

DOUGLAS, A. and FREMANTLE, C. 2024. *Thinking with the Harrisons: re-imagining the arts in the global environmental crisis*. Presented at the Keynote lecture for the Helen and Newton Harrison: California work exhibition, 19 November 2024, San Diego, USA.

# Thinking with the Harrisons: re-imagining the arts in the global environmental crisis.

DOUGLAS, A. and FREMANTLE, C.

2024

Keynote Lecture, University of California San Diego, 19 November 2024

'Thinking with the Harrisons:

Programme:

Ceci Moss: UCSD Land acknowledgement

Alena Williams: Introduction 1

Anne Douglas and Chris Fremantle: Keynote Lecture 3

Alena Williams: Introduction

*I want to thank Ceci Moss and Tatiana Sizonenko (UC San Diego, PhD '13) for the honor to introduce our keynote speakers tonight, Anne Douglas and Chris Fremantle, two artist-researchers who have been engaging in the worlds of Helen and Newton Harrison since nearly twenty years.*

*The past several weeks our campus and community have been a party to a series of conversations on our current predicament—a global environmental crisis—which the Harrisons sought to explore in their long-standing engagement with ecological thinking, which traces back towards the inception of our Department of Visual Arts. The University of California, and we, would not have the possibility to convene here, if not for the history of colonization in the Americas, and the California region more specifically, which the Harrisons sought to delineate in their critical engagements of the deeper histories of the State of California.*

*As Anne and Chris explore in their newly published and multifaceted book, Thinking with the Harrisons: Re-imagining the Arts in the Global Environment Crisis<sup>i</sup>, the Harrisons have reflected upon an expanding sense of what this crisis' implications for humanity might be—across maps, diagrams, and multimedia installations. Outlining the relevance of the philosophical writings of Alfred North Whitehead and Isabelle Stengers, Thinking with the Harrisons sets out what is at stake in the Harrisons encounter with and criticality towards an “economy of knowledge” which limits humanity's scope on such urgent topics as climate change, while also reflecting on how humanity might develop an environmental ethics by introducing new lines of thinking with such fields as political theory, philosophy, literary studies, aesthetics, and the history of science. Our speakers' interdisciplinary research reminds us that Helen and Newton Harrison were not transcribing scientific research into the*

*space of art but plumbing the depths of scientific rationality in order to grapple with what some might consider to be its aesthetically and socially productive elements. Through storytelling—which not only took dialogic, visual, and spatial form—the very nature of ‘space’ in the Harrisons’ work assumed a dynamic meaning. We must—as the Harrisons state in their multi-part The Lagoon Cycle<sup>ii</sup>—“attend to the discourse between belief systems and environmental systems” (The Sixth Lagoon: On Metaphor and Discourse, my emphasis). That is a discourse that takes shape as the space of production, the space of engagement, the space of collaboration and exchange continually at work between subjects, both human and nonhuman. As we will hear tonight, this active space of working and thinking with the sciences, the humanities, and, of course, the arts, is indicative of the Harrisons’ penchant for being in “many conversations at once” (The Seventh Lagoon). Of course, it is not incidental that the Harrisons’ deep questioning emerged during the early years of the Harrisons’ faculty employment at the University of California, San Diego. The research taking place here—particularly at the Scripps Institution of Oceanography—meant that the Harrisons had ample proximity to a world of ideas connecting scientific endeavor to the planet’s futurity. The Harrisons’ legacy thrives on our campus—in the research and pedagogy on urban ecologies of Teddy Cruz in the Department of Visual Arts and Fonna Foreman in the Department of Political Science—who together are developing models for furthering climate education for future generations of students and its relevance for our social and political realities; as well as in the work of artist, researcher, and educator Ruth Wallen, who studied under the Harrisons and was a long-standing continuing lecturer in the Department of Visual Arts. This is just to name a few!*

*And this influence continues on in Tatiana’s impressive and beautifully rich multi-venue retrospective exhibition Helen and Newton Harrison: California Work. Within each installation of the works on view—from Urban Ecologies at the La Jolla Historical Society, to The Prophetic Works at the California Center for the Arts Escondido, to Saving the West at the San Diego Public Library Gallery, and Future Gardens at UC San Diego’s own Mandeville Art Gallery—we encounter the Harrisons’ lessons on how we might diverge from humanity’s limited vision of its future—one predicated on the present—towards an open-ended, generative, and resolutely dialogic engagement with the environment.*

*Since California Work opened this past September, both Anne Douglas and Chris Fremantle have been active participants in a range of programming around these simultaneous exhibitions, in which their commitment to furthering the lessons of Helen and Newton*

*Harrison is profound. Tonight, we have the opportunity to learn more about their collaborations with these pathfinding artists, and to explore even more new material they have developed beyond their recent publication.*

*Anne Douglas is a Professor Emerita at the Gray's School of Art at Robert Gordon University, Scotland. Her research explores the changing place of the artist in public life, with an increased focus on art and the environmental crisis from a practice-led research perspective. In collaboration with Newton Harrison and the Center for the Study of the Force Majeure, which the Harrisons founded at the University of California, Santa Cruz, Douglas was a co-producer of the Harrisons' 2017 work, On the Deep Wealth of this Nation, Scotland, which we will learn more about this evening.*

*Chris Fremantle is a researcher and producer of award-winning projects who lectures at Gray's School of Art at Robert Gordon University in Scotland. He is a longstanding member of the international ecoart network and co-editor of Ecoart in Action<sup>iii</sup>, a collection of activities, case studies and provocations drawn from the network. Fremantle was a producer on the Harrisons' 2006-09 project entitled Greenhouse Britain: Losing Ground, Gaining Wisdom which we will also learn more about this evening. Please join me in welcoming them both to the podium!*

AD/CF: Thanks to Alena Williams, Associate Professor, UCSD for introducing us and fielding the Q and A, Tatiana Sizonenko and Heath Fox for hosting our visit, Ceci Moss, Director of Mandeville Gallery, for setting up this keynote. Thanks also to Lauren Bon and the Metabolic Studio for supporting Chris' Research Leave.



