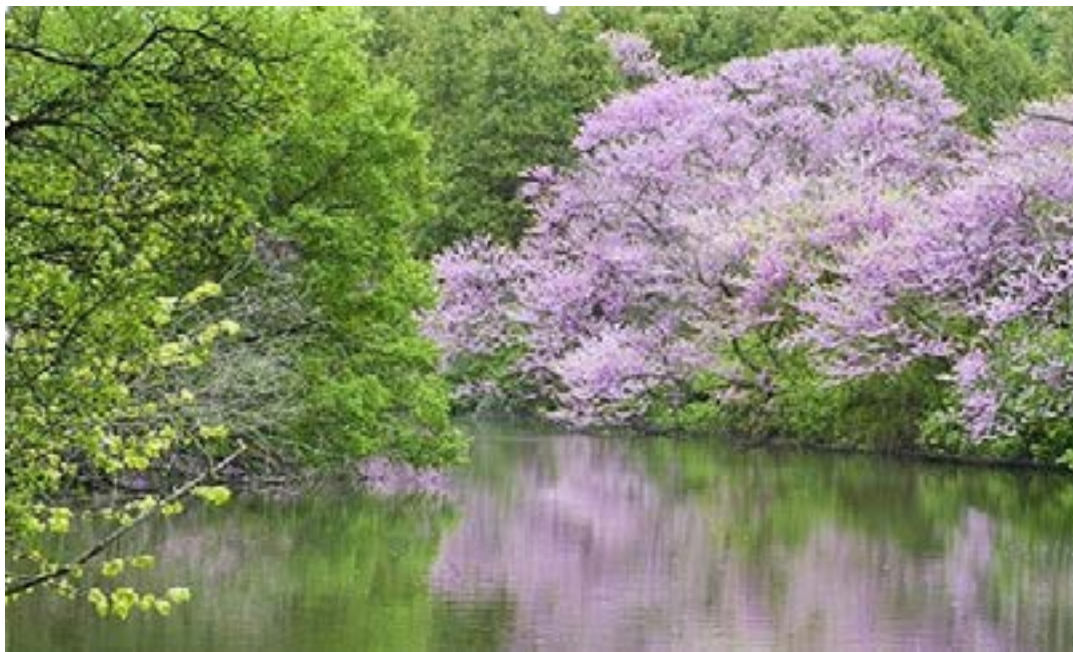


Figure1. Redbud Trees lining the riverbank / Photo by Hank Erdmann

In early spring, Redbud blooms clumps of rose pink to light purple flowers that attract many butterflies and bees. When flowers mature into bean pods, they provide a feast for neighbouring cardinals, pheasants, white-tailed deers, and grey squirrels. Native peoples on Turtle Island (also known as the United States and Canada) use parts of Redbud for whooping cough and fever. When grown along riverbanks, Redbuds prevent soil erosion and clear the water of water pollutants.

Riparian buffers are a kind of edge ecosystem, a filter between water and land, and Redbud Trees would likely be what May East calls ‘edge workers’.

The word ecotone, or ecological edge, is defined by Alfred Russel Wallace in 1859 as a transition area between two distinct ecosystems. ‘Eco-’ from ecology and ‘-tone’ from the Greek tonos, meaning tension. As we’ve seen above, riparian buffers, being sandwiched by water and land, are a kind of ecotone where many organisms thrive.

Many different ecotones boast increased biodiversity than the two communities on either side, having characteristics and species that can only be found in the ecotone. For example, mangrove forests straddle land and sea. Plants living in these zones have adapted with elegant ways to live in a salty environment. Their extensive roots grab onto



Figure2. Importance of Riparian Buffers / Graphic by Sharma (2022).

the saltwater-soaked sand and silt like long fingers, reducing coastal erosion and food and shelter for young marine life, not yet ready to venture out into the open ocean. Humans have observed nurseries of Hammerhead

sharks in mangroves of the Pacific coast and those of Lemon sharks in mangroves in the Caribbean bioregion. The safety of mangroves and shallow waters allow small juvenile sharks to zip in and out of the roots, looking for crabs, fish, shrimp, and squid, away from predators in the open sea.



