Future Experiences:

Sustainable Development and the Global South

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INNOVATION SCHOOL
THE GLASGOW
SCHOOL OF ART

Visual storytelling used to present research outcomes

Stakeholders Meeting
Botswana hub of the SFA Network

Uganda hub of the SFA Network

Private view for the
Work-in-Progress exhibition

SFA International Symposium (2019)
- Lira, Uganda

Contents

Introduction

This book provides a step-by-step overview of the Future Experiences project completed by the Innovation School's 2020 B.Des Product Design graduates. It outlines why Sustainable Development was chosen as the project theme, describes the processes and methodologies used to explore the topic, and presents the varied proposals developed in response to this urgent global issue

Students attending the project briefing presentation

Physical prototypes used to present ideas for feedback

PREFACE

GSA and The Politics of Creative Engagement: "for the common good"

2020 will always be remembered as the year that Covid-19 came to Glasgow and the GSA, as the phenomenon that interrupted study and paused the ambitions of the Product Design students, and called a halt to their collaboration with the Sustainable Futures in Africa Network, and the University of Glasgow. However, despite this hiatus, learning continued. The enforced pause of 'lockdown' in Scotland, as in many countries around the world, allowed enquiring minds an opportunity for reflection. The fruits of this reflective labour, as well the research and design that preceded it, are gathered in this publication. What emerges here is testimony to the marriage of imaginative possibility and technological potency: innovation as the critique of the present through the lens of the future.

The student work presented here began by using design to explore the politics of the world in which we lived, the politics of colonialism, capitalism and climate change, a world imperilled by a catastrophe that threatened to escape humanity's capacity to control or avert. Unfortunately, the students were obliged to fulfil the project under a similar but different threat. Covid-19 as a 'global pandemic' has interrupted *progress* or *development* in both the Global North and South, problematising a carbon driven, population dense conception of humanity's future. The occupants of Buckminster Fuller's 'spaceship Earth' have been obliged to recognise that we are bound up in a complex, inter-species intimacy, which demands that design operate as a form of politics. The world after Covid will adhere to different rules and new codes.

The post-Covid world must not be the re-creation of ecologically disastrous consumerism, the inequities of economic colonialism or global contagion, carried by both

back-packers and Business Class. The task of re-imagining the world, of determining what must be inherited from the past or created to shape today and tomorrow, requires a particular set of skills and competencies. If design makes ideas material, makes thought visual and tangible, then the task of the graduates of the Innovation School is to do so in *collaboration* with others, to give form to ideas and aspirations that arise through conversation not competition. Innovation is the application of design practice as both an intellectual and a political activity: it is the shaping of the world we live in now, and the future that we seek to inhabit. The projects contained in this collection bring together both the world we experience and the planet we inhabit; they make visible the role of design in making the imaginary concrete, and embody the link between past, present and future.

Dr Gordon Hush
Head of The Innovation School
The Glasgow School of Art

Guests enjoying the work on show at the exhibition

PROJECT OVERVIEW AND CONTEXT

Future Experiences: Sustainable Development and the Global South

The Innovation School at The Glasgow School of Art teaches design as a human-centred practice that can be applied universally to local or global issues, and so acknowledges the stakeholders, systemic elements or actants that lie beyond the human. This Future Experiences project asked the Innovation School's graduating B.Des Product Design students to address one of the greatest challenges facing humanity today, Sustainable Development, which is defined by the United Nations as: 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs.'

Now, more than ever, there is a need for greater cooperation at a global level between governments, civil society, the private sector and other stakeholders to ensure that those with the least still have an opportunity to prosper. Sustainable Development recognises that, despite more people around the world living better lives compared with a decade ago, inequalities and climate change threaten to undo the progress made in fields such as healthcare, employment and education. It helps economies to grow through the use of innovative technologies that can unleash opportunities for shared prosperity. It aims to ensure everyone has access to nutritious food, quality education and freedom of speech. And it attempts to do all of this without harming the environment, while seeking to respect local culture, traditions and values. A global action plan initiated by the UN in 2015 sets out 17 Sustainable Development Goals that must be achieved in the next decade as part of the 2030 Agenda for Sustainable Development if we are to end poverty, protect the planet and improve the lives and prospects of everyone,

everywhere. These goals now inform ongoing Sustainable Development work all over the world, and also helped guide this Future Experiences project.

The project was completed in January 2020, as the deadly and disastrous Covid-19 pandemic was just beginning its spread around the world. This unprecedented catastrophe reinforced the importance of supporting those most in need – the citizens of developing regions in the so-called 'Global South'. In April 2020, the heads of all the UN's major agencies issued an open letter warning of the risks the virus posed to the world's most vulnerable countries. It called on wealthier nations to increase funding and help to tackle issues such as the cessation of aid as a result of cancelled flights and disrupted supply routes. These and many other concerns highlighted during the crisis are among the topics explored in this project, which feels even more relevant and urgent than when it was initiated in the summer of 2019.

The project's main focus was on how design can support development work in the Global South by helping providers move beyond legacy approaches and explore new practices, projects and directions of research. The students stepped outside of their comfort zones and engaged with people living and working in developing nations in order to identify how design innovation might best be used in the context of Sustainable Development. Their speculative visions offered an alternative to existing development frameworks, prompting providers of development to reconsider their modes of operation or how they engage with users. In particular, the students focused on empowering communities by proposing new products, services or interactions, as well as alternative forms of civic organisation or behaviours, that could help these communities to enhance their own sustainable futures.

Research and practice within the field of Sustainable Development is currently undergoing a significant shift away from a colonial model that saw international aid being administered by the richest members of the global capitalist North to resolve perceived problems in the poorer South. The students were asked to imagine a global landscape ten years from now in which citizens living and working in developing countries across the Global South are in control of their own development agenda, which in a globalised world, is always also in relation to the North.

Based on this more participatory context, the Innovation School's human-centred, research-driven approach was used to explore new ways of initiating, funding and sustaining projects aimed at providing lasting benefits for specific communities. The outcomes ranged from a new healthcare system that blends traditional and modern medicines, to a technologically advanced refuge for women moving to cities for work, and a service that promotes the use of cleaner energy within homes in rural Africa.

For this year's project, The Innovation School partnered with the University of Glasgow and the Sustainable Futures in Africa Network to provide the students with direct access to academics and development professionals working within the field of Sustainable Development in the Global South. The insights the experts provided about everyday life in nations such as Malawi, Uganda, Botswana and Nigeria helped to inform solutions that address real-world problems. The ambitious collaboration allowed both the Innovation School and its project partners to examine new ways of integrating design and innovation practices into the planning of future Sustainable Development projects.

Video call with global
Sustainable Development experts

About The Innovation School

The Innovation School at The Glasgow School of Art is a leading centre for design and innovation that focuses on the key issues impacting contemporary society, now and in our near future. Rather than concentrating on the more conventional interpretation of design in an industrial context, students learn how to generate innovative, alternative solutions that foreground the experience of users, stakeholders and elements within our ecological context. This post-disciplinary approach to Product Design encourages students to consider the needs of the user, our fellow citizens and the wider planetary ecology when developing proposals for building a better world.

Through collaborations such as this one with the University of Glasgow and the Sustainable Futures in Africa Network, our students apply their research skills and creativity to real-world scenarios. By adopting a participatory approach and involving various stakeholders throughout the process, they are able to devise human-centred and systemically sensitive solutions that seek to positively influence the future of our rapidly evolving society. This project was led by Product Design lecturer Kirsty Ross, with support from the Innovation School's undergraduate faculty, colleagues from the University of Glasgow and external industry experts.

Sustainable Development: thinking global and acting local

The topic chosen for this year's Future Experiences project is one of the most complex and globally important that the Innovation School has so far confronted. Previous projects have tackled themes including the Future of Work in relation to advancements in Machine Learning, and the Future of Cancer Care in the era of Precision Medicine. The decision to explore Sustainable Development this time was prompted by the urgent need to find new ways to end poverty, combat climate change and fight injustice and inequality, using design as a form of intellectual and practical enquiry at the societal and the planetary scale.

In September 2015, world leaders agreed the 2030 Agenda for Sustainable Development, a framework aimed at creating a better and more sustainable future for all during the succeeding 15 years. The document sets out 17 Sustainable Development Goals (SDGs) that governments around the world have committed to achieving. These range from improving healthcare and building more sustainable cities, to reducing the impact of climate change and eradicating poverty.

At the SDG Summit held in September 2019, world leaders called for a decade of action and delivery to accelerate progress on the Sustainable Development Goals. The UN Secretary-General asked for global action to secure greater leadership, more resources and smarter solutions, alongside local action focused on implementing policies and budgets as part of institutional and regulatory frameworks. The SDGs outline political, technological and financial tools that could help to alleviate many of the problems facing the world, but there is also a recognition that these must be employed effectively and rapidly if the goals are to be met. With Glasgow set to host the COP26 international summit on climate change in 2021, the focus is on the city and its inhabitants to lead the way towards conceiving a brighter and more sustainable future.

Over the next ten years, the flow of aid money, resources and increasing global morality will steadily alter the way Sustainable Development research and practice is conducted. A more collaborative approach will see partnerships emerge and evolve between governments, businesses, charities, aid organisations and communities across the Global North and Global South. In this context, design and innovation can play a vital role in facilitating multi-sectoral collaboration across different locations. Design methods can also be used to ensure precious resources are used in a more progressive, structured and egalitarian manner, therefore helping to build a better and fairer world.

Only by moving from the traditional 'expert-recipient' model of development towards a reciprocal partnership between researchers, practitioners, citizens and designers, capable of giving form to the future, can the potential of this new global dynamic deliver the promise of better, more sustainable lives for all our fellow citizens.
Kirsty Ross

Introducing the Sustainable Futures in Africa Network

Our project partner, the Sustainable Futures in Africa (SFA) Network, is an interdisciplinary collective that brings together researchers, practitioners and communities of practice that acknowledge the complex nature of sustainability. Its aim is to build understanding, research and practice in socio-ecological sustainability in Africa.

The SFA Network was established in 2016 and is now a growing network of NGOs and academics working on global sustainability challenges. Its main research hubs are in Botswana, Malawi, Nigeria, Scotland and Uganda. From these hubs it addresses socio-ecological issues, such as water access, food security and land degradation. Each hub is engaged in projects that correspond to local contexts and focus on the challenges and needs of local communities. Its projects favour interdisciplinary and international approaches to local issues, bringing together local communities with experts from around the world.

By partnering with the SFA Network, the Innovation School was able to access and contribute to a wealth of knowledge and experience of direct involvement in the Global South. An expert panel comprising researchers and professionals specialising in geography, education, health, environment, engineering, cultural practice and community engagement helped the students to understand how people in underprivileged regions experience and respond to the issues they are confronted with on a daily basis. Regular interactions with these specialists also ensured the project followed a cross-sector collaborative process that incorporated the Network's own approach to Sustainable Development.

Why Sustainable Development?

This project is informed by the recent shift in focus away from a legacy model of Sustainable Development, which has seen the Global North administer aid and resources in ways that have often proven harmful to the people and places receiving them. It is now widely recognised that a more collaborative approach is needed, but what is the best way to deliver this, who needs to be involved, and how can these people work together despite their different cultural backgrounds?

These issues and questions lie at the heart of the approach adopted within this project.

The definition of Sustainable Development has recently expanded to include the dimension of 'culture' – which looks beyond economic growth as a measure of progress and, instead, focuses on issues associated with human development, such as education, public health and standard of living. This prompted the students to examine how governance processes and policy making can operate alongside the faith systems, societal structures and day-to-day living practices of an often overlooked global social class.

Innovation is already occurring across the Global South, as communities existing outside of the formal world economy engage in bold experiments to implement sustainable economic development on a local scale. The process of empowering these communities to become increasingly self-sufficient involves introducing new products, services and interactions that can operate either alongside or independently from existing development partnerships and organisations. The students took great care in envisioning how such future innovations might be sensitively and effectively implemented for the lasting benefit of all communities and stakeholders.
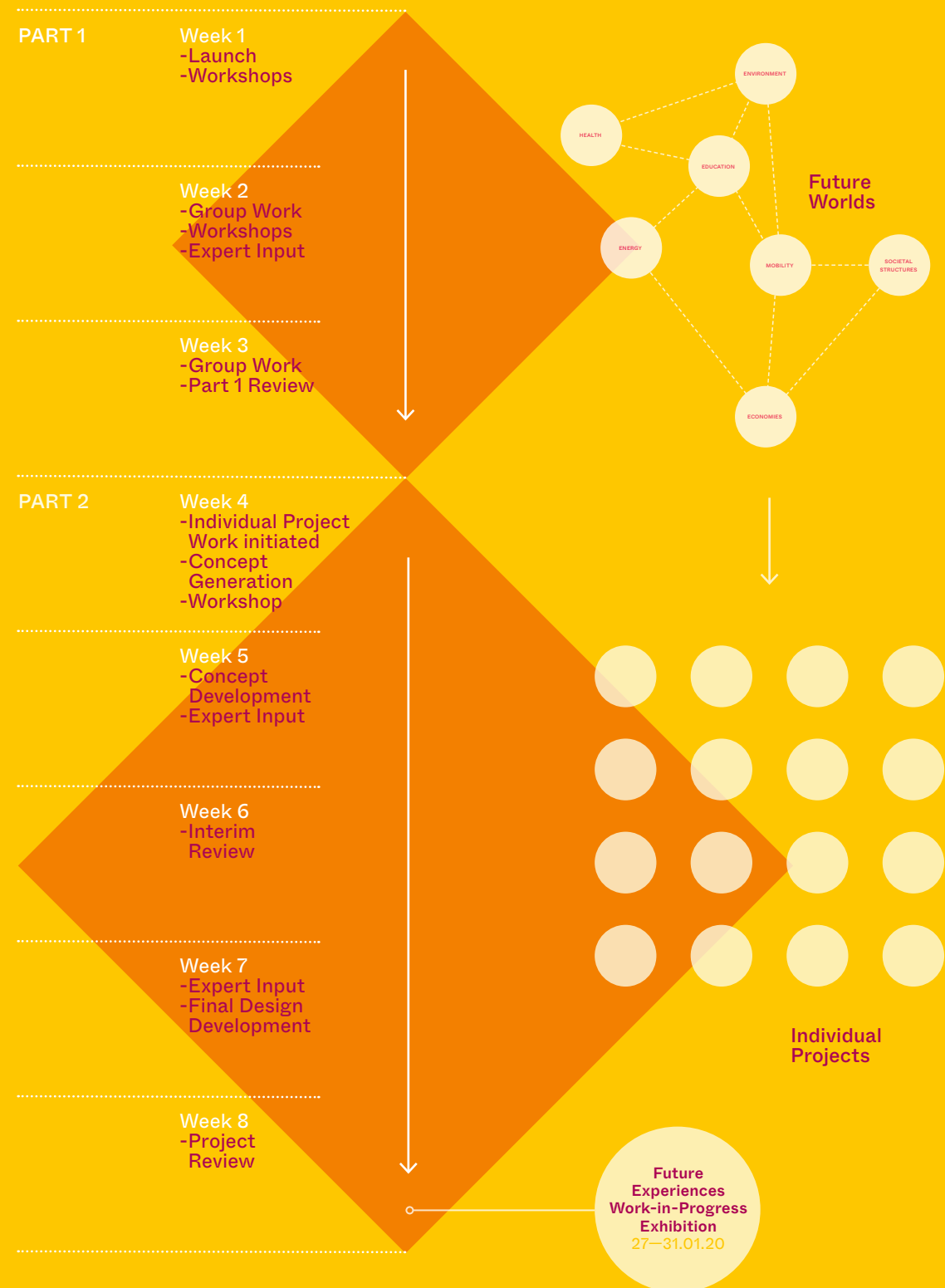
By applying a human-centred design approach and speculating about future scenarios, this project allowed both the Innovation School and the SFA Network to explore innovative proposals for a more participatory and collaborative approach to Sustainable Development. At the project launch in Glasgow, SFA Network co-director and project partner lead Dr Mia Perry explained that her organisation's projects are required to focus on specific contextual issues, examining the everyday experience of people and place, rather than looking at broader perspectives on the future of Sustainable Development. This collaboration with the Innovation School, therefore, provided an opportunity to assess the Network's objectives, procedures and practices against the 'preferred futures' proposed by the students.

Project scope

The main goal of this academic project was to enable the Innovation School's B.Des Product Design students to engage with an important contemporary topic and use their design practice to generate proposals for a highly resolved design experience during their final year of study at GSA. The students were given an opportunity to demonstrate the skills, methods and approaches required to envision and design for the future in relation to the theme of Sustainable Development. This experience mirrors the sorts of analytical and strategic skills valued by the design industry, as well as public and private sector organisations involved with setting the future agenda for areas such as policy, citizenship and healthcare. They were assessed based on both their group research and individual outcomes, with the grades contributing to their final degree classification.

Alongside its primary academic scope, the Future Experiences project exemplifies the Innovation School's commitment to partnering with leading businesses, third sector organisations and public institutions. This project involved working closely with the Sustainable Futures in Africa Network and the University of Glasgow. Their input brought an added dimension of realism to the project, emphasising that the issues being addressed affect the lives of millions of people across the Global South. The collaboration also enabled our project partners to gain a fresh perspective on their own practice, and an appreciation for the ways in which innovation can facilitate new approaches and working methods. The project's outcomes were presented as part of a Work-in-Progress exhibition at The Lighthouse, Scotland's Centre for Design and Architecture, in central Glasgow in January 2020. The exhibition was attended by members of the public and civil society, as well as the media and our project partners.

Image: Project Process Diagram

PART 1

Week 1
-Launch
-Workshops

Week 2
-Group Work
-Workshops
-Expert Input

Week 3
-Group Work
-Part 1 Review

PART 2

Week 4
-Individual Project Work initiated
-Concept Generation
-Workshop

Week 5
-Concept Development
-Expert Input

Week 6
-Interim Review

Week 7
-Expert Input
-Final Design Development

Week 8
-Project Review

ENVIRONMENT
HEALTH
EDUCATION
ENERGY
MOBILITY
SOCIETAL STRUCTURES
ECONOMIES

Future Worlds

Individual Projects

Future Experiences Work-in-Progress Exhibition
27—31.01.20

Project Team

Teaching at the Innovation School is a collaborative practice that draws on the varied expertise of our faculty. We also recognise the value of collaborating with project partners, which is why the contributions of the experts from the Sustainable Futures in Africa Network and the University of Glasgow were vital to the success of this project.