Cullen Ceiling, Cullen House, Banff, Scotland c.1600<sup>iv</sup>

[Anne]

You may wonder why I have chosen to open with this work, a 16<sup>th</sup> century painted ceiling from the Scottish Renaissance, that is not only historical, but also built heritage, that depicts classical content and involves conventional artistic skills i.e. an artwork that apparently has nothing to do with the kind of art that addresses the environment, other than perhaps through its content depicting the classical pantheon in the remarkable figures of Flora (Gaia), Luna and Neptune with Mercury working between the heavens and the Earth. One reason is that it evokes a powerful memory of first meeting the Harrisons at the Darwin Symposium, Shrewsbury England, 2005. This event, organised by a friend and colleague, David Haley, was focused on emergent projects and practices addressing environmental issues and the Harrisons were distinguished keynote speakers. Chris and I were giving a presentation on an artistic research programme that addressed the question of contemporary art and its relevance in remote rural contexts in Scotland. At the time contemporary art was predominantly imagined, practised and shared in urban, metropolitan contexts. We were surrounded by a deep and rich heritage and worked with artists, local communities and cultural leaders to develop ways of working in the arts that energised this context and challenged convention. One of the five experimental projects that formed our approach to this research was this work in Cullen House on the NE coast, an iconic 16<sup>th</sup> century painted ceiling from the Scottish Renaissance that had been destroyed in a fire in the late 20<sup>th</sup> century. We inflected our question to address: How might contemporary art address the loss of such significant Scottish heritage?

Helen and Newton's response to our presentation of this work was unexpected. It was the morning after the presentation. Helen and Newton stood at the end of a dark wood breakfast table of considerable length. Newton, far from stressing the conceptual nature of their work, pointedly told us how he had classical skills of art making, both in producing abstract painting and through his teaching of Josef Albers' colour theory at Yale, as well as in sculpture, having been apprenticed to the celebrated sculptor Michael Lantz, and then undertaking commissions in figurative work.



Newton Harrison with his sculpture entitled 'Blanche', 2022 (courtesy of the Newton and Helen Family Trust)

Helen complemented and expanded Newton's story, by exploring her interest in early literature, in particular Geoffrey Chaucer, the 14<sup>th</sup> Century English poet, as a major influence. What had struck her was the way that Chaucer had developed the English language as a literary language for everyone, when French at the time was formally the language of 'high art'. Chaucer had harnessed the power of plain speech to subvert, and question received values. We experience this influence particularly in the end of *The Lagoon Cycle*, currently on exhibition at the Center for the Arts at Escondido, in this resonant passage that Helen always read



*Book of the Lagoons, Seventh Lagoon* 1985 (detail)

*And in this new beginning  
This continuously rebeginning  
Will you feed me when my lands can no longer produce  
And will I house you  
When your lands are covered in water  
And together  
Will we withdraw  
As the waters rise?*

Lagoon Cycle catalogue, Seventh Lagoon p.96<sup>v</sup>

These eight short lines and two deceptively simple questions capture in one moment the forms, the deep threat *and* opportunity, that climate induced human migration might take, here explored in the context of sea level rise. The slide shows a map of a probable world where all the ice has melted, and sea level has risen 300ft. It ends a 360 foot mural in 60 parts, developed at the scale of the human body, each part carefully judged visually to complement an epic story that follows their journey of researching a particular species of crab, *Scylla Serrata*. The combining of media, of text and image, on this grand scale carefully distils ten years of their shared experience into a single epic poem *and* predicts one of the greatest political challenges of our time, migration brought about through environmental change.

The conversation in 2005, no more than 15-20 minutes, was clearly pointing us to their love of, deep understanding, and considerable mastery of the traditions of art as the underpinning to their way of thinking and creating work. But there was more to it. What seemed to interest them in particular about the Cullen ceiling was its function, in the tradition of 16<sup>th</sup> century Scottish emblematic painting, of creating ideographic images and text, that 'spoke' to their audiences, provoking us as audiences to reflect and interpret, to make meaning by experiencing the work. They saw a clear connection between this historic work and the form and function of their own work as art.

In this keynote we want to explore why it is important to understand the Harrisons' work from the perspective of art. They often encouraged others to evaluate this work in terms of its relevance to landscape or urban planning, turning our attention to focus on ecological ideas and experiences and away from the art. However, we see more and more people turning their attention to environmental issues, not least younger artists and audiences. Ceci asked her students to frame questions in response to the exhibition at the Mandeville gallery – there are two pages of significant and relevant questions, one of which is

[Chris reads]



*How do we stay hopeful with these idealistic and speculative solutions the Harrisons have proposed when there is so much existential dread currently?*

We as artists need to understand in what ways we are part of this discourse on art and the environment to know how to craft our own practices and build on that tradition. We believe this is one of the finest examples to learn from. It is also important to audiences not least because the Harrisons' art makes demands upon us as audiences. Like the Cullen Ceiling, we are invited into an experience, to take the time with the work, to interpret what is gifted to us through it. It is through active participation that the work can become meaningful.

In our analysis we draw on the writer Italo Calvino's *Six Memos for the Next Millenium* 1985<sup>vi</sup>. He too is concerned with what it is about art that matters. We have therefore worked with his thinking as an appropriate guide to analysing the Harrisons' work in terms of themes he chose to analyse his own work '**lightness, quickness, exactitude, visibility and multiplicity**'. Calvino died before completing the sixth memo, '**consistency**'.

