Approaching ecological ambiguity through a non-divisionary understanding of colour in art

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ABSTRACT

In the face of the current ecological uncertainty, we are often confronted with discomforting ambiguity: the boundaries across human and nonhuman worlds continue to blur. In response, the discourse of environmental humanities looks at reframing existing approaches of being in the world. It proposes a focus on 'entanglements', which prefigures turning away from individualistic and discordant thinking towards a mode of operating that highlights connection and relationship. Much like every aspect of our interconnected world ecology, colour too is subject to the current environmental crisis. With unprecedented rates of extinction, we are losing colours and unique colour combinations in our environment. Though colour is an ambiguous, unstable and constantly shifting phenomenon, colour studies have traditionally favoured a divisional approach, dividing the spectrum into categories and individualised colours. In this drive towards divided categories, we often forget that we are dealing with one spectrum, and that strict division is artificial. A non-divisional approach to understanding colour falls closer to the natural aesthetic experience of the visual field and corresponds with the interconnected ecological approach. The author aims to link this non-divisional approach in colour to 'entangled' environmental thinking and examine this through art practice as an effective tool for comprehending invisible ecological interconnectedness in the time of the 'Anthropocene'. The article concludes that colour offers a powerful tool for exploring ecological entanglements, offering entry into positive ambiguity.

KEYWORDS Ambiguity, Art, Colour, Ecology, Entanglements

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1. A spectrum of life

Environmental humanities has emerged as a response to the growing environmental challenges facing life on earth today, out of the need for a more balanced approach to environmental issues. The interdisciplinary nature of the field, combining the humanities with social and environmental sciences, calls for new ways of understanding humanity's place within the world: it aims to resituate the human within the wider ecological structure, challenging a pervasive anthropocentric ontological exceptionalism. The key proposition of the environmental humanities is to focus on entanglements between human and other-than-human agencies, moving away from the divisionary individualistic mode and towards interdependencies. Entangled relations between human and non-human worlds are situated at the core of environmental humanities approach (Rose et al. 2012).

Emerging out of biology, ecology offered a specific study of the interrelatedness of all organisms and their physical surroundings. However, despite the deepening of human knowledge in this area, our connection with the surrounding world has dissipated further. One of the world's leading anthropologists, Tim Ingold (2018), feels that science has lost the radical ecological awareness it previously had. Once championed by science, this awareness, Ingold believes, has found a home in the arts. Within this context, exploring the notion of ambiguity through art practice could be an effective way of looking at the challenging and multifaceted contemporary ecological situation. In their book Rethinking Pluralism: Ritual, Experience, and Ambiguity, Adam Seligman and Robert Weller argue that "all quests for certainty contain inherent dangers and limitations." The authors do not deny the construction of categories as invalid or incorrect, "Constructing categories is one of the fundamental skills that make up our human capacity for culture," but wonder "how to live with ambiguity while still retaining order" (Seligman and Weller 2012:13).

Exploration of the ambiguous is especially important now that humanity has stumbled into the age of the 'Anthropocene', defined as the epoch in which humans have become the dominant global geophysical force (Steffen et al. 2007). One of the foremost contemporary thinkers on the state of ecology today, Timothy Morton, argues that we live in a time of ambiguity and a resultant anxiety. He notes that, "the basic affect of an ecological era – that is, the era we have been realising we have been inhabiting, namely the Anthropocene – is anxiety" (Morton 2018a:232). Morton, suggests that ambiguity is precisely what we need to expose ourselves to today, "True and false might not be that different," says Morton, "Ambiguity is the space in which really true things can be said. Ambiguity isn't vagueness, ambiguity is an accuracy signal" (Morton 2018b, video file 00:32:16). Within this context, contemporary art practice and colour explored through a non-divisionary approach could contribute towards these important discussions and help unravel the more 'entangled' thinking on being a part of the world.

2. The in-betweenness of things

Through the normative objective, and hence disconnected, scientific approach, with division into lists and taxonomies, a separation between the human and the rest of the world becomes formally established in our thinking. Art practice, with its core methodology of paying and directing attention, through openness to and abiding by the unknown, has the capacity, as a shared experience, to help bridge the perceptual gap that has grown out of the disconnection inherent in taxonomic methods.