The teaching team for the project comprised Academic Lead Kirsty Ross, with support from lecturers Mil Stricevic, Janet Kelly and Rachael Sleight. During the Discover & Define phase of the project, each tutor was assigned to support one of the seven domains. Kirsty made this decision based on their professional expertise and interests. All of the tutors have taught on previous iterations of the Future Experiences project, so could call on past experiences when contributing advice or running dedicated teaching sessions.

Programme Leader for Product Design, Irene Bell, also played an important role in this year's project, joining the project reviews and teaching alongside the rest of the team. She was involved in the initial meetings with Dr Mia Perry and supported Kirsty in developing the project brief. Throughout the project, the students received feedback and guidance from the Innovation School faculty and experts from the Sustainable Futures in Africa Network. Dr Mia Perry sat in on project reviews to provide targeted insight that helped keep the work grounded in reality.

All of the Innovation School faculty were involved with reviewing the students' work at various stages, and summatively assessing it at the end of the academic year. They all also contributed to the curation of the Work-in Progress exhibition, which was overseen by Innovation School lecturer, Robert McCaffrey.

This project was initiated following a conversation between Kirsty Ross and Nicol Keith, Professor of Molecular Oncology at the University of Glasgow, who was lead project partner for the previous Future Experiences project which explored the Future of Cancer Care in the era of Precision Medicine. Nicol was instrumental in introducing Kirsty to Dr Mia Perry and in suggesting, based on his own experiences, that Sustainable Development could lend itself to the pedagogical model and framework of the Future Experiences project. He also joined some of the expert input sessions, providing insight that was particularly relevant to the domain of Health.

We are a highly experienced team teaching on this project, which I believe is vital for final-year teaching. My colleagues bring professional and academic expertise which enriches the students' own research and design practice in a multitude of ways.
Kirsty Ross

This project made the students explore sustainability, a topic which is important to them, from perspectives they would never have considered before. I was particularly impressed with how the students engaged with the experts, and the respect with which they treated their input and advice. The students I worked with were really committed to proposing futures that really reflected the values and cultures of people in the Global South.
Janet Kelly, Innovation School lecturer

No one could have anticipated how this year was going to change with the arrival of the Covid-19 pandemic, making this project on Sustainable Development exceptionally timely and relevant. The students have proven their ability to inhabit a real-world situation with sensitivity and understanding beyond their years, demonstrating how young designers can learn to participate in changing society.

The complexity of this year's challenge should not be underestimated. But the students accepted the challenge and embraced the diversity of lived experiences of the stakeholders from the Sustainable Futures in Africa Network to create form and future visions that break down barriers and transcend geographies, disciplines and sector limitations.

The students have highly attuned research competencies merged with progressive design skills and knowledge. The results of this project are highly effective and at times startling, but at all times justified, genuine and honest. It is clear that the students take a responsibility for their research and this reflects a commitment to global citizenship. It is design innovation with societal impact.
Professor Nicol Keith

Case Studies

This project generated diverse, surprising, provocative, insightful and intelligent responses from the graduating students. The following case studies represent a sample of these outcomes, chosen to demonstrate the unique ways in which different individuals approached the brief. This book describes the journey that led to these conclusions, with all of the participants' projects presented in the Graduates Directory section at the end

Holly Zambonini
—If you've got a body, you've got something to sell

'If you've got a body, you've got something to sell' looks at the future of the gig economy in the Global South. It focuses on what could happen to those who lose their jobs to automation, who may have nothing left to sell but their bodies.

The project is based on the current issue of body commodification, which sees people in the Global South make a living through the transnational kidney trade, hair trade and surrogacy. It poses the question of what the gig economy might look like if it was possible for buyers in the Global North to purchase another person's genes from the Global South in order to change their own genetic code using CRISPR/Cas9 technology. 'If you've got a body, you've got something to sell' draws attention to the need for Sustainable Development to continue supporting those left behind by changing economic models. It highlights the responsibility of governments to develop innovative solutions for those who will inevitably lose their jobs to automation.

AS LONG AS YOU'RE HUMAN, YOU HAVE SOMETHING TO SELL!

SITTING AROUND WON'T MAKE YOU MONEY, JOIN A COMPETITION NOW!

THE GLOBAL NORTH NEEDS YOUR GENES. START WORK TODAY!

TREND
MAGAZINE

January 2039

The Latest in This Year's Genetic Trends

Plus an exclusive interview with superstar gene seller, Abdul Abimbola

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1

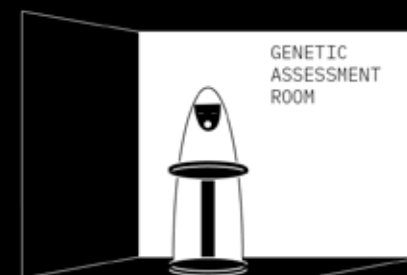Unemployed person goes to The Ministry for Economic Advancement.

2

He enrolls in the Body Commodification Gig Economy at reception, as a new employee.
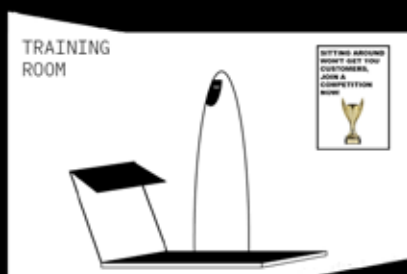

3

He does his Genetic Assessment and discovers he has 2 functioning copies of the ACTN3 Gene, found in elite, short distance runners.
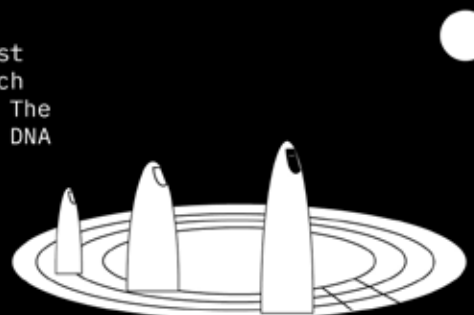

4

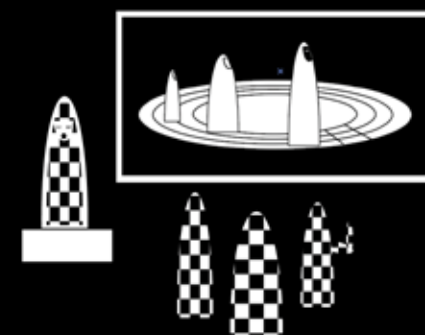He starts training on a treadmill to prepare for his first competition.

5

He wins his first competition which is televised in The Global North at DNA Centres.

6

At the DNA Centres in the Global North, Gene Buyers bid on the winner's genetic material. The highest bid, wins.
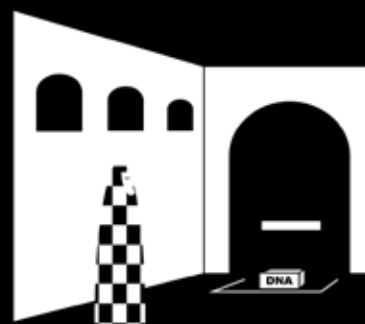

7

The highest bidder enters his personal information, at a kiosk, so the genetic material can be sent to his home.

Congratulations! You were the auction's highest bidder!

Enter your information to receive the winner's genetic material.
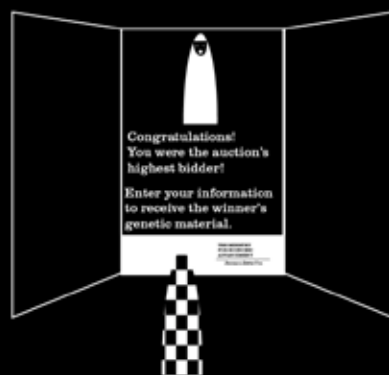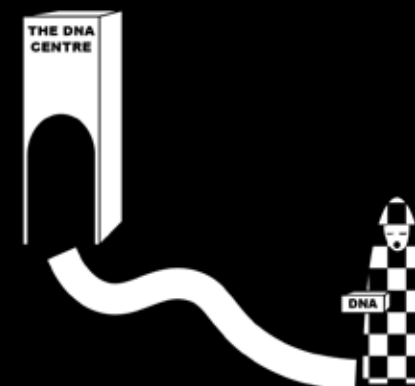

8

The buyer receives the genetic material in the mail.

9

The buyer takes the genetic material to his doctor, in order to change his genetic code.
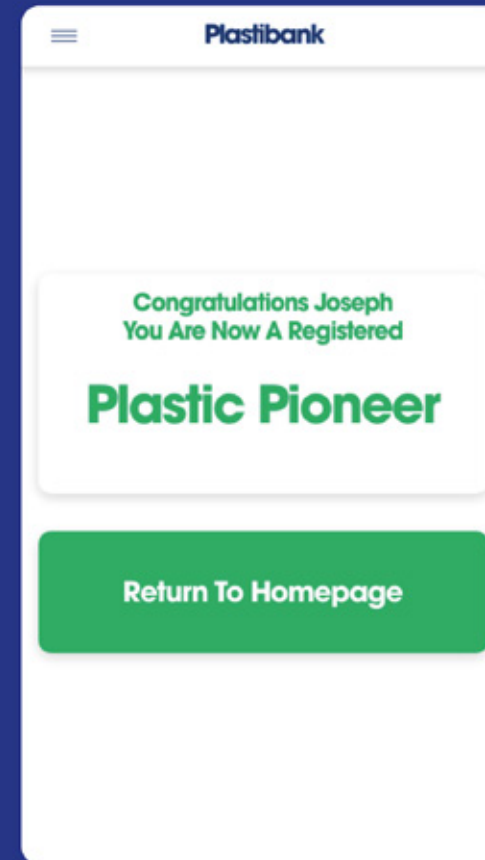
Callum Ferguson
—Plastibank

Recycling waste material is uncommon and seen as unimportant in many developing nations. Plastibank is a new economic system that rewards users for collecting plastic waste, which can then be reused to limit the amount natural resources being transformed into virgin plastic. The Treasure Hunters deposit plastic at the Plastibank, where it is sorted, shredded and weighed. They receive credit based on the weight of material they collect, which is calculated by a machine called the Exchanger based on a new material stock market. The Plastibank transforms the waste material into plastic granules that can be used by makers to create new products or returned into the Global supply chain.

Plastibank

We Recycle Your Valuable Plastic

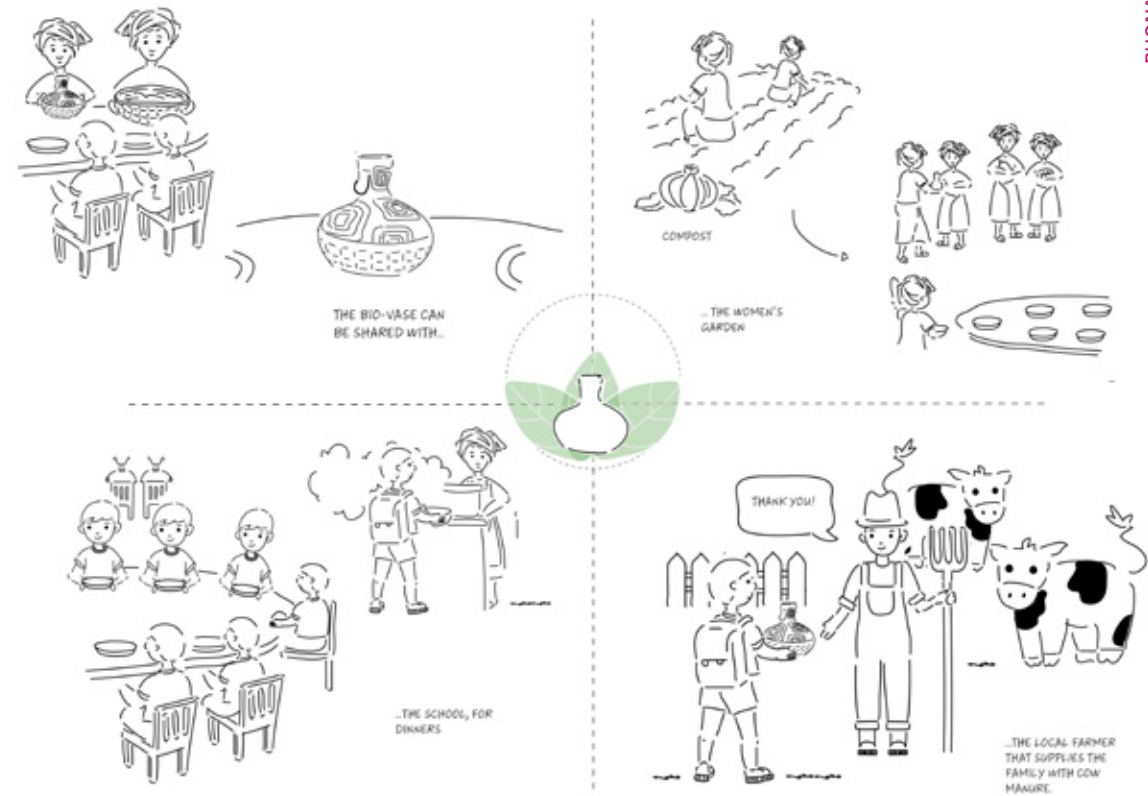1 PETE   2 HDPE   3 PVC   4 LDPE   5 PP   6 PS   7 OTHER

Rhona Brown
—Biovase

Biovase tackles the many issues associated with current cooking practices in rural areas, the biggest being indoor air pollution and its impact on our climate. Biogas provides an alternative source of clean domestic energy that helps to mitigate the emission of dangerous greenhouse gases. The Biovase service encourages users to create clean energy using household waste. A digester device mulches food waste, accelerating the chemical process that produces the biogas. The user can see how much gas is being generated, which helps them appreciate the value of their waste. The gas is transferred to the Biovase vessel, which the user can personalise with their own decoration. This artefact references traditional vessels and can be used to transport and share excess fuel with friends or neighbours.

BIO-VASE

THE BIO-VASE CAN BE SHARED WITH...

COMPOST

...THE WOMEN'S GARDEN

...THE SCHOOL, FOR DINNERS

THANK YOU!

...THE LOCAL FARMER THAT SUPPLIES THE FAMILY WITH COW MANURE.

Piér Paolo Stevens-Rosa
—E-Cycle

The ubiquity of technology and issues related to planned obsolescence have resulted in electronic waste worth €60 billion currently rotting in landfill globally. Much of this e-waste is exported to countries in the Global South as it is easier to dispose of there. E-Cycle is a speculative brand aimed at helping communities affected by e-waste. It provides services including workshops, tech repairs and the sale of e-cycled tech to help create a new economy around affordable technology. Users can join workshops and learn how to repair their electronic items, or can bring items in for repair and observe the expert technician repairing it. They can also purchase items or trade their own broken tech to promote e-cycling behaviours. An optional membership scheme enables them to gain qualifications so they can become an e-cycling expert and take on a leadership role within the organisation.

E-CYCLE CERTIFIED

REDUCE · REPAIR · REUSE · RECYCLE
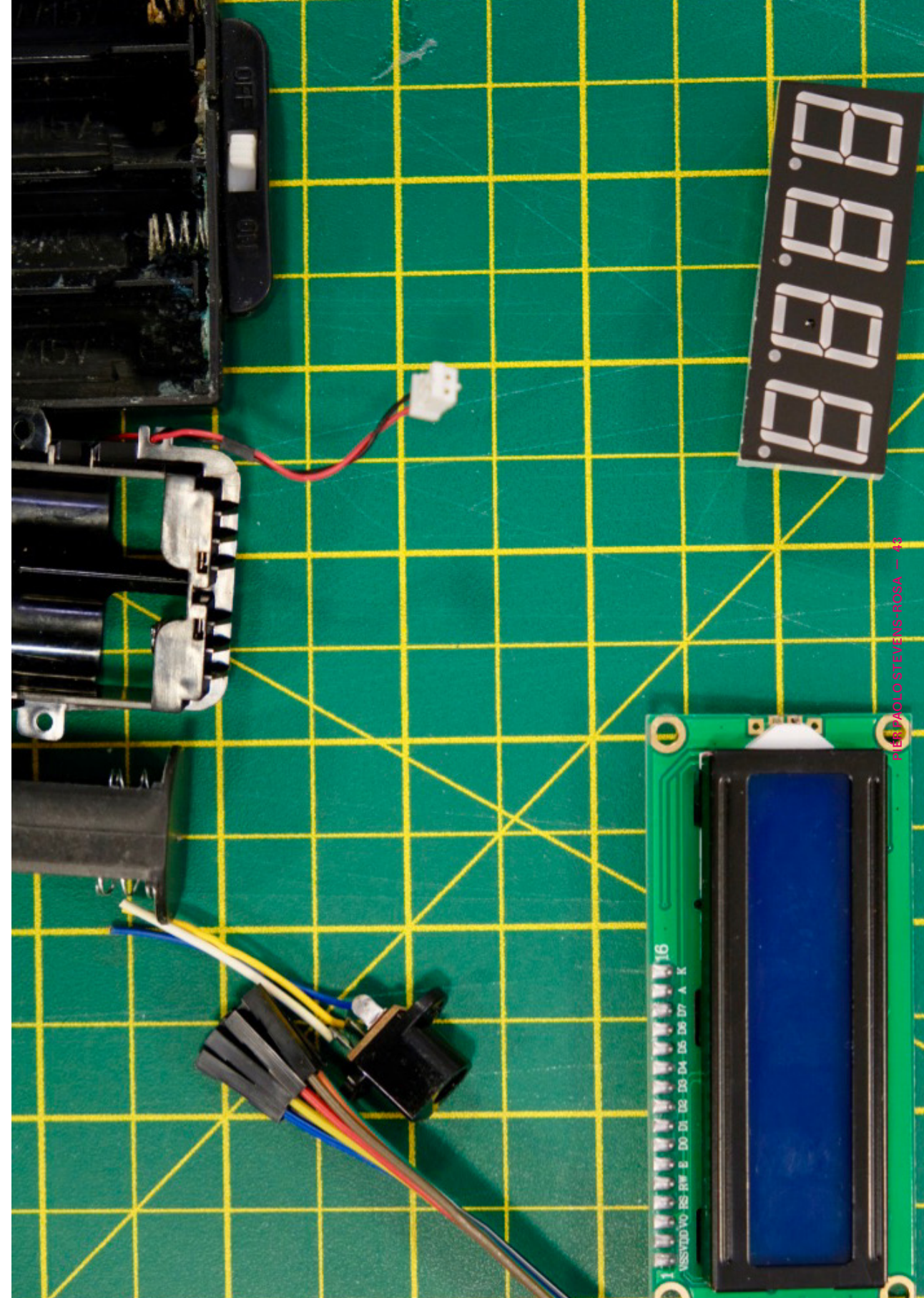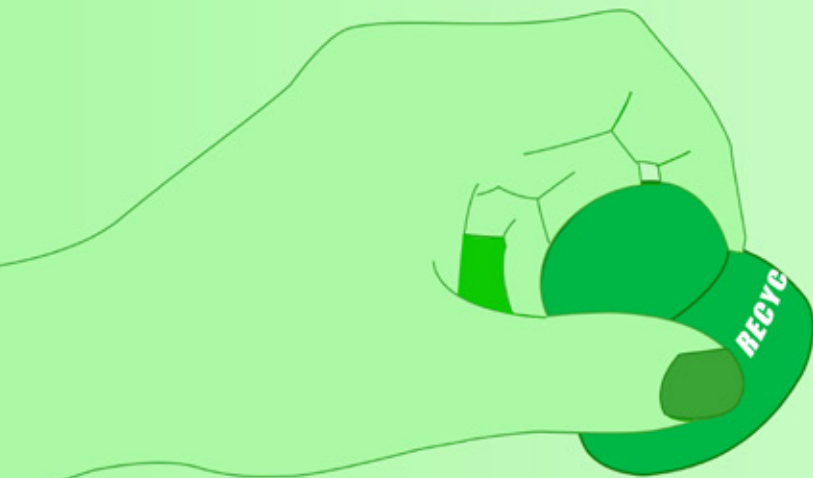
All tech that comes through an E-Cycle Location is certified with a stamp.