[Chris]

### **GHB Albers/boundaries**

Calvino's articulation of multiplicity is framed by the assumption that the writer, the artist, is faced with the incomprehensible complexity of the world and the multiple ways of knowing it, which have become dominated by scientism. He isn't against scientific ways of knowing, but he is interested in the multiplicity of ways, and how writers have worked with and developed their own ways of knowing and being with complexity. He is interested in ambitiousness and failure. He in particular says "Only if poets and writers set themselves tasks that no one else dares imagine will literature continue to have a function." (p112)

Following the Darwin Symposium David Haley secured funding for Helen and Newton to visit various locations in the UK to do lectures. At the Symposium as I remember it David had asked Helen and Newton at the end of their keynote "What is the important thing to do here?" They said they would focus on the rising of the waters looking at mainland Britain as one ecosystem under stress from climate change. David then secured some funds which enabled a programme of further lectures and workshops in locations across Britain – in Scotland they spoke at Robert Gordon University in Aberdeen, and they also visited Ayr where I live. Somewhere towards the end of that process we discovered that the UK Government's Department of Food and Rural Affairs had a grant opportunity open for projects to raise climate awareness and motivate climate mitigation. We wrote a blue-sky proposal for a very large sum of money to enable people to see the impact of sea level rise

on the places they lived. For those of you who have seen the exhibition in the library, the idea was the same as putting a map on the floor, although in this case it was a topo model onto which sea level rise was projected



Helen Mayer Harrison and Newton Harrison, *Greenhouse Britain: Losing Ground, Gaining Wisdom*, 2008, Courtesy of Ronald Feldman Gallery

*Anne comments: What was memorable for me about the work, astonishing in fact, was the sheer simplicity of expressing phases of sea level rise in 2-meter intervals by varying intensities of light.*

The process was typical in terms of giving lectures to build a network, thinking at a scale that others were not, but also challenging assumptions and existing frameworks. I remember that we were in the process of developing the physical elements of the exhibition and a Civil Servant pointed out that the environment was a devolved issue and that therefore the model of the island of Britain should not include Scotland or Wales because the funding was for projects in England! Luckily, they didn't insist... That wasn't the only point where we ran up against framings – the Civil Servants were very clear that the scheme was intended to promote mitigation actions, and actually *Greenhouse Britain* is focused on adaptation. The work talked about low carbon in landscape terms rather than people changing light bulbs or using more efficient transport.

Helen and Newton were completely clear that the urgency was to think about adaptation to climate change and only two years later they wrote the Manifesto for the 21<sup>st</sup> Century

[Anne reads]

*We, of the Harrison Studio assert  
As do others somewhat differently  
That the Force Majeure, framed ecologically  
Enacts in physical terms outcomes on the ground  
Everything we have created in the global landscape  
Bringing together the conditions that have accelerated global warming  
Acting in concert  
With the massive industrial processes of extraction, production and consumption  
That have subtracted forests and depleted top soil  
Profoundly reduced ocean productivity  
While creating a vast chemical outpouring into the atmosphere  
Onto the lands and within the waters  
That altogether comprise this Force Majeure*

[Chris reads]

They continued

*The counterforce we envision will permit  
A culturally generated acceleration of adaptation behaviors at great scale  
Operating at a parallel rate to the climate forcing generated by human activity  
setting the stage for adapting strategies that will assist the migration of our own  
species  
And those who are not ourselves  
Who are co-equally endangered by the threat of mass extinction  
Into zones of greater safety  
Tuning to and over time in concert with the Force Majeure  
(From the Manifesto in the CIWEM Publication)*

This was the time when Helen and Newton were putting together the Center for the Study of the Force Majeure which has become the focus of ongoing work. Just as many of their works have intergenerational timescales, so the Center is an intergenerational entity. The Force Majeure refers to the legal term for a 'get out' clause - something beyond everyone's control. Here it is appropriated and flipped to mean the out-of-control processes that we have set in train ourselves, but to which we can now only adapt. As Ruth Wallen, artist and colleague of

the Harrisons, pointed out, it also indicates that the 'contract' of modernity, of progress and control, is broken.

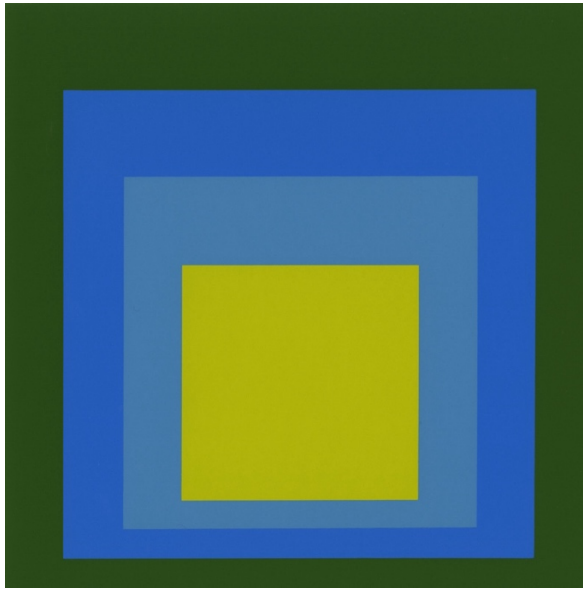
But I want to go back to a couple of incidents during the many train journeys across the UK as we developed Greenhouse Britain. Somewhere in that process the conversation touched on systems and in particular systems aesthetics and the writings of Jack Burnham. Jack Burnham coined the term systems aesthetics in the late 1960s in seeking to articulate what was being made to matter by artists like Hans Haacke and Les Levine, and in due course by the Harrisons. I'm not going to go into the background to systems thinking and the way systems became a cultural trope in the period but suffice to say in the arts the concern with systems finds its most significant manifestation in institutional critique. However, Burnham's conception is equally applicable to ecological art approaches, and particularly the Harrisons.

But I need to start somewhere else – during one of these journeys Gabriel Harrison who was designing the exhibition related this anecdote – the wall hangings, the maps, had arrived from the printers and were in the studio. Newton was mixing paint. Gabe described the colour Newton was mixing as sort of hospital green. Everyone thought it was horrible, but when Newton applied it to the border of the wall hangings, everyone was astounded how right it was.

