

ART & INNOVATION

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EXHIBITIONS
SAINSBURY CENTRE
for Visual Arts



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PREFACE

PROFESSOR EDWARD ACTON
VICE CHANCELLOR,
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The University context for the whole project was a crucial element both in its distinctiveness and its ambition. The whole team involved was working in an atmosphere of understanding of the relationships between blue-skies thinking and public engagement. The University context raised the game in terms of establishing the project as an area of enquiry, valuing the research practice and process.



VISION AND CONTEXT

DR JOHN FRENCH, INCROPS

In essence, InCrops is a huge experiment to try and stimulate much more innovation in businesses — and from there to encourage them to be much more active in bio-economy, and more open-minded about the use of renewables and the things that they can do.

The InCrops project covers a wide span of interest areas ranging from the more traditional areas like bio-energy and bio-fuels through to some much more challenging sectors like fashion, design and sustainability. It has a crossover with areas like art and design, as we are starting to look at innovation in the use of materials that have an impact on design; how designers use new materials; and how they are being affected by the unique qualities and properties of these materials. So, in a broad range of areas - anything from architecture through to natural materials used by artists - there is a huge range of opportunities that suddenly open up the ways in which we can start to explore the properties of these new materials. InCrops is really there to act as a catalyst, to get these things to happen. It's not working to any prescribed model. It's very much an experiment, and we don't really mind what comes out of it as long as businesses end up being more entrepreneurial - and in this instance if artists can latch onto some of opportunities associated with it.

The Sainsbury Centre for Visual Arts (SCVA) is a fabulous resource, and not only in terms of the nature of its collections, how it displays them and develops new ways of

interpreting the materials that it holds: it also throws out new ways of thinking. In that respect, the SCVA has a natural synergy with the work of InCrops, particularly in terms of the emergent rural and land-based area of common interest. Nevertheless, it does go further and deeper, and we find that many of the ideas that InCrops is engaging with now have been around for quite a long time. For instance, via the Sainsbury Centre's collection of contemporary furniture, you can trace the lineage of innovation in materials - of plywood, in this case - back to the 1930s, 40s and 50s.

“If we look at InCrops and climate change and art, some of the ways that artists have looked at natural materials as part of their toolkit have also led to some visible examples. For example, finding different ways of deploying woad has brought the whole concept of a dye crop into a different context.”

There has to be a value in the arts and sciences working together, therefore. From InCrops' perspective, I wouldn't say there is a distinction between the arts and sciences. Although the project has its origins very much in the technical sciences, in our work, it's very important that the arts and sciences collaborate when investigating the way people behave and how they think about things. Artists and scientists tend to be trained very differently, and consequently have different ways of perceiving, understanding and

expressing themselves. There are probably many different approaches to working across disciplines, and I wouldn't want to generalise, but for us, getting artists to look at the areas in which we have worked has revealed new paradigms and ways of thinking. And it has done so in ways that we wouldn't have predicted had we just worked with scientists, or those people that work in the technological industries, as they do tend to have a constrained way of looking at innovation, whereas artists have an unconstrained approach. Nevertheless, it is hard to gauge the success of InCrops because it depends on how you are measuring success. We have many indicators, such as the number of jobs created and companies supported. If you take a quantitative approach, then the impact has been quite substantial in terms of the businesses we support, especially small and medium enterprises and local companies in the grassroots environment of sustainability. At the small business and community level it has had a measurable impact, where it is more visible on the more high profile projects that have captured people's imagination with exciting outcomes. If we look at InCrops and climate change and art, some of the ways that artists have looked at natural materials as part of their toolkit have also led to some visible examples. For example, finding different ways of deploying woad has brought the whole concept of a dye crop into a different context. However, it is really far too soon to really assess where the biggest impact is really going to be, as InCrops only started in 2008. We have now finalised a funding package to build a low-carbon building of natural materials at the University of East Anglia, the first university building to be made



Without a doubt, the companies we support who interacted with the artists came to see their activities and the value of their own business processes from a completely different perspective, and all changed their approach as a result. Though some businesses may not initially have seen the experience as relevant, their reactions afterwards were the opposite thanks to the way in which the artists had encouraged them to think differently.

“Without a doubt, the companies we support who interacted with the artists came to see their activities and the value of their own business processes from a completely different perspective, and all changed their approach as a result.”

It is very hard for me to judge what the artists themselves have taken from the project. Having spoken to some of them, I think they have seen, at a very basic level, the huge scope around diversifying their use of materials and understanding the importance of the choices they have about the use of materials. A material which might be aesthetically pleasing may well be not so agreeable in terms of its ethics, origin or cultural context. Those factors, when you begin to consider them, can change the whole aesthetics of how an artist can express themselves. I am not an expert in artistic schools of thought, but I often think that an artist may miss an opportunity to substitute a material that is ethically sourced, has a green supply chain associated with it, a cultural community benefit or a story of legacy. We often see that opportunity wasted, and many of the artists in this project exemplify how this can be done. ●

incropsproject.co.uk

of natural materials, which will also provide an opportunity to showcase lots of the other things that are going on within the project.

The Art and Innovation project evolved from the initial recognition that university departments were exploring a cross-disciplinary project, but I think we joined this hoping we would be surprised by the outcomes we might get. Indeed, the findings of this piece of work were quite startling and were different in terms of the general approach, so this was, in a sense, an evolution

rather than a development, and although unforeseen it ended up exceeding expectations.

The strengths of the project included seeing businesses, scientists and artists working together and the energy of the people that were involved and the way they interacted. The conducive environment the SCVA brought to the project was crucial; and the artists themselves varied quite considerably in how they responded, so we saw quite a wide cross-section of activities. We could have had a greater number of

artists at work, and more businesses with the time to interact in order to develop innovation, but I wouldn't think of these things as weaknesses, more considerations and further opportunities for the future.

I hope that this project might lead to another which is more ambitious; and to more work with both these artists and others. Ideally, I would like to see some of the ideas generated leading to people starting up new companies, and contributing to existing businesses in their communities. There are quite a lot of

examples where this might happen in the future. We have just started a collaboration with Norwich University College of the Arts to get involved in architectural aspects of the new University of East Anglia building – specifically sustainable building and design. We have also collaborated with Kingston University on the ‘Sustainable Luxury’ project with MA Fashion students to create concepts and samples using bio-based and waste materials in fashion and design, and to work to

introduce these concepts to luxury, high-end fashion. We need to encourage these types of project.

We are running the new building project as a reflexive process. At each stage, we are going to be doing business support with companies from design through to execution. It's all about how you build the right teams, and what we have taken from this project is that a cross-disciplinary team is highly fertile and generates work that mono-disciplinary teams tend not to do.

INNOVATION AND IMPROVISATION

DR. VERONICA SEKULES

The relationship between the Sainsbury Centre and InCrops works at the fertile edge between two disciplines and two branches of an institution: broadly representing art and science, though each aspect can be much more finely differentiated.

For the Sainsbury Centre for Visual Arts, an art gallery, the collaboration offered an opportunity to extend its range and relevance into new areas. Every opportunity for us to use the resources of the gallery experimentally, to explore how art in its broadest sense can inspire people to view their environments differently, is welcome, and the relationship with InCrops promised to open up new ways to look at materials and making both from traditional and contemporary perspectives.

The specific framework for the Sainsbury Centre was its educational outreach project 'The Culture of the Countryside', subsidised by the Heritage Lottery Fund, which aimed, ultimately, to create greater understanding of local heritage by starting from our World Art collections in order to stimulate new

ideas, reflections, and revelations about similarities and differences with other cultures and ways of life. This work has resulted in a wide range of creative development projects with schools, communities, artists, creative educators, academics, students and volunteers, and we have been consistently interested in creating contemporary models of how heritage might be interpreted or indeed transformed.