Exploring the in-betweenness of things and how seemingly separate objects, bodies and phenomena are entangled, a number of authors within the environmental humanities looked at various 'borders' and what reformulation of those might reveal. This opens up new possibilities of viewing and conceptualising some of the most pressing environmental and social issues today.

A time of ambiguity may be a time when outcomes are not easily anticipated. Now, more than ever, we are all aware of the rapid changes around us, but often unaware of how we should act. So, how do we allow ourselves to find comfort in the ambiguous? How could art practice and the exploration of colour and its dynamics aid this? In what way can the environmental humanities provide a powerful platform for this inquiry?

The notion of entanglements could serve as a way into the space of ambiguity, in which art can physically manifest this ambiguity in relatable and emotionally resonant ways. Timothy Morton talks about art as a powerful tool for 'ambiguity tolerance training' (Morton 2017). Artistic practice lends itself perfectly as a platform for exploring the ambiguous. "Uncertainty is typically not desirable in everyday experiences, but uncertainty in the form of ambiguity may be a defining feature of aesthetic experiences of modern art" (Jakesch and Leder 2009:1). Artistic practice also offers a powerful tool for visualising the ecological entanglements which might not be obvious, or even visible to the human eye.

There is a discrepancy between what happens within the environment and what we perceive as happening, with a large number of signals remaining unnoticed or misunderstood. Anthropologist, cultural ecologist and philosopher David Abram argues that a crisis in perception is one of the key reasons for ever-growing environmental concerns. Reciprocity is one of the ways in which Abram describes that ongoing interconnection, revealing the interdependencies between human and other-than-human worlds (Abram 1997).

If we need to break the restrictive conceptual and, more importantly, perceptual borders that maintain the threats, in order to generate an entangled state of being, then contemporary art practice, together with environmental humanities, becomes a powerful tool to help break these borders.

The colour scientist and semiotician José Luis Caivano proposed a new approach for understanding colour – a gradualist hypothesis – whereby the focus lies on "The moments of transition, gradations and transformations that allow moving from one category to another, with a better understanding of how the relationships are produced and the ways in which those differences occur" (Caivano 2018:1). Rather than employing divisional approaches to understanding colour, and visual phenomena in general, Caivano's gradualist method rejects the traditional focus on divisional categorisation and so falls closer to the natural experience of the visual field and how life on earth operates from the ecological perspective.

Colour, as one of the key instruments of visual perception, explored through contemporary art practice, offers a powerful tool for visualising the ecological entanglements which might not be obvious, or even visible to the human eye. A deeper exploration of the non-divisionary nature of colour could enable further insight into ecological entanglements, as well as offer artists a way of contributing to this understanding through the use of colour in works which seek to engage with entangled being.

3. Colour extinction

Colour plays a key role in the aesthetic experience of visual perception and as a way of reading an environment and orienting within it. It is also a means of communication between the different species – between human and non-human worlds. Understanding colour has most often been approached through the process of breaking the visual field down into categories, those of individual colours. While this divisional, micro-perspective has proven enlightening, the inclusion of a macro-perspective – investigating colour as a boundless spectrum – might offer a more holistic understanding of colour, articulating the interconnectedness of all things as observed through ecology.

This interconnectedness we often fail to perceive when reality superficially appears to be so separated, leading to actions which are as destructive to ourselves as they are to the conceptualised 'other'. As a species, we have a strong desire to resolve things, to understand, to uncover, to divide into categories. These categories are expanded and divided in increasing complexity as fields of knowledge develop. We also know, however, that there are many unknowns, and there always will be. The balance is too often skewed towards maintaining definition and classification, rather than also accepting that reality can be ambiguous, and the borders are somewhat enforced. Ambiguity isn't simply a blockage in the workings of knowledge caused by the lack of information necessary for classification, but also a vantage point to reconsider assumptions already made in the rush to certainty.

Colour and its dynamic nature might be a very useful tool for shared extrication from such assumptions in understanding ecology, with contemporary art practice attuned to ecological concerns enabling a productive platform for exploration. Often perceived as a background, static property of objects, the influence of colour within the larger environmental context is rarely seen. In this crucial time of pressing environmental changes, there may be wide-ranging insights from greater exploration and analysis of spatial colour distribution. How can artists use colour to produce a particular effect, which in turn might present new insights about environmental processes and enhance people's awareness of their environment.

