Arts, Religion, and the Environment

Exploring Nature's Texture

Edited by

Sigurd Bergmann
Forrest Clingerman

BRILL
RODOPI

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The Black Wood: Relations, Empathy and a Feeling of Oneness in Caledonian Pine Forests

Reiko Goto and Tim Collins

Abstract

How do ideas and aesthetic experience affect our understandings, imaginations and future visions of a forest environment and culture? This article focuses on two years of artist-led research and an art exhibition about an ancient Caledonian pine woodland, located on the south shore of Loch Rannoch in the southern Highlands of Scotland. The artists were interested in the relationship between cultural value and biodiversity and how they might contribute to the well-being of the forest, and promote a range of meanings amongst its communities of interest. Securing funding from Creative Scotland and the Landscape Research Group, the artists organized three residencies: beginning with the community and working within the forest itself; then another at the regional art and natural history museum in Perth; the final one was at Forest Research outside Edinburgh. Art-led methods included walking and talking in the forest, consideration of the extant history and forestry commission management records and various interdisciplinary and multi-community discussion groups; the artists sought to uncover social and cultural relationships to a forest that had been managed for biodiversity and conservation value for fifty years. The chapter begins with initial work from David Hume's idea of `relations' to explore integrated conceptual and experiential forms of aesthetic perception. A relational approach between people and trees is navigated by Edith Stein's theory of empathy.

In this chapter we reflect on ideas and practices that have shaped an artistic inquiry with a specific focus on the experience and perception of being in and

working with material from the Black Wood of Rannoch.[1] After a brief review of previous work, we describe recent experiences that shaped questions about biodiversity and cultural value, and the potential for art to contribute to forests and people. We begin with initial experiences and impressions of the forest, followed with a description of an evolving discursive practice. We work from David Hume's idea of 'relations' to understand complex issues such as historical and political incidents that influence the shape of the trees and forest, and question how does Hume's ideas of impression and understanding work to look at the broader context of the place? We then consider Edith Stein's theory of empathy before reflecting on the relationship between Gaelic place names and the broader landscape context. Lastly, we reflect on the artwork produced and return to our initial questions.

Background

We are researchers and environmental artists. Working as research fellows at Carnegie Mellon University, we have focused on the aesthetics of ecological recovery and a community dialogue about post-industrial places in western Pennsylvania. Our work has been influenced by the theory and practice of environmental restoration. After completing two projects[2] in Pittsburgh, we moved to the U.K. in 2005, and then to Scotland in 2010, where we started to focus on trees and the environment. We began to understand the forests are again on the move, enabled by human policies and actions. Scotland has the newest national parks in the world; 2006 forest policies target rapid expansion to 25 percent forest cover by mid-century; and 2003 laws provide the most significant public rights to access land and water in Europe. In 2010 we visited the Trossachs National Park with the Native Woodlands Discussion Group. Sheep had been removed from the area since the place was claimed as a national park in 2002. Thousands of small birch trees were growing in a bracken area. During our visit, Ruth Anderson, a member of the group, pushed aside the bracken with her hands to reveal the base of a tree trunk. It was thick and looked like an old bonsai tree. She told us these birch trees had started growing long before the sheep were gone. They were small because sheep had eaten the saplings over and over again. It was almost a miracle that they could re-grow. If people

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1 The Black Wood is owned and managed by Forestry Commission Scotland.
2 We were research fellows in the STUDIO for Creative Inquiry at Carnegie Mellon University, Pittsburgh, Pennsylvania, between 1996 and 2005; we worked on two research projects: Nine Mile Run and 3 Rivers 2nd Nature.

wanted to learn about forest ecology in Scotland, seeing these millions of small birch trees might be an important step to feel the potential changes that might occur between the land and trees.

We visited significant remnants of ancient Caledonian Forest:[3] Mar Lodge, Abernethy, Glen Affric, Dundreggan, Loch Maree, Glen Tanar, and the Black Wood of Rannoch; we have also looked at more sporadic forests such as Glen Falloch and Coille Coire Chuilc near Tyndrum. With funding from Creative Scotland, we were able to work for two years on a project called "Caledonia: The Forest is Moving." It was about the Black Wood of Rannoch, an ancient semi-natural pinewood and the most significant Caledonian pinewood in the Southern Highlands of Scotland. The forest 'on the move' was a reference to Shakespeare and the Birnam Wood. Here it was used as a metaphor for natural regeneration and future forests that would be enabled by public interest. Our research questions were: (1) Do the semi-ancient forests of Scotland provide a higher level of cultural value due to their biodiversity and iconic status? (2) Is it possible to make a small contribution to the well-being and prosperity of human and non-human forest communities of Rannoch? Our practice and process involved on-site experience, walking, talking, and recording. Our enquiry began with experiences in the forest and on the hills above it.

Impressions of the Black Wood

Our first visit to the Black Wood of Rannoch was in the early spring of 2011. There was still some snow on the ground. After a two-and-a-half-hour drive from Glasgow to Loch Rannoch in Perthshire, we found ourselves lost. There was only one sign along the loch; it took a few passes before we noticed it, as it is parallel to the road. It said, "Forestry Commission Scotland, Black Wood of Rannoch, Caledonian Forest Reserve." There was no map or any indication of a formal trail into the forest. We did not know where the trail would lead us or how long it would take. First, the trail went uphill toward the south, taking us away from the loch. The forest consisted of a mixture of pine (*Pinus sylvestris*), birches (*Betula pendula* and *Betula pubescens*), and some rowan (*Sorbus aucuparia*). Moving toward the center of the forest, large old pine trees appeared

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3   "[The Caledonian forest] once covered a large part of the Scottish Highlands and takes its name from the Romans, who called Scotland 'Caledonia,' meaning 'wooded heights.' The native pinewoods, which formed the westernmost outpost of the boreal forest in Europe, are estimated to have once covered 1.5 million hectares as a vast primeval wilderness of Scots pine, birch, rowan, aspen, juniper, and other trees" ("The Caledonia Forest").