#ecyclecertified

E-CYCLE CERTIFIED MEMBER

Members get free work-shops, repairs, and ma-terials, and a discount in the shop.

E-CYCLE CERTIFIED TECHNICIAN

Technicians can advise on products, stamp tech, and perform re-pairs.

E-CYCLE SENIOR TECHNICIAN

Senior techs can run work-shops and sell their own e-cycled tech in the store.

E-CYCLE LOCATION MANAGER

Location managers are in charge of a loca-tion, and purchase any needed supplies/brand-ing materials from E-Cycle.

Nella Piątek
—H.E.R.A.

The Habitat Education and Restoration Agency (H.E.R.A.) is a speculative system related to the Environment group's proposal for a Sustainable Belt between urban centres and the countryside. This self-sufficient community focuses on applying Sustainable Development practices to protect and regenerate nature. H.E.R.A. supports individuals from urban and rural areas as they transition to a new life in the Sustainable Belt. Users undertake a personality test to determine skills, strengths and behaviours that are used to place them in a relevant sector where they contribute to the growth of the community. The district uses vertical farming and permaculture to support the population, while native plants help to clean the air, land and water. H.E.R.A. participants feel more integrated into society and learn sustainable behaviours that they will continue to apply if they choose to return to their previous lifestyle.

IMANI'S JOURNEY WITH H.E.R.A.

This is Imani Osei. She is 23 years old. She works in the city as a receptionist. It has been 5 years since she spent her required 6 month duty at the Sustainable Belt after graduating highschool. Recently she has been granted a 6 months tax-funded allocation from H.E.R.A. as an opportunity to reconnect with the environment and learn new habits. She chooses to redeem her 2 months now, as she has been feeling in the fast-paced metropolis.

H.E.R.A.
Habitat Education and Restoration Agency

She visits the H.E.R.A. website and registers online.

REGISTRATION
We have curated a virtual application system that allows us get to know you better. The system will take you through a personality test, asking about your skills, preferences, life experiences.

HR ANALYTICS using

H.E.R.A. A.I.SYSTEM

1. DATA PROCESSING
Next, our AI system will go through the process of analysing your footprint, evaluating your skills and strengths.

2. PREDICTIVE ANALYTICS
Our system will then undergo the process of seeking any behavioural patterns and trends to forecast possible future relations.

3. TEAM ASSESSMENT
At last, your profile will be analysed in relation to other applicants for the purpose of workforce planning, evaluating skill gaps in our sectors and assessing your compatibility with specific compounds.

ALLOCATION
Imani's profile gets analysed alongside other applicants. Her skill set and personality traits make her best compatible with individuals such as Oe and Arin. She gets assigned their compound.

a.

b.

c.

d.

e.

RETURN AFTER:

1 month
2 months
6 months
or
12 months

ex.

EXPLORATION OF ROLES AND ACTIVITIES
During her stay, Imani chooses to work in the NutriLab to learn how to maintain a sustainably sourced diet. She also joins the Parenting scheme, as she wants to introduce more green-space into her work and home environment.

MEMBERSHIP ACTIVATION
Imani's membership is re-activated and her journal card is ready for scanning.

transfer

H.E.R.A.

The landscape of the Sustainable Belt consists of housing amongst regenerating nature, that we are responsible for. Vertical farming and permaculture is used as our local productive systems. Native plants are used to clean up air, land and water from pollutants through a bioremediation process and our diets consist of indigenous super vegetables.

Struan Stewart
—Mutua

Mutua is a service provider established as a subsidiary of the United Nations in response to Goal 17 of its Sustainable Development Goals. This Goal aims to revitalise partnerships between the Global North and Global South, enhancing the exchange of knowledge and helping to promote trade. Mutua aims to provide technological guidance to a range of stakeholders interested in partnering with people in diverse communities around the globe. The service offers training for 'Technological Ambassadors', who can participate in residencies aimed at building knowledge and identifying needs for new technologies in specific contexts. By pairing people and companies from the Global North and Global South, Mutua ensures that technology projects are implemented in ways that are useful and sustainable.
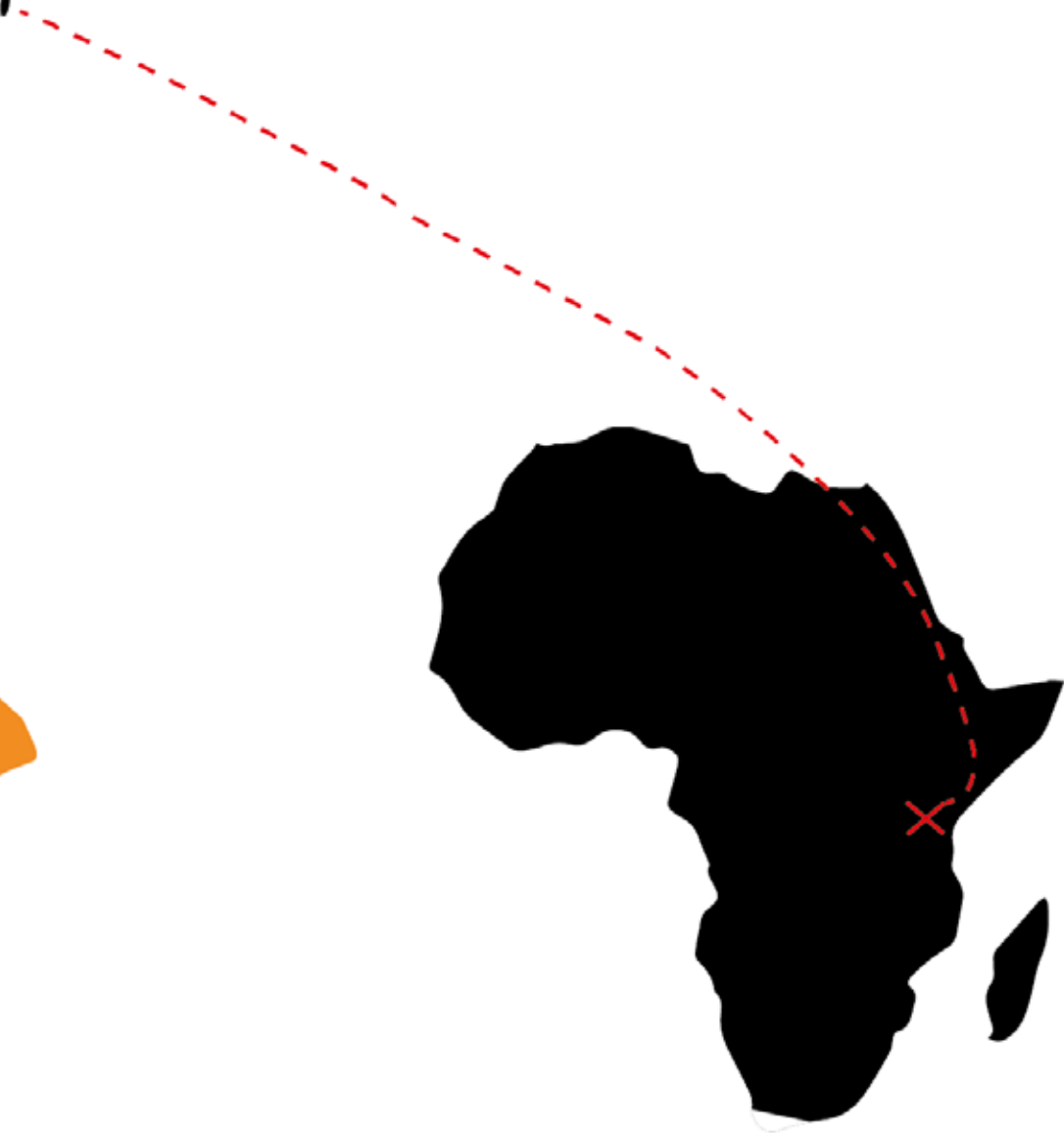
TECHNOLOGY AMBASSADOR
UNITED NATIONS

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Amara Naisiae

ID: **172498012378**

Jessica Judge
—SenseVoice

SenseVoice is a public service that encourages communities to capture their unique values through different senses. This non-linguistic form of expression offers an effective way of collecting and communicating important Memories, Aspirations and Judgements. A Value Navigator invites participants to capture an aspect of their community using the most appropriate physiological sense. Local creatives then transform these sense portraits into outputs such as exhibitions or presentations that can be shared with other communities, schools or governments. By experiencing the positive or negative sensory values in this way, the SenseVoice network can appreciate how others around the globe are living and suggest improvements.

Rover
SenseVoice capture device

① CAPTURE

Asks participants to view their lives through Memories, Aspirations, or Judgement, and choose the best sense with which to capture this value

M J A

② CO-PRODUCE

Engages local creative industries to produce outputs for these senses, in the form of Celebration, Education, or Activism

C E A

③ RELEASE

Senses are released in either an exhibition, school, or government setting
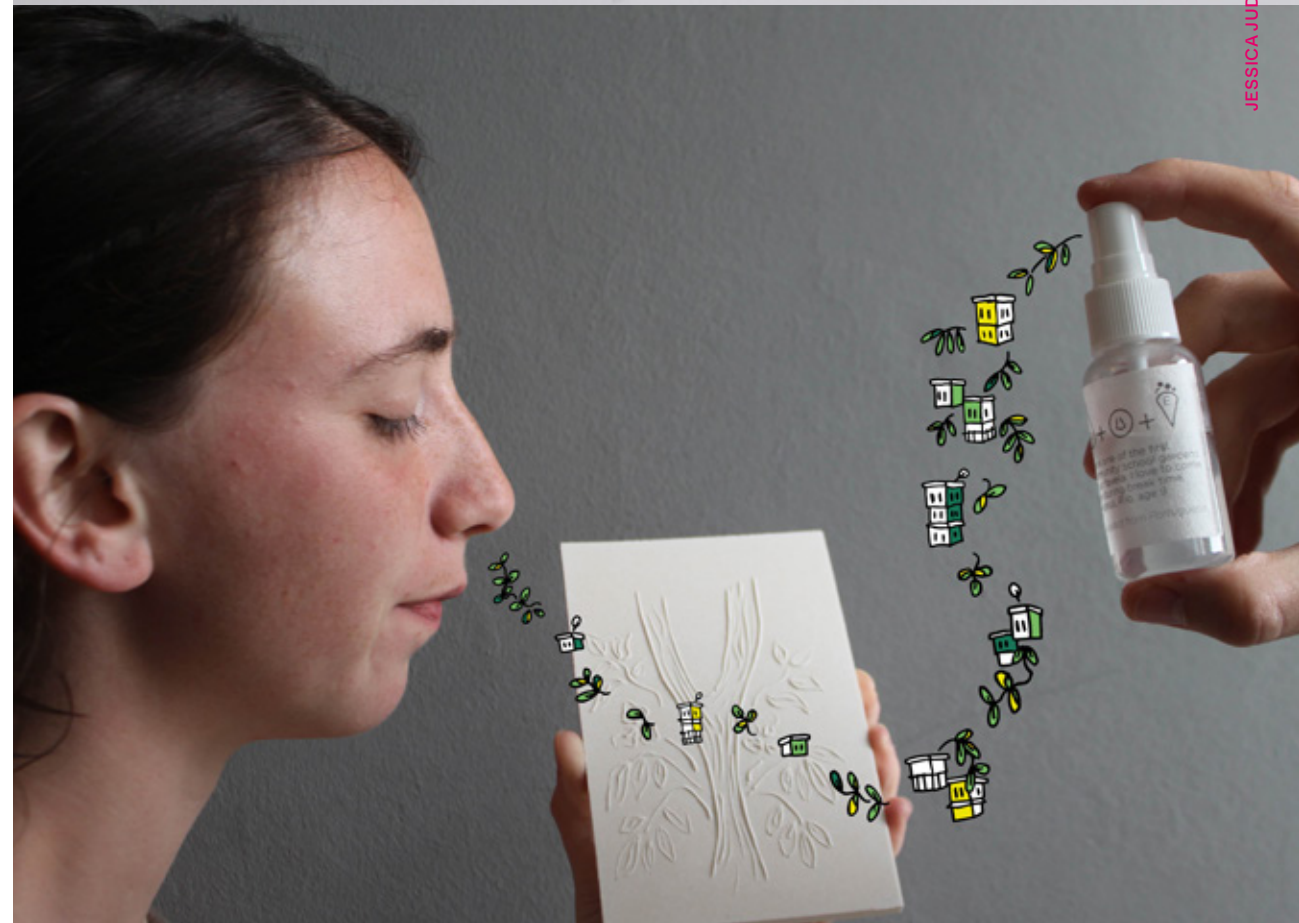
Rio

Memory

2020

'Playing capoeira outside in the early morning'

Rio

Judgement

2030

'Lack of sustainable rubbish and recycling disposal'

The Usual Place: a global music-sharing platform by Conor Keenan

pride of place and tradition

cultural movement in sound

live

the app

the Usual Place

Plastibank: a system for rewarding plastic recycling by Callum Ferguson

Kirsty Ross
—Design Academic and Project Lead, the Innovation School, Glasgow School of Art

Kirsty teaches across the Product Design undergraduate programme in the Innovation School and is responsible for the coordination of the final year curriculum for both the B.Des and MEDes degrees. As Project Lead on the Future Experiences project, she was responsible for establishing the partnership with the SFA Network and the University of Glasgow, as well as setting the brief and overseeing the project from start to finish.

What is the main aim of the Future Experiences project?

We challenge the students to explore a topic that's future focused and emerging in society. This gives them a chance to add something to their portfolio that is really contemporary or ahead of industry practices.

Why did you choose Sustainable Development as the topic for this year's project?

I'm aware that sustainability is huge in design now, but I felt that our students were thinking about it in a traditional way – about materials or ways of producing things. I thought it was important for them to broaden their definition of what sustainability means. Also, the topic lends itself to the design of Future Experiences because it's about development. It's a living thing that's always changing and it directly affects people's lives. I'm interested in the impact designers can have on non-creative areas. This felt like it would be a rich territory for the students to explore, with enough scope for each of them to identify their own area of focus.

What was it like working with Dr Mia Perry and the Sustainable Futures in Africa Network?

Mia had never worked with designers within the network so she was interested to see how they would think differently about the domains she and her colleagues focus on. The brief was formulated in a very collaborative way, with Mia helping to define domains that holistically represent Sustainable Development work. One of the things we discussed was the idea of the Global South actually leading the future of Sustainable Development. To me, the notion of turning the world upside down and reversing the way knowledge is shared was very exciting.

How important was it to involve an appropriate group of external experts to help guide the students' projects?

The expert input days were essential in order to explore this brief in a way that is ethical, respectful and ethnographically honest. We brought in people who live and work with these issues every day. They provided a level of reality that was key to the students forming their own opinions and feeling that their proposals were accurate rather than assumptive.

Why did you choose to present the students' projects publicly at the Work-in-Progress exhibition held at The Lighthouse gallery?

Removing the students from the school and having them exhibit publicly encouraged them to lift their heads up, look objectively at what they'd achieved and appreciate the journey they'd been on. Throughout the project, Mia and I structured the reviews to feel more collaborative and discursive, which helped each student to develop and enrich their understanding and their own point of view. By the time of the WiP show, they felt confident and articulate about what they presented. Some of the outcomes are pretty risky and provocative but they are based on thorough research. We wanted to create a safe space within this project for the students to push the boundaries and I think that was evident in many of the propositions.

Click here to view a short film of the Work-in-Progress exhibition

The Innovation School teaches a human-centred, research-driven process that challenges traditional perceptions of design. This section describes how the students worked in groups to conduct in-depth research with support from Sustainable Development experts. It also explains how workshops led by design specialists provided valuable guidance at specific points in the process

Process

GROUP RESEARCH
DISCOVER & DEFINE

I felt it was important to avoid 'othering' people in the Global South. The research helped me understand that we're all dealing with similar issues around social cohesion, politics, corruption, different cultures, diversity. I thought it's better to consider what you would do in a particular scenario, rather than speculating about how others might think or respond.
Kourosh Khalilian, graduating student

The breadth and complexity of issues associated with Sustainable Development required the student cohort to thoroughly research the topic in order to understand the current situation and likely path of progress. At the beginning of this Discover & Define phase there was an appreciation within the group that they were starting from a point of disadvantage due to their limited understanding of the problems facing communities in the Global South. The inability to conduct field research compounded this issue and presented an additional challenge to the students, who are used to embedding themselves in the context they are designing for. A greater emphasis was therefore placed on the quality of desk research than in previous Future Experiences projects, which have dealt with issues that are more familiar and closer to home. The cohort adapted to the project's unique challenges by learning as much as possible from news articles and research papers that were cross referenced to check their accuracy. The key insights were then discussed with the experts in the studio or by conference call to reaffirm their legitimacy and value to the project's future direction.

