

Exemplification: A Case Study

CATHERINE Z. ELGIN(*)

Introduction

Rather than asking «What is art?», Nelson Goodman maintains, we should ask «When is art?» (1978). That is: under what circumstances does something function as art? He maintains that something that is not standardly considered a work of art can nevertheless function aesthetically. His example is a stone in the driveway. Although he goes on to detail what he takes to be the symptoms of the aesthetic – the factors that indicate that something is functioning aesthetically – he never returns to the stone. That is unfortunate. The stone in the driveway seems quickly to revert to its earlier, mundane insignificance. We might therefore conclude that a non-standard object's capacity to function as art is transient and trivial unless, like Duchamp's *Prelude to a Broken Arm*, it is suitably ensconced in an art museum. I will argue that such devaluation is unfounded. Through a discussion of an installation called *Hemlock Hospice*, I show how a stand of dying trees in the Harvard Forest was brought to function as a powerful, indeed potentially transformative work of art. Such transmutations of function are epistemically valuable. They augment the insights science yields. To treat a mundane object as art is to open our eyes to aspects of it and relations in which it stands to other things – aspects and relations that we would otherwise miss. I will argue that the

(*) Graduate School of Education, Harvard University.

installation functions simultaneously as a scientific symbol and as an aesthetic one. Rather than being antithetical, I will urge, the two functions are complementary.

1. Background

To make my case, a bit of background is required. The eastern hemlock (*Tseuga canadensis*) is an evergreen that was once widespread in eastern North American forests. Owing to climate change and the introduction of a tiny insect – the hemlock woolly adelgid – the species is in apparently irreversible decline. There is, evidently, no feasible way to control the adelgid’s spread. As a result, scientists predict that the eastern hemlock is threatened with functional extinction. To honour its passing, ecologist Aaron Ellison and interdisciplinary artist designer David Buckley installed *Hemlock Hospice* in the Harvard Forest from 2016–2017 (see Ellison and Buckley 2021).

Hospice care is palliative medical care provided to terminally ill patients when further attempts to cure have been deemed futile. The mood in hospice is often bittersweet. Patients, their families, and friends reflect on past joys and triumphs, while sadly aware that the end is near. Hospice can serve to reconcile survivors to the patient’s impending death. *Hemlock Hospice* then was a site to reflect on a species whose end is near.

The installation coursed through a stand of hemlocks in the Harvard Forest, a research department of Harvard University focused on forest ecology, land-use history, and climate change. A two-mile-long path through the woods was interspersed with sculptures designed for the exhibition. The individual sculptures are undeniably works of art functioning as such. There is no controversy about them. I want to focus on the trees. They were not just the backdrop as the site might seem to be the backdrop in more familiar installations – for example, as Central Park served as the backdrop in Christo and Jeanne Claude’s (2005) *The Gates*. Rather, the trees were the focus; they were what the installation is about. The work was designed to exemplify the hemlock’s fate.



Fig. n.º 1:

Hemlock Memorial Shed (2017). Installation at Harvard Forest, 8 × 8 × 9 feet; wood, acrylic paint, and assorted hardware. Collaborating artists: David Buckley Borden, Aaron M. Ellison, and Lisa Ward. Image © Aaron M. Ellison, and used with permission.

[*Hemlock Memorial Shed* (2017). Instalação na Floresta de Harvard, 2,4 × 2,4 × 2,7 metros; madeira, tinta acrílica e ferragens diversas. Artistas cooperantes: David Buckley Borden, Aaron M. Ellison e Lisa Ward. Imagem © Aaron M. Ellison, usada aqui com permissão.]

2. Exemplification

Exemplification is a mode of reference whereby a symbol refers to some of its own features via its instantiation of those features (Goodman 1968; Vermeulen et al. 2009). It underscores those features, drawing attention to them. As I use it, the bland, neutral term «feature» refers to properties, relations, matters of fact. The features of a thing may be obvious or obscure; dramatic or mundane; literal or metaphorical. Although a staple of both art and science, exemplification is not esoteric.

It is the relation in which a sample or example stands to whatever it is a sample or example of. A sample of laundry detergent exemplifies its cleaning power; a swatch of cloth in a tailor's shop exemplifies its pattern, color, texture, and weave; a problem worked out in a textbook exemplifies the way the rules are to be applied to a range of problems.