one after another. The size, the texture, and the form took our breath away. We also found a couple of fenced areas. They were not far apart from each other, but the vegetation looked very different. One area was filled with many young rowan trees and the other area was full of evenly spaced mature pine trees with little understory. Both seemed to be scientific experiments, but there was no indication what was going on. Near the highest point there was an old pine with a plaque. The tree was called "Gunnar's tree" and commemorated Gunnar Godwin, a Forestry Commission Conservator who worked with conservation interests to see the forest designated as a nature reserve in 1975. When we reached the highest area, the trail gradually shifted towards the northeast. Looking north towards the loch, there was an open area with a vigorous rowan tree in the middle. We noticed a small stream that trickled down through a woodland floor covered by bright green mosses. The loch was seen in the background far below. We then came to a fork in the trail and noticed two distinctively different pine forest areas. On one side, the trees were unevenly spaced and of different ages, and the ground was rough with old stumps and hillocks; the understory seemed to be well developed with a mix of species. On the other side of the trail, the forest was filled with tall straight young pines. It 'read' like a dark plantation and the ground was flat, the understory uniform and grassy. We were surprised to see a few large old pine trees on the edge of the young forest. We would learn that this place was called the "Potato Patch." It was cleared at the turn of the century and not regenerated until the 1950s. Gradually the trail declined and finally reached the paved road. The whole walk along a triangular trail took less than an hour. The Black Wood consisted of different types of woodland areas with many old pine trees. We would return again later that year and walk deeper into that forest.

"Caledonia: The Forest is Moving"

One year from the first visit, we came back to the Black Wood with arts funding from Creative Scotland to work on a project[4] with local community members.

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4   The project was primarily funded by the Imagining Natural Scotland program of Creative Scotland in 2012. It was one of fourteen nationally-funded projects that sought to "encourage cross-sectoral engagement and knowledge exchange amongst environmental historians, scientists, ecologists, artists, creative producers, and curators." It was intended to promote a critical interest and dialogue about the artistic and cultural representations of Natural Scotland in academia, the cultural sector, and amongst the wider community. The project proposal was to consider remnant pine forests that lie between the south shore of Loch Rannoch and

We were surprised how familiar the old trees seemed to be, although we had only been there briefly before. When we described this to community members, they said they had similar experiences with those trees. They also told us they were known as 'granny trees.' As this project settled in, we learned there was tension between the local community and the Forestry Commission about their policy of 'open access,' which generally meant no physical constraints (gates or fences) would block anyone who found their way to the Black Wood; although any changes to public awareness and understanding of the forest was constrained. There were two signboards deep in the Black Wood that illustrated historical canals built in the 1800s, explaining that the canals would have been used to remove timbers from the forest. Despite the policy of open access, some residents had never been in the forest because they thought the forest was protected. The forestry commission had no intention of making people more aware or to promote access, such as putting maps and new signs, or offering parking, toilets, and an information service. This followed the policies and practices set out in the 2009–19 Black Wood management plan that limited any additional "formal recreational development" within the forest (FCS 2009: 10 and 15). After listening to the claims from the community members, it became clear that the artists might be able to help open a dialogue about a broader social and cultural relationship with the forest, which was being managed for its biodiversity, 'the ecosystem taking precedence over public awareness, interest, and access' (Collins, Goto and Edwards 2015: 10). Interested in the forest as a 'cultural ecosystem,' research began at the Perth Museum and Art Gallery to find any information, documents, records, or specimens on the subjects of art, photography, natural history, and archaeology. The entomology collection had specimens of a rare Welsh Clearwing (*Synanthedon scoliaeformis*), a moth that mimicked a wasp's form. This species only bore holes into 40- to 50-year-old mature birch trees to lay its eggs. The larvae stage of the moth could live two to three years in a tree. We found only a few botanical specimens that would represent the Black Wood, one of the largest, most biodiverse forests in Scotland; with its long history of social conflict, it had little presence in the museum or the art collection.

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the north shore of Loch Tay. The Caledonian pine forests have significant cultural and ecological value. As the research developed, the collaborators did some work in Glen Lyon; then, following the interests of the project partners, focused on specific issues and opportunities in the Black Wood of Rannoch. The research examined ideas about a 'cultural ecosystem' and the services and values lost as social and cultural relationships with the Black Wood waxed and waned over three centuries.

During the summer, we camped in the Black Wood, spending time walking and talking with others in the forest and observing the forest with cameras. By late summer, we began to understand the issues and plan how we might realize a future forest dialogue. We worked with the local community to organize a two-day workshop in Kinloch Rannoch, with a wide range of participants from the arts, humanities, ecology and forestry, local communities, and other public agencies. The following year, the project was extended as we took up a residency at Forest Research, working at the Northern Research Station in Roslin, with Dave Edwards, a social scientist. We began the research, discussion, and documentation of images and ideas that would lead to the publication of *Future Forest: the Black Wood, Rannoch, Scotland.* This report to the community focused on the historic challenges in the forest and the contemporary issues of public awareness and open access. The report closed with developmental ideas that came out of the workshop: (1) an interdisciplinary deep mapping effort; (2) a planning process with local citizens and the Forestry Commission; (3) an artist/scientist in residency program; and (4) a landscape partnership idea.

"Caledonia: The Forest is Moving" was artist-led research that sought new cultural understanding of the forest through an interdisciplinary approach. Our process was documented including ongoing conversations with local communities and experts. The evolving conversations were analysed and documented in the final report, "Future Forest: the Black Wood, Rannoch, Scotland." After completion of the report, we were ready to settle in with ideas and images to develop artworks for the exhibition *Sylva Caledonia* that would synthesize our experiences, observations, different forms of investigation, and analysis.

The Impression of the Black Wood and Hume's Idea of Relations

When the two of us go into a forest we notice there are extraordinary living things that stop us in our tracks and capture our aesthetic attention. We have been asking each other what makes us stop, what the components of aesthetic attention are, and how we define the extraordinary.[5] This is the impression of the forest. The idea of impression is recognized in the foundations of Hume's ethics:

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5   This method was developed and explained in the narrative of the video *A Tree is a Living Thing: The Piper Shelling Experiments* (2015a).

> Vice and virtue are not discoverable merely by reason, or the comparison of ideas, it must be by means of some impression or sentiment they occasion, that we are able to mark the difference betwixt them. Our decision concerning moral rectitude and depravity are evidently perceptions; and as all perceptions are either impressions or ideas, the exclusion of the one is a convincing argument for the other. Morality, therefore, is more properly felt than judged (1985: 522).