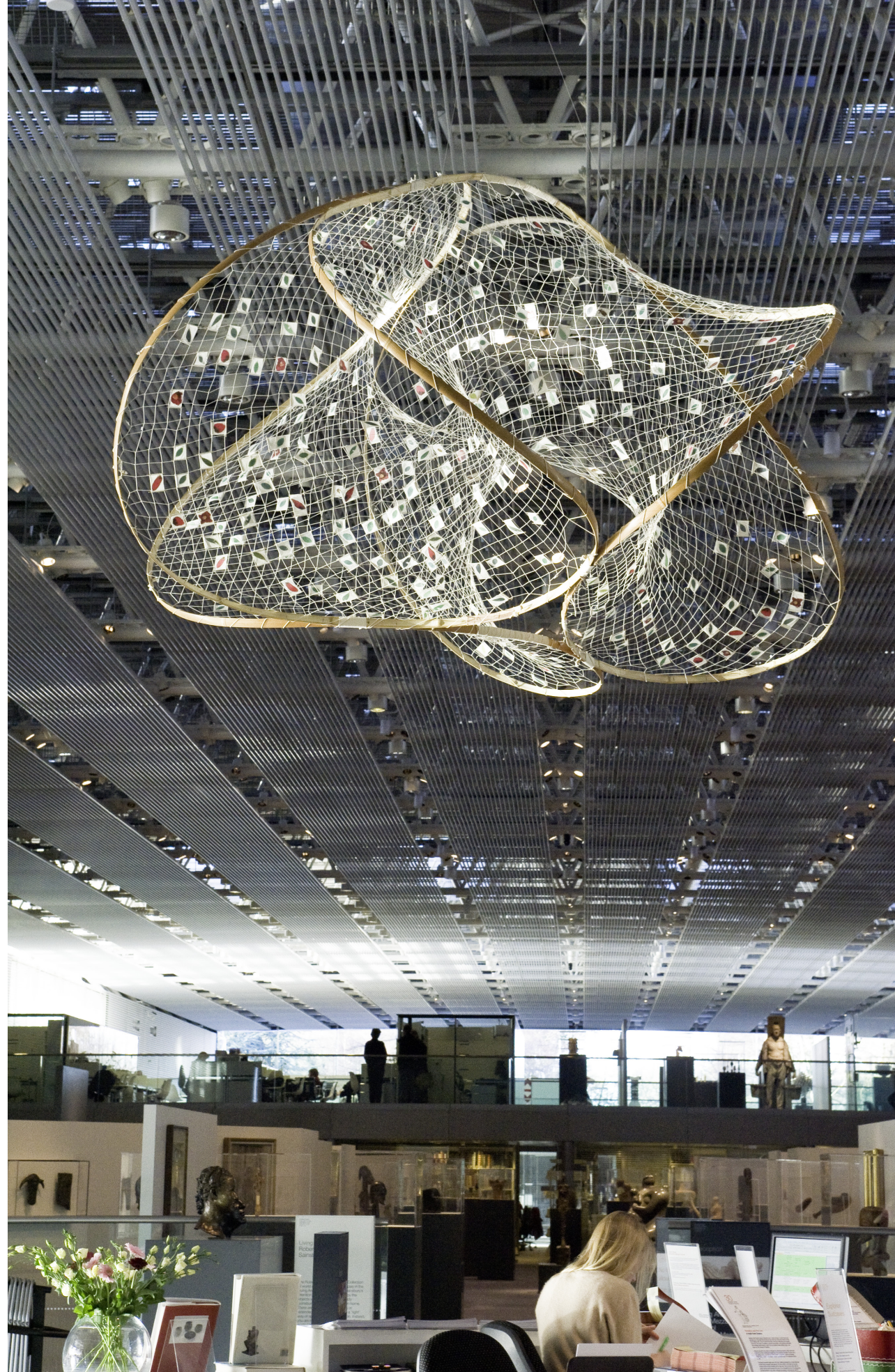
InCrops' entrepreneurial approach, working with growers, manufacturers and enterprises in promoting biological products and bio-technology has brought us in the art world to the cutting edge of commercial, social and scientific relevance. Together, we have formed the beginnings of a programme of applied research into broader ways of inter- and cross-disciplinary practice, and, as we have discovered, a model for creative enterprise which can make use of artistic talents and skills to the mutual benefit of a whole range of interests from individuals to organisations. Both the art and the science elements share an interest in the pursuit of innovation, with a grounding in theoretical perspectives governing our complex of commercial, developmental and cultural contexts. It encouraged us to begin to draw conclusions in a wide-ranging way, moving forward

intellectually as well as practically.

For the 'Art and Innovation' research, we nurtured an experimental pilot project for artists. We advertised the project to artists in East Anglia who we knew would have relevant skills and experience and who had been trained or linked with various local projects, including Norfolk County Council's 'Artists for Climate Change' initiative. It so happened that several of the people we chose, but not all, had already worked with us for The Culture of the Countryside. The role of the artists was to engage with a select group of companies to see if and how their products might be useful, or have potential for creative development. We had no particular expectations and required only that the artists would visit the companies as often as practically possible in the limited time allowed. They were given a very open brief, to conduct whatever experiments they felt were relevant. They were then required to present their findings at a seminar at which the entire group would be discuss the results.

Each of the artists responded in an open-ended way, making an assessment of the potential of materials and contexts for the development of their own work and they each came up with projects or proposals which were both personal

Right Ueno Masao XXXXX,
Sainsbury Centre for Visual
Arts, 2011



and communicative. They engaged in similar processes: observation; discussion; assessment of the range of potential materials to be engaged with; selection; testing applications; creating an idea or product which made use of their previous experience. Their approaches and results were quite different from each other, however, not only because the companies offered a range of different possibilities, but also because their practices were so varied and adaptable. As it happened, the first results were so rich, varied and intriguing, we encouraged the artists to undertake a second phase of longer-term research to develop some more ideas with different materials and companies.

“The artists brought unexpectedness to the project: imagining a range of future applications, as well as making unexpected developments in their own work, which showed all of us something new about themselves, but was also revealing about the methods and processes of research undertaken by artists in general.”

The artists pursued clear aims, but in a non-utilitarian way, with no particular expectation of results and no special commercial purpose, yet their findings were potentially useful commercially both to themselves and to the companies and their publics. They brought unexpectedness, too: imagining a range of future applications, as well as making unexpected developments in their own work, which showed all of us something new about themselves, but was also revealing about the methods and processes of research undertaken by artists in general.

Their sense of experimentation and their distinctive contribution to the field of research was precisely their eccentricity: they didn't

necessarily pursue the obvious but thought laterally; were playful and quirky. Indeed, the range of their work was very striking and unpredictable. Its strength was its variety. No-one, not even the artists themselves could have predicted what they would come up with, and all of it was highly original and particular to each one of them.

The project's outcomes were diverse not only in terms of the range of responses and methods undertaken by the artists but in terms of the implications for the whole partnership. The art gallery, while it provided one of the overarching cultural contexts, played a minor role literally in the display of outcomes, at least in these first phases of the project. Works of art were made and ideas generated for a wide range of contexts, factories, fields, forests, sea-shore, shop, home, playground, animation studio. On the whole, applications conformed to art world rather than commercial world languages. So, both Andi Sapey's and Sam Abelman's work was visually interpretative, where Jacqui Jones created highly symbolic pieces. Marcela Tršová's practical experiments had both display and commercial potential, and Mark Haywood thought very much in terms of the practical and economic as well as the artistic potential of the materials. Kaavous Clayton was the only one who really turned the task around to apply his lateral thinking skills to rethink commercial viability via a whole new creative application.