Familiar pedagogical and marketing exemplars are standardized and regimented. They are designed so that their interpretation will be readily agreed upon. But exemplification does not require standardization or regimentation. It can be entirely ad hoc. Anything becomes an example, simply being used as such. A naturalist might point to a plant in a field as an example of goldenrod, or of an indigenous plant, or of a particular color, or as a flower that might prompt a sneeze. A car salesman might point to a car as an example of a Chevrolet, or an electric car, or a sedan, or a bargain at the price. A football coach might point to a play as an example of competence or incompetence, brilliance or bungling, even of brilliance in overcoming bungling. Their actions of pointing, indicating, or mentioning turn mundane objects into symbols that exemplify features that make them representatives of particular kinds.

Context often makes obvious what features are exemplified. It might be plain to the naturalist's auditors that the color and shape of the flower are the grounds for treating it as an example of a goldenrod. But ad hoc exemplars are sometimes hard to interpret. The naturalist's auditors might be uncertain as to which other plants qualify as goldenrods – that is, how far the color and shape can diverge from the exemplar and still qualify as a goldenrod. A mining inspector's air sample must be run through a gas chronometer before anyone can tell what gasses it exemplifies. A seeming compliment may exemplify a hidden slight. A speaker's remark may exemplify tact by what she did not say – not everything she did not say, of course. It is an exemplar of tact because of an omission of something whose mention, although conversationally appropriate, would have been embarrassing. In such cases a good deal of analysis may be needed to interpret an exemplar.

Where the features themselves are subtle, the function of the exemplar is to bring them to the fore. A delicate experiment may be contrived to exemplify the difference between similar proteins. The finest curve of a lip may exemplify the difference between a smile

and a sneer. In other cases, the exemplified feature is so obvious that we routinely look right past it. If everyone knows that trees die, and everyone knows that everyone knows that trees die, what is the point of highlighting this fact? It might seem that exemplifying the obvious is a waste of time. Often it is not. Through defamiliarization – making the familiar seem strange – we may be brought to notice what we ordinarily overlook (see Banes 2003).

Exemplification highlights certain features, drawing attention to them, making them salient. In so doing, it marginalizes or occludes others. A test for pollutants in the river might marginalize organic matter in the sample in order to exemplify and thereby focus attention on toxic chemicals. In an audition seeking to exemplify musical talent, performers play behind a curtain so that their gender and race are occluded. Successfully marginalizing irrelevances thus protects against an exemplar's distracting, obscuring, biasing, or misleading. Exemplification screens out irrelevances. It thus affords epistemic access.

Carmo d'Orey argues convincingly that exemplification is central to the way works of art function (1999). Goodman maintains that it is one of the symptoms of the aesthetic (1968). Although I agree with d'Orey and Goodman about its importance in the arts, I deny that exemplification is a symptom of the aesthetic; for, as I have argued, it is equally important in the sciences (Elgin 2017). Experiments and models, as much as still lifes and symphonies, foster understanding via exemplification. This may raise a problem for my interpretation of *Hemlock Hospice*.

Exemplification plainly plays a role in *Hemlock Hospice*. On an ordinary stroll through the woods, visitors might simply pass by the hemlocks, paying them little notice. They are, after all, familiar in New England. But the title of the installation draws attention to them. It brings them to exemplify a type of tree – the hemlock. The term «hospice» sensitizes visitors to the trees' state. They are not just trees, they are dying trees – trees whose condition is terminal. They were, of course, trees, hemlock trees and dying trees anyway. But the title underscores these facts; it makes them salient. The path does too. It is not just a walk in the woods; it is a walk through dying hemlocks. The installation, moreover, brings the trees to exemplify generally. It is not just these particular trees or the trees in this particular forest



Fig. n.º 2:

Sixth Extinction Flag. Installation at Harvard Forest, 5 × 5 feet; canvas, thread, nylon rope, and grommets. Collaborating artists: Jackie Barry, David Buckley Borden, and Aaron M. Ellison. Image © Aaron M. Ellison, and used with permission.