Hume talks about how a personal belief and morality can be based on deep understanding. And it begins with a striking experience and the impression, such as the granny pine trees. Impression is driven by two kinds of perceptions. One is called outer perception; that is our senses: seeing, hearing, smelling, tasting, and touching. It connects to inner perception that is 'ideas about feeling' about sensations, such as the light is bright or dim, a sound is loud or soft, a taste is bitter or sour, and your touch is warm or cold. Vallega-Neu said, "We also feel hunger, pleasure, discomfort, pain, kinesthetical movement of space, resistance in muscles, tendons, and joints" (2005: 47). When we are looking at an extraordinary tree, the size, height, and volume are stored in our memories. Outer perception and inner perception function together as an 'act of perceiving' that is recognized in aesthetic experience and empathic experience. In one case, I smell the fragrance of honeysuckle and describe the experience as beautiful. The fragrance may be part of the experience of the flower for its own reasons, such as attracting insects to exchange pollen and enable reproduction. But the reproductive intention is not my concern when I am immersed in beauty and the pleasure received through aesthetic experience. In another case, when I look at a person's face I may feel that I perceive sadness in the face. "The sad countenance is actually not a theme that leads over to another one at all, but it is at one with sadness" (Stein 2002b: 71–72). The empathic experience always relies on the other.

Sensation and reflection can be connected by memory and imagination. Memories are not utterly sensations but attached to perceptions and feelings. Imaginations are not utterly reflection but rooted with knowledge and intellectual mental activities. We talk about some trees that evoke feeling of vitality in the section 'degree.' Hume suggests that the impression can add (transfer) vital force from the thing perceived to the idea (1985: 147–166). Memory can enforce inner perception. I will talk more about this in the section on "a feeling of oneness." Hume's philosophical "relations" consist of seven ideas: resemblance, contrariety, space and time, quantity and numbers, identity, degree, cause, and effects. We reflect on these ideas to look at the trees in the Caledonian Forests.

Resemblance

> Resemblance is a relation, without which no philosophical relation can exist, since no objects will admit of comparison, but what have some degree of resemblance.
>
> HUME 1985: 61

Regeneration of pine trees in the Potato Patch (Figure 7.1), described above in 'The first impression of the Black Wood', all share the same degree of resemblance. They all look to be of the same species, size, form, and age; they have the 'look' of a plantation forest, although there are no obvious planting rows. In other places such as Beinn Eighe (Figure 7.2) we find two trees that resemble each other like a mirror image twin. The impression of twin trees is that they have grown together and become balanced and harmonised. Their forms are different from tall, straight, and skinny forms that have been developed competing with each other in the shared environment. They seem to grow together closely and create symmetric forms through inter-relationship. In both of these cases, trees show some degree of resemblance but the qualities are different; one seems to seek harmony and the other seeks competition.

FIGURE 7.1   *The Potato Patch in the Black Wood.*

FIGURE 7.2   *Twin pine trees in Beinn Eighe.*

Trees cannot move around once they are placed in the ground. We have seen a young pine that grows too close to an old pine (Figure 7.3), where the younger tree trunk cuts into the older tree's lower branch. Deep in the Black Wood there is a pine and birch tree that have grown together and into one another (Figures 7.4 and 7.5). Two different species of trees have found a harmonious interrelationship, a visual reminder of the fundamental relationship (as described in the National Vegetation Classification for woodlands in the U.K.) between pine and birch in the Caledonian forests of Scotland.

Contrariety

> The relation of contrariety may at first sign be regarded as an exception to the rule that no relation of any kind can subsist without some degree of resemblance.
>
> HUME 1985: 62

Contrariety is recognized in the two 'classic' forms of pine trees. One is a straight and tall tree – the arborist's ideal – and the other is the broad-branched

FIGURE 7.3   *Two pine trees against each other in the Black Wood.*

granny pine (Figure 7.6). Grannies are individual, large, and curvilinear; they have thick trunks with widely spread horizontal branches. Both are the same species of *Pinus sylvestris.* Arborists seek trees that are straighter and taller because of the simplicity of harvest and log/commodity values. In plantations, trees are planted closely together, so they compete for the light by growing vertically. Granny trees have less timber value, however they contribute to the biodiversity of a forest, by letting more light into the understory. They also have social value that can be talked about as visual, aesthetic, cultural, ecological, and spiritual, although some of these qualities can be found in a forester's plantings as well.

Space and Time

Space and time which are the sources of an infinite number of comparisons, such as distant, contiguous, above, below, before, after, etc.

HUME 1985: 62

FIGURE 7.4   *A birch and a pine are growing into each other in the Black Wood.*
              PHOTO COURTESY OF P. STEEL.

FIGURE 7.5   *Detail of Figure 7.4, P.*
              PHOTO COURTESY OF P. STEEL.

V.M. Thom, an officer of the Countryside Commission, describes general views of a mature pine forest: "Anyone entering a pinewood finds that the trees, spacing, and light in a pine forest is satisfying to the eye" (1975: 101). There are many patches of mature pine in the Black Wood. As described above, we have experienced continuous pine forest not only in the Black Wood, but also in

FIGURE 7.6   *Granny pine in the young regenerated pine trees in the Black Wood.*

FIGURE 7.7   *Evenly spaced pine trees in Ballochbuie.*

forests such as Ballochbuie (Figure 7.7) and Abernethy. The 100- to 150-year-old pine trees are often straight and also do not have the large lower branches that granny trees have. Grannies are probably 250 to 300 years old and are spatially dispersed (Figure 7.8). The space between trees is related to what were often demanding times, periods of social and political unrest as well as economic

FIGURE 7.8   *Clumped pine trees in Glen Falloch.*

struggles; the trees embody some of these conflicts. In order to develop the lower branches, the tree must be getting full sunlight when they are very young; often this would mean that the understory was under significant grazing pressure from goats, sheep, cattle, or deer; later that pressure was removed. Or it can mean that trees were selectively harvested, the tall straight trees cut, leaving the twisted horizontally branched granny pines behind. We have wondered about the relationship between the evenly-aged young pines in the Potato Patch and a small group of older pine trees on the edge of that patch. We begin to imagine an open field that was replanted or possibly naturally regenerated by the seed thrown from a few granny trees.