Despite this being a relatively short pilot, the project demonstrated the considerable potential for a new kind of residency project between artists and businesses. However, in any future creative collaboration across disciplines, there needs to be a greater and broader understanding of the cultural differences between them, which in these projects hinged on the different attitudes to the development and flourishing of ideas and to what constitutes work. Artists are used to working to a very open ended brief and it is quite normal for them to be thrown into a situation and told

to find their way creatively through it. They expect to have freedom to think and to engage in trial and error, and to have time for ideas to mature.

While this leads to a willingness to experiment and indeed a leaning towards risk, which has tremendous potential in a commercial context, companies who need to make money and keep premises and staff are less used to being quite so open or so relaxed in their use of time. The artists were initially told to be careful and considerate of people whose time was precious, so they entered the project conscious that they might unwittingly tread on toes or waste the time of busy executives. There was variety in attitudes to knowledge and experience here as well. One company was very wary of the commercial sensitivity of their product knowledge and cautious about it being too widely disseminated. Another was disappointed that the project, always conceived as a pilot, was so limited in scope and length, which militated against the development of real potential for innovation which the artists witnessed and uncovered further.

There were, however, other aspects of the process, which really demonstrated the potential of collaborations between artistic, commercial and academic interests which need to be recognised and enhanced in future. Although they all welcomed the prospect of hosting an artist, the companies were not as fully engaged in this project as they might have been, and some of them felt this more acutely than others. There were very particular reasons why this was the case: partly because so much was unknown at the outset, but also because their role was not made as explicit as it might have been, as an integral part of the development of the project.

The artists were commissioned with general instructions to explore creative potential. They were therefore expected to draw from their own experience and training as innovators. But it is precisely that equation of creativity and innovation leading to an advanced product which sets up unrealistic expecta-



Opposite Andi Sapey, Caption, 2010

tions, or at least expectations of unequal weight by the various protagonists in the project.

As Tim Ingold and Elisabeth Hallam have pointed out in their perceptive introduction to their edited collection of essays, 'Creativity and Cultural Improvisation', where innovation is the end result, it is the product of what might be a break with convention, whereas improvisation is anticipatory, the pursuance of a fluid and exploratory process (Hallam and Ingold 2007, 1-24). Improvisation, they maintain, is necessary to the creative process which itself can be seen as forward-looking; as an improvisatory response to a world in the making, as opposed to a departure from a pre-existing or pre-determined or fixed state. In terms of how this works in practice, a skilled practitioner is not hide-bound by rules, but recalls deep knowledge as a result of experience, knowing how to monitor, adjust, and adapt their particular skill: in short, they improvise knowledgeably at each stage.

The real reason why the artists' results were so different from each other was because they had to improvise constantly in response to the shifting nature of their situations. In a conventional artistic residency they would be doing their own work in an unfamiliar environment, so

they would be required to confront a different kind of practice with their own. But this was quite different. The artists were in effect being asked to bring potential applications into the processes of creation of a product and thereby to assimilate new information and to respond creatively and almost instantly to the new stimuli. It was an improvisatory situation for them and that was well understood. The fact that it was equally so for the companies, was not made as clear (and we did not recognise at the time the extent to which it was the case), though they were equally in a situation requiring adaptation and improvisation, and were required to open up access but with an unknown and unknowable result.

This insight into the tactical role of improvisation in the production of innovation is very helpful in foreseeing how this could be applied in future to all the participants in a project of this kind, which could therefore lead even more to a truly cross-disciplinary approach to research and development of new materials and products. For it is not enough just for the artists to recognise qualities of the materials: if potentially they have wider relevance, commercial or otherwise, they need to be followed through and acted upon as part of the wider

cultural context.

“Improvisation is relational, then. Because it goes along 'ways of life' that are as entangled and mutually responsive as are the paths of pedestrians on the street. And by the same token, the creativity it manifests is not distributed among all the individuals of a society as an agency that each is supposed to possess a priori...but rather lies in the dynamic potential of an entire field of relationships to bring forth the persons situated in it.” (Hallam and Ingold 2007, 7)

Each element of the project, from its management and administration to the partnerships and creative collaborations formed in its execution, needs to be seen as cross-fertilising and contributing to a changing culture. The people concerned, the project coordinators, the artists, the companies are not just managing and responding, but should be seen as occupying equally improvisatory roles as they adapt to the fluidity of the situations they encounter. As the project proceeds to a new phase, then, it will be on a foundation which is equally critical and thoughtful in both fields of art and science and with further potential for consideration of its impact as “innovation between people.” (Barber 2007, 33) ●

Hallam, Elisabeth and Ingold, Tim, ed. 2007, 'An Introduction' Creativity and Cultural Improvisation, Berg Oxford, New York., 1-24.

Barber, Karin, 2007 'Improvisation and the art of making things stick' in Hallam and Ingold, 2007, 25-41.



INCROPS ENTERPRISE HUB LILIYA SERAZETDINOVA

InCrops Enterprise Hub was set up in 2008 as a not-for-profit technology transfer company within the University of East Anglia. InCrops, which stands for 'Innovation in Crops', aims to stimulate use of alternative and non-food crops, as well as crop wastes, for the development of new products, technologies and services. These renewable materials are able to replace finite petrochemical resources and improve the environmental sustainability of the industry.

The hub facilitates the commercialisation of innovative ideas and approaches developed within the region's foremost plant science research institutions; a process which in turn helps to boost innovation within businesses and increase their competitiveness. Innovation and the sustainable use of materials stimulate low-carbon economic growth in the region, which is seen by regional

and national government as a priority for development and investment. The East of England is one of the top three performers amongst the 12 UK regions in innovation (for 21 out of 36 measures; Innovation Insight report 2009).

Funded with support from government (the Regional Development Agency and European Regional Development Fund), InCrops is also supported by partner organisations, regional research organisations and businesses concerned with the commercial use of plants. Government funding enables InCrops to provide free support to regional companies and entrepreneurs looking to develop new ideas, products and technologies. The organisation is working with a wide spectrum of industry sectors including bio-based chemicals and biopolymers; natural fibres; composites; sustainable construction materials; ingredients for personal care and nutrition; bioenergy and biofuels; and biomass heat and power.

InCrops has long been interested in collaborating with the creative industries in order to develop concepts and prototypes using natural materials in mainstream products for both public and private spaces. At the launch of the InCrops project in 2008, the then-Director of the Sainsbury Centre of Visual

Arts (SCVA), Nicola Johnson, used as part of her presentation a Vitra collection chair as an example of a sustainable and desirable product. Inspired by an object which combines the value of a natural material with 'green credentials', wood, and a unique design signature in this way, InCrops saw that it was possible to commercialise the production of attractive everyday objects from sustainable materials. Having maintained a strong relationship with the SCVA, InCrops was interested in working together to develop further the use of sustainable materials by the creative industries.

The collaboration between the two organisations has helped to combine entrepreneurship in the environmental sector with art and creativity, giving sustainable materials and products a platform within the creative industries. The idea behind the project was for a range of local artists to engage with selected InCrops-supported businesses to design and create artworks using the bio-based materials produced by the companies. All parties would benefit from this project: InCrops and its clients would be able to raise awareness of new markets within the creative sector for the producers of sustainable bio-based materials, and the SCVA would have the opportunity to develop relations with artists

interested in working with new, sustainable materials, which would in turn inform its ongoing project Culture of the Countryside (CotC). The project was to culminate with a seminar where the artists would showcase their work and discuss how they found the experience.