[*Sixth Extinction Flag*. Instalação na Floresta de Harvard, 1,5 × 1,5 metros; tela, linha, corda de nylon e ilhós. Artistas cooperantes: Jackie Barry, David Buckley Borden e Aaron M. Ellison. Imagem © Aaron M. Ellison, usada aqui com permissão.]

that are dying. The trees are representatives of their species. The entire species is in peril.

So the trees exemplify «tree», «hemlock», «dying», «member of a *T. canadensis*, which is in dire straits» and «member of a threatened species». The predicates have different extensions; by jointly exemplifying them, the installation weaves connections among them. It is then straightforward to argue that *Hemlock Hospice* exemplifies. It does not follow, though, that *Hemlock Hospice* functions as art.

3. But Is It Art?

The Harvard Forest is an institution devoted to the discovery and dissemination of scientific understanding. Since its staff designed and presented the installation, wouldn't it make sense to interpret *Hemlock Hospice* simply as a scientific exhibition? Much of the material published by and about the project construed it as a project in scientific communication. Putatively aesthetic aspects were said to be deployed to communicate an ecological message to the public. On such a reading, art plays a merely instrumental role. It hardly functions as art at all. Rather, the installation is described as something like a public service advertising campaign, designed to convey a particular scientific message to an audience of non-scientists. This characterization sells the installation short. It does a serious injustice to the power of the work.

What does it miss? What is to be gained by interpreting the installation as art in a more robust sense? To begin to answer this question, we need to consider the differences between aesthetic and scientific symbols. Science places a premium on intersubjective agreement. Because scientists build on one another's findings, determinacy about what those findings are is imperative. As a result, science favors articulate symbols with sharp-edged boundaries and determinate extensions. It sets limits on the precision of its measurements. If scientists agree up to the threshold of measurement, they agree. Beyond the threshold, any further divergence of opinion is to be dismissed. It makes no difference. Scientific disciplines rely on the antecedent specification of the axes along which assessments are to take place and the orientation

from which observations are to be made. They specify what to look at, what to measure, and how to look at and measure it. These priorities are not shared by the arts, where divergence interpretation is not merely tolerated, it is valued. Critics may never agree about whether Hamlet was mad or whether *Le Comptoir* exemplifies the flatness of the picture plane. This is not a weakness in the works or in art criticism. Lack of resolution fuels further open-ended inquiry into the works and what they reveal.

Goodman illustrates the difference through comparison of a Hokusai drawing and an EKG (Goodman 1968). Even if the configuration of ink on paper is the same, the two are not equivalent. The Hokusai is syntactically and semantically dense. Every difference in the symbols that make up the drawing is potentially significant. None is too small to matter. The picture is replete. It symbolizes along a variety of axes. The size, shape and color of the line, the differences in color of the background, the exact proportions of the drawing, even the weave of the paper may be significant. Equally astute connoisseurs may disagree endlessly about which features are exemplified, which orientations are illuminating, which aspects of the work function aesthetically. The EKG is different. It exemplifies the pattern of the patient's heartbeat. Up to a specified level of precision, the shape of the wave is significant, as is the frequency with which the pattern repeats. Nothing else matters. The color of the line, the thickness of the line, and the size of the image are irrelevant. Moreover, cardiologists agree in advance that this is the case. Since they are indifferent to the color of the line, they are apt to be, and are justified in being, oblivious to changes in its tone. If the color fades out toward the end of the image, that's a technical glitch; it's not their problem as it has no diagnostic significance. If cardiologists discern something odd about the shape of the curve, they may call in a colleague for a second opinion, bring in another machine to make sure the anomaly is not a product of instrumental malfunction, or order a different test. They do not interminably pore over the original output. Intersubjective agreement is not always easily achieved. An odd output may be a source of controversy. But rarely will the controversy be resolved by prolonged study of the EKG that gave rise to it. To settle the matter, cardiologists look beyond the original EKG.

Nor are such responses just characteristic of medicine. Instrument outputs in other sciences are treated in the same way. Intersubjective agreement, test/retest agreement, and agreement across a variety of types of test are demanded across the sciences. Investigators want to know what is being measured and to what degree of precision before measurement is taken. This secures against bias, idiosyncrasy, subjectivity in assessment.