The research process began with the cohort working in seven groups to collectively research and explore the domains of Health, Energy, Mobility, Economies, Education, Societal Structures and Environment. These topics were carefully chosen by the project leads to cover the key issues affecting the future of Sustainable Development and its core ambitions. The aim of the Discover & Define phase was to generate a comprehensive vision of the development landscape and how it is approached across these different domains. The research was conducted and formatted so that it could be shared with the whole of the cohort and used to guide the design phase.

An analytical technique for speculative design research developed by Project Lead Kirsty Ross within the final-year curricula of the MEDes and B.Des programme pathways in recent years provided the basis for the initial desk research. The STEEEVPLE methodology involved examining each of the domains through the following lenses: Social, Technological, Economic, Ethical, Educational, Values, Political, Legal and Ecological (STEEEVPLE). The Values lens was added for this year's project on the recommendation of project partner lead Dr Mia Perry, who felt that it was essential to consider the importance of faith and cultural values in the Global South.

The students were provided with a template for compiling STEEEVPLE research cards, with each card used to distill the desk research into specific insights or phenomena that acted as indicators for future growth or change. The aim of the cards was to quickly capture, analyse and activate the research, enabling the information to manifest in multiple configurations that reveal layers of meaning. The template was designed with space on one side for an image that visually represents the insight. The other side includes a title bar for the concept name alongside a short description annotated with the original sources. The visual format is intended to aid the communication of the research with the project partner, both in the studio and remotely.

Each student was tasked with producing approximately ten cards, which were then analysed and used to identify any crossovers or broader areas of interest within the domains. Clustering the cards in this way allowed the groups to point out key themes and societal shifts related to their designated lens. The cards were used as talking points during group tutorials with Product Design faculty and as a way of framing questions for the SFA experts. The findings from this process provided a 'red thread' throughout the project, with each group retaining the cards that were relevant to their developing future world and emerging individual design concepts. By combining this approach with insights from the expert input days and guidance from project partner lead Dr Mia Perry, the result was a robust, evidence-based research process for identifying future experiences in response to the brief.

During this initial research phase, some of the students spoke with friends who live in places such as Zimbabwe about the issues they have to confront on a daily basis. These personal conversations helped to reaffirm some of the early findings and unearthed other unexpected consequences of everyday life in the Global South, combining personal insight with more formal research methods.

The STEEEVPLE cards were very helpful because they conveyed a lot of different aspects of our research in a way that's concise and easily understandable.
Holly Zambonini, graduating student

The studio working environment

EXPERT INSIGHT

Following the initial period of desk research, the students had an opportunity to meet with a range of experts who work within Sustainable Development across the Global South. The group of experts was compiled by project partner lead, Dr Mia Perry, using the extensive contacts and relationships she has established through her role as co-director of the Sustainable Futures in Africa Network. The experts visited the Innovation School on several occasions throughout both the group and individual phases of the project. They answered specific questions about current and future practices within Sustainable Development and offered key insights rooted in their own personal experiences. Some of the network's members also contributed via video call from locations including Africa, North America and New Zealand.

The experts who participated in the workshop sessions possessed professional expertise ranging from social sciences and geology, to energy and human geography. The group also contained educationalists working in international or development-related research, a representative from an NGO that builds schools in Malawi, and an entrepreneur who runs an ethical clothing company that partners with producers in the Global South. Other participants included a senior governance officer from the UK Government's Department for International Development (DFID), a research network administrator, and international graduate students from Africa based at Scottish institutions.

The students said their interactions with these experts were essential in providing a personal perspective on key issues surrounding Sustainable Development. The sessions also helped to identify gaps in the students' knowledge, as well as highlighting instances where incorrect assumptions might have been made. For example, it was pointed out to one of the groups that recycling is not common in many African communities in the way that it is in Scotland, although re-using is more common; and that the concept of future thinking is viewed as a luxury by people living in challenging circumstances, where primary needs take precedent. The Education group learned that Western notions of teaching are not always practiced in developing regions, where knowledge is often shared outside of a classroom context. These insights helped the students to focus their research and feel much more confident in their findings. One of their key concerns was inadvertently imparting personal or cultural biases onto their research and creative choices. The opportunity to gather feedback from people with both professional expertise and personal experience of living and working in the Global South ensured they were able to cite specific scenarios and quote real-world examples in their presentations.

Most of the issues that might be important in considering empowerment and sustainability were evident and were loosely sewn together. Some of the approaches were very imaginative and engaging, including the shredding of a word on paper to exemplify communication challenges arising from working in the Global South.
James Conroy, Professor of Religious and Philosophical Education at the University of Glasgow

The first input session was based on the outcomes of the STEEEVPLE card research, with each group presenting its findings to three pairs of experts. Several of the groups used mind mapping to tie together aspects of their research and create more digestible clusters of information. The groups were also encouraged to present their findings and initial ideas about a preferable future as experiential prototypes that the experts could engage with. By bringing their research to life in this way, the students were able to quickly communicate key concepts and gather feedback to help shape the future direction of their projects. Each group prepared questions in advance to ensure they made the most of their time with the experts and devised methods to accurately capture feedback during the discussions.

One of the key challenges of the input sessions was the requirement for some of the experts to participate remotely, using Skype or WhatsApp video calls to interact with the students. This provided a lived experience of the methods commonly used by academics and organisations involved in international collaboration, as it is not financially or ecologically viable to travel regularly for meetings. It is also another example of the project overcoming logistical complexities that have become familiar to many in the Global North as a result of the coronavirus crisis.

Ahead of the workshops, the students submitted questions by email so the experts were prepared. This helped them to overcome inevitable difficulties in conducting a flowing, two-way conversation due to time lags or technical delays they experienced. Sadly, it was impossible for experts around the world to interact with the models and games some of the students had prepared. This communication challenge reaffirmed an opportunity some of the students had identified to improve how collaborative projects involving participants in the Global North and Global South are organised.

Further workshops with the experts were conducted later in the project, as the students began to explore their own personal design directions. The process of collaboration with industry experts is typical of the Innovation School's human-centred approach, which focuses on the needs of all stakeholders impacted by a project throughout the creative process. The workshops were equally rewarding for the experts themselves, who said they were generally impressed with the level of insight the students had gathered and how it was presented to them.

The whole process was extremely enjoyable and stimulating. I really enjoyed the creativity used to present both the research and the main scenarios. Their lenses on the 'Future' and the imagination they showed to identify potential 'solutions' through artefacts, services and/or experiences was a refreshing, inspiring and positive experience for me.
Vanessa Duclos, Research Manager (School of Education) at the University of Glasgow

SPECIALIST WORKSHOPS

Workshop 1: Mapping a Future Vision

In addition to the teaching provided by the Innovation School's faculty throughout the Future Experiences project, design industry professionals are also invited to run dedicated workshops focused on specific skills and methodologies. These designers use their professional expertise and experience to demonstrate techniques that the students can apply in their projects.

Following the initial research phase, the students participated in a workshop led by Santini Basra and Freyja Harris from design strategy studio Andthen, which looked at ways of distilling their research into key areas for creative exploration. The end goal was to produce a series of short news broadcasts outlining futuristic scenarios based on findings extrapolated from the earlier research process.

To begin with, Andthen asked the students to define what Sustainable Development means to them. This warm-up exercise helped to identify some of the key criteria that set Sustainable Development apart from existing development practices. The groups were then encouraged to consider the potential impact of change on various stakeholders within their designated domain. They were asked to examine the unexpected consequences of change, which can facilitate a non-linear view of the future.

After examining a change from the status quo (in this case a shift towards Sustainable Development practices), the students identified first-, second- and third-order consequences in order to develop potential solutions that lie beyond the obvious. They also examined the stakeholders affected by these changes and produced stakeholder maps outlining the user journeys of people impacted by their STEEEVPLE themes. By voting on the consequences deemed most interesting and relevant to the future of Sustainable Development, the groups identified key areas and moments of change, which were stitched together to form a hypothesis on what the future might look like — a Future Vision.

The outcomes from the unintended consequences exercise formed the basis for scenarios presented in the form of simple posters featuring a single image and brief explanatory paragraph. These scenarios were also used to create an imaginary future news story, formatted with a headline and image in the same way as a newspaper report. Finally, the groups presented their Future Worlds using the posters and a 'newscast' that they produced and filmed to communicate the potential impact of their proposals.

The fast pace of this workshop really forced us to think quickly and pushed us forward. In one day we came up with a lot of things that shaped our Future World exhibit. It helped us to understand that future thinking is about not about making assumptions, instead it's about the cycle of predicting and analysing how the present might affect the future.
Nella Piątek, graduating student

Workshop 2: Physical prototyping

Innovation School students are taught to communicate in many different ways, using appropriate media to express their research and ideas to different audiences. They are encouraged to use visual methods wherever possible, from sketching and model making, to film and other digital presentation formats. To help them refine and display their Future Worlds, Brian Proudfoot of local design consultancy GOODD visited the studio to conduct a workshop focused on physical prototyping and storytelling.

As with previous Future Experiences projects, the students were confronting extremely complex scientific or cultural issues that are not straightforward to explain. Brian's workshop aimed to help the groups identify the people and situations at the centre of their Future Worlds and translate these into a tangible and relatable format.

The process began with the students creating value propositions based on their research. Each group gathered images relating to current scenarios in the Global South, which they contrasted against images depicting a preferred future scenario. The visual worlds they generated provided the basis for a narrative journey focused on the needs of a particular stakeholder or group. Finally, the students chose a specific issue or area of focus that was translated into a physical model using basic materials and rapid prototyping methods. The models

were shown to the Sustainable Development experts and formed the basis for conversations around the potential impact and viability of each group's Future Vision.

The ability of the students to rapidly give physical form to their ideas, and to conduct conversations based around a combination of three-dimensional artefacts and appropriate imagery, is what sets them apart from academics operating in more conventional disciplines. According to Brian, several of the groups used the workshop and the making process to clarify thoughts that emerged during the research process. Other groups were more confident in proposing new interpretations of their theme and expressing these concepts in a physical form. In addition to aiding the interactions with the visiting experts during their input sessions, the prototyping process prompted discussions within the groups about which aspects of their Future Worlds would become the focus for their individual projects.

The point of the workshop and the making process is to create an object that provides a talking point or a way of starting a conversation with the experts. It allows them to explain their research and ideas in an interactive and understandable format that the expert can give feedback on.
Brian Proudfoot

Dr Mia Perry

—Senior Lecturer in Community Development and Adult Education at the University of Glasgow; Co-director of the Sustainable Futures in Africa Network

Dr Mia Perry works at the intersection of contemporary arts and cultural practices and formal and informal pedagogies. She cofounded the Sustainable Futures in Africa Network with colleagues across Africa and now co-directs it with Dr Deepa Pullanikkatil. Mia was the lead partner for this Future Experiences project.

How did you get involved with this project and what appealed to you about working alongside the Innovation School?

I contributed to a previous Future Experiences project as an external expert and I became interested in the Innovation School's approach. I met with Kirsty and we both agreed that there was great potential for collaboration, especially because I had an appropriate research network of external partners that could fit this type of project. It's also both intellectually and pragmatically a good time to think about speculative futures in relation to international development work.

Why was this such a relevant moment to explore alternative approaches to sustainable development?

Our work is set against the backdrop of a long history of development work and international collaborations that have been led by Western notions of science, progress and truth. A Western or 'Northern' approach underpins the training and expectations of researchers and scientists in the Global North as well as the South. We're all well versed in these traditions and conventions that have evolved over the past 80 years. The SFA is working against that tide because we see the injustices of those systems — where those already privileged tend to benefit the most.

What are the main problems confronting people working in development today and how might design-led approaches help to induce positive change?

IIt's fair to say that many of the communities we've been trying to support are not better off than they were 20 years ago. There is a greater divide between rich and poor, and social fragmentation and environmental degradation have increased despite having more expertise to counter those trends. We observe the trends and are trying to innovate and research new ways of working. One thing we don't have is a design and speculative thinking approach. It struck me and many of my colleagues as a potential doorway into a new aspect of our work.

What were you hoping to get out of this project?

My objective was to build a bridge between imagination, creativity, design and our own experiences and expertise. In doing so I hoped the collaboration would prompt new practical initiatives and directions of research, as well as new projects and opportunities. I felt it would also build a lot of capacity in us, as individual experts, whether we're talking about the researchers, the development workers, the businessmen — I wanted it to invigorate and influence the way we think about our work.

What is your understanding of what design is and how did you find working on a brief for designers?

To me, design is about taking on multiple influencing factors, which might be expertise, disciplines, knowledges or contexts, and through a responsive, creative, improvisatory process, creating something that wasn't there before. It was fascinating to work with Kirsty on the brief and to see how she took on a whole new field and integrated it into her structures and practices. It created a good foundation for us to work together on the project.

What about Sustainable Development? How do you explain what it means to people that know nothing about it?

From our perspective, Sustainable Development doesn't mean just one thing because it's very contextual. However, if we look at it holistically, Sustainable Development is about creating ethical and lasting contexts for people and places and ecologies to evolve in appropriate ways. It's a contextually specific, ethically grounded practice of allowing the continual emergence of all factors of life, the social, ecological, spiritual and material to continue to evolve and develop in ways that are harmonious.

What was the biggest challenge posed by the brief you set the students?
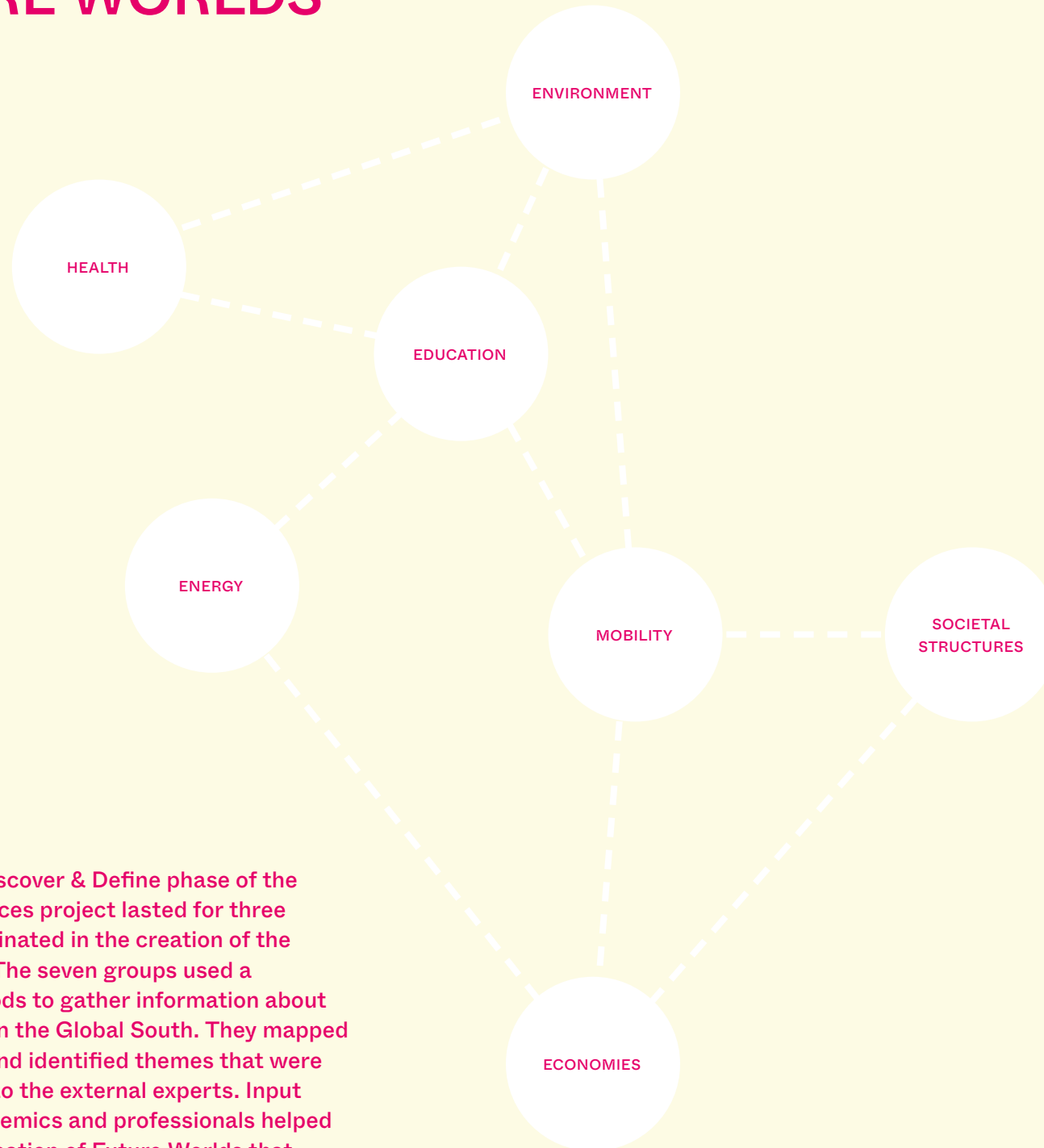
The biggest challenge was the need to design from multiple perspectives, so creating frameworks, structures, roles and technologies, whether they are for one place or multiple places. What counts as good or progressive in one realm may not be seen that way in another.

Outcomes

The outcomes of the group research phase were envisioned as Future Worlds built around seven key domains. This section describes how these Future Worlds evolved and focuses on how they were presented using physical prototyping and other visual methods. It also shows how specialist workshops and expert input helped the students to begin developing their own targeted design solutions

PRESENTING THE FUTURE WORLDS

ENVIRONMENT

HEALTH

EDUCATION

ENERGY

MOBILITY

SOCIETAL STRUCTURES

ECONOMIES

The methodologies explored by external designers from Andthen and GOODD helped bring the students' research to life. The focus on producing communication artefacts that aid storytelling ensured that the Future Worlds felt realistic, relevant, engaging and immersive. Throughout this initial phase the students were also supported by the Innovation School faculty and had several review sessions during which both Kirsty Ross and Dr Mia Perry provided feedback and guidance.