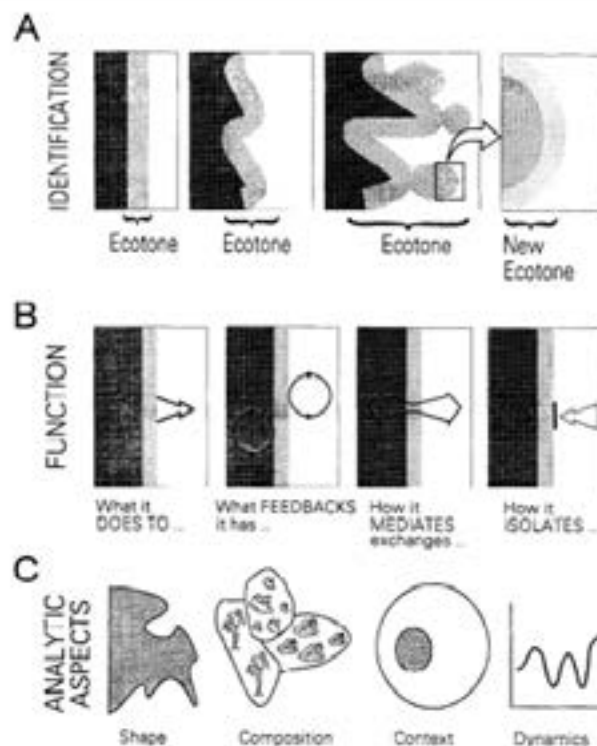
Figure 3 . Lemon shark pup (*Negaprion brevirostris*) in mangrove forest which acts as a nursery for juveniles of this species. Eleuthera, Bahamas. (Photo by Shane Gross/naturepl.com) (Shane, 2019)

Ecotones are also significant to human evolution—in fact, the greater part of early hominins were fossilised at land-water interfaces. (Shabel, 2010). To that point, we can see that ecotones are not temporally or spatially static. Rather, they may change depending on events, changes, and influences happening on either side, as well as within the ecotone itself.

Water that flowed in a particular area may not flow there in 10, 100, or 10,000 years. Evolution of a species residing in a particular ecotone may influence the entire ecosystem in 100,000 years.

Human practices, like forest clear-cutting, may create a new ecotone overnight. Ecotones are as much delineations as they are zones of connections.

Figure 4  
Visual effect of ecotone.



(Kolasa & Zalewski, 1995)

Jurek Kolasa and Maciej Zalewski offer a visual understanding of ecotone. (Kolasa & Zalewski, 1995) Briefly, «A» illustrates how an area of ecotone could change with the shape of its edge; «B» shows the range of functions or interactions an ecotone may have with other habitats; «C» represents the principal properties of ecotones.

## Bringing Forth Potential Through Diversity—Sociotone

You may have noticed that human-created sceneries and habitats also have edges. Here, we draw on May East’s extensive experience in ‘edge work’ and ‘sociotone’. She defines sociotone as ‘social systems in tension’. This can be seen almost everywhere in our daily lives, where different cultures share an imaginary border, between

favelas and gentrified neighbourhoods, urban and peri-urban or suburban areas, groups of people migrating through a country, imaginary edges between spaces with distinct socioeconomic standing, ideologies, cultures and traditions, religions, etc.

In her examination of sociotones, East points out that, like ecotones, sociotones are a ‘field of increased diversity’. (East, 2019) Reductively, if you live in a neighbourhood where a community of Greeks live on one side and Chinese on the other, you are more likely than not to find restaurants offering Greek and Chinese food, signs with Greek and Chinese, and people speaking both languages on the street. Of course, there are a lot of other implicit and less visible edges at work, such as differences or convergences in gender roles, religious beliefs, lifestyle choices, cosmovision, etc.

For social groups that share a sociotone, they experience a spectrum of adaptability. On one end, two distinct social groups could clash violently and be extremely incompatible (i.e. turf wars). On another end, they could blend and learn from one another, adapt and co-create something that’s greater than the sum of the two.

East aptly offers that ‘stress in natural systems often occurs due to impermeable membranes’. Therefore, learning from nature, sociotones would allow for more inspiration, collaboration, participation, and alliance when boundaries become permeable through caring, empathy, curiosity, and understanding. Instead of repelling, competing, or fighting one another, groups that share edges can instead come together to co-create a richer and more meaningfully diverse urban environment.