Not all scientific findings are products of laboratory experiments with carefully calibrated instruments. Ecologists study their subjects in their natural settings. Their data may be less sharp-edged. But they too set thresholds of significance, fix orientations from which to observe their objects, and demand intersubjective agreement about findings. Such determinacy and austerity are completely familiar and reasonable in the sciences.

The Harvard Forest, as a scientific institution, could easily bring the hemlock trees to literally exemplify their condition in a way that respects standards of scientific rigor. In their research, the scientists do just that (see e.g., Ellison et al. 2018). The issue here is how they convey their research to the public. Both the Forest and its Fisher Museum provide suitable venues. Both science and art exhibitions regularly facilitate exemplification through wall texts, gallery guides, annotated maps, and brochures. The Forest could simply post a sign along the trail saying «this is an example of a dying hemlock» or «this is an example of the hemlocks that are dying throughout North America». It could display an adelgid or a group of adelgids to exemplify the organisms that are damaging the trees, and perhaps illustrate how they feed on the nutrients in the needles, thereby weakening the trees. It could supply a trail guide which explains the background, the current condition of the trees and the reasons why things are not likely to improve. It could provide statistical information exemplifying the connection between the effects of climate change, the rise in population of the adelgids, and the effects of industrialization. It could intersperse artifacts along the trail to highlight relations between the natural and the man-made. Such artifacts would exemplify literal connections between, e.g., industrialization and the rise of ambient temperature, between international trade and the introduction of non-native species, and so forth. *Hemlock Hospice* did these things.

It is thus entirely appropriate to construe it as a scientific symbol. Such literal scientific exhibitions are staples of nature preserves and natural history museums. We learn a lot from them. People coming away from a literal, scientific exhibit about the fate of the eastern hemlock would know both that and why the trees are dying.

4. What does an Aesthetic Perspective Add?

Construed as a work of art, the installation does more. It yields epistemic access to features that an austere, purely scientific perspective occludes. To see this, let us return to Goodman's symptoms of the aesthetic. If something functions as a work of art, every difference in certain respects has the capacity to make a difference in interpretation. There is no mandatory cutoff point on significance. If the least differences between symbols matter, the system is syntactically dense; if beyond a certain threshold, further differences are no longer significant, it is syntactically articulate. As we saw, science favors articulate symbols. Art values density. Semantics is a matter of what the symbols of a system refer to. Although Goodman focuses on denotational semantics, I have argued that since exemplification is a mode of reference, we should recognize exemplificational density as well (1988). So in construing the installation as syntactically and semantically dense, we treat it as having the resources to exemplify indefinitely fine distinctions. But to say that it has the capacity to exemplify broadly is not to say that it does so. The installation exemplifies trees, hemlock trees, dying trees, waning species, etc. These were also exemplified under the scientific interpretation.

That might suggest that there is no premium in construing the installation as art. Even if every difference makes a difference, the differences that an exhibition can make salient seem to be restricted to ones that are fairly widely accessible. There would be no utility in a gallery guide's highlighting features that few visitors could discern. If the nuances in shades of color of a leaf or in the curve of a line were so subtle that few viewers could perceive them, pointing them out would be fruitless, if not counterproductive. It would be off-putting for visitors to be told to attend to a feature that they cannot even see. In effect then, although ever more fine-grained features are capable of

being exemplified, there is a threshold on what an exhibit can plausibly purport to show. It might seem then that the aesthetic interpretation and the scientific interpretation are on a par. The added capacity that symbolic density supplies is then idle.

This is not quite right. Even if the scientific and aesthetic didactic materials respect the same threshold, they adopt different orientations toward it. An aesthetic guide may refrain from pointing out features beyond a given threshold of discernment, but it invites the viewer to look further, to make more subtle discriminations on her own. It suggests that there is yet more to be seen. The scientific guide, on the other hand, might make the same fine-grained distinctions, but it intimates that once the threshold is reached, any further discriminations are scientifically unfounded. The two interpretations supply different orientations toward their subject.

