

# NICHE MAKING & WORLD BUILDING

Niche construction has provided a framework for understanding my world-building practice in a meaningful way. My artworks, mindmaps, folderstructures on the computer, my big bags of notes, my home studio, workplace, commute journey, sourdough, garden, are all ongoing niches that I interact with through sensorimotor processes. This concept has contributed in untangling my personal intuition a bit and brought understanding to what it bases its knowings, its certainties on.

## Biological niche

In biology “niche construction” refers to how organisms change their environments, and how different species can share space by using resources in different ways. These interactions help explain species diversity. The set of conditions and resources affecting an organism represents its “niche”. When organisms change their environment in ways that affect themselves and others, its called niche construction. This can create feedback loops that shape how species evolve, passing on not just genes but also modified environments.

## Cognitive niche

In cognition reasearch this idea is extended to how “structured niches” are a way of creating scaffolding for cognitive and creative processes. Some individuals tend to create “cognitive niches”, environments that support their way of being and thinking as well as holds accumulated experiences. I think this is relevant to artists who engage in such externalising practices of materialization of objects such as, artworks, installations, exhibitions, studio inhabiting.

In “Making Space for Creativity - Niche Construction and the Artist’s Studio” Jussi Saarinen examines how artists offload elements of creative and cognitive processing onto their studio environment, enabling them to channel greater complexities of ideas.

In “Drawing in the Cognitive Niche” Clifford Richards examines his drawing practice as a cognitive extension where his drawings becomes stable structures that help induce further thinking.

In [\[LP1\]](#) “Precise Worlds for Certain Minds - An Ecological Perspective on the Relational Self in Autism” the authors connect this tendency to rely on externalizing cognition, to a type of mind who has a minimal sense of self. Instead of a strong sense of self as an isolated entity, their sense of self is extended to their environment, a sense of self that is closely intertwined with their environment.

*“If you took all of them away, I wouldn’t know who I was any more”. – AB*

*“I think that autistic ways are also more attuned to the ways of things and use them to have there the language as a part of feeling and the ways that if the objects are gone, I can’t move and that means we are making worlds together”.  
- Adam Wolfond*

*“Reading as neurodivergents, the content and the form melt together – it is more than ‘literary style’, it is a way of existing. This reading, and our writing about our reading, is not neutral. It is an engaged and personal reading, where we let our reading subjects fuse with the text. - Anna Nygren*

*“I end with a sense of being more me than before, and at the same time, having fused totally with the text and the nature-animal-moons within the text”. - Anna Nygren, Empathy with Nature and an Autistic Spirituality*

The kind of self that is described in terms of lack and weakness in pathological contexts, are by the autistic self advocacy communities experienced as a rich environmental self.

## Collective niche

Especially people who rely on external objects and environments for their thinking and sense of self, also rely on it to build relation to other people. They come to share mind space with others through collective niche construction. Taking turns with objects, sharing sensorimotor patterns of sensing and responding in ways that leave marks in the physical world, connects the externalized self with others. Without this possibility these individuals risk becoming excluded from community.

*We argue that the neurodivergent experience is different when experienced as a collective rather than individual experience – the feelings of reading, becomes when shared, something more and other. - Anna Nygren*

## Undermining of niche construction

Collective niches are under massive attack. Colonialism, slavery, ecocide, genocide of indigenous peoples are the most obvious and devastating examples of collective niche destruction in our history. But constant top-down reorganisations of workplaces, the artist who is repeatedly moved to new demolition contracts, the allotment garden bulldozed by the municipality, the forest clear-cut along our walking paths, the subtenant who is regularly evicted, the streamlining of education with standardised and quantified tests, larger classes, smaller classrooms, the dominance of theoretical teaching — all these things are also part of the same pattern of niche destruction.

## Times of uncertainty

In times of upheaval and undoing of identities and understandings, collective niche construction is a necessary form for reliable knowledge that also builds trust and connection between people. In “A variational approach to niche construction” niche construction is approached as a meta learning mechanism. A knowledge form that enables learners to adapt behaviour to complex shifts and events happening across different times and places, allowing them to pick up on hidden causes through their responses before these have become identified on a conscious level.

(Something to keep in mind when planning schools and curriculums, since recent development has undermined the conditions for such learning.)

*Coming to know in this way is the pursuit of whole body intelligence practiced in the context of freedom, and when realized collectively it generates generations of loving, creative, innovative, self-determining, inter-dependent and self-regulating community minded individuals. It creates communities of individuals*

*with the capacity to uphold and move forward our political traditions and systems of governance. - Leanne Betasamosake Simpson*

## *Ref*

### *Precise Worlds for Certain Minds- An Ecological Perspective on the Relational Self in Autism*

*AB was a 34 year-old lady who was diagnosed with Asperger syndrome in 1999. Since the age of 16 years, AB had been collecting, categorizing and storing a wide range of items in her two-bedroom apartment. [AB described] the difficulty that she had with discarding any of her belongings, as each item had a particular salience for her and prompted particular memories of where she received the item, when she had received it and what she was doing at the time. When asked what it would be like if someone were to remove the items, AB explained*

*In turn, the intersubjective self can be seen as entangled with the extended self because the leap to collective attention depends on the ability to anchor models on material artefacts, and motor interactions with other individuals. This can be viewed as collective niche construction, understood as the coordinated narrowing down of the variance of sensory samples to expected sensations via joint sensorimotor patterns of attention leaving durable, informative modifications in the physical environment e.g., materially mediated turn taking.*

*Making Space for Creativity - Niche Construction and the Artist's Studio*

*Embodied-and-enactive-approaches-to-cognition*

*Drawing in the Cognitive Niche Clifford Richards*

*Anna Nygren, Earthlove – Theorising Neurodivergent Reader Love of A Room Called Earth*

*Adam Wolfond quoted by erin manning Being of Relation*

*Empathy with Nature and an Autistic Spirituality  
Anna Nygren<sup>1</sup>*

*Constant A, Ramstead MJD, Veissière S, Campbell J, Friston KF (2018) A variational approach to niche construction*

argue that niche construction—as a meta-learning mechanism—enables agents to synchronize their behavior with events unfolding at multiple spatio-temporal scales: i.e., implicitly infer causes hidden at various depths.

*Andy Clark (2013) (movement matters introduction)*

has posited a bidirectional, iterative relationship between sensorimotor input and conceptual knowledge, such that the brain is constantly predicting what sensory and bodily information is being encountered and then using stored knowledge via feedback to refine these predictions

*“Binoojiinh Makes a Lovely Discovery” Page 145 – 149 in the book “As we have always done”, Leanne Betasamosake Simpson*

[\[LP1\]](#)

*autistic individuals to experience a stronger, and less seamlessly integrated sense of extended self in familiar environments.*

*Serving as external scaffolding, or extensions for a sense of self*