   The shape of a pine is related to space and time. The space between trees is related to demanding times, periods of social and political unrest as well as economic struggles; the trees embody some of these conflicts. The next section is about the historical events that influence not only space and time but also the quantity and number of trees. Those human activities help us imagine how the Black Wood has been formed.

Quantity and Number

> All those objects, which admit of quantity or number, may be compared
> in the particular, which is another very fertile source of relation.
> HUME 1985: 62

The history of the Black Wood of Rannoch includes a narrative specific to tim-
ber and its quantities. In 1439 the estate was given to the Robertsons of Struan
for apprehending the murderers of King James I. Between 1689 and 1745 the
estate was forfeited three times[6] and 960 trees were cut per year. In 1745 the for-
est was much threatened by local people as a haunt for 'broken men,' outlaws
from the failed Jacobite rebellion. A garrison was established and Jacobites'
homes were burned. In 1750, despite the fact that the forest was judged to be in
a poor condition, the forfeited estates initiated the felling of twelve hundred
trees per year. In 1781 the forest was completely enclosed to protect it from
damage by domestic animals. In the late eighteenth century, swine were kept
in the forest to break up soil for regeneration. Between 1803 and 1805 the Napo-
leonic Wars were underway and significant tree felling occurred again. Canals
were built for floating the timbers to market. In the mid-nineteenth century,
the Highland Clearances and the Industrial Revolution began. The numbers
of sheep were drastically increased, while the human population of Rannoch
was reduced to less than half. Between 1889 and 1894, one thousand trees were
felled to construct the West Highland Railway. Between 1939 and 1945, eight
thousand trees were cut (during World War II). In 1975 Gunnar Godwin, as
a Forestry Commission Conservator, designated the place as a forest nature
reserve, and two years later deer protection began. Between 1957 and 1967, the
Forestry Commission cut five thousand trees. In 1974 the Black Wood became
a forest nature reserve and later it was designated as a site of specific scientific
interest. (Collins, Goto, and Edwards 2015: 8). To the best of our knowledge, it
is no smaller at this writing than it was then, although the future expansion
of the forest with potential links to the Caledonian forest in Glen Lyon to the
south is not yet clear. Number and quantity are also related to the biodiversity
count of the various species of lichens, invertebrates, reptiles, birds, mammals,
and higher and lower plants that make up the spectacular ecological condi-
tions that define the Black Wood.

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6   The estate was forfeited in 1869, 1715, and 1745.

Identity

> This relation I here consider as applied in its strictest sense to constant
> and unchangeable objects; without examining the nature and founda-
> tion of personal identity, which shall find its place afterwards. Of all rela-
> tions the most universal is that of identity, being common to every being,
> whose existence has any duration.
>
> HUME 1985: 62

For over 250 years the identity of the Black Wood was tied to the value of its tim-
ber resource. Today when we talk about the identity of the Black Wood, people
often use the term 'wild.' During the Future Forest workshop, a local conserva-
tionist said, "It is important that the Black Wood expands. It [must remain] in
a wild/semi natural state that is significant when compared to others" (Collins,
Goto and Edwards 2015: 4). 'Wild' suggests nature removed from human influ-
ence. The ecological authenticity of the ancient forest has been protected by
scientific interest in biodiversity for fifty years; but is the Black Wood wild? In
our report we define wild (in Scotland) as "being of ancient natural lineage
with a history of sustained propagation; an ecology which has structural com-
plexity, native biodiversity and a significant if not expanding footprint, an eco-
system that is understood to be autogenous, sustaining, and regenerating with
little or no human interference" (17). The conditions in the Black Wood have
changed throughout human history. In the eighteenth century it was said to be
the home of outlaws from the Jacobite rebellion; does this social and cultural
history shape the identity – the meaning and form – of the Black Wood? Are
the granny pines a living memorial to three hundred years of conflict over land
use and ownership? One of the foremost ecologists in Scotland has suggested
that if left to regenerate on its own, the Black Wood canopy will begin to close,
the granny trees will dissipate, and with less light getting into the understory,
biodiversity will start to diminish (Peterken and Stace 43). What is wild in the
Black Wood of Rannoch? Is it the aesthetic perception of a large old forest with
a range of forms and age groups, the robust understory, and the knowledge that
the list of species in that forest runs on for nine pages? (Does the social and cul-
tural history play into the identity of an autonomous living thing?) Is it the fact
that according to some expert opinions it is the largest patch of functioning –
generating and regenerating, and biodiverse – semi-natural pine forest in Scot-
land? If the granny trees were lost as the forest regenerated on its own and
the biodiversity left to diminish 'naturally' would the Black Wood still be wild
and semi-natural? Or would it be more wild and natural? If the Welsh Clear-
wings first found in Rannoch in 1867 were lost, would this indicate progress or
failure?

The Caledonian forest was formed about 5000 B.C., after the Scottish climate became wetter and windier. A forest eco-system is dynamic rather than static, and it changes in size and quality in time. Through our imagination the 'wild' identity of the Black Wood seems to be informed by experiences, ideas, and practices, and diverse but essential interconnections between culture, ecosystem, and the environment.

Degree

> When any two objects possess the same quality in common, the degree in which they possess (that quality in common) creates a fifth species of relation.
> HUME 1985: 62

Hume's idea of 'degree' is recognized in the extraordinary granny pine trees. The differences between a young pine and a two or three-hundred-year old granny pine is not only age but also the degree of size, form, texture, colors, intensity, and interrelationship with other things in context. Descriptions of degrees are not only attached to impressions and aesthetic qualities (of the tree) but can also describe the strength or vitality of the tree. Another example is a rowan tree (Figure 7.9) found in the Black Wood. Numerous branches spread out from the tree; the form is vigorous and robust. Viewers can easily perceive and empathize with the tree's wellbeing and energy. In the same manner, Annie Benson of the Rannoch community has identified her favorite tree next to a small bridge. It is an old pine (Figure 7.10) that has a deep crevice on the trunk. The tree bark is crooked at a gaping wound, then it becomes straight again. The form of the pine makes us imagine a tragic accident and subsequent recovery. An intensity is embodied in the tenacity of that tree and its response to distortion then recovering to grow straight towards the light. In the Black Wood we discover this idea of degree as a sense of the life force.