The Future Worlds demonstrated widely varying approaches to communicating outcomes from the research phase. Several of the groups focused on specific personas or scenarios based on their research, and generated stories around life in these future contexts. Others created artefacts representing solutions to some of the problems they had identified. Interacting with these objects allowed the viewer to immerse themselves in these worlds and imagine how they might feel if placed in certain situations.

The Future Worlds were used to gather feedback from the external experts, which helped to guide the students' individual project directions. They were further refined before being presented as part of the Work-in-Progress exhibition alongside the individual project outcomes. The Future Worlds gave visitors a valuable insight into the depth of research underpinning the design solutions on display and provided context that made the individual work more relatable.

The intensive Discover & Define phase of the Future Experiences project lasted for three weeks and culminated in the creation of the Future Worlds. The seven groups used a variety of methods to gather information about circumstances in the Global South. They mapped societal shifts and identified themes that were communicated to the external experts. Input from these academics and professionals helped to inform the creation of Future Worlds that represented areas where design interventions could make a difference to the delivery of Sustainable Development.

It's really interesting to see the visual connection between ideas. They've challenged me to think more imaginatively and laterally than we usually do in our own research practice.
Professor Jo Sharp, Honorary Research Fellow (School of Geographical & Earth Sciences) at the University of Glasgow

ENVIRONMENT

The group developed personas to help visitors to their exhibition understand the relationship between the urban realm, the countryside and the Sustainable Belt. The personal circumstances of members within a single family unit were presented on story cards that corresponded to viewing holes positioned around the circumference of their topographical model. From these vantage points, visitors could see how the different zones might appear from each individual's perspective. For example, the youngest family member remains in the rural area, yet longs for the city. The older siblings took a chance and moved to the city, but one of them moved out to the Sustainable Belt because she wanted the benefits of rural living without sacrificing her opportunities for good employment.

The designers suggested that the Sustainable Belt would comprise housing and micro vertical farms using permaculture and redundant materials to generate sustainable food, energy and other resources. The idea of a new type of community focused on Sustainable Development, opportunity and empowerment provided a starting point for the team members' future-focused individual projects.

The Environment group's initial research looked at how the trend towards urbanisation is affecting communities in the Global South. It suggested that more people will continue to migrate to cities for work, particularly as climate change makes the agrarian lifestyle of those in rural areas more demanding. Overpopulation in the cities and improved communication technologies could lead to changes in the way previously undervalued land on the periphery of these metropolises is perceived. The group named this space the 'Sustainable Belt', as it would rely on a symbiotic and harmonious relationship with the environment in order to transform barren ground into a thriving community.

Simulation of a futuristic environment called the Sustainable Belt
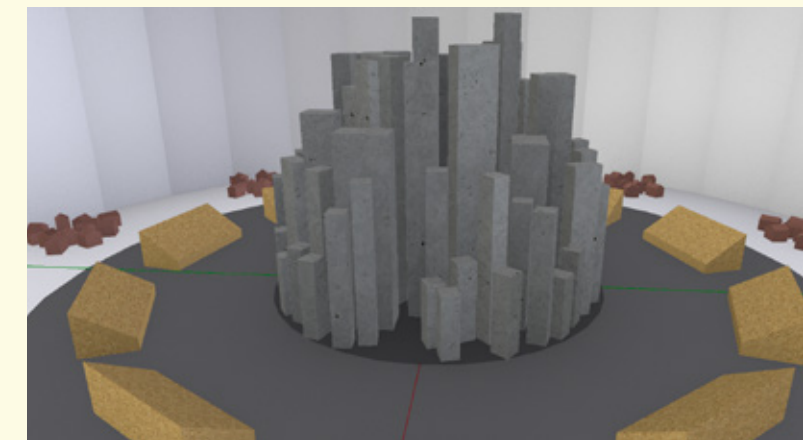
HEALTH

The Health group examined three key changes likely to affect the future of healthcare in the Global South. Firstly, increased global sharing of knowledge will support rapid advances in science and medicine. Greater understanding of illness and disease should also result in improved systems for preventing their spread. Lastly, lifestyle-related diseases such as obesity, Type 2 diabetes and heart disease will become the biggest killers in the Global South, if it follows a developmental trajectory based around the experience of the Global North.
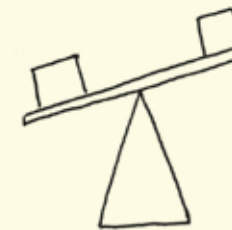
The students developed three personas and accompanying products to demonstrate potential solutions to the issues they face. The first story focused on a mother in the Global North participating in a trial of an alternative medicine developed by traditional healers in the Global South. The second story explained how an educational workshop helped a patient in Bangladesh realise she had developed Type 2 diabetes due to her increasingly 'Westernised' diet. The third example explained the importance of safe drinking water and proposed a specially designed straw that purifies water during use. The stories were presented alongside their accompanying objects at the Work-in-Progress exhibition.

Health practices in both the Global North and Global South are constantly evolving in response to the latest research or newly developed treatments. In the Global South, however, much of the work in combatting illness and disease focuses on education and prevention. Changing behaviours and improving hygiene awareness can have a more profound and lasting impact than treating patients suffering from preventable conditions – this is as pertinent in the Global North as it is the Global South, as the recent health crisis has demonstrated, but implies access to a very different resource model.

IDEA 1

BALANCING 'VALUES'

VALUES

TWO - SIDES ?

Envisioning healthcare practices in the Global South in 2030
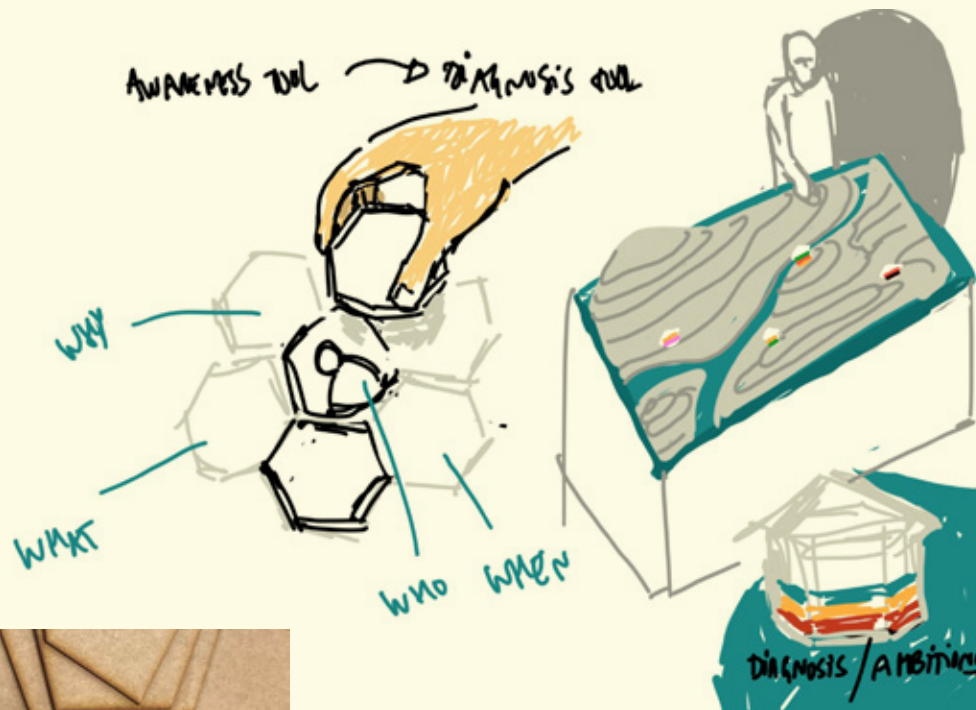
EDUCATION

The group focused on what people in the Global South might want from education and suggested that, in 2030, economic growth may no longer be seen as a core measurement of societal success. Therefore, a shift in the focus of education is required. They proposed an educational system based on promoting socio-economic sustainability, diversity and inclusivity, with teaching tailored to an individual's personal needs and values. This citizen-based service would provide open education for all, with a focus on skills that can be used to tackle local and global issues.

An education system adopting such a 'bottom up' approach is more likely to benefit the learner rather than the institution, and will be able to focus on what, when, where, why and how individuals want to learn. Students in rural areas would enrol through a decentralised branch system comprising schools of interest that would promote the international exchange of ideas. This self-sustaining, user-led service would be tailored to local needs. The group presented a toolkit used to gather details from potential participants about what subjects they would most like to learn, which would eliminate biases and focus on their specific needs and values.

Education in the Global South can be very different to the state-run, institutionalised system typical in the Global North. In communities without formal schooling, knowledge and skills are passed down through the generations. There is also often a greater focus on practical understanding, rather than academic learning. These were some of the Education group's research findings, which helped to inform their Future World.

A tool for understanding users' individual educational needs

ENERGY

The Energy group explored how communities in the Global South are responding to issues that are also relevant in the Global North, such as the need to generate, preserve and consume energy in more sustainable and practical ways. They focused on concerns relating to climate change and developed a vision of 2030 in which African governments promise to supply everyone on the continent with access to energy. Their research identified opportunities to increase supplies of off-grid energy, which would give users autonomy over their energy supply and provide a more reliable, clean and self-sufficient service. They questioned who should be responsible for the decentralisation of energy supplies and how important it is to ensure transparency and empowerment in such a future system.

Their Future World is titled 'Terra' and depicts a model community based in Malawi, where some of the experts they spoke to had worked on energy related projects. The African nation currently faces issues regarding insufficient access to energy and has a history of corruption. Predictions of increased variable weather conditions make it vulnerable to falling behind neighbouring countries seeking to improve rural energy access. The group saw self-sufficient energy production as the key to unlocking the Sustainable Futures potential of Malawi's rural areas.

Terra aims to empower citizens by providing them with the tools they need to produce and trade clean energy, allowing them to operate off grid. The system can only function if the community works together to overcome challenges including the need for a reliable energy supply to help sustain general living or occupation, changing weather conditions, or the need for stronger relationships between the instigators (natural or human) that bring energy to rural Africa.

The final exhibit helped visitors to appreciate this dynamic by encouraging them to collaborate. It also presented the four key values required to sustain self-sufficient energy production within their model community, without relying on corporations or state actors. Participants put on a headband with a label naming one of four key values of the Terra community – Materials, Knowledge, Climate, and Traditions & Cultures. By working together they could figure out which part they played before stepping on corresponding footprints to complete a circuit that illuminated the village.

SOCIETAL STRUCTURES

Coloured blocks representing
different societal values
join together
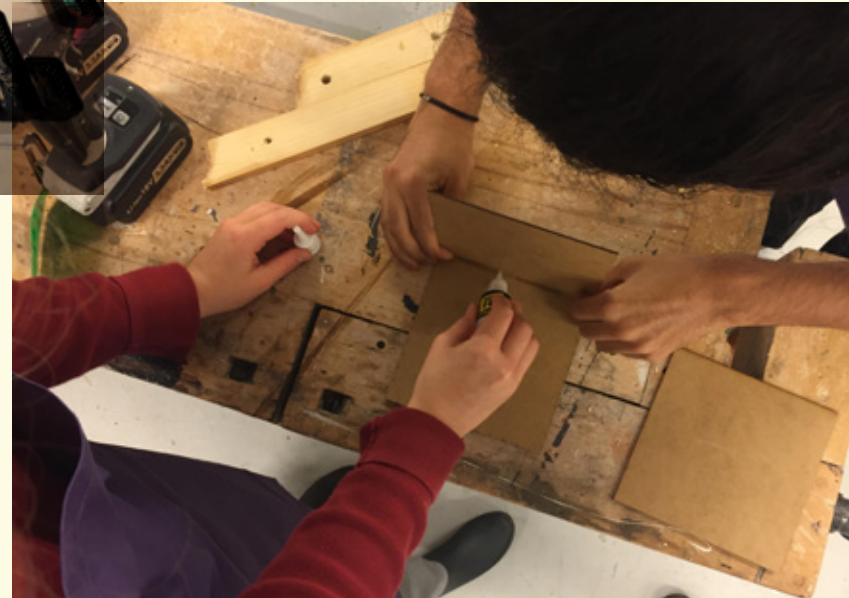
Aid and development processes are currently administered in ways that often negatively impact communities in the Global South. Support for educational projects in these areas can create inequality that divides communities, while companies moving their production to regions offering cheaper labour are harming the environment. Damage is also being caused to pre-existing social hierarchies and their related economic systems. Demand from the Global North continues to fuel illicit activities such as smuggling, poaching and slavery, which further undermine traditional socio-cultural frameworks and relationships.

Based on their findings and the need for communities in the Global South to implement independent Sustainable Development projects, the Societal Structures group proposed a shift away from 'human-centred design' towards the idea of what they called 'network-centred design'. Their 'Symbiotic Societies' concept seeks to promote a more sustainable model for future development that is driven by communities themselves, utilising Global North knowledge and resources. At the WiP exhibition at The Lighthouse, they presented a society-building tool based on a projected future for Glasgow. This enabled visitors to see how the concept could be applied anywhere in the world – even their own city. Participants added blocks representing different values to the framework, helping to build a model for an improved societal structure that reflected a collective, 'network-centred' approach.

The Societal Structures group looked at ways of maintaining the positive aspects of faith, sharing and exchange that bind many communities in the Global South together. These communities need appropriate support and education to help them learn how to negotiate and collaborate with large organisations, whose ambitions often come with unanticipated or undesirable consequences. The needs of the group should come before those of individuals, which means educating people with influence who can in turn help others to understand and act.

ECONOMIES

PLACE SAMPLE

CHEMICAL POLLUTANTS

SEND ANALYSIS

SEND DATA TO

SENT
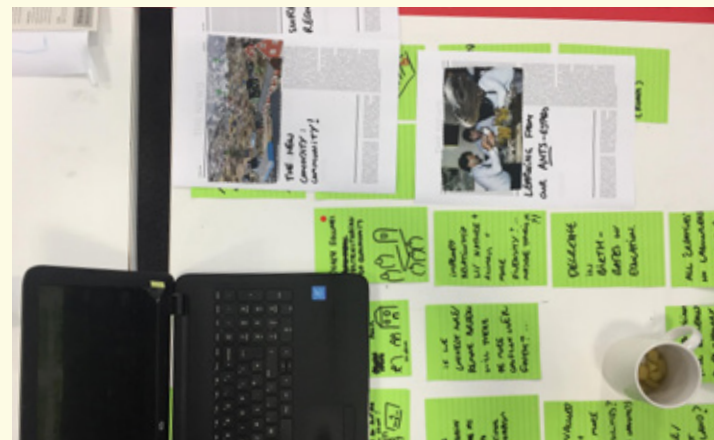
The group's research highlighted an opportunity for creative entrepreneurs in the Global South to address the damage caused to the planet by those in the Global North. Using their knowledge and experience of how best to manage natural resources at a local level, these future businesses could help to pioneer alternative economic ecosystems. In this context, new value systems would be created around sustainability, transparency and cooperation within specific contexts and locales.

The Future World envisioned by the Economies group focused on objects and systems that could support the work of these new social entrepreneurs. The Droplet device uses topographic and local knowledge to point farmers in arid regions towards sustainable water sources. The Soil Analyser allows users to scan a soil sample to determine if the soil is contaminated and identify the most suitable foods to grow in a particular area. Nature's Accounts ensures knowledge about the beneficial properties of flora in the dwindling rainforests is retained and utilised. Trees and plants are marked with a QR code linked to a digital archive containing practical information about each species. All of these proposals use future technologies to stimulate micro-economies, co-creation and co-production by local communities. This would support the development of healthier, happier and more prosperous communities that are not driven purely by a pursuit of profit by capital.

The definition of value and how it is perceived in different cultures emerged early on as a key point of discussion for the Economies group. In particular, they spoke with the external experts about the meaning of wealth in developing nations. Should money be a central focus for people in these regions, or are other values more important? Could Gross Domestic Product (GDP) be replaced by Gross National Happiness as a measure of growth and success? Or a localised version of this concept – community happiness?
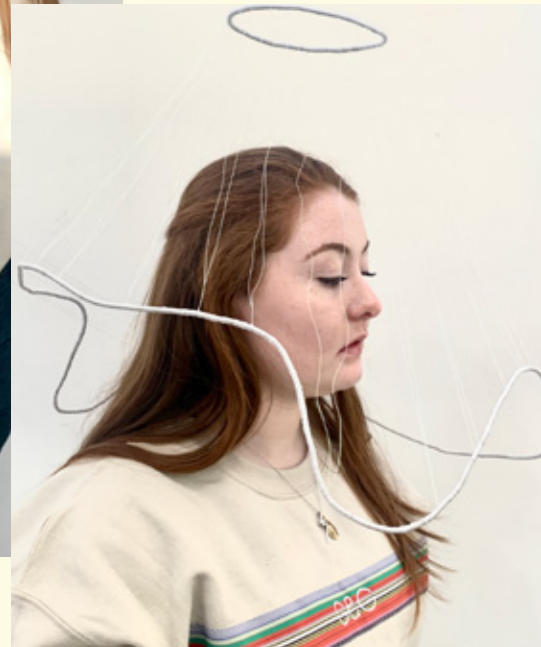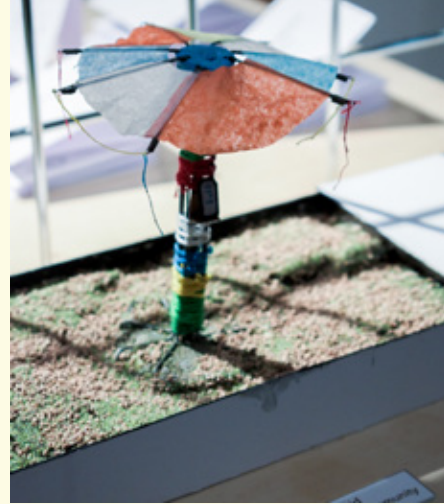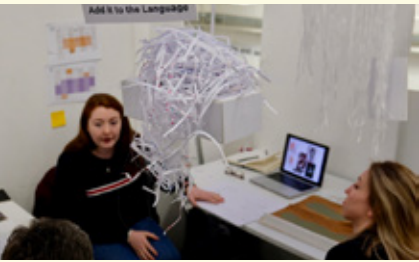
MOBILITY

Interactive artefacts represent a vision of future communication
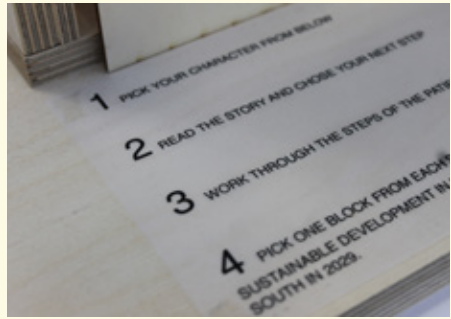
The systems used to move digital information around the world became the group's central focus. In particular, they examined how the movement of knowledge on digital platforms is impacting employment, prompting more people to move to cities and subsequently compromising the traditional structures of families and communities that have existed for generations in many of the Global South's rural regions. They also envisaged a reduction in air travel due to flight shaming, and now the impact of the Covid-19 crisis, which will affect how many businesses and organisations operate or communicate.