In 2017, the European Space Agency reported that the colour loss of the Great Barrier Reef - or coral bleaching - can now be observed from space (ESA 2019). Knowing that, in nature, colour developed as a result of evolution to support life processes, the presence of colour, its richness and vibrancy, can be seen as a signifier of life (Buether 2014). As species disappear, we lose the colours, and especially the particular colour combination of the departed organism. As an example, the Carolina parakeet, a small neotropical parrot, which before 1918 spanned the forests of the United States, was the only indigenous species of the neotropical area within the US, and one of the only two indigenous parrot species in the US. Its tantalising combination of a unique proportion of greens, yellows, reds and pale pink will no longer brighten the forests - having been declared extinct in 1938.

The species loss over the last few decades has been so extreme that scientists are now considering we might be in the midst of the sixth mass extinction (Barnosky et al. 2011). Thinking of these losses, it raises the question of how many colours and colour combinations we have already lost. Are the sci-fi visions of dystopic future with their achromatic landscapes our destined future? With a great number of species already gone, and a large number of those entangled with us, might we soon be caught in the same vortex.

4. Artistic propositions

author's recent work exploring The ecological entanglements took the form of a series of art pieces investigating ecological interactions through colour and its spatio-temporal dynamics, reconsidering perceptual boundaries in search of new possibilities of how spaces are shared with non-human others. A series of abstract entitled Blue: interactions 'Grev to Ecological Entanglements' is explored through sculptural, photographic, moving image and sound-based works, drawing attention to the role of colour in the living world, while highlighting ecological loss and absence.

These works articulate a positive ambiguity of representation, showcasing organisms in interconnected relationships and interacting with the environment, translated into indistinct colour forms that release our perception from preconceived separateness and division.

Taking inspiration from the natural world, these artistic propositions deal with the removal of borders and boundaries to create positive ambiguity. Each artwork explores how everything is entangled, the in-betweenness of things and how seemingly separate objects, bodies and phenomena relate.



Fig. 1. Detail of 'Torch Ginger | Lesser Violetear' installation, 2019.

A sculptural installation (Fig. 1) comprised of thin multicoloured wooden rods looks at the interaction of a hummingbird and its flower as the bird enters the flower to feed on nectar. The coloured lines representing the flower interpenetrate the colours of the hummingbird, creating one entangled spatial experience that absolves the audience of any need to distinguish one organism from another, accentuating the intractable relationship rather than binary forms. The audience can walk through the piece, thereby entering the hummingbird-flower experience and experiencing a frozen moment of ambiguity that conveys ecological interaction outside of feeder/food or sentient life/non-sentient life definitions.



Fig. 2. Detail of 'Pawpaw | Dark Flower Scarab Beetle' sculptural installation, 2019. Photo: Kenny Lam.

Another installation (Fig. 2) considers how flowers attract insects through their shape and colour. Two-metre long rods, suspended vertically and painted in the colours of a pawpaw flower, open wide to allow visitors to enter the flower, duplicating the insect's journey. This is the first piece experienced by the audience immediately upon entering the space, in which they mimic the path and colour attraction of the insect, without foreknowledge of the meaning, as an introduction to the proposition of entangled ecology of equal forms.

A pile of soil spanning almost six metres in length is studded with casts of avocado stones of different shapes and sizes (Fig. 3). The sculptures are absolutely white; their hue is missing – reflecting the extinct large mammals who would swallow and distribute the avocado stones. Thousands of years ago, these great giants, such as the six-metre-tall giant sloth, would be attracted by the ripe avocados and mangos, swallowing the entire fruit with its pit, helping the plant to disperse its seeds far and wide.



Fig. 3. Detail of 'Avocado | Giant Sloth' installation, 2019. Photo: Machal Jesionowski.

Those animals are long gone, yet the fruit has not caught up to this reality and continues to call for its lost partners. This collapse of deep time into a single representation brings the audience closer to a past that is directly linked yet feels impossibly distant. In the modern age of evershortening immediacy, it is perhaps the understanding of these direct links over deep time that could counter ecological anxiety.



Fig. 4. Part of 'Avocado | Giant Sloth' installation, 2019. Photo: Michal Jesionowski.