Cause and Effect

> All other objects, such as fire and water, heat and cold, are only found to be contrary from experience, and from the contrariety of their causes or effects. (This is a philosophical relation as well as a natural one.)
> HUME 1985: 62

We have reflected on the Black Wood forest, its individual trees, and the condition of the understory. We have considered the different ways that specific types of trees cause us to think about why they are different from other pine trees

FIGURE 7.9   *A vigorous rowan tree in the Black Wood.*

that we have experienced. Hume's "cause and effect" is related to the forms of pine trees and the overall aesthetic perception of the 'condition' of the forest. We have explained these relationships in the sections on resemblance, contrariety, space and time, quality and numbers, identity, and degree. The question about biodiversity and the aesthetic/cultural appreciation of forests is introduced in the sections on contrariety and quantity and numbers, then directly discussed in the section on identity. If the aesthetic identity of the Black Wood is tied to its granny tree form and open canopy relationship, and its biodiversity form is tied to the same structural conditions then there are a set of questions that need to be examined regarding future forest plans for natural regeneration which would reduce both values. Within the three hundred years of a normal life cycle of the pine trees, human ideas about land, people, and nature have changed radically. There has been a cycle of decisions about goats, cows, sheep, and deer in the forest, and ongoing land management practices that have influenced the form of the Caledonian pine trees we see today and will see in the future. We have discussed the contemporary identity of the forest as 'wild' but also provide insight on the conflicted nature of that identity at least as the idea of 'wild' is understood in Rannoch. A tree form can be influenced by accidents caused by either humans or nature. We can imagine or

FIGURE 7.10   *An old crooked pine in the Black Wood.*

empathise with the causes of the tree's form. The idea of 'degree' can express the life force of the tree and qualities such as 'vigorous' and 'robust.'

Using Hume's idea of relations we have examined how our impressions can lead us to a deeper understanding – from experience – within the Black Wood. A follow-up question is how this kind of understanding can go beyond

individuals and be communicated socially. In the next sections we introduce a phenomenological idea that involves empathy and memories.

The Feeling of Oneness

The feeling of oneness is a sense of shared experience. Stein says, "The feeling of oneness and the enrichment of our own experience become possible through empathy" (2002b: 18). For example, watching fireworks makes many people say "Wow!" The moment the fireworks go off, people express their perception and excitement. One enjoys not only the fireworks but also experiencing and sharing other people's excitement. In the case of fireworks, individual joy and other people's joy seem to be inseparable. This kind of shared experience is called a feeling of oneness. Stein also says, "The feeling of oneness and the enrichment of our own experience become possible through empathy" (2002b: 18). Every time a firework is set off the excitement continues. Our inner perception seems to go back and forth between the present and past. Each excitement is stored as memory and is recalled with every burst of fireworks:

> What became, was lived, and is finished, sinks back into the stream of the past. We leave it behind us when we step into new experience; it loses its primordiality, although it remains the "same experience".... Just as solidifying wax is first liquid and then hard but still wax, so the same material body remains.
>   STEIN 2002b: 69

Each empathic experience can be ephemeral and changeable. However it can be built up as a memory (or memories) that enforce a certain inner perception. This accumulation of inner experience can be connected to intellectual mental activities. With repeated visits and walks in the Black Wood with the community members, we started to describe this complex ecosystem as a living entity that 'returned our gaze.' We have argued that the forest has sufficient complexity: it can't be seen in a day and indeed evolves in one's eye and mind as it is visited over seasons and years. For example, when we hear the call of stags for the first time in the wood, it may be odd or scary. The sound seems to come from nearby, the creatures seem to know where you are, but the calls continue. If somebody explains the reason why stags roar and grunt during the rut, you will understand what is going on. Walking through the place with community members, foresters, and naturalists who have spent a lot of time in the wood, not only provides knowledge but also focuses and enforces our

experience. With each visit the idea of what it is gains depth and meaning (Collins, Goto and Edwards 2015: 24). This is an idea that is generally shared by those who seek out the Black Wood repeatedly. After many experiences, will it still surprise us? It may depend on the person's curiosity, but the loud, unnerved voice in the forest never loses its strong foreign quality. In the back of our mind is the imagination – the belief – that we are starting to experience the forest (as it knows itself) over a period of time that we can never fully resolve or comprehend.

Aesthetic experience and empathic experience can be shared as the feeling of oneness. If a feeling of oneness can be found in the shared experience, how about shared place?

Gaelic Names in the Landscape

In human conversation people rely not only on language but also on eye contact, facial expression, the tone of voice, and body gestures. Stein's phenomenological idea of a "symbol" is like a person's facial expression that reveals his/her mental state. A 'symbol' is related to a unity of body and mind that is understood within the lived body. On the other hand a 'sign' is related to intellect and cognitive mental activity. It has a code relationship such as how smoke can indicate a fire. The meaning of 'magnificent pine' is more universal than the meaning of the phrases 'granny pine,' 'a vigorous rowan,' and 'a resilient wounded old tree,' ideas that resonate with our past experiences. In this context words are not only symbols and signs, they can also be codes that describe experience and impression.

The Black Wood translated into Scottish Gaelic language is *Coille Dubh*. *Coille* means forest and *dubh* means black or dark. Alistair Scott has said, "The wood was black because the trees were dark pines in contrast to light oaks and that the pines preferred these colder, north-facing slopes while the oaks relished the sun?" (Steel and MacDonald 2004: 6). In Scotland, Ordnance Survey (OS) maps are filled with non-English names; only a few are translated. There are three major languages in the region: English, Scots, and Gaelic. Scots has its origins in Northumbrian English (Murray 2014: 4). Gaelic takes its roots from Celtic languages and is culturally related to the Highlands. Scots has a connection with the Lowlands. Doric is a dialect of Scots that has a strong connection to the northeast of Scotland. Gaelic declined rapidly over three generations in the twentieth century. There were several historical events that had an impact on the language, including the Act of Union with England in 1707 and the Highland Clearances in the nineteenth century (see visitscotland.com). When we

were researching the Black Wood, we visited the Beat Ranger with the Tay Forest District. Looking at the map and our initial Gaelic to English translations, he told us about his childhood memories of growing up in the area. In the 1950s if a student spoke Gaelic in school, the teacher could punish the student. The local understanding of Gaelic place names has been significantly affected by this kind of cultural suppression.