The students created a series of new roles for community members to demonstrate sustainable approaches to the more digitally connected world. The Community Ambassadors represent communities, such as migrant mothers and caregiving fathers, around the world, listening to their concerns and feeding back to a network of local ambassadors. The Value Navigators work with communities to capture their unique values and channel these into ongoing Sustainable Development projects. They ensure these values are communicated effectively in an engaging way to prevent them being lost as people move away. The Digital Gatekeeper attempts to make sense of vast amounts of data affecting Sustainable Development work. They produce accurate and trustworthy information for people involved in projects on the ground. The group created a participative installation that encouraged visitors to provide their own perspectives on key future topics. These words or drawings passed through a shredder representing the difficulties of translating ideas accurately. The shredded remnants fell into a transparent net, with some landing outside to demonstrate that not all information is communicated effectively or as initially intended.

The Mobility group's initial research inevitably focused on the physical transportation of people, but conversations with the external experts quickly helped them understand the broader social implications of mobility for people in the Global South. Their STEEEVPLE research led them to explore the word's meaning in the contexts of migration, collaboration, connectivity and communication.

Future Worlds
Process and Outcomes

Jacob
The Sustaina

Maria is an explorer who is invo
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30 January 2030

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DiGi ED - EDUCATION ACCESSIBLE FOR ALL

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Instagram

rural_brazil
Bonito

Work-in-Progress exhibition at
The Lighthouse gallery in Glasgow

Visitors interact with the Societal Structures group's exhibit

Struan Stewart's concept enhances the exchange of knowledge through 'Technology Ambassadors'

TECHNOLOGY AMBASSADOR
UNITED NATIONS

Date of Birth: 24/02/1995

Origin: San Francisco
USA

Expiry Date: 01/01/2044

Darrel Holt

INDIVIDUAL
PROJECT WORK
DEVELOP & DELIVER

Following the three-week Discover & Define phase, the students worked individually to generate their own responses to the Future Experiences brief. The Develop & Deliver phase of the project lasted five weeks, and included further opportunities to meet with the experts from the University of Glasgow and the Sustainable Futures in Africa Network. Studio AndThen also returned to run a workshop in which the students created short films about fictional personas extrapolated from their research.

The workshop with Andthen aimed to identify future users or stakeholder groups that became the focus for design development. The students were asked to create a range of concepts based on the needs of these users, which helped to define the specific context they were designing for. They then began to formulate a targeted design solution, with consideration for how Sustainable Development work might evolve to alter the lives of these future citizens or their communities.

Each student produced a detailed use-case outlining how the working practices of their future user(s) might affect design decisions in terms of aesthetics, interactions and functional behaviours. They participated in a specialist seminar led by Innovation School lecturer and sustainable materials expert Rachael Sleight that demonstrated ways of 'thinking through making.' Rachael explained how to use model making to quickly develop prototypes and communicate ideas in three dimensions. She also offered individual tutorials focused on presenting the future concepts in a clear and engaging format.
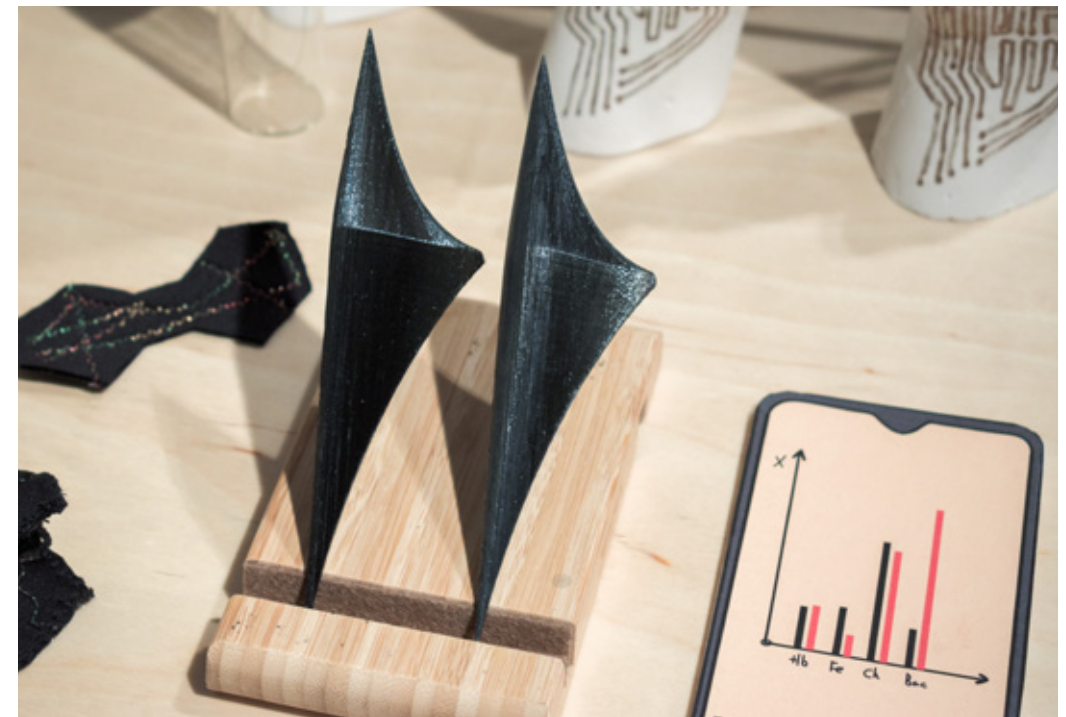
These skills were applied by the students as they refined their detailed proposals to make them ready for review and assessment. The expert group said they appreciated the physical worlds they were presented with and the way some students used gamification to make the exhibits more interactive. This both helped them understand the challenges or contexts the students were designing for, and made the conversations more focused and enjoyable.

DOCUMENTARY WORKSHOP

As the cohort began distinguishing between the broad scope of their group research and more specific areas of individual focus, design studio Andthen was invited to return and oversee a workshop focused on translating their future scenarios into short exploratory films. The exercise was preceded by a session intended to help the students identify a particular stakeholder, community or group of people that they wanted to design for. They began by creating Top Trump-like trading cards used to categorise different groups and communities, as well as the roles of individuals within these groups. Stakeholder maps were then produced to outline key relationships between people (personas) in these groups. Each student generated a fictional persona to represent an archetypal user within their area of focus. These users became the basis for a speed-dating exercise, during which their likes, dislikes, habits and routines were discussed to help develop the characters.

Once the students had identified suitable stakeholders and design opportunities, they were tasked with turning these into films of up to two minutes in length. They developed storyboards to outline moments in their characters' lives that represented a particular problem or opportunity. They then used props including found objects and simple toys to bring their stories to life. Captured using basic cameras or smartphones, with voiceovers or captions providing context, these simple films helped the students clarify the direction of their individual projects and allowed them to communicate this to the rest of the group. The films were presented at a group screening, with popcorn provided. They were also used in one of the expert input sessions, providing an easy and entertaining way for the students to share their ideas. Participants joining the session remotely also received the films in advance so they could provide feedback during a call with the students.

The films we made were really useful because when you're presenting such complex issues to the public you need to be able to distil your concept into something that's understandable, and communicate it on a human level.
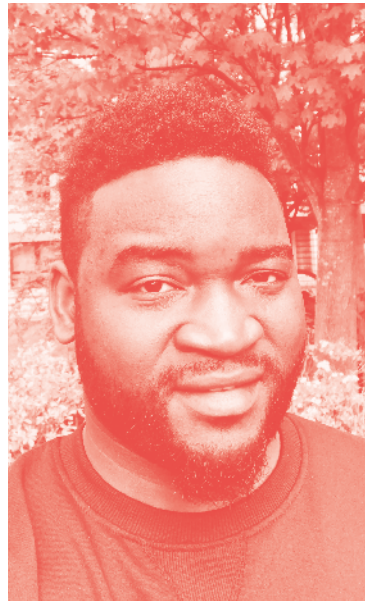Jessica Judge, graduating student

Stewart Paul and Anthony Kadoma

—Stewart and Anthony are members of the Sustainable Futures in Africa Network who contributed their insight during expert input sessions held throughout the project

Stewart Paul (L) - SFA Member and Masters student at the University of Glasgow
Stewart is Project Coordinator of Let's Develop Malawi (LEDEMA) and volunteer secretary for Abundance – a non-profit organisation working towards creating better lives for people and caring for the environment in Malawi

Anthony Kadoma (R) – SFA Member and PhD student at the University of Glasgow
Anthony's work focuses on environmental sustainability. He holds a Masters of Arts degree in Applied Community Change and Peacebuilding, as well as a Bachelors Degree in Adult and Community Education

You participated in several expert workshop sessions during this project. How do you feel the students' projects have evolved and how useful do you think these sessions have been?

Anthony - the people I talked to have changed a lot. Every time we meet they have new ideas. The big challenge is that they are asked to design for communities they are not familiar with. Their confidence has improved and creativity is really at play.

Stewart - I like the design of the sessions because each student receives feedback from three groups of experts. They are then able to take this diverse feedback and use it to build on and refine their projects.

What particular insight do you think you were able to offer the students that helped them develop their concepts?

Stewart - Almost all the groups I spoke with had conceptual ideas for projects in Malawi. Being Malawian I could talk to them about my personal experiences and knowledge about healthcare, educational systems, energy and other topics. I was able to provide insight on how things work and I think that was priceless for them because they were able to reframe their ideas based on what is actually happening on the ground. I also offered my professional opinion about the practicalities of rolling out such ideas.

It's good that there are people from all sorts of different specialisms involved. This diversity plus the practical experience was very beneficial for the students because they were exposed to various experiences and technical know-how. It would be easy to overlook some of these aspects but they have been provided with a fairly holistic overview.

Anthony - We were not called upon only to provide our geographical experiences, we also have technical expertise. We have worked on projects and different assignments in Africa. We came without knowing what we were going to see so any ideas or experiences we shared are those we already had. We didn't do any specific research to prepare or plan what to say, we only shared what we knew.

What are the main things you have learned from this project that you might take away and apply in your own practice?

Anthony - One of the main things I will take away is the need for partnerships and collaboration. You can't work in isolation so networking and a collaborative approach is key, because if you work together you can channel your knowledge much more effectively. Working with different stakeholders, creative people and people with different backgrounds is very helpful because you also learn from the other experts.

Stewart - What I have learned is that as we face up to diverse new challenges we need new ways of tackling these issues. It's difficult to solve these challenges using the same methods that have already been tried and don't seem to work, so innovation is vital. It's also good to involve people who have experience in different kinds of practice because then you have a wider view. This highlights the need for interdisciplinary partnerships because they help you to have a holistic point of view rather than only focusing on your own field of study.

Students engaging with experts in the studio and remotely

Speed-dating exercise used to develop personas

INDIVIDUAL PROJECT OUTCOMES

Following an interim review during which Kirsty Ross and Dr Mia Perry, alongside Product Design faculty, provided feedback on the design proposals, the students further refined the artefacts, services and experiences they had produced in preparation for a mid-year review and the Work-in-Progress exhibition. The outcomes presented for review were expected to include designed products or services finished to a high degree of resolution in support of a detailed concept.

The final proposals confront a broad range of issues relating to Sustainable Development work. Each student focused on a unique direction that emerged from their group research and identified specific users who could benefit from their proposed interventions. These range from an accessible educational service that is tailored to the needs of individuals in the Global South, to a refuge for women moving to cities for work. The students presented their concepts for review and public exhibition in the form of explanatory posters accompanied by models of their products and services.

Directory of Graduate Work

The students each individually explored an aspect of their group's Future World that they found most interesting. These were developed into highly resolved artefacts, services or experiences for specific users and contexts. This directory briefly summarises their diverse, original and provocative design proposals, and the methods used to bring them to life

Breagh Baird
—CultivAid

The CultivAid system helps farmers assess important factors affecting the growth of crops, such as soil conditions and climactic events in response to challenges posed by abnormal environmental conditions. The CultivAid wearable sensor collects and transfers data to the CultivAid Platform as the farmer works the land. The sensors correlate to the changing climate whilst learning how to predict approaching weather, soil hydration, nutrient levels, and pH balance. The farmer receives data and basic advice to help them anticipate changes that might affect their crop yield and productivity. Farmers can also access the CultivAid Platform through an app used to trade knowledge and resources, creating a global farming community focused on adapting and surviving as climate change progresses.

Kathrin Brinkmann
—Habitat

Habitat is a service providing public green space that allows city dwellers in the Global South to escape the hustle and bustle of their environment. Faith plays a major role in the Global South and is considered a primary need. Habitat therefore seeks to create more opportunities to engage with faith whilst also advocating a reconnection with nature. The compact spaces for prayer or meditation are integrated into the cityscape, providing a capsule of greenery that helps to re-establish traditional connections between faith and nature. Habitat aims to increase the enjoyment of the user's prayer times as well as the enjoyment of nature, hence encouraging greater care in the interaction with both.

Rhona Brown
—Biovase

Biovase tackles the many issues associated with current cooking practices in rural areas, the biggest being indoor air pollution and its impact on our climate. Biogas provides an alternative source of clean domestic energy that helps to mitigate the emission of dangerous greenhouse gases.

Emma Chisholm
—Blended Healthcare system 2030

Due to the current Covid-19 pandemic, there is an increased global emphasis placed on the pursuit of new cures and vaccines. The Blended Healthcare system aims to develop cures whilst introducing cultural sensitivity in medicine by encouraging collaboration between different practices. This involves creating a standardised healthcare system that unites traditional and conventional medicine, giving patients the option of various treatment methods depending on their symptoms. The system introduces a new healthcare role – the Treatment Mediator and Consultant (TMC). They operate within surgeries and pharmacies, informing patients of the different treatment options available to them. They also provide information to laboratories focused on creating new cures. Patients can access their own health records and biometric data using dedicated machines that provide updates on advice from the TMCs or doctors.

Luke Fallow
—Mother

Mother is a speculative LGBTQ health brand, offering discreet care under the guise of consumer products through an imaginative distribution network. The project is a response to the current persecution of people pursuing same-sex relationships in some countries in the Global South. Brand ambassadors or 'Mothers' act as representatives for the service's members, providing information on risks the community may face and advising on a range of products to be distributed to members. These might include items relating to self-care, health and peace of mind. By posing as consumer goods and infiltrating existing supply networks, Mother will covertly provide illicit care and support to people forced into living secret lives.

Callum Ferguson
—Plastibank

Recycling waste material is uncommon and seen as unimportant in many developing nations. Plastibank is a new economic system that rewards users for collecting plastic waste, which can then be reused to limit the amount natural resources being transformed into virgin plastic.

Alice Harper
—The Sankofa Journey

The future of education will have a core focus on accessibility for all. Teaching will be removed from traditional settings and will become more tailored to an individual's needs, occurring anywhere and at any time. The Sankofa Journey App helps individuals to reach their career or personal goals. It supports users who missed out on a proper education due to circumstances such as religious priorities or gender inequality that affect many people in the Global South. The app matches university students with those who are unable to continue their education. The mentoring service ensures greater equality can be created within communities. Once the pupil has completed enough lessons, they can become a mentor and carry on sharing their knowledge with others.
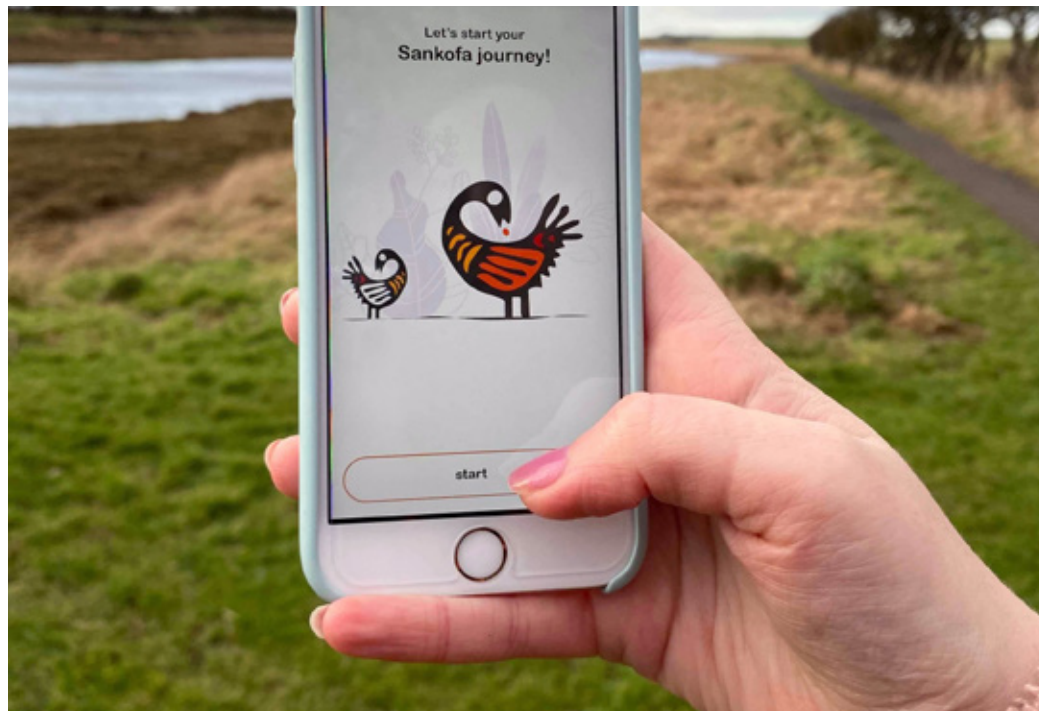
Jessica Judge
—SenseVoice

SenseVoice is a public service that encourages communities to capture their unique values through different senses. This non-linguistic form of expression offers an effective way of collecting and communicating important Memories, Aspirations and Judgements. A Value Navigator invites participants to capture an aspect of their community using the most appropriate physiological sense.