Moreover construed as art, the installation has the capacity to exemplify features that go beyond established scientific categories – transience, ephemerality, fragility, vulnerability. It might also exemplify our ill-founded propensity to treat long-lived things as permanent or to treat other species as impervious to human meddling. The exemplification of such features might start a chain of associations, leading to further exemplifications – perhaps to the Heracleitean insight that impermanence is the natural condition, that species go extinct, mountains crumble, stars nova. It might bring visitors to, in Wittgenstein's terms, «feel the world as a limited whole» (1961: §6.45). It might loop back to exemplify our own mortality not just as individuals but as a species.

Goodman maintains that works of art are relatively replete. That is, they symbolize along multiple axes. If *Hemlock Hospice* functions as art, a variety of factors that would be irrelevant under a scientific interpretation have the capacity to foster understanding of and through the work. The perception of the flickering light through the branches, the feel of the pine needles on the path beneath our feet, the sound of the wind through the trees, the shadows the dying trees cast on an October afternoon, all may come to symbolize features of the grove.

A work of art merits repeated attention because the viewer or the conditions under which the work is viewed afford new orientations, enabling the viewer to notice and appreciate previously overlooked or undervalued features. Ordinarily we do not take the new insights

to be grounded in changes in the work itself. We return to *The Night Watch* because we think that although it is pretty much as it was, there remains more to be seen in it. *Hemlock Hospice* is different. Since our previous visit, ailing trees have shed more needles; branches have broken off; the wind sounds different and the shadows look different because the current configuration of branches is different. There is an ineluctably temporal dimension to our experience. It is not just the current state that is exemplified, changes from the previous state are also exemplified as is the fact that further changes are anticipated.

Goodman's final symptom is multiple and complex reference. Works of art may symbolize along chains of reference, extending indefinitely. To a poetically inclined visitor, a bird perched overhead might recall Robert Frost's poem «Dust of Snow» with its image of a crow shaking snow from a hemlock branch onto a walker below. That might evoke an association to another Frost poem, «Nothing Gold Can Stay» which exemplifies the transience of youth, life, and natural beauty (1969). The associations might continue indefinitely, bringing the visitor to move from attention to his current surroundings to the ways these surroundings are illuminated by the insights of familiar and unfamiliar poets. This visitor's mode of referential access to the exemplification of transience and inevitable loss then might be via a poetic path. Others might detour along other routes and perhaps arrive at other destinations. Visitors to the installation were asked to wear hard hats to protect them from debris falling from the trees. This might lead some to forge a conceptual link to construction sites where wearing hard hats is mandatory. Drawing that connection, which exemplifies the commonality between the two, might prompt them to appreciate how humans are responsible for dangers in the woods as well as for dangers in the city. It might suggest that construction and destruction are equally fraught.

5. Moral Emotions

Elsewhere (Elgin 1996; 2007) I argue that emotions function cognitively. They afford epistemic access both to one's own commitments and to the objects of those commitments. A jolt of fear informs an

agent that he considers its object dangerous. A spark of joy indicates that he finds favor with the object. Granted, emotions are noisy; they often mislead. So, an arbitrary agent ought not immediately conclude that the object is dangerous simply because he is afraid of it. But if he is a good judge of such matters – if, that is, he is suitably reliable – he is justified in taking his emotional reaction as evidence that the object has the feature the emotion indicates. That, for example, a nuclear engineer is worried about the water level in the reactor is a good reason for both him and the rest of us to think the reactor is in a dangerous state.

Emotions are avenues of epistemic access in both science and art. *Hemlock Hospice* might occasion regret at the passing of the trees whether it is interpreted as a scientific exhibit or as an aesthetic one. So the mere fact that visitors respond emotionally to the work does not determine what stance they are taking toward it. A visitor who interprets the work scientifically might use her regret or dismay as an epistemic resource. If so, she takes it to convey information about what she thinks about the dying trees or her approach to them and, if she considers herself reliable about such matters, what is the case vis à vis the trees themselves. She uses her emotional response as evidence that the trees have the features her emotions register. Someone who approaches the installation as a work of art would do the same.