A Map of Breadalbane

We started developing a map (Figure 7.11) with translation of Scots Gaelic place names. Encouraged by a historian at Forest Enterprise we decided to represent the historic area of Breadalbane. This represented the upper catchment basins of the Tay River. This area of three valleys (Loch Rannoch, Glen Lyon, and the Tay Valley) was the larger landscape context for the Black Wood. Located between the two national parks, it is a landscape of geological import, with pockets of recognized biodiversity and ecological importance; it was also a place of significant social and cultural history. As we began our work, we found that over 1300 names were listed on a Forest Research computer map file. A Gaelic language expert translated the Gaelic place names for us. Working on a computer graphic file, we checked the location of each Gaelic name and pasted
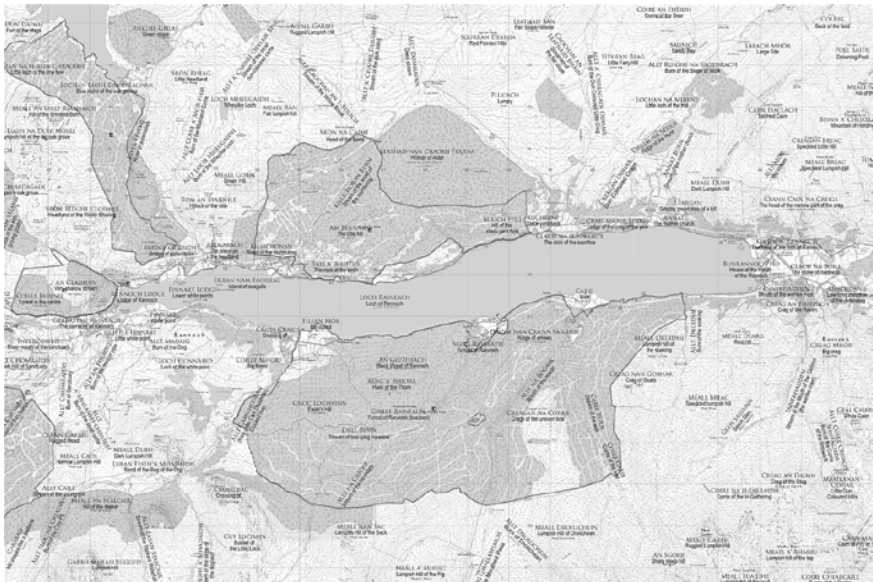

FIGURE 7.11   *Detail of the map of Black Wood with Gaelic place names.*

the translation on the GIS map. If the name on the OS map was incorrect, we pasted the translator's suggested name underneath. Sometimes it was hard to find the locations because multiple names overlapped in some areas of the map. Sometimes it took more than a half hour to find a name. In the worst case, we could not find the location of a name. Because of the limited screen size, we could not see how much the editing job progressed daily. These difficulties were solved when we decided to use an actual paper map. Sara Ocklind, a young Swedish artist, joined the production and spent eight months working with us to produce the large map. We assembled many sections of the OS maps in order to make an eleven square foot map of the Breadalbane area. (Later this was presented in the exhibition *Sylva Caledonia*.) The names were printed on translucent velum. The procedure became simpler. We began to realise that the list of thirteen hundred names was still not a complete record of the Gaelic place names. We had first envisioned the map as a final artwork, however it became a process that would require input from different experts and communities of land and language over a period of what could be years.

Many of the names were related to natural elements such as water, landforms, trees, and forests, and some names describe the built environment. The landforms consisted of headlands, knolls, hills, peaks, mountains, caves, quarries, corries, slopes, and crags. The hydrological forms consisted of streams, streamlets, rivers, burns, brooks, glens, and lochs. The built environment consisted of farms, crofts, churches, huts, weirs, and cairns. The word 'cairn' comes from the Scottish Gaelic *càrn* (plural *càirn*), and it means a manmade pile of stones. There were thirty-five names that contain the word *dubh*, meaning black or dark. The name *meall dubh* (dark lumpish hill) was found in six different places. Distinct colors were: *liath* (blue/gray), *glas* (gray/green), *bhuidhe* (yellow), *odhar* (dun), and *ruadh* (reddish brown). During the Future Forest workshop, art historian Murdo MacDonald said, "The Scottish Gaelic language [has] descriptive qualities, ideas about color, and a relationship to an 'ecology of mind' and contemporary Scottish art practice" (Collins, Goto and Edwards 2015: 15). The Gaelic place names were cultural products and reflections of the natural environment.

When we exhibited the map, the translation of the place names drew a lot of attention from experts, hill walkers, and the general public. There were questions easily answered like the name of Craiganour Lodge: why was its meaning different than Creaganh Odhar (dun colored crags) just north of the lodge? The answer was found even further north where (despite bare hills) the place was known on OS maps as the Forest of the Craig of the Yew. Our translator believed Coille Creag an Lubhair, was phonetically similar to Craigenour but a much larger landscape feature would befit such a house. Many with a sharp eye

caught Leacann Nan Giomach meaning the "broad slope of the lobsters." Why was the name of a seawater creature in landlocked Rannoch? Most assumed the translator meant fresh water crayfish. However, there has never been a native crayfish recorded in Scottish streams; where they occur today, they are imported from Europe. The early Gaelic speakers would not experience either lobster or crayfish in Rannoch. Was it a misinterpretation? Next time we would climb to an overlook, to see if the shape of lobster tail – which could be understood from the topographic lines – would be visible to a hill walker.