With help from SCVA in sourcing the artists, focusing on those with a previous interest and experience in local environmental projects, InCrops contacted clients indicating the potential exploitation of their product for a new market. The companies selected ranged from small businesses distributing and developing linseed oil-based paints, natural plant pigments and essential oils to research companies developing plant-based resins and manufacturers of packaging materials and large government organisations such as the Forestry Commission.

In total, five artists took part in this initial experimental phase. They were assigned to InCrops clients based on their submitted proposals and the compatibility of their work with the companies' materials. In the space of two months, the artists were to work as collaboratively as they saw fit with their business partners to create something that could be used to help develop the materials within the commercial sector. InCrops provided funding to facilitate the artists' engagement with the businesses and provide a budget for materials.

The outcome of this first phase of the project was extremely successful, with the artists producing a variety of unexpected outcomes and innovative solutions to the materials they were given, each completely different to the next. Given this success, and the positive feedback from both artists and businesses, InCrops and the SCVA agreed to extend the project, selecting artists Jacqui Jones, Marcela Tršová and Mark Haywood to continue their research on the basis of their interest in working in this area.

To mark the final phase of this project, all artists and InCrops staff were invited to the Culture of the Countryside project's closing conference which celebrated the

“The project allowed the artists to experiment with new and different materials and to develop new ways of communicating environmental awareness to the public, as well as assisting them in the development of their own practice.”

success of CotC and enabled the artists, InCrops, and SCVA affiliates to network and promote the Art and Innovation project and its benefits. Looking back at their involvement, the artists found their work to be highly inspirational and challenging. It allowed them to experiment with new and different materials and to develop new ways of communicating environmental awareness, as well as assisting them in the development of their own practice. The businesses involved saw it as an opportunity to promote bio-based materials and products into a market they would not have necessarily explored before. It also created new applications and ideas for their materials, with benefit, potentially, to both business and artist. In helping to raise the awareness of their products, it offered businesses the chance to engage more effectively with the public and helped to convey the message about environmental protection and sustainable manufacturing.

Critical reflection raises questions for the future of the project. More time and proper management of the relationships between artists and business would be required in order for the project to maintain its success. This largely falls down to lack of resources such as funding and time from both from InCrops and SCVA. It was noted, also, that the artists and businesses both need more guidance on how to work effectively with each other. However, this pilot project resulted in an amazing variety of ideas, the development of unpredicted

concepts, and in some cases, new uses for materials. The sustainable materials provided the artists with new inspiration and led to a deeper engagement with an environmental agenda. As the result of their involvement in the project, businesses were able to view their product in a very different and creative way.

Although the project is in its experimental stages, the remit of bringing together two different worlds was successfully achieved. Neither InCrops nor the SCVA knew exactly how the relationships and engagement would develop between those involved, but the project demonstrated a huge potential for the generation of new innovative ideas on the cross-section of creativity and technology. ●



Right Andi Sapey, Caption, 2010

KAAVOUS CLAYTON

WITH EARTH AND REED

The potential for the bio-resins produced by Cambridge Polymers to be combined with other materials and produce sustainable forms in simple moulding processes could have an extremely positive impact on the production of design items. Combining the resin with waste materials such as sawdust, vacuum debris or ground plastics from household plastics or tyres creates a potential for pressed forms with retaining properties (bowls, cups, pots, etc) that would have a strong ethical sense of responsibility that would be strongly demonstrated in the manifestation of the material.

The wide range of traditional products available via Earth and Reed would allow the production of objects that have a sense of responsibility without compromising or adjusting pre-existing values and looks.

These are initial thoughts relating to the potential for future uses of the materials which would be extremely wide reaching and have an ever-growing importance and relevance.

I went to meet Christopher and Margery from Earth and Reed at the end of March 2010. We discussed how the business came into being; Christopher and Margery's intentions for it; problems they have encountered; and the materials they distribute. It soon became clear that they chose to work in this sector because of a concern about the detrimental impact the construction and DIY industry has upon the environment, and their desire to change this.

Christopher and Margery's business has become integrated into the business network and community in Needham Market due to proactive and positive communication with local businesses to establish a collaborative system of recycling and reusing, mainly of packaging materials. As an adjunct to their main business, this demonstrates their conviction and dedication to their beliefs.

Earth and Reed itself supplies environmentally-responsible building and decorating materials

including paints, pigments, brushes, insulation material, boards, laths, lime and more. The company's principles summarised by the phrase 'Healthy Buildings, Healthy People', the materials it stocks are, variously, biodegradable, sustainable, non-toxic or breathable. They invariably make use of recyclable packaging, are manufactured in a low-energy production environment; and subscribe to the ethos that minimising harm is more important than profit.

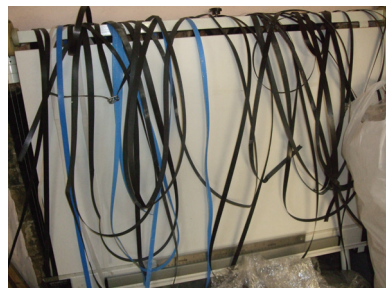
A product of major interest for me was a water-based paint that is transported in a concentrated form to be diluted with water by the consumer on site, saving transport of water. This is taken to its most extreme in a powder paint that can be sent through the post.

The main problems Christopher and Margery seem to have encountered stem from a lack of public awareness of the issues involved, and a general laziness: customers have asked that the powdered paint be diluted with water by them before delivery. The public perception of Earth and Reed's goals and ideals has also been an obstacle – early on in the business a customer said they were the cleanest looking hippies he had ever met – as are the realities of competing with large corporations and businesses, which mean that it is sometimes difficult for the company to stock certain materials at a price which is competitive for large distributors.

The nature of much of their materials is self-explanatory, and



Opposite
Kaavous Clayton
Caption, 0000, media, dimensions



the way it can be translated into use by artists is clear: the natural pigments they stock are already used by artists for producing oil paints, and paint and brushes in general are used by artists for painting.

My interaction and engagement with Christopher and Margery and their business has led me to start thinking about several possibilities in regard to the production of work which reacts and responds to their endeavours: a specific response through my own activity. For me, the main interest was one of issues and ideas and the way they relate to materials rather than merely a question of how those materials can be used to produce work.

I was struck by the way in which the construction and DIY industry has an extremely tangible impact upon our environment but that little thought is given to how that impact extends beyond the visible. The way in which food production and the marketing of food have recently changed seemed a potential area to consider and explore. The advocacy of 'food champions' has had a massive effect on the way we think about food and the factors we now take into account when making a purchase. Terms like 'food miles' and 'fair trade' have become common parlance and feature strongly in marketing campaigns. These concerns are ones that indeed would have been the domain of 'hippies' in the past, subject to ridicule or disdain.

The potential for advocacy in the construction and DIY industry to have a positive impact on the public's awareness of the way construction affects our environment beyond the visible is one that for me is exciting. Thinking about terms like 'construction miles', 'DIY miles', 'paint miles' and similar is one area that I have begun to explore, and may result in a poster or some form of visual communication that would aspire to support Christopher and Margery's ideals.

One of the materials I chose from Earth and Reed was the book *The Diary of an Eco-Builder*. The possibility of writing a story relating to Christopher and Margery's work is one that struck me as having potential for advocating their ideals; and the genre of science fiction came to mind when thinking about how to approach the communication of the ideas involved.