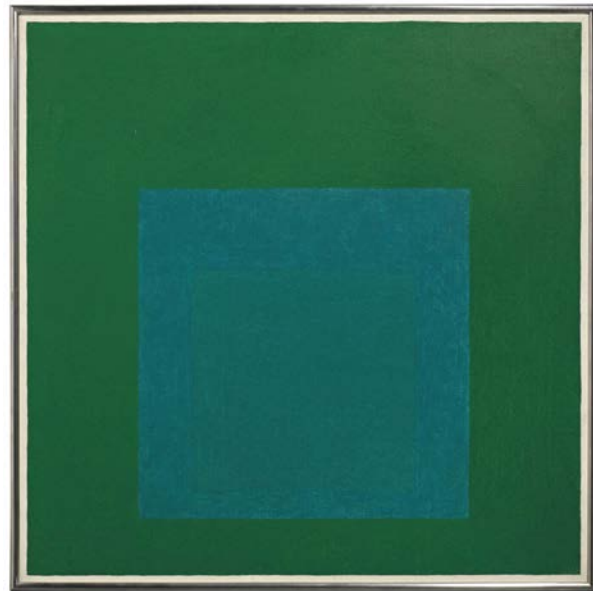


Helen Mayer Harrison and Newton Harrison, *Greenhouse Britain: Losing Ground, Gaining Wisdom*, 2008 (courtesy of Newton and Helen Family Trust)

And of course it was right because Newton understood the power of colour. With Helen's help he had studied Joseph Albers' Colour Theory to be able to secure a Teaching Assistant position whilst he was doing his MFA at Yale. Albers had recently retired but his colour theory was still part of the curriculum.



Josef Albers, *Homage to the Square*, 1972  
screenprint 38.1x50.8cm



Josef Albers, *Homage to the Square Cool Rising*, 1963, oil on masonite, 76 x 76 cms

Margit Rowell, Curator at the Guggenheim, Pompidou Centre and MoMA, explained in 1972 the way we can see Albers' Colour Theory through his *Homage to the Square* works. She says "Albers promotes the visual interaction of color and space which occurs *at the passage* from one to the other" drawing attention to the way that "The activity at this boundary is never the same. It allows a sharp *or* a fluid transition."

She goes on to say, sometimes "the passages are barely perceptible, the angles no longer prominent, and the horizontals and verticals appear to waver. The whole configuration dissolves into indeterminate form. In other cases, however, radical contrasts of hues, ... draw attention to the edges as the "hot points" of activity ..."<sup>vii</sup>

The Harrisons talk about boundaries, edges, and the field of play in various places always in reference to painting but at a different scale. They also talk about boundaries and images as temporary saying

[Anne reads]

*Nature, the life web in its entirety, appeared interactive, interdependent, mutually evolving and, therefore, in various degrees indeterminate and frameable only in a narrow way. As a result, any central images that appeared seemed to exist for only a moment and thereafter to fade back into a pattern of moments grouped within moments.* From There to Here 2011

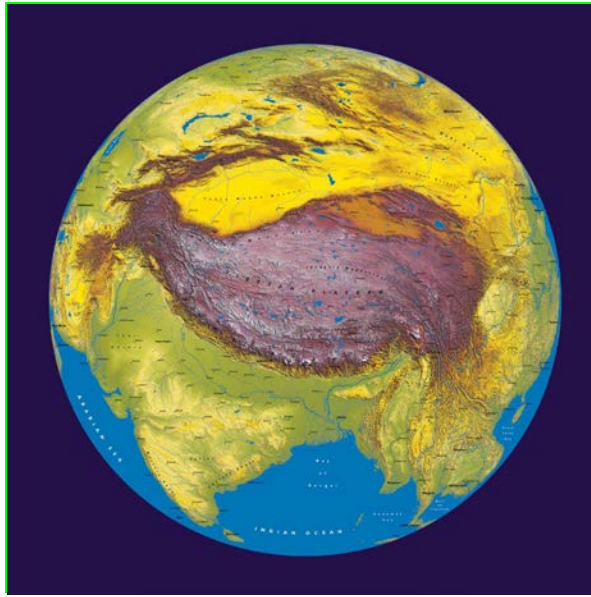
Burnham's conception of a systems aesthetic helps us to see that the Harrisons' poetics, their attention to boundaries, is deeply informed by what they understood about colour from Albers' experiments. Their conception of boundaries, such a key idea in systems thinking, is related to their understanding of image making.

In systems literature the boundary of a system is what distinguishes it from its environment. It's an essential part of being able to think holistically about complexity.

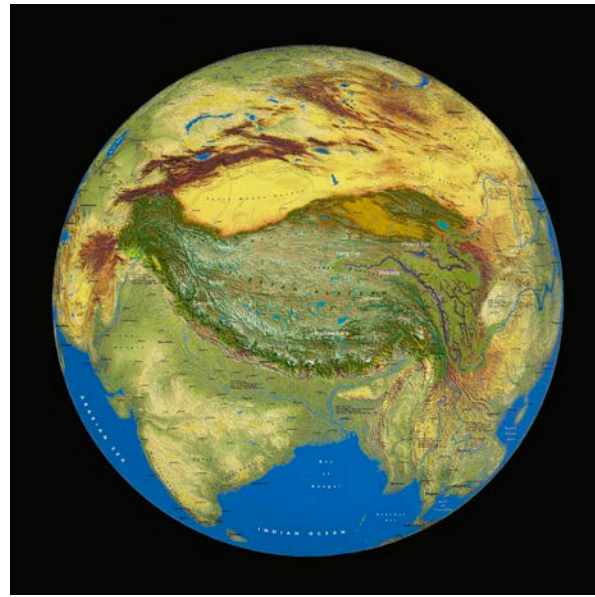
Every one of the Harrisons' works evokes a boundary, focusing on an ecological boundary rather than a human one. In this case the boundary is of the high ground of Tibet, though the national border is removed and the mountain mass emphasised.

Every work narrates how the Harrisons came to understand and conceive of that boundary, edge, or the central image.

When they say that the central image appears to only exist for a moment (which for the Harrisons might be a 10 year moment), it is entirely informed by those words that Rowell uses – remember she says “The activity at this boundary is never the same.” She highlights “the interaction in the passage from one to the other” which for the Harrisons is between figure and ground or between elements in the figure. She says “in some cases the change is barely perceptible – but equally “edges can be ‘hot points’ of activity”.



Helen Mayer Harrison and Newton Harrison, *Tibet is the High Ground*, 1993, Courtesy of the Newton and Helen Harrison Family Trust



Helen Mayer Harrison and Newton Harrison, *Tibet is the High Ground*, 1993, Courtesy of the Newton and Helen Harrison Family Trust

The difference between the two Tibet images is two futures, one where the glaciers melt and the mountains become bare, and the other where we work with biodiversity to encourage the emergence of novel ecosystems.