Four weeks into the exhibition, we assembled a group of experts in Gaelic language with interests in language, literature, and culture in the region: a poet,[7] a landscape architect,[8] scholars of Celtic literature,[9] and a Gaelic landscape researcher,[10] all who were experts in Scottish place names. They came to talk about the map, place names, regional literature, and the initial translations. Much of the discussion focused on literary traditions and the contributions made by the eighteenth century Scottish poet, Duncan Ban MacIntyre (*Donnchadh Bàn Mac an t-Saoir*). His poems were developed and shared in spoken Gaelic; later they were transcribed by Donald MacNicol, Minister of Lismore. The discussion was about two poems that engage large hills in the southwest of Breadalbane. One was "In Praise of Beinn Dorain" (*Moladh Beinn Dòbhrain*), a mountain with an elevation of 1076 meters; it means "hill of the small stream." MacIntyre praised nature and described the beauty and the wild deer that belonged to the area. Our discussion also touched on *Coire a' Cheathaich* – The Song of the Misty Corrie – and its descriptions of the landscape and the tension between the ideal and spoilt landscapes:

> Your kindly slope, with bilberries and blaeberries, studded with cloud-berries that are round-headed and red; wild-garlic clusters in the corners of the rock terraces, and abounding tufted crags; the dandelion and pennyroyal, and the soft white bog-cotton and sweet-grass there on every

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7   Alec Finlay is an artist and poet whose work reflects on human interaction with nature and considers how we as a culture, or cultures, relate to landscape and ecology.

8   John Stuart Murray is a landscape architect and the author of "Reading the Gaelic Landscape." He is currently developing a Gaelic place-names application for Loch Lomond and Trossachs.

9   Anja Gunderloch is a lecturer in Celtic literature; her main research interests lie in Scottish Gaelicpoetry, mostly covering the period from the sixteenth century to the end of the First World War.

10   Jake King works for Ainmean-Àite na h-Alba, a national advisory partnership focused on appropriate Gaelic forms of place-names. His research includes the Gaelic Scholar Charles M. Robertson.

part of it, from the lowest level to where the peaks are at the topmost edge.

MACLEOD 1952: 166–168

The group brought our attention to small landscape features such as Sithean Beag (small faery dwelling) and Sithean Mhor (large faery dwelling), which had remained untranslated on our map. They also talked about place names like Druim Nan Cran Saighde (the ridge of arrows) perceived by many to be a site of conflict with some relationship to Glen Sassunn (The Saxon Glen), which is understood by some to be the valley the British would have used to march into Rannoch at one point.

In the area of Breadalbane there are numerous hills and small hill features such as knolls, corries, and crags. The word 'crag' comes from the Scottish Gaelic *creag;* it means a steep rugged mass of rock projecting upward or outward. A corrie (or cirque) is a natural amphitheater created by snow and ice during the glacial period. The translations of these names seem to delineate a character – or an identity – of the landscape. These place names are important for people who know the place or try to communicate about it with others, and they must be evolved through shared experience of the place. There are many hill names: Meall na Leitreach (a lumpish hill of the broad slope), Meall Glas Bheag (a little green/grey lumpish hill), Meall Clachach (a stony lumpish hill), Meall nan Oighreag (a lumpish hill of the cloudberries – *Rubus chamaemorus*). *Meall* (a lumpish hill) is described as the shape, the color, the material, the texture, or the vegetation. The names consist of simple descriptions based on people's observations, experiences, and interests through their day-to-day conversation. Next to the Black Wood there is a hill called Meall Dubh (dark lumpish hill). At one time we camped to take video overlooking the Black Wood of Rannoch. We thought a hill in the southeast would be a good place. We needed to stay overnight somewhere on the hill in order to get the morning light. The hill looked like it was covered by grass, but actually there were many deep bogs. We were walking on deer trails with heavy backpacks. In summer the weather was good and the hill was green, but many wetlands and midges made our walk slower. Tim found a quarry on the side of the hill as a place to set our tent. In the middle of the night we woke up to some noise and went outside with a flashlight. We almost jumped because many deer were surrounding the tent. Early the next morning, we walked to the top of the hill to see the view of the loch and the Black Wood. The area was flat and rocky. Swallows were flying about to catch the insects. Many small streams of low ground fog were moving from the Black Wood forest rising up and merging into the clouds. Later on we found the top of the hill was called Leagag (the falling). The area where

we camped is the Coire Buidhe (yellow quarry). After experiencing the places and knowing the names we are more familiar with the place. Is this a shared experience with the anonymous people who named the top of the hill and the quarry? On the other hand, we still do not know why the hill – Meall Dubh – is called 'dark.'

An Exhibition: *Sylva Caledonia*

In the spring of 2015 we presented the map, sculptures, and video works that focused on the Black Wood of Rannoch in the group exhibition *Sylva Caledonia*[11] at Summerhall in Edinburgh. Our idea was to present a body of work that would develop a correspondent relationship, forging links between the artwork in Edinburgh and the forest in Rannoch. The large map was titled *Comh-Chomhairle Bràghad Albainn* – The Breadalbane Deliberation (Figure 7.12). *Coille Dubh Rainich* – The Black Wood of Rannoch (Figures 7.13 and 7.14) was a sculpture made of felt. The Gaelic name represents planters to hold soil and native plants commonly seen in the Black Wood such as saplings of pine, birch, fern, cowberry, blueberry, heather, and mosses. Each planter was about 150 cm × 200 cm × 9 cm (tall). It was a challenge to create an empathic experience of the Black Wood in a gallery over one hundred miles away. Goto thought native plants could remind one of a sense or a memory of the place. If the plants were presented as an artwork, would they 'create' an empathic relationship in the gallery? Would it be possible to enhance the relationship, nurture it, visualize it, and produce the conditions for deepening it? The intent was to fill the gap between Summerhall and Rannoch by reconstructing specific elements of experience and memory. The intention was to create a setting where an empathic relationship with living plants could emerge. This would build on everyday observation and everyone's experience of plants and gardens. The piece included an offer to transfer the work to anyone in Edinburgh that had the land, vision, and care to develop a Caledonian forest that would take three hundred years to come into fruition. We also presented small sculptures: *Caora* – Sheep (Figure 7.15) and *Fiadh* – Deer (Figure 7.16). *Caora* was made of a handmade felt from fleece. The sheep population was declining in that landscape. The artwork is supposed to be a small model for a larger work that would celebrate

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11   *Sylva Caledonia* was a group exhibition with collaborative work by Gerry Loose and Morvern Gregor, who focused on the Sunart Oakwood at Ardnamurchan, and the ecoartscotland library by Chris Fremantle. Chris also organised three public dialogues with artists, curators, and forestry experts.