Science fiction is often perceived as a 'low' fiction, and this seemed to me to relate to the way in which global warming and the protection of the environment are sometimes portrayed as being 'crackpot' beliefs or goals. The way in which science fiction often deals with apocalyptic events provides a potential approach, too. My initial ideas have also explored ideas around religion and belief as a way to communicate some of the ideals. But the tone of any written work would have to

“The potential for advocacy in the construction and DIY industry to have a positive impact on the public's awareness of the way construction affects our environment beyond the visible is one that for me is exciting.”

strike the right note to ensure it did not have a sense of the zealot, rather the campaigner.

The third area I am exploring is that of the potential of the materials themselves and the way they could be used to directly communicate some of the ideas and ideals they represent. Through the design and construction of practical design objects, perhaps furniture, and using production values that demonstrate a low impact upon the environment (through re-use, recycling and the use of low-impact materials), I plan to produce objects that intrigue and question values, perhaps using some of the principles of Memphis furniture which purposefully intended to cause an affront to the eye and the mind so as to be noticed. ●

About the artist

Kaavous Clayton's work explores the potential for materials to be transformed and have a positive impact upon society. A background in architecture has led to the production of objects that often cross the boundaries between art and design, testing notions of functionality whilst uncovering the nature of 'things' (objects or materials). A strong ethical element is integral to his research and production, resulting in an economy of resource requirements and negligible negative impact.

Clayton also works with other artists on the commissioning of work as well as curating exhibitions and presentations of ideas, which places him in an ideal position to pass on the potential for new materials and techniques to a wide range of creatives.



In my artistic practice, I am fascinated by a variety of different materials and am very interested in their social history, symbolism, how they combine together and what they mean to people. When conducting the research for the InCrops project, I took all these factors into account. I feel this is especially important with materials such as woad, as it has such a rich history: one that cannot be ignored when working with it. To me, it is the process of extracting the pigment from the plant and the subsequent magical transformation from yellow to blue when it comes in contact with air that makes it such a special material to work with.

There are three colours basic to the human state: red, white and black. Though their interpretation and symbolism may vary, white traditionally means purity and recalls the potency of milk and semen. Black is associated with earth and excreta and denotes decay; and red, the most vibrant, is the colour of blood, life and sacrifice.

The colour blue, however, has always held a special place in many cultures. It may be because it is overwhelmingly present in our life as the colour of the sky, providing a backdrop that is echoed and reflected in the sea, rivers and lakes. From space, our planet looks blue. Blue carries the sense of spiritual and suggests calmness and serenity in its lighter tones, and mystery as it approaches black. It has always been considered both cursed and lucky. It has cooling, almost therapeutic powers but it also holds an aura of melancholy.

It is a unique colour and until recent times when colours began to be recreated synthetically the only way blue could be gained for dyeing is through laborious process extracting the pigment indigotin from the Indigo plant in Asia, or woad plant, which is the European member of the indigo family.

The aim of my research was to come up with an innovative use of woad products for other artists. Woad has been used to dye cloth since the Iron Age, and the processes and results are well rehearsed. In my own creative practice I am quite experimental and work mainly in 3D, so I decided to take an alternative approach in terms of how to use the dye.

I have dyed a variety of materials I thought that might take the dye

well. Indigo dye is different from other natural dyes in a sense that the pigment is not absorbed into the object or cloth but sits on the surface. Therefore, the surface must be reasonably textured in order for the indigo pigment to settle on.

I have experimented with dyeing shells, willow, lichen, limestone, bones, corn-starch plastic, potato-starch plastic, pine and lime wood, oak bark, willow bark, driftwood, rabbit fur, sheep and goat wool, mistletoe, hawthorn, common wormwood, cherry tree, feathers, nettle yarn, hessian, canvas, cotton scrim, onion peels, feathers, thinly sliced mahogany wood, lodestone, iron and iron shavings, silk, bamboo, seaweed, weld paper, and dried flowers.

Some materials were more successful than others. Nevertheless, the whole collection produced an amazing variety of shades of blue — from pale hues to deep black-blue.

To summarise the research, I think the most successful was the wood, rabbit's fur, wool, feathers and bones. I feel the wood especially has got great potential. As it is a material widely used by many artists and the results that can be achieved are not only beautiful but woad also preserves the wood.

I have really enjoyed the project and although I have used natural dyes such as weld, woad and madder in my work before, having the opportunity to explore it in more depth, researching its history and context as well as practical experimenting and pushing the boundaries of woad dye beyond its traditional use has proven to be a great inspiration for me. I am currently developing a new body of work based on my research. ●





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My involvement with this project focused on the area of green plastics.

I initially visited the premises of Cyberpac (Great Blakenham) at the beginning of April. This company markets a range of conventional and 'harmless packaging' using oil and starch based plastics. I subsequently tried to visit the factory in Milton Keynes producing 'Harmless Dissolve', but although Cyberpac

were happy to arrange this it hasn't proved possible due to a temporary breakdown in production.

At my first visit I took away samples of corn starch, potato starch and secondary crude oil-based 'Harmless Dissolve', a water-soluble biodegradable polymer which is harmless in use and dissolves

naturally in the waste stream. Subsequently, at my request, I was sent a substantial quantity of 'Harmless Dissolve'.

My research started off with a range of practical experiments to see how starch and oil based plastics reacted to dyes, heat and compostability. I then went on to explore the products' sculptural installation and performance possibilities.

The work I am producing has relevance to the impact of litter on the environment; the alternatives

to, and environmental impact of non-biodegradable plastics; the qualities of compostable starch-based plastics; and the function of soluble plastic.

In terms of its ethos, and its focus on materials shifting and changing shape due to elemental forces, the work I've produced so far may be considered to have parallels with that of Nina Canell. I also feel the work I am producing now is a natural progression from an interactive installation I exhibited at

the Sainsbury Centre for Visual Arts' monthly performance event The Late Shift in April, 'Second Skin', in which members of the public were sculpted in reflective material.

In the work 'A Bag For Life' (above right), I sculpted alternative plastic bags from 'Harmless Dissolve'. The bags are formed in the shape of embryonic figures and filled with seeds, saplings, etc. Each 'bag' has burst, as water has been poured onto it allowing some of the contents to spill out. The piece reflects on the vulnerability of the human race and an awareness that green plastics may offer opportunities for regrowth. ●

About the artist

Born in South Yorkshire, Jacqui Jones lived for 10 years in North Wales before moving to Norwich in 2001. Prior to this, she worked for various television companies including Sky, BFBS and Anglia Television. She returned to education in 2005, gaining a first class BA (Hons) in Visual Studies.

In 2009, Jones completed an Art Education training programme at the Sainsbury Centre for Visual Arts which led, in 2010, to her being selected to work on the Art & Innovation project.

The project had a profound effect on Jones' practice, leading to the realisation of a number of projects across visual and performance art; and developed significantly her knowledge and engagement with climate change and sustainability concerns. She is now committed to raising awareness of these issues in her personal practice.



Left
Jacqui Jones, 'Harmless Landscape'
Site-specific installation, 2010

My first visit to Hemp Technology was on 1st April 2010 to meet with company staff and Rob, the company's principal engineer and main business director. I was taken around the factory and was shown how the hemp is processed into bales of differing quality according to use.

The factory is basically a very large machine which processes the raw hemp material: the hemp is fed into one end and then processed into differing grades of softness, thickness and strength. The hemp, once graded, is directed and then baled, packaged and sent to the entrance of the factory to await transportation. I saw a large shipment going to BMW to be used in the manufacture of door panels. Other current uses are animal bedding and roof insulation.

I was also given a demonstration of resin/hemp products such as brake pedals and brake pads, plant bedding and models using the resin/hemp mix. I was impressed with the full automation of the agricultural processes, and realised that the automation replaces hundreds of labourers. A lot of the dust and waste produced is also processed, packaged and sold as firewood briquettes.