The obviousness of the relationship with Albers is sometimes very evident through specific uses of colour as with the Tibet work and sometimes not so explicitly based in colour interactions, but the approach to edges and boundaries is as Rowell characterises. In Greenhouse Britain the colour relationship between land and sea is made animate in the model – the ‘hot point’ is the redrawing of the boundary, the edge of the country, by the rising of the seas. The animation of the boundary draws attention to the pattern of life that is affected. In this case where the conventional description above is that the boundary is what distinguishes the system from its environment, the challenge of sea level rise is the changing of the edge in the most literal sense, “all over, altogether, all at once” as it says in *The Lagoon Cycle*.

One of the challenges of multiplicity Calvino talks about is representing, “without in the least diminishing the complexity of the world, ... the simultaneous presence of the most disparate elements that converge to determine every event.” (2009, 106)

[Anne] **A new form of practice**

Before exploring the second work, *On the Deep Wealth of this Nation Scotland*, we want to outline the extraordinary event that is the Harrisons shared practice.

It begins with a commitment voiced in 1969-1970

to do no work that did not in some way look at ecosystemic well-being.

*From There to Here* (2001)

We have often described this early commitment as a compass which helped them steer the course of their whole career. 'Compass' is an interesting metaphor. Set to the 'givens' of magnetic north, south, then east and west, a compass helps us to navigate across land, sea, and air, to align what we find in experience with knowledge to date in the form of maps, logs and so on. It helps us to establish a shape to the Earth. For the Harrisons this compass worked between their inner and outer worlds, a tool through which they came to 'own' in a sense the problematics of environmental devastation through their experiences of particular places and projects. It enabled them to orientate the reality out there with the creativity within, with a degree of freedom and mobility. Through this commitment they were free to deviate from institutional practices of art and of science, free to refuse to be trapped in habits of thought anchored in particular places and belief systems, while recognizing that each occasion of experience, each opportunity required their careful judgment, responsive to the circumstances at hand. In the early 1970s this commitment entailed creating a single practice drawing together two very different experiences: as sculptor and as educator and poet. To quote Helen

[Chris reads]

One of us—who had been an artist from early adolescence on—had to change completely to do this. The other of us—who had been a lifelong teacher, researcher, educational philosopher, and student of psychology and literature—had to change completely to do this. We were convinced that neither of us had the capability to become ecosystemically empowered without help, encouragement, and dramatically different talents, experience, and tolerance for ambiguity of the other. We began to imagine that there was a third party, a unique co-creator, and that we were assistants to this entity—the real artist, visible only to us...

We were teaching each other to be each other, but not completely each other.

(Harrison and Harrison, 53)



In an interview of 1980-81 being shown as part of several of the exhibitions they trace very clearly how this practice congresses out of their very different creative personalities. Helen clearly states that it is always harder for a woman to be taken seriously, that it takes twice as much energy, twice as much effort to be heard. She alludes to the kinds of prejudices there are against strong women.

Newton responds that the work would not be possible without their having established what he describes as 'common ground' – he says the work could not be done by one person, the convergence of different kinds of play and the interweaving of different sensibilities creates the common ground.

### **Context**

The practice emerges in a volatile, rapidly changing world. The environmental crisis is one of four momentous changes in 20<sup>th</sup> century in which they were born, Helen 1927 and Newton 1932. In the mid 20<sup>th</sup> century, Hannah Arendt<sup>viii</sup> (1906-1975), the political theorist, described these four events in combination as a moment in human history of irreversible change: the splitting of the atom in 1938 that, in an unprecedented relation of science to politics, led to the creation of the atomic bomb; secondly, the rise of totalitarianism and its seeking of absolute control over other human beings; thirdly, the Holocaust (1933-45) and its treatment of human beings as superfluous; and fourthly, the emergent environmental crisis that had begun 500 years before with industrialisation and capitalist economics. All four events became possible through massive developments in science and technology that, while producing considerable benefits, did so in a way that alienated humans as individuals from their Earth. While man has always acted into nature -all living creatures do so- the 20<sup>th</sup> century, had predominantly witnessed a step change in which human action can now destroy planetary life in a mass extinction event. In the process the sciences as an economic force have become reified and the arts reduced to entertainment.

**And yet despite the image of bleakness and overwhelming scale of the issues**, when we experience the Harrisons' work, this is not the sensibility that we are left with. Their work is, in fact, a profound experience of hope, drawn out of their encounters and learning about the environment in real places with people who could best inform them.

### **How do they achieve this sensibility?**

I want to come at this question of how they achieved this sensibility through the experience of a late Harrison work, 2017-onwards, entitled *On the Deep Wealth of This Nation, Scotland*. While the story of its development is a very interesting one, I would like to focus on what I experience, what I learn from it as an interlocutor in the presence of the work, much in

the way I would have experienced the Cullen Ceiling and in what sense this is an experience of art and aesthetics.

It is also important to note here that Helen died during this project in April 2018 though we felt that she was present throughout its development. That slips off the tongue easily – but in the weeks being involved in its developments, we felt at every point the common ground that they emphasise in the 1980-81 interview.