Furthermore, sociotones have a high level of uncertainty and choice, which could lead to endless possibilities of innovation and, as May East puts it, serendipity. In *Landscapes and Labscapes*, Robert E. Kohler writes that the sociotone of field and laboratory work is ‘... where neither has a clear advantage and where we expect to find the odd hybrid’. (Kohler, 2021) Where there is a highly diverse natural system, there is also a highly information- and communication-rich network. In this edge world, any one person or living being has many options of whether, how, and with whom and what they interact, and the possibility of serendipity—coming upon something unexpected yet valuable.

### **Inner Work and Undoing Intergenerational Trauma—Psychotone**

Dare I suggest that there is an inner, psychological edge that exists in all of us and our societies?

Colonisation and European settlement on indigenous lands on Turtle Island, Abya Yala (also known as Latin America), and countries in Africa and Asia, have had a profound negative impact on ecosystems, as well as social and mental systems. In a way, all colonised bodies are caught in an ecotone, if the body is an ecosystem (which it is). Extending to our minds, the parasitism of colonial worldviews has created and continue to create a psychotone within our mental paradigms and societies. We see this in examples of indigenous women in Chiapas who wish to be Catholic nuns or the use of voodoo rituals along with praying to the catholic God in Haiti. We see this in parents who struggle with whether or not to teach the next generation their native tongue and ways of life or the colonisers’. We see this in people

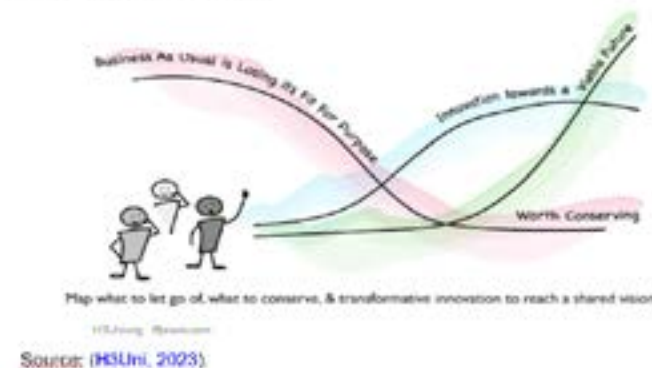
who are losing knowledge of how to prepare their native cuisine and are forced to eat a westernised diet. We also see this in our capitalistic economic system, where most of us know that it is dysfunctional but cannot or don't know how to leave the system.

By accepting the parasitism of colonial thinking and systems ingrained in us, we may start to rescue and relearn our own values and beliefs that exist deep inside, the pre-colonised wisdom that our ancestors have passed on to us. Like the Redbud Tree on the riparian buffer, we may find functional parts of the edge that could cleanse the pollution.

As Rumi, 13th-century poet and Islamic scholar, tells us, 'The wound is the place where the Light enters you'. Mental wounds are psychotones. They offer us choices: to heal or to exacerbate, to reflect or to blame, to learn or to ignore, to share or to keep silent. All parts of edges make up a greater ecosystem. I offer the concept of psychotone to heal our way of viewing the world, from a reductionist, mainstream-driven, capitalist, credentials-craving worldview to one that recognises that all parts of the mind and of our society is of a greater whole, one that seeks understanding and unity rather than division. A perfect example of psychotone in regeneration is seen in the Three Horizons framework, proposed by Anthony Hodgson. The Three Horizons framework helps us understand how we may move from business-as-usual (Horizon One) to step-change socio-environmental improvements (Horizon Two) to truly transformative and regenerative systems (Horizon Three). The middle curve, or Horizon Two, perfectly illustrates the tension between Horizons One and Three; the solutions are bold and worth exploring but they don't quite get us yet to a viable future where all beings thrive. Many people might

write off this middle zone as unnecessary or ineffective, but arguably, it is the most important curve. It gets us to imagine what we could do even better, what can be kept and what let go of. It's the precise stepping stone our imaginative minds need.

Figure 5. Three horizons thinking model



Just as biologists and conservationists study how to protect ecotones, we can all explore ways to become connoisseurs of sociotones and psychotones. Between people of different cultures, backgrounds, beliefs, and ideologies, how might we facilitate non-violent conversations? How might we stay curious and alert to the unexpected beauties, patterns, and co-creations and to serendipity? How might we inspire collaboration and create spaces free of competition? Within ourselves, how might we understand and uncover the intergenerational trauma caused by colonisation, capitalism, violence, racism, sexism, etc.? How might we accept and heal our mental wounds? How have these wounds affected the way we relate to other beings? How might we help potential to emerge?

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