I think that hemp will come to be more widely used as a manufacturing product as it is biodegradable and is therefore in line with legislative commitments and targets to reduce landfill and use sustainable materials within industrial production. I presume and hope it will be used widely throughout diverse manufacturing industries in the future. And, while the production facility did not have any examples of foodstuffs using hemp, I am aware of its use as an oil and dietary supplement: it is reportedly a healthy alternative.

I decided that a film would best demonstrate Hemp Technology and the material itself rather than making something physical. I placed a digital movie camera with a motorised tripod head in the centre of the factory floor to rotate 360° over ten

minutes. Sound was also recorded from this position. The film was exhibited unedited in the presentation. I also talked briefly about my research into hemp as a crop and as an industrial material, outlining its physical qualities and historical background.

I found the grading process in the factory of great interest due to the full automation of the agricultural process. This industrial innovation is representative of agricultural development as a whole and also exhibits how modern farming processes, in becoming more streamlined, efficient and economical, have brought about massive changes in workforce patterns and greatly impacted on local communities.

I would like to continue making this film, and am in communication with Hemp Technology to film actively growing hemp fields and harvesting in the future, during the appropriate seasons. It is an easy crop to grow, and is presumably profitable, yet it is in competition with other crops grown for other industries and foodstuffs.

It was a shame to not see the factory in operation at full production capacity and going 'at full tilt'. I can only presume orders are down due to the economic downturn which reinforces the viewpoint that all industries, green or otherwise, are subject to market forces even if compelled by government and statutory targets to work to mitigate further climate change. The inactivity of the factory only enhanced the poetic nature of the film by enhancing the viewer's focus and gaze onto the textures, sounds and machinery of the dormant factory.

labelabel.blogspot.com

How would you describe your style or focus in your creative work?

I don't think of a particular style when approaching my creative work, but rather let the work dictate itself in an 'organic' way. I play with materials when creating work – whether this be in sculpture, film or performance – to elaborate upon concepts and ideas.

Who and what are your influences?

My influences are many, but I'm particularly influenced by artists such as Jeremy Deller, Gavin Turk and Grayson Perry, who don't restrict themselves to formats and genres. I like artists who broadcast ideas to generate and provoke discussion, but I am still enamoured with craftsmanship and artisans.

Do the materials you use influence the outcome or the processes?

Of course. The outcome is as perceived by the viewer. The processes are the manufacture of the art, whether this be in low tech materials or using sophisticated technology. I usually have to rely on an energy source to produce the work, and this ultimately will influence the outcome and process.

What were your initial perceptions about the InCrops and Culture of the Countryside research opportunity with local businesses?

My initial perception of InCrops was that it was a purely scientific, research-based organisation that had little relationship with contemporary art practice. The research opportunity helped broker links between two usually disparate worlds, that of art and that of business that usually do not have dialogue or relationship.

Did the experience influence or change the way you practice?

Yes, it's made me think about innovations in agriculture and the constantly changing nature of rural life and work. I have not previously used film and recorded sound to examine

an environment but will continue to do so in the future.

Has your increased knowledge of materials created inspiration?

Yes: perhaps not to specifically create anything out of the material itself, but to examine the way the material has been produced and then used within industries and consumed as a commodity by culture and society, either as foodstuff or composite.

Do you think the science and business based organisations have benefited from the artists' research?

Maybe it has helped them broaden their own scope and vision of the material and their own business. It's nothing but a positive thing to gain further insights to broaden concepts and highlight possibilities and even constraints.

How?

In my own case and relationship with Hemp Technology, the making of the film and the film itself may have helped them to re-examine the production cycle, especially in the 'downturn'.

Have you idea about future developments and opportunities?

I would like to continue filming agricultural processes, specifically within different seasons. The films would be archival yet exploratory. I am interested in documenting the numerous innovations within farming and manufacture to respond to climate change and the constantly changing nature of market forces, legal frameworks and consumer tastes and desires.



MARK HAYWOOD

WITH HARDY BAMBOO

Before meeting with Hardy Bamboo, I was keen to work in partnership with my local primary school to create some sort of garden artwork, and was interested in looking at bamboo in a coastal environment to strengthen landscape sea defences and create sculpture trails. Similarly, I wanted to look at working in partnership with Norfolk Wildlife Trust, to focus on the implications of non-indigenous species on the local environment.

I was also interested in bamboo in manufacturing, especially for surfboards – another passion of mine – and I was keen to build a bamboo board based on Hawaiian designs for Norfolk breaks.

Surfers are very keen to embrace bamboo's ecological, low carbon manufacturing properties. There are surf manufactures in the UK that import bamboo for construction, but it's a very small market. I was interested in investigating the potential to develop local bamboo for a domestic market, as well as exploring other manufacturing possibilities. Further research would have centred on carbon absorption and oxygen production of bamboo; soil types on the coast; reinforcing cliffs, sand dunes and beaches; and ornamental landscaping in a coastal environment.

I met with Paul Whittaker of Hardy Bamboo on 15 December 2010. Paul is an extremely interesting character, and a fount of knowledge for all things bamboo. He is passionate about bamboo and has written books, *Taming the Dragon*

and *Practical Bamboo*; numerous articles; lectures; and runs workshops and frequently contributes to gardening shows on local radio.

We spoke about my interests in bamboo and he expanded on the unique qualities it has as a manufacturing material and its thousands of applications from clothing, scaffolding and eating utensils to the construction of bikes and surfboards. The versatility of the crop is extraordinary, with some parts even edible for humans (not just pandas!) It is also used in traditional Chinese medicine.

Paul and I spent the morning chatting, as he showed me around his garden nursery to see the amazing variety of richly coloured bamboos, explaining as he did so the difference between Old and New world varieties. The more I listened, the more I realised I had to rethink my approach — to look at the material afresh, and to learn from Paul's knowledge and enthusiasm. He describe it as 'rule-breaking bamboo', a grass with woody stems, that mostly propagates by spreading



Opposite
Sample tests : drilled, pigmented and carved
bamboo (Mark Haywood, 2011)

underground, forming new plants or colonies. In fact, bamboo has so many unique features and applications that it is not surprising that it has a spiritual significance to many Eastern cultures.

Paul is an extremely creative person, who photographs and illustrates his own books. The more we talked, the more aware I became of the importance of incorporating his concerns and ideas into the project. Paul sees the potential of bamboo to help reduce carbon dioxide. We spoke about designing a scheme to help councils meet their carbon reduction targets by planting bamboo

“Bamboo cane and discarded man-made rubbish now sit side by side in my studio: two contradictory materials, remnants from different worlds, which for different reasons have an obscured identity and hidden history.”

in public spaces, such as roundabouts, council offices, schools and parks. Paul, as a small businessman, enjoys personal contacts with his customers, and is keen to feature ideas that may improve his business, such as collaboration on creating a ‘visual’ document’ which promotes bamboo; raising awareness of bamboo’s eco-credentials, through promotional activities; increasing domestic sales through his website; the conservation of potentially endangered Chinese species; and developing its use as an artists’ material.

After speaking with Paul Whittaker, I wanted to forget any preconceived ideas I had for using bamboo and focus on the material, rather than manufacturing applications. I was given a sample of ‘canes’ which for Paul are redundant byproducts of his business which sells bamboo plants to a domestic market. I procrastinated over what to do, and left the canes lying on my studio floor for a couple of months, thinking of a way to proceed.

Eventually, I started to work with the two types of cane, one solid

the other with a hollow core. I had about 12 lengths, ranging up to 3m. The first thing that struck me was how elegant the canes are. The material has an inherent strength and flexibility which leads itself to an engineered approach. I tried different methods of joining – bounding, like in Asian scaffolding – and asked myself what super-strong complex structure I could make.