***On the Deep Wealth of this Nation, Scotland 2017***

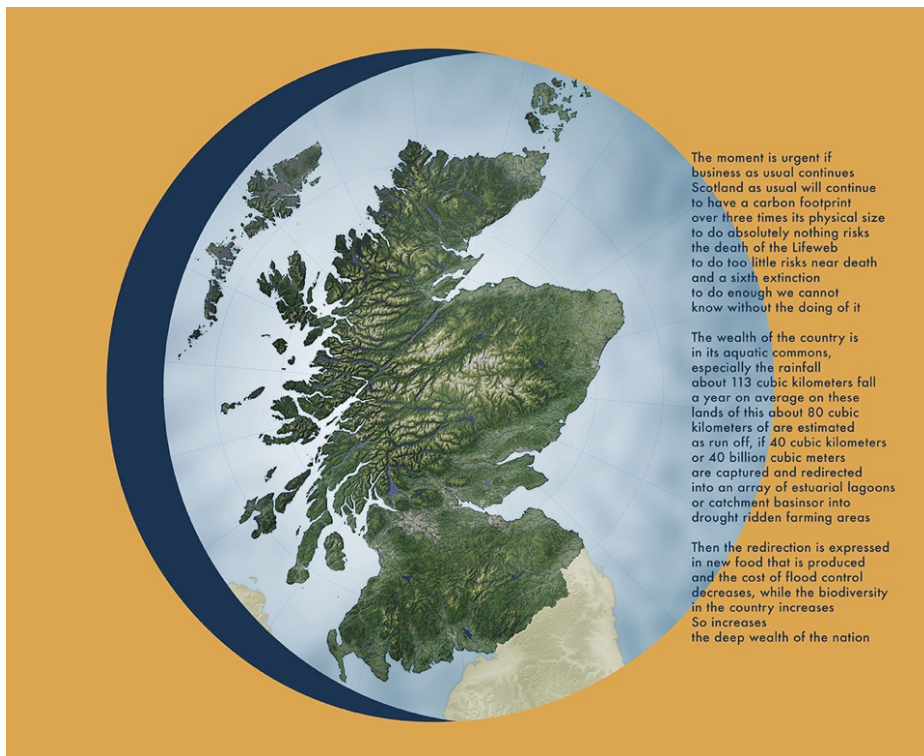
What I see is five images centring the map of Scotland. The map is repeated, each iteration subtly manipulated in colour and tone in the way Chris has described with Albers and the Tibet works, to focus a specific aspect of Scotland's natural commons:



soil



air and forests



water



collective responsibility

*On the Deep Wealth of this Nation, Scotland 2017*

The images are incisive, to the point. The text accompanying each 'map' has the same quality of exactitude, a quality that Calvino notes, is necessitated by lightness. It forms a poem that posits that Scotland could become the first industrialised nation to give back more to the web of life that it takes.

A number of thoughts come to my mind: Scotland *is* an industrialised nation thanks to Adam Smith (1723-1790), the eighteenth century Scottish moral philosopher and political economist. Smith arguably founded capitalist economics in his influential book, *An Inquiry into the Nature and Causes of the Wealth Of Nations* (1776)<sup>ix</sup>. In Scotland we are quite proud of him! *On The Deep Wealth* makes a direct reference to his work, 'wealth' and 'nation' specified as 'deep wealth' and 'this nation, Scotland'. In ten short lines within the first map image, the work *declaims* a vision that turns Scotland's successful industrial past about face to an ecologically focused future.

*On The Deep Wealth* opens with a bold statement of a possible present, if certain conditions are met.



Scotland becomes the first  
country in the history  
of countries  
to intentionally give back  
more to the life web  
than it consumes  
when the deep wealth  
of the country is understood  
to be in part a vast commons  
the topsoil as vital

The wealth becomes  
magnified when the topsoil is  
attended to, beginning by  
transforming all organic  
waste into humus  
and continuing the  
regenerating of carbon in  
the topsoil mat while banning  
all inorganic fertilizer  
under these conditions highly  
productive farmlands  
increase in size by  
10% or more as does the  
production of food, so to,  
does the deep wealth  
of the nation

*On the Deep Wealth of this Nation, Scotland 2017*

[Chris reads]

**Scotland becomes the first** (author's emphasis)

country in the history

of countries

to intentionally give back

more to the life web

than it consumes

**when the deep wealth**

**of the country is understood**

**to be in part a vast commons [stop]**

**the topsoil is vital**

The tone is one of laconic disinterestedness, matter of fact. The concept links natural resources of available soil, clean air, ample forests and a relatively low population with the potential of people to arrive at a 'commons of mind', defined as 'a shared understanding and collective responsibility for the well working of the life web'. I was not quite expecting that a **500-year 'success' story** from the Scottish Enlightenment that has admittedly pitted individual against individual in cultures of competitiveness, would be thoroughly disrupted in a **five-minute narrative** of image and text. The stark simplicity and directness with which the provocation unfolds evokes its opposite, raising questions of enormous scale, complexity

and weight in terms of how such a vision could possibly be implemented, and why it mattered to do so.

I notice that the work is not *an attack* on Smith's thinking. It is a dialogue with the ideas. I need to remind myself of how Smith reimagined the division of labour in ways that would open individual agency and human potential for every citizen, not just a ruling class; how he argued for the freedom to trade across borders in the development of a more equitable society; how he had recognized the need for forms of governance that would offer protections to citizens (through his earlier text [\*The Theory of Moral Sentiments\*](#) (1759)<sup>x</sup>) and how the wealth of a nation would no longer be measured in quantity of gold and silver. Up to this point I feel the Harrisons and Smith are fellow spirits. But then they dramatically part company on what 'wealth' might actually mean. Where Smith proposed that a nation's wealth be measured by production and commerce, *On The Deep Wealth* proposes care for the natural resources that through care, become a source of abundance where the surplus of that abundance could be traded.

[Chris reads]

When the wealth of the Scottish  
nation becomes great enough  
to trade for what it cannot produce  
And this wealth springs from the  
life web in such a way  
that the web's overproduction is  
harvested the harvest preserves  
and can even enhance the system  
... its deep wealth  
[becomes] ecologically tuned to the original  
peoples' life ways and the delusion  
of an invisible hand disappears

The 'invisible hand' is Smith's notion that self-interestedness can often unexpectedly and unintentionally act in the public interest.

The maps are painstakingly drawn and redrawn to show in a glance and with an exacting degree of accuracy, the distribution and presence of each element within Scotland. The text complements the image by carefully tracing the vital relations through which natural elements sustain life itself. This is not a technical explanation but a form of drawing not unlike the Surrealist game of 'Consequences' in which a mark here connects with another

unlike it and in that relation creates a spark, an unexpected form and meaning that is palpably different from the scientist analysing vast bodies of data.

I become aware that these interdependencies, crucial to the furthering of planetary life, have become not only invisible in industrial forms of production, but also 'unimportant' in the deification of 'productivity'. *On The Deep Wealth* traces the dynamic relations between natural elements including humans in everyday language, in a *re-visioning* of value by appealing to my 'common sense', as both something that makes sense and that is shared.