Marta Kawecka
—Wove In

Wove In is a system that preserves craft skills by promoting cooperation between makers from different generations and communities. A byproduct of a West African crop called fonio is transformed into rope that can be woven into baskets and other traditional objects by an older generation of artisans. Younger innovators living closer to cities apply new approaches and technologies to develop sustainable products using the material. By merging the old and new techniques, the service creates contemporary products that retain a sense of their heritage. It also promotes the growth of fonio, which is an orphan crop that assists with biodiversity, food security and sustainable land use.
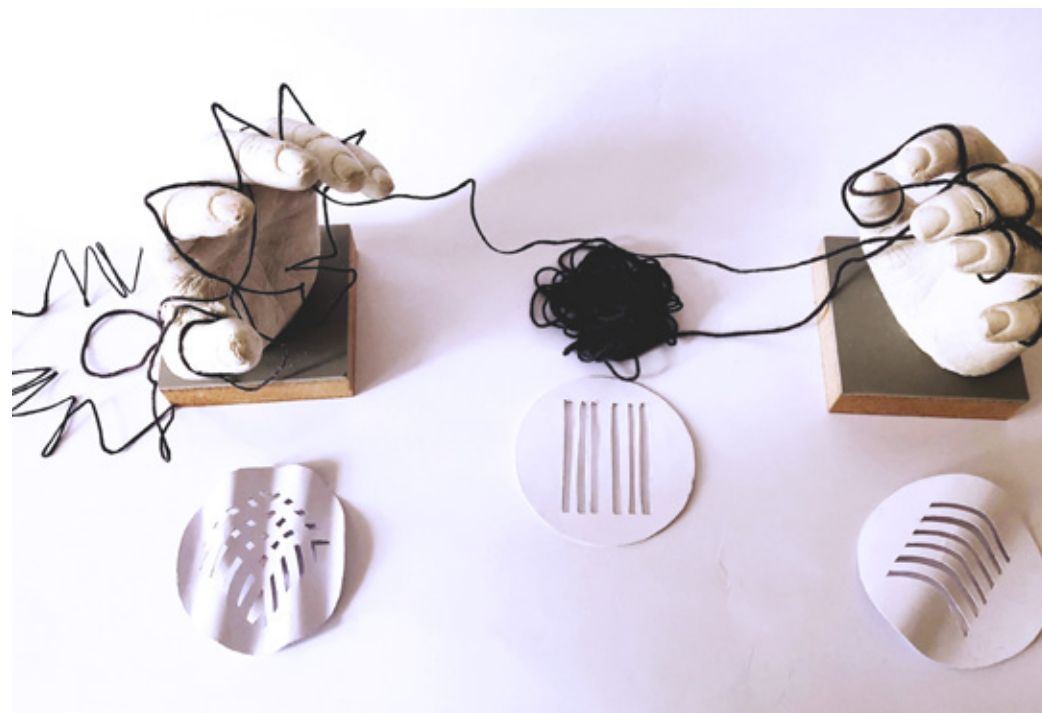
Conor Keenan
—The Usual Place

The Usual Place is a community of music makers and consumers. It is a framework of beliefs that can be manifested in whatever form best suits the surrounding socio-economic context; from a closed global network where the technology already exists, to physical spaces where thoughts, beliefs and cultures can be shared and cultivated. As an example, The Usual Place is envisioned within a South African community in 2030. Users pay a subscription and receive unique local music. They enjoy the exclusive tracks at home before exchanging it for new content. This forms a closed, circular platform based on the continuous sharing of independent music. The pride users feel in their local culture helps to unite the community and is represented by The Usual Place's special symbol.
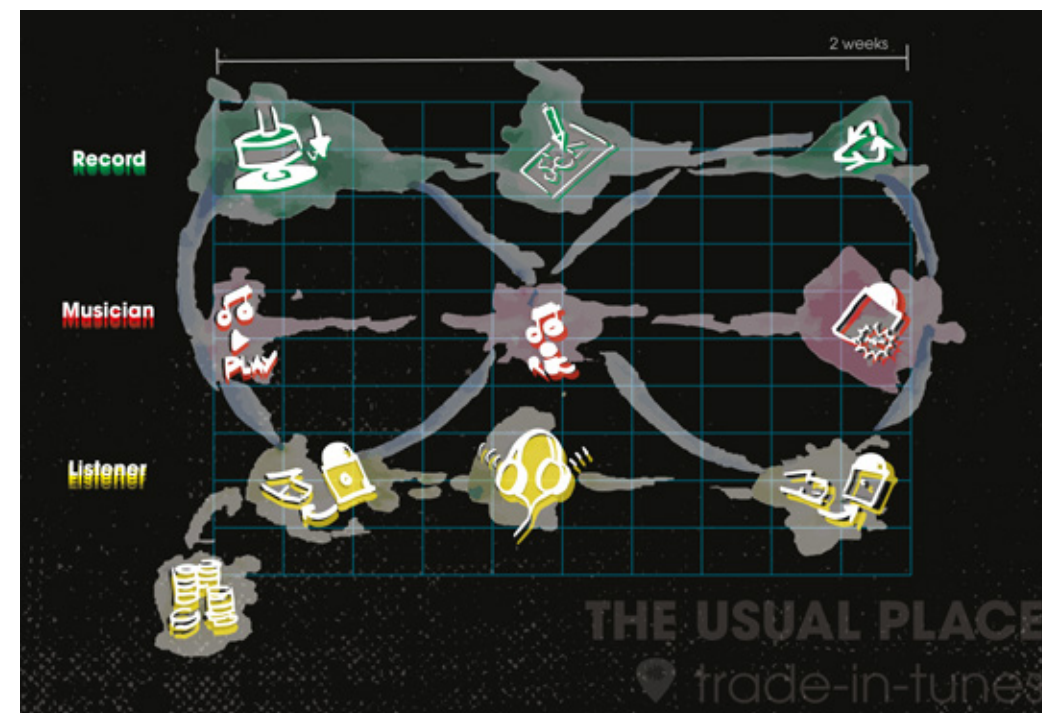
Kourosh Khalilian
—The River Guardians of Niger Delta

The project proposes a mandatory public service programme for young people living in urban parts of Nigeria. The service aims to conserve rural wetlands in the River Niger's delta region, which are home to a vast amount of flora and fauna. Communities living around these wetlands rely heavily on the ecosystem to survive, but pollution from the petroleum industry and other threats including local conflicts and poor land management are damaging this precious natural resource. The project specifically focuses on the conservation of mangrove trees. Young people are trained in landscaping and irrigation, learning how to support the growth of local flora, and eventually graduating to become River Guardians.
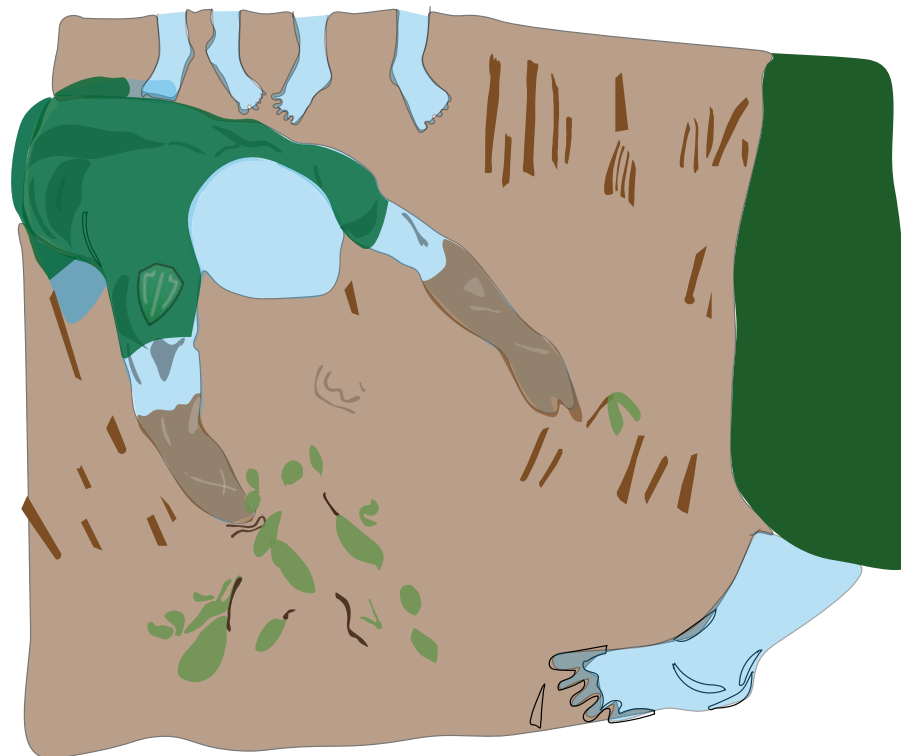
Ruth Kupiainen
—Toolstool

Toolstool is a service for prompting discussion among rural communities that may be affected by a loss of cultural identity as increasing numbers of inhabitants leave to live in cities. The kit is used in workshops aimed at encouraging people from different parts of society to discuss their shared values and concerns. Each participant receives a Toolstool, which they bring to the meeting and assemble together. Whilst sitting on their stools, the participants record their thoughts on a reflection sheet included in the packaging. These sheets help guide further conversations and are ultimately returned to a project leader tasked with compiling them in an exhibition that all members of the community are invited to attend. The Toolstool provides a neutral stimulus for important discussions within communities and will eventually become an icon associated with the act of meeting up to share and learn.
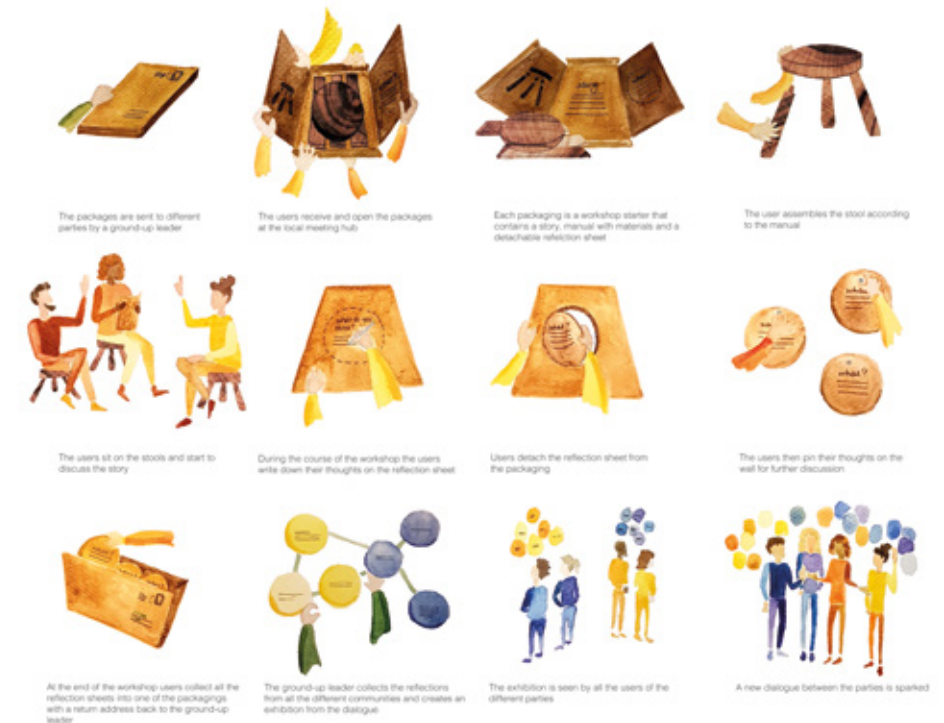
Helena MacDonald
—Wise Women

Wise Women aims to improve access to healthcare for women in rural communities within the Global South, whilst simultaneously creating roles for women in the healthcare system. The Wise Women are trusted members of the community, trained by their elders, whose role is to advise other women about preventative health measures, treat simple conditions, and refer more complex cases to specialists. They use wearable 'Techxtiles', created from weaving together fabric and conductive fibres, to aid diagnostics and treatment. This speculative project explores how the roles of women in the textile industries in some African cultures might evolve as the world's technological capabilities develop. Most crucially, it aims to highlight a move away from the clinical 'West is best' mindset, towards one of empathy and touch.

Eilish McArthur
—Global Knowledge Exchange

By 2030, aid should no longer be something administered to the Global South by the Global North. There should be opportunities for exchanging knowledge and skills rather than simply providing finance and other resources. The Global Knowledge Exchange builds on the role of the Community Ambassador identified as part of the Mobility group's research. The service sees ambassadors in the Global North and Global South team up to discuss ideas that are important to their communities. Using virtual-reality headsets and a series of tools to aid their conversation, the mentors are able to uncover knowledge which they share with their communities. The three artefacts are used as tactile input devices to support Diagnosis, Discussion and Celebration. The mentor can also wear the objects as jewellery to prompt conversation within the community.

Kristen McGhie
—Women Deliver

Women in rural Malawi are still subjected to a traditional initiation ceremony when they reach sexual maturity. This involves sending them away from their community to learn how to cook, clean and perform other household chores. They are also forced to have sex with a paid sex worker to rid them of their 'child dust'. Women Deliver is an NGO that aims to replace this antiquated practice with a ceremony during which young women are educated about sexual and menstrual health. During the ceremony, women are also gifted a wearable device in the form of an earring that secretly delivers contraception to prevent unwanted pregnancies. The service helps women reach maturity and finish their education without becoming pregnant, if that is their wish.

THE GIFT OF CONTROL.

Rosie McKenzie
—Local Coin

Local Coin is a digital alternative currency targeted at financially poor and resource rich communities in the Global South, which are often exploited by wealthy organisations in the Global North. Money can also be a source of exploitation and corruption by governments and central banks. Local Coin bypasses the current system and allows communities with little conventional wealth to control their own resources and stimulate their economy. Users trade goods or services for credits that are stored in a digital account. They can also track their community's progress in relation to others around the world and share knowledge through the platform. Rather than focusing on the accumulation of wealth and resources, the currency promotes a collective effort to preserve and enhance the environment by focusing on local transactions with inherent value.

Local Coin

Jennifer O'Rourke
—Renew

If rural communities in the Global South are to successfully adopt renewable energy, the associated technologies need to be integrated appropriately into everyday life. Renew is a renewable energy exchange that enables members of a future community in Malawi to better value and share energy with each other. Individuals can see how much energy they are using on their own domestic energy meter. The meter is linked to a home energy vane located on the outside of their property. This vane changes shape to indicate that the household may have excess energy to trade with another user for services or resources. Renew therefore acts as a new form of currency, encouraging more sustainable attitudes towards energy usage and promoting the self-sustaining exchange of resources within the community.

Nella Piątek
—H.E.R.A.

The Habitat Education and Restoration Agency (H.E.R.A.) is a speculative system related to the Environment group's proposal for a Sustainable Belt between urban centres and the countryside. This self-sufficient community focuses on applying sustainable development practices to protect and regenerate nature. H.E.R.A. supports individuals from urban and rural areas as they transition to a new life in the Sustainable Belt.

Euan Robertson
—Tacc

Tacc is focused on helping people to live more sustainably by encouraging small behavioural changes in everyday life. It targets people who have a desire to be more sustainable but feel daunted by what might be required. Tacc creates a network that helps users realise they are part of a greater whole and that their combined efforts can make a big difference. The service analyses a user's unique circumstances and provides a personalised plan demonstrating steps they can take. The digital platform provides clear goals and visual data outlining how small sustainable acts add up throughout the day. Tacc also connects users to like-minded people so they can share their experiences and learn from each other. The result is a global community which is attempting to live more sustainably and create impactful change to benefit future generations.


Chantal Roth
—S.U.T.E.C.