As the hue left the avocado pits, the actual avocado dye became one of the components of the three plaster casts on the wall overlooking the soil (Fig. 4). This piece shows the various shades that can be derived from avocado dye. With the giant mammals gone, it is the role of the human as a surrogate to continue the work of helping these plants disseminate.

A long strip of instant photos (Fig. 5), suspended from the gallery ceiling and continuing on the floor, examines the changing colours of a mango as it ripens and spoils – from greens to yellows, oranges and reds. The mango fruits are lying on the forest floor waiting for their great giants, slowly transforming, slowly losing colour.



Fig. 5. Part of 'Mango | Stegomastodon' instant image installation, 2019.

The images are of an actual mango fruit as its colour changed, taken with in-camera blur. The details of the

mango skin are removed, giving focus to the shifts in colour. Hidden behind the changing colours, that fade out to the grey and black of mould, is the death of a relationship that flowered through evolution, now disrupted in a portent of further disruption inevitable through ecological collapse.



Fig. 6. 'Red Silky Oak | Swallow-tailed Hummingbird' installation, 2019. Photo: Kenny Lam.

In a dark space is a blurred video of a brightly coloured swallow-tailed hummingbird and a red silky oak flower projected onto an imposing fractured 'screen' made of suspended paper tubes (Fig. 6). As the hummingbird feeds from the flower, the border between each organism is obscured to the point of near-imperceptibility – only the colour and movement betrays a possible separation. Accompanying the visual is a sound piece, a shimmering interpretation inspired by the sound of a hummingbird that carries the audience through the columns in a path within the hummingbird-flower relationship.

The lights piece (Fig. 7) is looking at the relationships between bees and flowers through colour and movement - as a single bee flits from flower to flower in search of nectar. The lights are mapped to the bee's movement, while the colour of the flashing light is that of the flower, so the piece creates an experience of a bee-flower as one entity – alive only in coexistence.



Figure 7: 'Purple Coneflower | Rusty Patched Bumblebee' installation, 2019. Photo: Kieran Gosney.

5. Resting in the unknown

The world operates as one interconnected ecology, yet we fail to see the connections. There is a discrepancy between what we perceive as happening in the environment and what actually occurs, with a large number of visual signals remaining unnoticed or misunderstood. This misconception left us in the space of ambiguity and led us into an environmental crisis, with the planet now largely contaminated by industrial pollution and species disappearing at an unprecedented rate.

Contemporary art practice has a crucial role to play in this time of environmental urgency, when an increased understanding of often invisible processes happening within the environment is a requirement. Focusing on the gradualist approach to colour, alongside the idea of entanglements, has the potential to rearticulate the role and possibilities of contemporary art practice within the larger perceptual reframing efforts in response to key environmental issues. In paying closer attention to entanglements and recognising how interdependent we are in the wider web of life, the agency of the human can be reconsidered and de-centred.

Searching for that moment of ambiguity, resting in it, living in it, and finding comfort - oscillating at the biting point between sharpness and blur; like settling down in a foggy land, where the spaces between - the invisible - thicken, masking body and landscape; looking for those spaces, spending time in them, where thoughts do not fail to grasp onto separated elements; then slowly, as the fog dissipates, one might still embody that feeling of togetherness, fully entangled, and proceed the journey in gratitude and in kind to that larger self. This oscillation is what might allow us to be present in the world of forms and move into the fully entangled and interconnected experience of life as ecology describes it, but which is too challenging to perceive merely through the senses. Vision is what so often misleads us, like the elusive and ambiguous nature of colour as light. As much as it is wonderful to hold onto something, there is value in learning to completely let go in the unknown, to trust, and act with care and attention.

6. Conflict of interest declaration

The author certifies that she has no actual or potential conflict of interest, including financial, personal or other relationship with other people or organisations in the prior three years that could inappropriately influence, or be perceived to influence her work, and no financial/personal interests have affected the objectivity of the author.

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9. Short biography of the author

Yulia Kovanova is a Siberian-born, Scotland-based artist and researcher. Her practice currently focuses on the investigation of ecology of colour and its dynamics, the ideas of spatio-temporal borders and perceptual boundaries. She often takes an interdisciplinary approach, working across a range of media, including moving image and sculptural installations, and through collaborative practice.

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