The second phase of the work presents me with four more 'inserts' that unpack the commons through practices close to Scottish culture, including foraging, forestry, agriculture, and fishing: The foraging inset draws on Forestry Commission research that indicates one fifth of the population forages. This inset tests my threshold of plausibility by proposing that the foragers, whose activity tends not to be social, self-organise and form a voting block championing environmental issues in the Scottish/UK Parliament.



Insert 1: Foraging. *On The Deep Wealth* of this Nation Scotland 2017

[Chris reads]

It is a complex commons with an appearance of simplicity  
only now beginning to understand itself as a commons  
It is the commons of the people who forage  
It is a powerful commons not knowing its own power  
Then as in any political entity leadership can emerge and guide  
with the monocultural mind and mindset and behaviours  
slowly fading into the compost of history

I know that foragers in Scotland do not necessarily husband the plants as happens in indigenous practices. They protect sites and gather. Nonetheless I enjoy their unlikely role in the quiet, picaresque composting of industrial economics...

**Speak to Prince Charles (now the King)! he said. 'He is interested in the environment'**, ask him to supply an area of 2-300 hectares and make this possible! We did indeed try to garner the King's interest, somehow feeling free and bold enough to challenge what we had previously assumed to be audacious.

Revisiting *On the Deep Wealth*, I start to notice *how* the environmental crisis is reported to me every day, relentless and disempowering.

### Earth's 'vital signs' show humanity's future in balance, say climate experts

Record emissions, temperatures and population mean more scientists are looking into possibility of societal collapse, report says



■ The report says Earth is entering a 'critical and unpredictable new phase of the climate crisis'. Photograph: EPA

Many of Earth's "vital signs" have hit record extremes, indicating that "the future of humanity hangs in the balance", a group of the world's most senior climate experts have said.

The Guardian 8.10.2024



I am not left with the emotional resources or ideas that would enable me to respond to a report such as this. In contrast I experience *On the Deep Wealth* with puzzlement, scepticism, enjoying the absurdity of some of its proposals, because I am situated in the work, as an individual in the world, sensitive to its colours, sounds, images and rhythms and invited to engage, participate and to think for myself.

[Chris]



*Greenhouse Britain: Losing Ground, Gaining Wisdom* Reviewing initial sea level rise maps at the Arnolfini Gallery, Bristol, England.

From left: Tom Trevor (Director), Newton Harrison, Martin Clarke (Curator), Helen Mayer Harrison, Chris Fremantle (2006)

Picking up on another of Calvino's characteristics of art, his discussion of 'exactitude' is also useful in linking as it does the presentation of the "tangible" with the "abstract". Talking of his own book *Invisible Cities*, Calvino makes an important observation,

...every concept and every value turns out to be double – even exactitude.

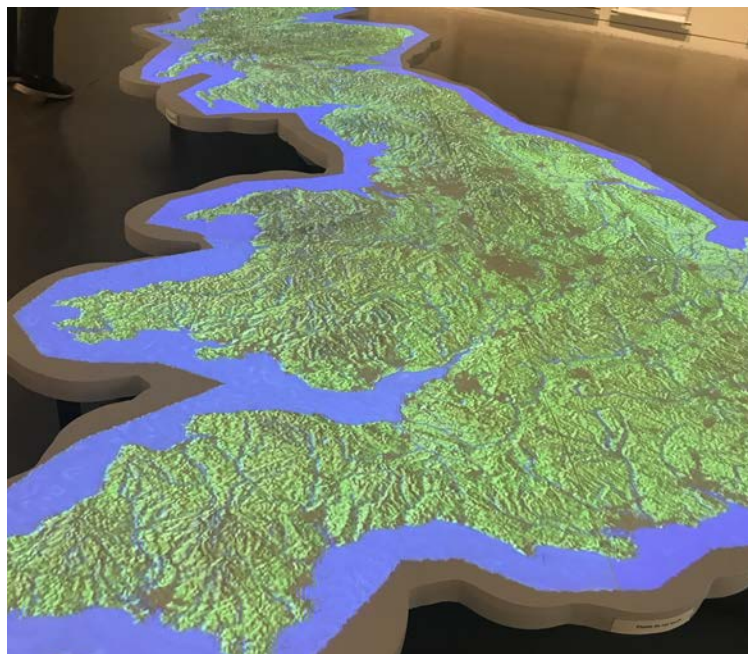
He goes on to explain this by saying

...my search for exactitude was branching out in two directions: on the one side, the reduction of secondary events to abstract patterns according to which one can carry out operations and demonstrate theorems; and on the other, the effort made by words to present the tangible aspect of things as precisely as possible.

This doubleness, of attention to the tangible aspects of things precisely, but also the 'reduction' of 'secondary events' to abstract patterns in order that we can do things and theorise, the both/and that Calvino articulates here, is a useful lens by which to think about what 'exactitude' might mean in the Harrisons' works.

Returning to *Greenhouse Britain*, I remember receiving a very large tube at home in Ayr which I then had to carry around Britain as we were developing the project. It contained three versions of the same map of the island – the difference was sea level rise at increments of 5 metres, 10 metres and 15 metres. These maps were made by French Cartographers Act Image who worked with the Harrisons over a very long period. We took the maps to meetings and unrolled them on floors and tables.

In due course these maps were superseded by data generated for the project by a Research Assistant working for Professor Paul Nichols, the Coastal Defence Lead Researcher at the UK's Tyndall Centre for Climate Change Research. The data they produced modelled the impact of high tides and storm surges at 2m intervals. This was the data that was projected onto the topographical model.



Helen Mayer Harrison and Newton Harrison, *Greenhouse Britain: Losing Ground, Gaining Wisdom* detail, 2008

As the projection shifted to the next increment, the audio said, “Looking at the 2m rise...”, “Looking at the 4m rise...”, “Looking at the 6m rise...” The exactitude of the scientific data is used to create rhythm in the text. Where there is less exactitude is in the associated timescales. The audio says things like “this alone can cause an ocean rise / of up to 7 metres in 300 years or less” in relation to the breakup of the Greenland Ice Sheet. In another place the audio says “some models predict / an ocean rise of only 1 metre / or less / in a hundred years”. The text doesn’t use the language of ‘confidence’ developed by the IPCC to discuss likelihood of particular outcomes. Rather it characterises the uncertainty through juxtaposition of different points of view.