I have tried to be objective and playful in my approach, inspired by the mechanical quality of the material. However, themes that run through my own practice seemed apparent, particularly my fascination with how the play of light describes objects and creates atmospheric effects. Bamboo planted in Britain seems to emit an exotic light, unlike our own native foliage. I’m sure this is to do with the structure of the stems, density, colour and luminosity of the leaves. But you can not help to sense the energy that radiates from bamboo, as if you bear witness to the devouring of carbon dioxide and release of oxygen.

An abiding concern is whether the cane comes with cultural baggage. Is there an inherent Eastern mystical past visible, or has it been domesticated and assimilated into our British culture? For several years now, I have been interested in the cultural significance of objects and how altering the context can change our perception. I have collected plastic rubbish that litters my local beach and this debris tells comparable stories. It has come to our shores uninvited, but carries with it a past history. These once-purposeful, practical objects are now dysfunctional. They have been redefined and sculpted by the forces of nature and washed up on a Norfolk beach.

Bamboo cane and discarded man-made rubbish now sit side by side in my studio: two contradictory materials, remnants from different worlds, which for different reasons have an obscured identity and hidden history. The bamboo canes also possess the quality of bone or ivory, and I am researching traditional carving styles and techniques.

This remains very much a work-in-progress. I feel like the narrator of two separate stories, deciding if or how they may become entwined. I have been experimenting with

etching patterns onto the surfaces, cutting out shapes in molecular, orbital designs: from micro to macro, mimicking growth, expansion and cellular harmony. Yet there is also an opposite impression; one of decay, reduction and the breakdown of the original structure.

I intend to organise an exhibition of new bamboo artwork in order to promote the material, in a suitable venue — potentially Hardy Bamboo’s garden nursery.

I would be interested, too, in working in partnership with Paul Whittaker and Liliya Serazetdinova to share research into the carbon absorption and oxygen production of bamboo; and to develop a consultation scheme, as mentioned above, to help councils meet their carbon reduction targets by planting bamboo in public spaces. ●

About the artist

Since graduating in Fine Art in 1988, Mark has worked as an artist, designer and educator. His various roles include creating site-responsive public artwork, facilitating community workshops and developing projects to engage people creatively with the landscape.

Mark returned to Norfolk from London in 2008 to collaborate with his mother, the painter Sandra Haywood in the ad hoc chicken shed gallery on the coast, an experience which has had a profound influence on his practice.

Mark has worked with numerous organisations, including The National Trust; the V&A; Tate Britain; the Sainsbury Centre for Visual Arts; the Norfolk & Norwich Festival and NCH. He has been commissioned to create public artworks in consultation with diverse communities in partnership with many county councils.

www.markhaywood.co.uk



Above
Caption
(Mark Haywood, 2011)

MARK HAYWOOD

WITH CAMBRIDGE BIOPOLYMERS

Bioresin is made from rapeseed or other vegetable oils, water and air using a sustainable, 'clean' process. It is strong-bonding, elastic and non-brittle. Formaldehyde-free, it is low odour and is pleasant to use.

The resin is supplied as a simple two-pack system comprising sandy-coloured oil and an orange-red crosslinker or catalyst. I love the fact that it is extremely versatile in use and application, with both hot and cold set formulations. It can be used to cast or as a lay-up resin, and can be diluted with water.

Bioresin has an excellent carbon footprint, since the process is a net absorber of CO₂. The two-pack system has an unlimited shelf life. Its applications and potential markets are many and varied, including insulation as mineral wool and foams; in timber boards for construction or furniture-making; as reinforced plastics (FRP) in the automotive, marine, artistic and construction industries; in foundries, for industrial castings, sculpture, film & TV; and in laminates & coatings in the manufacture of furniture, surf boards and flooring, for instance.

CBP Bioresin is pre-commercial and the company is actively seeking applications, collaborators, manufacturing partners and investors.

How would you describe your style or focus in your creative work?

I'm primarily a sculptor who creates site-specific public work in response to its location, often outside traditional gallery settings, and in collaboration. I strive to be intuitive in my approach and see my creative practice as the nuts and bolts of research and investigation. My 'style' is what happens during the process of making; often a regressive activ-

ity to try and simplify the outcomes. **Who and what are your influences?**

My inspiration comes from the people I work with, the materials I choose, and the landscape that surrounds me. The choices I make are influenced by a desire to not clutter the environment or use resources wastefully to produce more stuff to consume.

Do the materials you use influence the outcome or the processes?

Materials often dictate processes that lead to new investigations, experimentation and unexpected results. Embracing a material in a very fundamental way, to disregard preconceived ideas, takes courage and conviction.

What were your initial perceptions about the InCrops and culture of the countryside research opportunity with local businesses?

It felt as though, as artists, we could make a practical impact on the discussion about the use of finite resources and alternative materials. I had the opportunity to experiment/play with a new bioresin, which uses (80%) plant oils instead of traditional resins which are petroleum based. I had a very positive experience. I enjoyed disseminating and discussing ideas with artists, InCrops, CFCS and businesses.

Did the experience influence or change the way you practice?

I'm more sensitive to the materials I chose to work with, and question the use of resources. I work mostly with sustainable produces, found objects and old materials I have in my studio.

Has your increased knowledge of materials created inspiration?

My practice is continually evolving through learning and making connections between things. I'm interested in experimenting with the other materials, and I hope I get this opportunity. I have also made recommendations to schools I work with as a creative agent for Creative Partnerships to look at some of these materials and businesses. And the process of investigation has contributed to my professional development.

Do you think the science and business based organisations have benefited from the artists' research?

The bioresin I worked with is a fantastic material and has many advantages over traditional resins. Apart from its 'eco' credentials, it is also more versatile and has no shelf life. It can be used as a lay-up resin or solid pour system, (traditionally you'd need two different resins); and can even be diluted with water. I would fully endorse this product and hope someday it will be produced economically. I've had no feedback from Cambridge Biopolymers, so do not know whether my findings are useful to them.

Have you idea about future developments and opportunities?

Working with Cambridge Biopolymers, meeting other artists and scientists, and seeing extraordinary materials and companies has been a true pleasure. I'd like to develop a website: a creative hub that joins up other projects with complementary themes. I want to create a resource of innovative ideas – projects from around the world – for all to share, exposing links and opportunities for collaboration.



Above
Captions
(Mark Haywood)

CARLOS GONZALEZ AND ANDI SAPEY

WITH EASTON COLLEGE

As InCrops Agri-Business Officer between 2009 and 2011, my job involved putting academics and farmers in touch with companies which produce renewable, low-carbon products from alternative crops. Part of the project involved setting up and running demonstration and experimental plots at Easton College in Norfolk with such crops, including fibre, essential oil and medicinal crops.

As part of my involvement with the Culture of the Countryside project (CotC), I was invited to comment on 'The East Anglians,' a photographic exhibition by Justin Partyka. Although most of the works displayed reflect ageing farmers and buildings, I expressed an optimistic view of rural East Anglia as a complex and evolving patchwork of young and old, male and female farmers and their families, ranging from small, organic, free-range farms to highly mechanised enterprises, along with semi-urban dwellers and people who have chosen alternative models, such as cottage tourism. Agriculture will continue to play a key role in the East Anglian economy and culture, with sustainability as a topic high on the agenda of reconciling production with environmental conservation. Alternative crops, especially fibres, have a great potential to meet these objectives whilst generating rural employment and income opportunities.