Either way, the installation prompts regret. It might thereby exemplify that the situation is regrettable. But the property of being regrettable has no place in science. To be sure, science can track regret and identify its causes and manifestations. So a scientific investigation might reveal that the installation caused a given proportion of the visitors to regret the passing of the eastern hemlock. It might reveal more fine-grained patterns correlating regret felt by visitors with a host of other demographic factors. But this would not demonstrate that the situation is regrettable. For to be regrettable is to be worthy of regret. When a situation is regrettable, it ought to be regretted whether anyone actually regrets it or not. Science cannot bridge the gap between the «is» and the «ought». If the visitor sticks to the scientific orientation, her purview is limited. There are features of the phenomena that she can detect but cannot incorporate into her evolving understanding of the situation. The visitor who adopts an

aesthetic stance seems no better off. No more than science, can art demonstrate that a situation is regrettable. Hume is right. There is no entailment from an «is» to an «ought» (see Hume 1967).

Still, the property of being regrettable is not inscrutable. We discern it. At least part of the way we discern it is by recognizing and assessing regret – our own regret and that of others. Although there is no entailment from being regretted to being regrettable, regret is evidence of regrettable. An attitude is misguided when it is based on misinformation, unacceptably incomplete or biased information, a skewed perspective, or an unfounded weighting of evidence. When regret about a situation is not misguided, the situation is worthy of regret – it is regrettable. To determine whether this is the case, we must assess the regret and its grounds. If on reflection, we find that regret would be not misguided, we justifiably deem the situation regrettable.

Even where a situation is regretted, whether it is regrettable may not be obvious. If the verdict is to be reached on reflection, the question arises as to what factors should enter into that reflection and how they should be weighed. Sometimes simple cost/benefit analysis suffices; for the costs and the benefits are undisputed. It is regrettable that the shop is out of lemons, since you need them for the pie, and will now have to go to another store. No problem there. Often, however, this is not the case. To underwrite a verdict then, we may engage in a broad, circuitous, perhaps idiosyncratic assessment of the object and reactions to it. Even if we are still engaged in some sort of cost/benefit analysis, wide ranging inquiry is required to determine what the relevant costs and benefits are. We draw on the insights from a variety of sources, connect the situation to other things we value and disvalue – perhaps considering pleasure, pain, beauty, ugliness, fecundity, desolation, natural diversity, enjoyment, relaxation, and more.

Our issue here is not whether the fate of the hemlocks is actually regrettable, but whether the installation affords grounds for thinking it is. In deciding, both perspectives play a role. The scientific perspective affords access to considerations that stand up to intersubjective scrutiny. This validates their status as evidence of regrettable. The aesthetic perspective affords access to a greater range of considerations, but the evidentiary status of each of them is less secure. The aesthetic perspective enables viewers to take a wide survey, modulated through their

own reactions to the installation. Lacking intersubjective agreement, an aesthetic deliverance evidently affords relatively weak evidential support; but enough independent bits of weak evidence can make a strong case. Taken together the deliverances of the aesthetic perspective strengthen our grounds for thinking that the conclusion is not a product of limited evidence or a biased orientation. If both perspectives work together, we are in a strong position to conclude that regret the installation engenders is not misguided. The installation thus justifies considering the demise of the trees regrettable.

We might go further. Regret is an attitude that embeds a (perhaps tacit) belief that a situation is unfortunate. Agents often regret situations over which they have no control – tornadoes, tsunamis, typhoons, rainy days when they hoped to go on picnics. Such situations may, as we have seen, be regrettable. If so, there is nothing misguided about the regret they occasion. A related emotion is remorse. An agent experiences remorse when she regrets a situation and considers herself to some extent responsible for it. It is, she believes, at least partly her fault. The move from regret to remorse involves self-reflection. The remorseful agent is (at least subliminally) sensitive to what she takes to be her complicity with respect to the situation in question. If her attitude is not misguided – if, that is, it is not based on misinformation, unacceptably incomplete or biased information, distorted weightings of evidence, or a skewed perspective – she is indeed to some degree complicit in, hence responsible for, the regrettable situation. Pretty clearly, *Hemlock Hospice* can occasion justified remorse. It exemplifies the connection between industrialization, global warming, the inadvertent importation of an alien species, and the demise of the hemlocks. It makes the cost of carelessness, cluelessness, and negligence visible.