Woven through this we have the tangible aspects. There are multiple forms of this tangibility: maps on floors that you can walk on; the collages of photos of recognisable everyday scenes (and this is why the images are always everyday because they want the doubleness of the ecological pattern with the tangible aspects of everyday).

In the audio over the model there is a recurrent motif of discovery “...we examined...” “...and somebody said...” “...botanists studying...” “...we did a study...”. This is complemented by another rhyming device in the form of questions which also invite the listener into the debate. In Greenhouse Britain the question “...will it be enough...?” and “...would it be enough...?” recurs 12 times in a text of perhaps 1400 words.

Holding the tension between the pattern of sea level rise literally happening before your eyes on the model and the narrative which starts

[Anne reads]

And for this island  
which is a much-loved place

[Chris reads]

The news is not good  
and is getting worse

And yet the work is not ‘hopeless’ but rather, through offering ways to join in thinking and tracing the process of developing understanding about sea level rise, actually engenders hope, provides the emotional resources to engage. Throughout the development of the project and tour at meetings and lectures, Helen would bring the conversation back to the really important point by reading from the end of *The Lagoon Cycle*, the passage we read earlier ending

[Anne]

*Will you feed me when my lands can no longer produce  
And will I house you  
When your lands are covered in water  
And together  
Will we withdraw  
As the waters rise?*

The holding of the various tensions characterised by “would it be enough”, captured by Calvino in his framing of exactitude, enables a shift of perspective away from solutions and towards a different way of thinking. The work is a work on adaptation, and it concludes with a reframing, one which puts change, and the question of how we respond to change, as the critical point.

[Anne reads]

Finally understanding  
that the news  
is neither good nor bad  
it is simply that great differences are upon us  
that great changes are upon us as a culture  
and great changes are  
upon all planetary life systems  
and the news is about how we meet these changes  
and are transformed by them  
or  
in turn  
transform them

### **Imagination**

Calvino, as a 20<sup>th</sup> century artist who was also very interested in science, asks what kind of imagination is at work in literature and offers three options

Imagination as an instrument of knowledge, co-exists with science

Imagination as communication with the ‘world soul’

Imagination as a repertory of what is potential, hypothetical, of what does not exist, might never exist or might have existed.

We might ask what kind of imagination the Harrisons' work brings to bear on the issues of environmental change, and it becomes clear that all three kinds are at work.

### **As an instrument of knowledge, co-existing with science**

They frequently use mathematical calculation such as Chris mentioned in Greenhouse Britain. Early in their career they undertook quasi scientific experiments, and there are still ongoing experiments ongoing in the Future Gardens at times funded from scientific sources – and there is a panel on Saturday at Mandeville focusing on these works. They expose problems with the scientific scheme itself, particularly where it becomes fragmented either by disciplines overspecialising or research being in service of economic interests.

### **As communication with the 'world soul'**

We also encounter imagination in terms of sharing a 'world soul'. This might be characterised by the Harrisons' 'every place is a story of its own becoming". This version is a form of consciousness and a practice that requires to be re-created again and again if humanity is to survive. In *On the Deep Wealth*, for example, one of the inserts evokes elders that are ancient trees from a warmer period with whom we can converse and seek guidance.

### **As a repertory of what is potential**

We also encounter imagination as a repertory of hypothetical scenarios such as the absurdity of foragers in *On the Deep Wealth* as a voting block, or in Greenhouse Britain the repetition of "would it be enough...".

In our book, we reached into the philosophy of science (Latour/Stengers/Whitehead) because we observed they were asking the kinds of questions that the Harrisons were asking. As scientists, they were looking to the arts for support. Although we wrote more on Stengers and Whitehead, Latour provided us with three important ideas.

- His articulation that scientists should seek more than popularisation and ornamentation from the arts is very pertinent to our context and moment in time.
- He describes the environmental crisis as an intrusion into our assumptions into the world we construct in our ideas and cultures.
- He discusses the contradictions and emotional challenge of the intrusion and suggests that the arts have a role in dealing with this.

In this keynote, we have tried to explore the characteristics of the Harrisons arts practice that is fit for this purpose, the way it interrupts the sense of enormity and speed of the problem with disarming simplicity, clear and incisive questions, expressed through visual and verbal images, carefully chosen, direct language. This counters the story we tell ourselves in

everyday life that is formless, random, confused, rife with misinformation and fear. We need to be prepared to ask ourselves, **What do we fear?** Or to borrow from the Harrisons, **'What do we have to do with the world? And What has the world to do with us?'**

Thank you

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<sup>i</sup> Douglas, Anne, and Chris Fremantle. 2024. *Thinking with the Harrisons: Rethinking the Arts in the Global Environmental Crisis*. Leuven: University of Leuven Press

<sup>ii</sup> *The Lagoon Cycle* (1975-85), Centre national d'art et de culture Georges-Pompidou, Paris

<sup>iii</sup> Geffen, Amara; Rosenthal, Ann; Fremantle, Chris and Rahmani, Aviva. (eds). 2022. *Ecoart in Action: Activities, Case Studies and Provocations for Classroom and Community* New York: New Village Press

<sup>iv</sup> Douglas, Anne. 2004. *Celestial Ceiling: contemporary art, built heritage and patronage*. Aberdeen: Robert Gordon University

<sup>v</sup> Harrison, Helen Mayer, and Newton Harrison. 1985. *The Lagoon Cycle*. Ithaca, New York: Herbert Johnson Museum of Art, Cornell University

<sup>vi</sup> Calvino, Italo. 2009. *Six Memos for the Next Millenium*. London: Penguin Classics

<sup>vii</sup> Rowell, Margit 1972 On Albers' Color, *ArtForum*, 10, 5. <https://www.artforum.com/features/on-albers-color-210147/>

<sup>viii</sup> Arendt, Hannah. 2006. *Between Past and Future*. New York: Penguin Books

<sup>ix</sup> Smith, Adam. 1776. *An Inquiry into the Nature and Causes of the Wealth of Nations*.

<sup>x</sup> Smith, Adam. 1759. *The Theory of Moral Sentiments*