The independent photographer Andy Sapey had the opportunity to work with the demonstration plots set up by InCrops at Easton College.

Opposite

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Alternative crops such as hemp, linseed, woad, angelica, echinacea and roman chamomile were on display as part of an effort to link farmers and processors to develop new business opportunities in the natural fibre, construction and specialist oil sectors. Andy shot a number of images from the flowering crops and their surroundings, and presented them at a Culture of the Countryside event, where he shared his views on the aesthetic features of the plants.

As the CofC conference, InCrops were invited to comment on tradition and innovation in farming, which I undertook alongside John French. We stressed the cultural importance of landscape preservation whilst reconciling the need for a highly productive agriculture in a sustainable context making use of emerging technologies. The future of the small farm is clearly a concern for rural East Anglians facing land-use pressures. It is expected that alternative crops and their associated business opportunities will become part of this ever-evolving, diverse rural landscape. ●



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Research and investigative thinking were fundamental to the InCrops and Sainsbury Centre for Visual Arts collaborative arts and science project. Recognition of the value and role of these ways of thinking cemented our working relationship and brought greater empathy across disciplines. Initial inspiration was based on the belief that we could work together on a challenging and explorative project as we all valued the ability to ask pertinent and original questions and develop these into tangible responses.

The Sainsbury Centre for Visual Arts' outreach project Culture of the Countryside (2008-2011) exemplified creative and lateral thinking. The centre's world art handling collection stimulated original thinking and highlighted the great value of creative questioning and allowing opportunities for challenging perceptions. Many of the responses related to environmental responsibility and the future of land usage, including farming. This was a characteristic of both projects which drew us even more closely together: InCrops developing innovative crops for a sustainable, resilient future landscape; Culture of the Countryside forming creative and reflective responses with people living or working in the countryside.

Artists and scientists often employ many similar working methods for their initial investigations; and the ability to think originally is a skill which enriches and opens up possibilities in both disciplines. The initial meetings between the teams were open-minded and inquisitive: we were working in conversant ways, and there was a potential for developing ideas together. The first year of our working relationship was based on a practical process of discovery about the work we were all doing. Factors such as who we

worked with and how we engaged with others became relevant, with the University of East Anglia site connecting us physically and intellectually.

The prospect of cross-disciplinary work became more concrete with InCrops' participation in the Culture of the Countryside's event 'The Future of the Small Farm' discussion day (November 2009). This day provided opportunities for exploring the farms of East Anglia visually, economically and scientifically. Speakers and a wider participatory audience for this event included artists, farmers, a scientist from InCrops, local people and educationalists.

Artists working with or known to the Sainsbury Centre were fascinated by the opportunity of developing dialogues with scientists and it was clearly evident they could envisage the experience enriching their practice. In the spring of 2010, the centre invited artists to submit proposals to the project teams about how they felt the creative research opportunity could be beneficial to them and also how they saw their role in creatively working with InCrops-supported businesses. ●

cultureofthecountryside.ac.uk

Opposite
Andi Sapey, Caption
2010



NEXT STEPS
SUMMARY OF FINDINGS

TEXT HERE

TEXT HERE

NEXT STEPS
RECOMMENDATIONS

Cyberpac LLP

108 Claydon Business Park
Great Blakenham
Ipswich
IP6 0NL
www.cyberpac.co.uk

Cyberpac are specialists in bespoke and innovative packaging, retail and luxury packaging. With an increased interest in sustainability and global environmental issues, Cyberpac launched Harmless Packaging, a range of compostable packaging that biodegrades into naturally-occurring substances.

One of the materials is a starch-based biopolymer which can be used as a wrap or bubble-wrap. The other is Harmless Dissolve, a petrochemical-derived material that dissolves in water and is completely harmless to the environment. Actively engaged with creative industries and designers, Cyberpac launched Harmless Dissolve by wrapping 9600 copies of *Creative Review* in “The Bag that Dissolves in Water,” which received a positive response from the public.

Cambridge Biopolymers Ltd

Ickleton Road
Duxford
Cambridge
CB22 4FB
www.cambridge-biopolymers.com

Cambridge Biopolymers develop functional bioresins and other industrial polymers from environmentally sustainable resources — from vegetable oils or aromatic plants. Bioresins can be used as sustainable alternatives to traditional petrochemical resins. Cambridge Biopoly-

mers’ bioresins can be tailored for use in a wide variety of applications. Bioresins are formaldehyde-free, and can be used as a natural, sustainable alternative to traditional thermosetting resins in the manufacture of a range of composite products such as timberboards, laminates, mouldings, casting materials, GRP and FRP applications, mineral and structural composites, non-wovens, furniture.

Woad-inc™

Woad Barn
Rawhall Lane
Beetley
Dereham
NR20 4HH
www.woad-inc.co.uk

Woad-inc is a specialist woad grower, woad indigo pigment producer, woad dyer and luxurious woad-dyed textile retailer. The company has been working for a long time with craftspeople who make clothing, homeware and accessories for them.

A wide range of yarns and fabrics can be dyed with woad pigment — cotton, wool, bamboo; even wood. Woad-inc is interested in engagement with artists because it enables them to trial different ideas, and offer many individual items to complement their standard lines.

Earth & Reed

48-50 High St
Needham Market
Ipswich
IP6 8AP
www.earth-and-reed.co.uk

Earth & Reed supplies environ-

mentally-responsible building and decorating materials and promotes their use. The company sells a wide variety of boards, natural insulation, non-toxic paints, oils, waxes, limewash, mineral pigments, lime and similar.

All Earth & Reed’s products are made from natural ingredients and are of highest environmental standards. Materials are sourced as locally as possible: for instance, Earth and Reed’s own range of Suffolk Green Paints are locally-made.

Hemp Technology

Halesworth Business Centre
Norwich Road
Halesworth
IP19 8QJ
www.hemcore.co.uk

Hemcore are the world’s largest processor of industrial hemp and supplier of hemp fibre for automotive, insulation and paper industries, hemp matting for horticulture and landscaping, hemp-based construction products, and bedding for animals.

Hemp yields are amongst the highest of any crop, and requires no herbicides or pesticides. All parts of the plant have industrial uses. Hemp fibres are tough, durable and incredibly versatile. Hemp processing is made on industrial scale using state-of-the-art equipment that separates different parts of hemp plant – for instance, fibres and shiv – and converts it into finished products.

Currently, the plant produces over 12,000 tonnes of high-grade hemp fibre and 25,000 tonnes of shiv. Over the next decade Hemp Technology expects to see a substan-

tial increase in demand for hemp products in its existing markets, as well as an expansion into many new markets such as composites, textiles, and new health food products.

Hardy Bamboo

‘Sunnyside’
Heath Road
Kenninghall
NR16 2DS
www.hardybamboo.com

INFO NEEDED

Marchant Manufacturing Ltd

Piperell Way
Haverhill
CB9 8QW
www.marchant.co.uk

Established in 1934, Marchant supplies bespoke and branded polythene and compostable (biodegradable) bags, refuse sacks and specialist packaging materials to leading retailers, grocery wholesalers, manufacturing companies, packaging suppliers and local authorities throughout the UK. Marchant manufactures over six million bags a week, 52 weeks of the year – all to ISO 9001:2008 specifications. It is the country’s largest producer of compostable bags. An independent, family-run business, Marchant is based in a purpose-built manufacturing facility in Haverhill, Suffolk, with a workforce of 140 using 16 polythene film extruders and converters to provide fast production turnaround times at competitive prices.

Norfolk Lavender Trading Ltd

Caley Mill
Heacham
King’s Lynn
PE31 7JE
www.norfolk-lavender.co.uk

INFO NEEDED