Conclusion

I suggested earlier that the stone in the driveway might be doomed to insignificance because it was not given the sort of institutional framing that the art world gave to *Prelude to a Broken Arm*. It was not ensconced in an art museum where it would be appreciated for its aesthetic features. *Hemlock Hospice* shows that such framing can reorient without

uprooting things from their natural settings. Moreover the framing may be provided by a scientific institution rather than an artistic one. The installation focuses attention on what is there anyway. It brings visitors to attend to the hemlock in ways that they normally would not. It prompts visitors to interpret the trees as symbols of something beyond themselves. It does so by effecting the exemplification of a rich and varied constellation of properties and relations, enabling visitors to appreciate what they ordinarily would not even notice. Goodman's point, which *Hemlock Hospice* amply demonstrates, is that what is needed for something to function as art is not an institutional setting but an interpretive orientation. The Harvard Forest, through the design of *Hemlock Hospice*, fostered the interanimation of interpretive stances. It blended scientific considerations with aesthetic ones, providing a richer range of experiential possibilities than either a purely scientific exhibit or a purely aesthetic one could provide.

I have argued that *Hemlock Hospice* merits and rewards an interpretation under which it functions as art. My example was chosen precisely because the installation is an unlikely candidate. The material is unprepossessing: scraggly, dying trees whose demise is caused by unattractive bugs. The installation was located in a venue that is dedicated to the advancement of scientific understanding. This suggests that it be given a purely scientific interpretation. Although the Forest described the installation as art, its descriptions emphasized that its purpose was science education. Even the sculptures that were part of the exhibit could easily be seen as mere illustrations of the relation between the natural and the manufactured. The setting does not obviously invite or promise to reward aesthetic contemplation. But the installation frames things in such a way that the trees come to exemplify along a wide variety of axes, transgressing boundaries between art and science, between the built and the grown, between the empirical, the spiritual, and the moral realms. Through the alchemy of art and the rigor of science, it transmutes mundane matters into something rich and strange, something worthy of attention – an appreciation of trees whose passing is grounds for both regret and remorse.⁽¹⁾

⁽¹⁾ I am grateful to Aaron Ellison for helpful comments on an earlier version of this paper.

References

- BANES, Sally. «Gulliver's Hamburger: Defamiliarization and the Ordinary in the 1960s Avant Garde» in *Reinventing Dance in the 1960s* ed. Sally Banes. Madison: University of Wisconsin Press, pp. 3-5. 2003.
- CARMO D'OREY, Maria do. *A Exemplificação na Arte: Um Estudo sobre Nelson Goodman*. Lisboa: Fundação Calouste Gulbenkian, 1999.
- ELGIN, Catherine. «Emotion and Understanding». *Epistemology and Emotions*, Georg Brun, Uvli Dogouglu and Dominique Kunzle (ed.). London: Ashgate. 2007. 33-50.
- ELGIN, Catherine. *With Reference to Reference*. Indianapolis: Hackett Publishing Co. 1988.
- ELGIN, Catherine. *Considered Judgment*. Princeton: Princeton University Press. 1996.
- ELGIN, Catherine. *True Enough*. Cambridge MA: MIT Press. 2017.
- ELLISON, Aaron; BORDEN, David. «Hemlock Hospice: Landscape Ecology, Art and Design as Science Communication». *Routledge Handbook of Art, Science, and Technology Studies*. London: Routledge, 2021. 488-502.
- ELLISON, Aaron; ORWIG, David; FITZPATRICK, Matthew; PREISSER, Evan. «The Past, Present and Future of the Hemlock Woolly Adelgid (*Adelges tsugae*) and its Ecological Interactions with Eastern Hemlock (*Tsuga canadensis*) Forests». *Insects*. 9. 172, 2018.
- FROST, Robert. «Nothing Gold Can Stay» and «Dust of Snow». *The Poetry of Robert Frost*. Edward Connery Lathem (org.). New York: Henry Holt, 1969. 221, 222.
- GOODMAN, Nelson. *Languages of Art*. Indianapolis: Hackett Publishing Company, 1968.
- GOODMAN, Nelson. *Ways of Worldmaking*. Indianapolis: Hackett Publishing Company, 1978.
- HUME, David. *A Treatise of Human Nature*. Oxford: Clarendon Press, 1967.
- WITTGENSTEIN, Ludwig. *Tractatus Logico-Philosophicus*. London: Routledge & Kegan Paul, 1961.