FIGURE 7.12   Comh-Chomhairle Bràghad Albainn (*The Breadalbane Deliberation*).

the return of the forest with the name for sheep (in the last fleece) produced on that land. *Fiadh* was a model of a deer 'exclosure' made of metal screen and wooden poles. This is a proposal for a work that would occupy a restoration site in the first years after a clear cut. Deer were described as a sacred animal in MacIntyre's poem "Beinn Dorain." Today deer are essential to the economics of Highland estates. Their presence has a significant impact on forest regeneration, native plants, and ecosystem. Deer fences would be the most common way to protect nature reserves and public forest from deer. Beside *Caora* and *Fiadh* many Gaelic vocabulary words were found that describe relationships to sheep and deer. Both animals were deeply embedded in the culture and natural environment in Scotland, but the meaning and their role in the social and economic life of people was constantly changing.

Two video pieces were presented. *Tha a' Choille a' Gluasad* – The Forest is Moving (Figure 7.17) has been shown at the Perth Museum (2013). This twelve-minute video shows the Black Wood passing in two directions with Gaelic

FIGURE 7.13   Coille Dubh Rainich – *The Black Wood of Rannoch.*

FIGURE 7.14   *Detail of* Coille Dubh Rainic – *The Black Wood of Rannoch.*

place names fading in and out of the image. A text on the screen describes the
opportunities and constraints within the Black Wood. The other video piece is
Am Beàrn Eadar Na Craobhan… – The Space Between the Trees… (Figure 7.18)
that provokes an ethical and aesthetic consideration of two types of for-
est regeneration: one was showing a patch of trees that are tall and straight
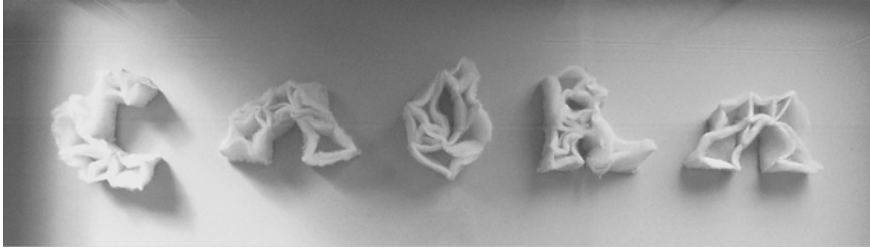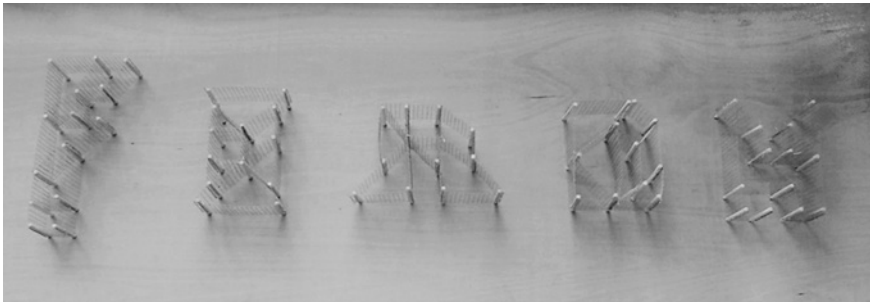
FIGURE 7.15   Caora/*Sheep.*

FIGURE 7.16   Fiadh/*Deer.*

FIGURE 7.17   Tha a' Choille a' Gluasad – *The Forest is Moving.*

FIGURE 7.18   Am Beàrn Eadar Na Craobhan… – *The Space Between the Trees…*

(the Potato Patch described earlier), a single generation with a grassy under-story. The other image showed a forest that was more aged and form-diverse with a rich understory of vegetation more typical of the Black Wood.

Conclusions

We began with a question: does the biodiversity of the ancient semi-natural Black Wood forest have a meaningful relationship to cultural value? Following Hume's impressions and ideas of 'relations' we understood that aesthetic un-derstanding was driven by our perceptions, which consist of outer perception and inner perception. Our perceptions are mental activities and understood as an 'act of perceiving' that is recognized in both aesthetic experience and empathic experience. In our case, empathy is a relationship between humans and more than humans.

We analyzed our experience of the Black Wood where co-relations were established between forms of the pine and historical and political incidents. While the number and quantity of trees harvested have been essential to un-derstanding the role and identity of the forest between 1700 and 1970, biodi-versity policies have driven the contemporary management of the forest for almost fifty years. We have described the contemporary identity of the forest as 'wild' but also provide insight on the conflicted nature of that identity at least as the idea of 'wild' is understood in Rannoch. Reflecting on each element of Hume's relations we understood the aesthetics of natural beauty was not sepa-rated from human culture.

The second question: is it possible to make a small contribution to the well-being and prosperity of human and non-human forest communities of

Rannoch? This question has been partially addressed by revealing a range of historic and contemporary human and nature relationships in the landscape. We are interested in Gaelic place names and began to understand that the meaning and definition of place is artificially stabilized in the OS maps Coille Creag an Lughair (the Forest of the Craig of the Yew) is a good example, it no longer has significant forest, nor is there a notable yew tree still present; but as the name of a great estate, its presence in the community is contemporary although its primary meaning has changed. We argue that the Future Forest workshop – and the developmental ideas that came out of it – has had an ongoing impact with potential to restore the cultural ecology, the link between society, and forest in Rannoch. The artworks that followed include video installations, the large maps, and sculptural artworks. Working with scientists and in communities we have developed a series of artworks that raise questions about the record of the forest – past, present, and future – to be answered through dialogue with others.

We have argued (following Hume) that understanding composed of both impressions and ideas are a basis for morality, but they also can form the foundation for a creative act. We have previously described this as an ethical aesthetic 'impulse,' that leads to creative action. (Goto and Collins 2012: 121–134). When we think about an understanding of the Black Wood and its context, there must be an equation between the actual wood and the memory inside of us. The reflection undertaken here intends to develop a specific type of imagination that relies on memories, past impressions, and thoughts. An artwork can contribute to a new social understanding of place by solidifying the relationship between our intellectual understanding and the experiential, embodied understanding of a place through a feeling of oneness. If this can be done socially, it brings the ecologies of culture and nature together again in important ways.

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