S.U.T.E.C. is a housing association aimed at providing communal living spaces for women in urban contexts that are safe, technologically advanced and environmentally friendly. The concept is informed by research suggesting that many women in urban slums feel unsafe living alone. In particular, they dread having to walk long distances at night to use the toilet. S.U.T.E.C. is a women-only refuge that provides a safe environment for women as they begin new lives in the city. The building incorporates essential amenities including a toilet, shower room, shared garden and a communal kitchen, so the occupants don't need to go out unless they want to. A workroom provides a space where women can work together and socialise. The refuge also promotes sustainability by utilising solar power for electricity and heating, as well as reusing waste and saving water.
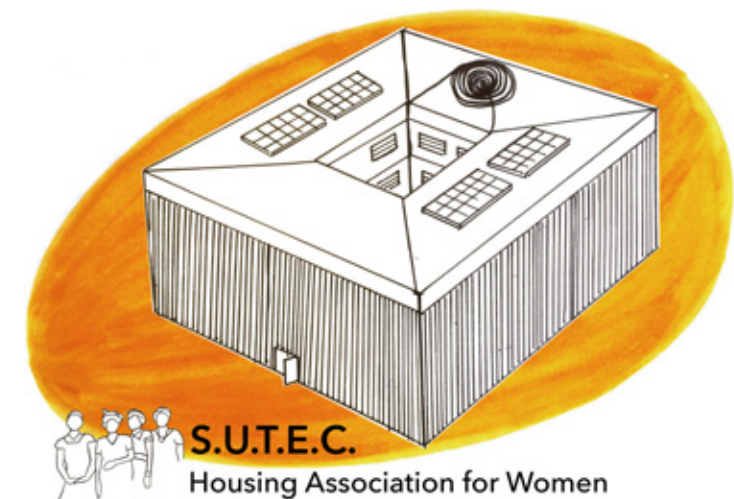
S.U.T.E.C.
Housing Association for Women

Piér Paolo Stevens-Rosa
—E-Cycle

The ubiquity of technology and issues related to planned obsolescence have resulted in electronic waste worth €60 billion currently rotting in landfill globally. E-Cycle is a speculative brand aimed at helping communities affected by e-waste. It provides services including workshops, tech repairs and the sale of e-cycled tech to help create a new economy around affordable technology.
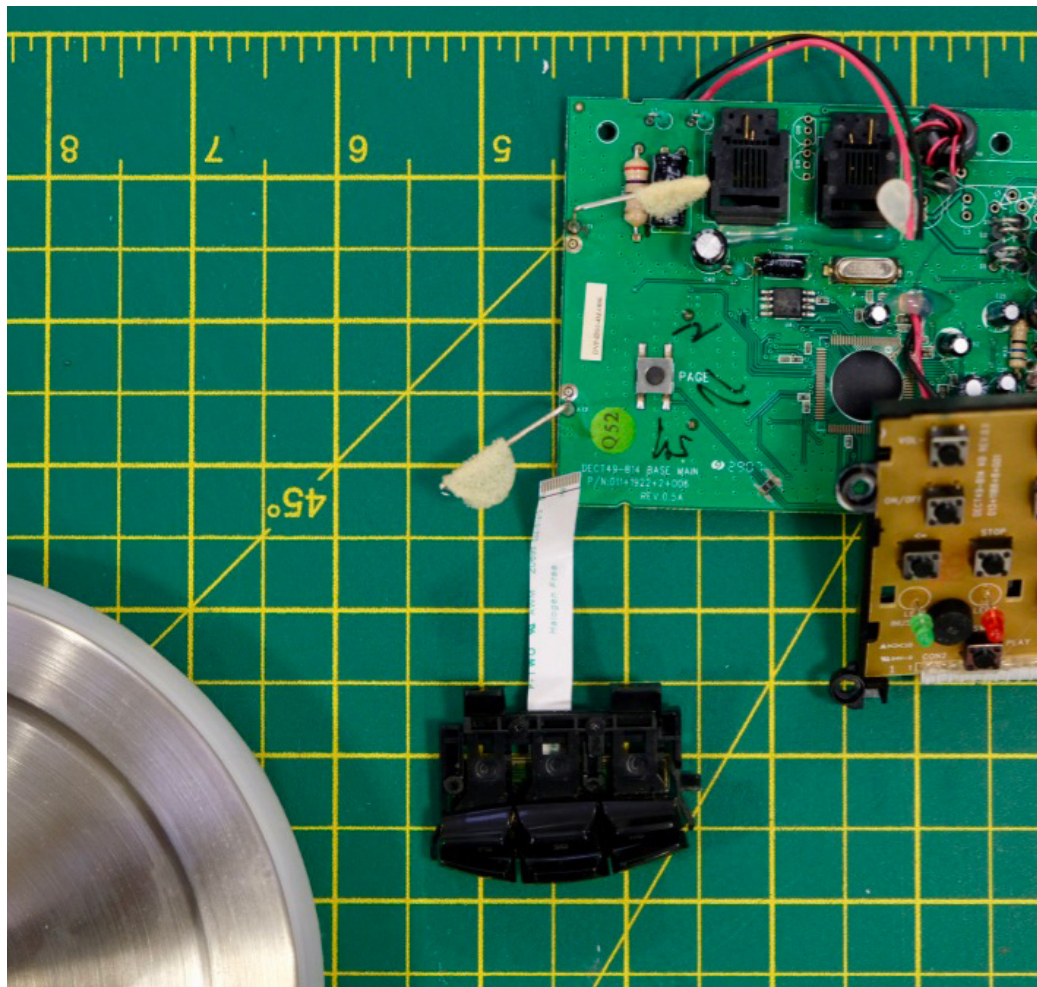
Indre Strazdaite
—Constitution Cloth

This project builds on research conducted by the Mobility group, which focused on the importance of communication in maintaining strong communities. One of the speculative personas that emerged from that research is the Community Ambassador. They gather important information from a global network and feed this back to their own community, in this case a Samburu tribe in Kenya. The Constitution Cloth is a system that promotes conversations around rights, values and diversity within the tribe. Members of the tribe participate in a collaborative event organised by external designers from an NGO. During this event they are invited to contribute statements that become part of their community's constitution. Alongside the discussions, skilled artisans work together to produce the Constitution Cloth as a symbol of unity. The cloth garment is worn by the Community Ambassador to represent their tribe during gatherings with other tribal leaders, as well as further international information gathering sessions.

Struan Stewart
—Mutua

Mutua is a service provider established as a subsidiary of the United Nations in response to Goal 17 of its Sustainable Development Goals. This Goal aims to revitalise partnerships between the Global North and Global South, enhancing the exchange of knowledge and helping to promote trade. Mutua aims to provide technological guidance to a range of stakeholders interested in partnering with people in diverse communities around the globe.

TECHNOLOGY AMBASSADOR
UNITED NATIONS

Date of Birth:
26/03/1995

Origin:
San Francisco, USA

Expiry Date:
01/01/2040

Darrel Holt

ID: 083623091382

Joao Lourenco Vidal
—ReÍcon

Belief systems define the fundamental worldview of a culture by explaining aspects of the natural and metaphysical world, and encapsulating a society's psychological and social practices. The beliefs of minority communities have been overlooked during centuries of colonisation. ReÍcon asks us to imagine, 'What if these aspects of culture were to be valued, protected, and celebrated?' Tribal myths are turned into artefacts, designed to invite exploration and trigger discussion with elder members. In this way, they unveil stories, the oldest mechanism for learning. The artefacts are used to teach virtues such as good judgement and awareness of our roots, as well as raising deeper philosophical questions. The aesthetics of these artefacts would reflect their attributes and the materials of their village's natural environment. They are accompanied by information about history and how to interact with deities in the divine realm through prayer, music, or other rituals.

Nicole Wills
—Musi Co.

As landfill sites and refuse take over our land, our communities and even our homes, we should train ourselves to value discarded materials. Musi Co. teaches people to treasure the waste that engulfs our urban environments. It aims to to create worth and spread culture by harnessing resourcefulness. Participants in the Global South collect useful waste materials and convert these into new, unique musical instruments. The instruments are used to play music that is shared with subscribed members of the Music Co. community around the world using a portable Pod device. This sharing of music with members in different countries creates a global network united by a passion for music and a desire to create culture from waste. The service also creates various opportunities for employment, as people are needed to gather materials, build the instruments, manage subscribers and oversee the service's operation.

Sarah Yang
—Empow{h}er

The Empow{h}er menstruation kit was developed in response to a lack of education and resources about female hygiene and care in some developing regions. Mothers can sign up for the service, which would be provided by the United Nations or organisations supporting human equality and women's rights. The kit provided to girls in advance of experiencing their first period contains information about the menstrual cycle along with products including reusable sanitary pads and instructions on how to make them. It also includes a paper-rose soap, cleaning products, important vitamins in the form of sweets, and a test that can be used to check blood for diseases. The Empow{h}er service aims to help girls throughout this transition and promotes communication between different generations of women on what can be a taboo topic.

Holly Zambonini
—If you've got a body, you've got something to sell

'If you've got a body, you've got something to sell' looks at the future of the gig economy in the Global South. It focuses on what could happen to those who lose their jobs to automation, who may have nothing left to sell but their bodies. The project is based on the current issue of body commodification, which sees people in the Global South make a living through the transnational kidney trade, hair trade and surrogacy.

Graduate Designers

—A conversation with some of the graduates at the opening of the Work-in-Progress exhibition

What did you think of the brief for this project when it was first presented to you?

Jessica Judge – The brief was quite overwhelming because there were so many aspects to it, but it also felt quite exciting and very relevant to today. Initially we weren't sure how to define all the different terms like Sustainable Development, post-colonialism and Global South. We kept coming back to the three points Kirsty asked us to focus on: Sustainable Development, work and our specific domain.

Holly Zambonini – This project felt a lot more real than anything we had done before because we were working with a project partner. There was a lot involved in the brief to get my head around but the idea of thinking ten years ahead really appealed to my interest in speculative design.

What did you feel were the main challenges in the early stages of the project?

Nella Piątek – The lack of direct contact with anyone in the Global South made it difficult to feel confident about the benefits of what we were doing for people living there. The expert input days were really important in helping us to find out if we were on the right track.

Struan Stewart – It was challenging to make this project feel personal and relatable when it's focusing on people and places that are so far away. We had no understanding of what it's like to live there, let alone how we could implement a project that would benefit them sustainably. The first expert input day felt intense because we were treading lightly so as not to make any judgement, but gradually we became more confident as our research evolved.

What sorts of methods did you use to generate appropriate research and communicate this to the experts?

Holly Zambonini – The STEEEVPLE cards were very helpful because they enable you to convey a lot of different aspects of your research in a way that's understandable. That couple of days opened my eyes to new ways of working.

Nella Piątek – All of the information we gathered was presented visually so we could show how it ties together to create different themed groups. That was very useful in presenting the data to the experts because there was so much to cover that we couldn't talk about it all. We turned different stories into personas or scenarios to explain how emerging trends can lead to unintended consequences or potential future scenarios.

Helena MacDonald – Our approach was very much based on scenarios and storytelling. I always lean towards storytelling because it puts you in the environment you're designing for. Learning about real life stories helped to inform my project, but then I had to apply the futuristic lens to these.

How valuable was the insight you received during the expert input days?

Jessica Judge – The experts did a lot of talking which provided us with lots of information. The fact they were all from different disciplines meant we got a wide range of insights that fed into our project.

Nella Piątek – The experts really helped us understand the gaps in our knowledge and what we had neglected to consider with the design direction we chose. It provided a sober representation of reality.

Holly Zambonini – Having experts come in who are really interested and excited about what we're doing was great. It gave us a push to want to do a good job.

What are the main things you learned from this project and what will you take away that you may use in your future career?

Piér Paolo Stevens-Rosa – It was really interesting to try to understand where your biases lie and how you can counteract them in a project context like this. It's so important to be mindful and constantly question whether you are making any assumptions. Getting comfortable with asking questions that you think you shouldn't really need to ask was crucial to the success of this project.

Conclusion

This project challenged the students to envision future forms and functions of Sustainable Development work in relation to the Global South. They rose to this challenge and produced outstanding work that demonstrates their expertise in human-centred design innovation. For everyone involved, this was a formative and enlightening project that provoked new thinking about design's role in the future of Sustainable Development

CONCLUSION

Each year, the Future Experiences project aims to embody the Innovation School's collaborative, future-focused and human-centred approach to Product Design. It gives final-year students a chance to put into practice everything they have learned by tackling a complex subject in partnership with professionals working in the field. This experience helps them to understand themselves as creative practitioners and prepares them for roles in private or public sector organisations, consultancy, self-employment or further study. In combining their professional and academic development – their creative as well as personal evolution – the project signals how these individuals will enter society as citizens able to articulate their views on local and global issues.

This year's focus on Sustainable Development offered an opportunity to imagine how new ways of thinking could improve approaches to supporting development in the Global South ten years from now. The brief for this Future Experiences project confronted the students with challenges they had never faced before. The difficulties associated with remotely gathering credible information about places they may never visit was very different to the immersive research and co-design process they typically follow. This forced them to identify new ways of conducting research, from organising video calls with experts around the world, to making the most of time spent with professionals in the studio during regular workshop sessions.

The project also prompted the cohort to consider the role of the designer in the context of international development, and the ethics of proposing solutions to problems that are completely alien to their own experiences. Their dedication to pursuing empathetic and ethical ways of working is evident both in the Future Worlds they produced during their group research, and in individual projects that focus on genuine human needs.

Key to the project's success was the involvement of the various academics and professionals associated with the Sustainable Futures in Africa Network. This collaboration with the network and the University of Glasgow provided invaluable insight throughout the research phase and the design process, as well as generating targeted feedback on the proposals that emerged. The students were able to cross reference their findings against the experts' actual experiences and respond directly to stories they were told about life in the Global South. The expert input days helped build confidence among the cohort that their work had merit, and also allayed concerns the students had about cultural biases infiltrating their thinking.

For the experts themselves, the process of working alongside the students prompted them to reconsider their own working practices. In particular, the collaborative workshop sessions created an environment in which knowledge could be shared easily between the participants. The presentation of information in a visual or experiential format also made a strong impression as an alternative to more conventional methods of interacting with their students, peers or project partners.

Working with the Innovation School has taught us all a lot and has been really invigorating for the way that we practice. Working on what for us is quite an experimental process has been an inspiring and unique experience for all the members and associates of our network. The completed projects are urgent, important and relevant provocations that are very meaningful for us in our day-to-day work.
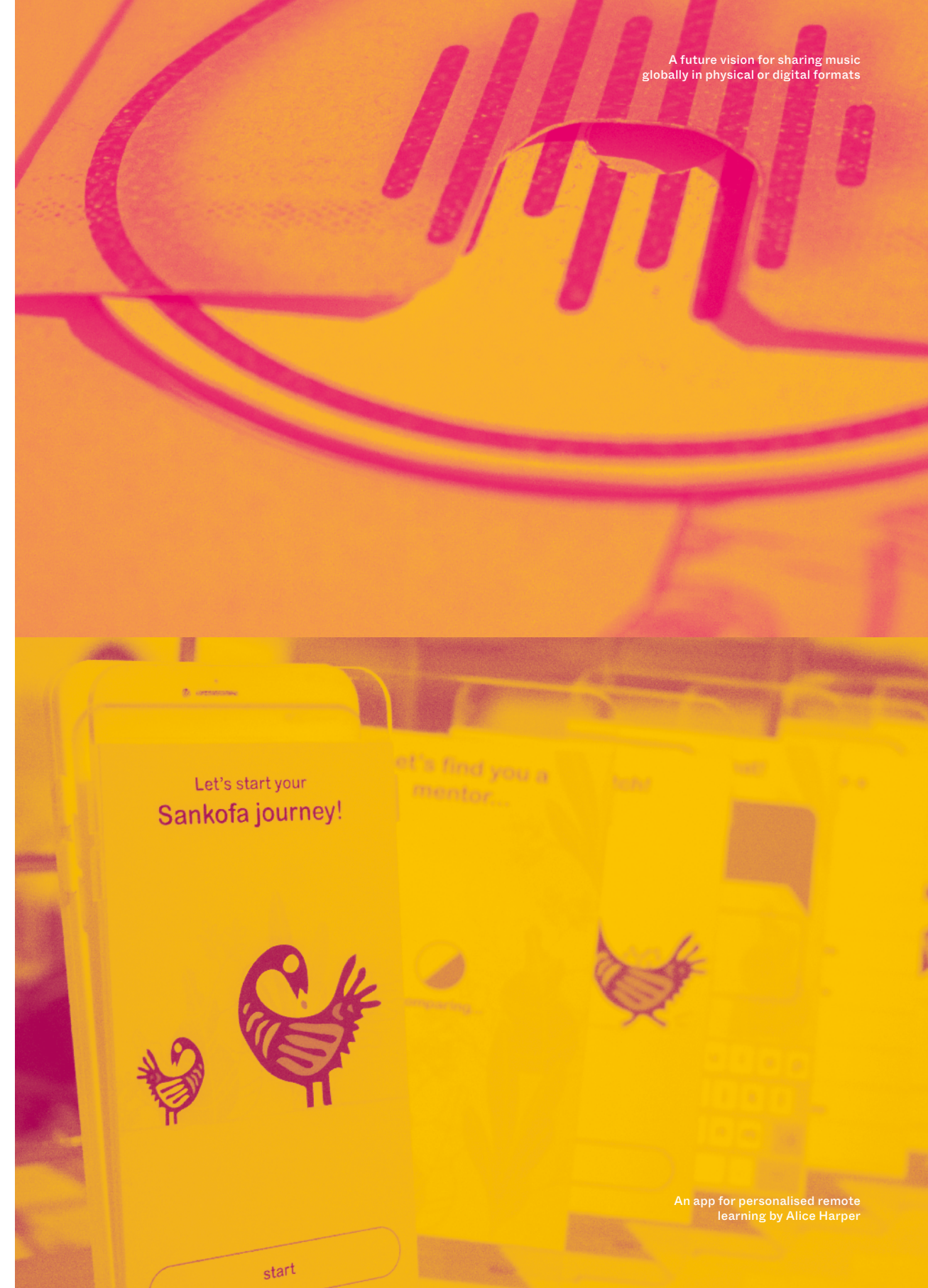Dr Mia Perry

Despite Sustainable Development being one of the most challenging subjects so far chosen as the topic for a Future Experiences project, the outcomes displayed in this document are thought provoking, considered and based on a thorough understanding of future development practices. The students were able to overcome concerns about their previous lack of knowledge by conducting in-depth research and testing their ideas against the experiences of experts immersed in the contexts they designed for. One of the students claimed that the project 'allowed me to see design as a useful tool rather than something I'm imposing on someone,' demonstrating that, by adopting a human-centred approach to innovation, designers can overcome any inherent cultural biases and create solutions that respond to the unique situation of an individual or community.

At a time when the world is facing unprecedented ecological, social and economic challenges, this Future Experiences project envisions diverse preferable futures for Sustainable Development, as an academic discipline and a political imperative. Several of the experts involved in the project have expressed interest in continuing to work with the students to explore how human-centred interventions, such as the ones presented in this publication, could support development work within the Global South. This targeted application of design and innovation could help deliver development to those who need it most, in ways that are most appropriate to their needs.

Being a part of the Future Experiences project has stretched our understanding of the potential for interdisciplinary collaboration and demonstrated the capacity for design to contribute to, expand, and propel our own work. It has made many of us realise the limitations of a dominant focus on present conditions (often based on insufficient past models or practices), and the benefits of incorporating both a design and a future-orientated expertise to our work.
Dr Mia Perry

A future vision for sharing music globally in physical or digital formats

Let's start your
Sankofa journey!

et's find you a
mentor...

start

An app for personalised remote learning by Alice Harper

DIGITAL IDENTIFIER AND OPEN SCHOLARSHIP

This year's challenge focused on Sustainable Development in the Global South – a topic that is complex and often unpredictable. It enabled the students to work with and for communities and stakeholders from the Global South and partner organisations at the University of Glasgow. The project has benefited all involved by bringing them together under a shared aspiration to co-design and visualise products, services and experiences for a more equitable, fair and sustainable future.
Professor Nicol Keith

Immediately following the completion and presentation of the Future Experiences project, our partners at the University of Glasgow compiled the various research and outcomes as an open science project with its own digital identifier (DOI) on the University's data repository. This action makes it straightforward for anyone to access, navigate and retrieve resources relating to the project's methodologies and findings, therefore enabling the work to be referenced in academic papers, reports and applications for grants or funding.

By uploading the project to the data depository, it becomes part of the Open Scholarship programme. This will help to generate ongoing interest around the research, creating a legacy that is anchored to the institutes and people involved in its creation. Attributing a DOI to the project affirms its significance as a valuable example of academic study. It also ensures the provenance of the work is permanently recorded and any information used is traceable back to the originators. As part of an ongoing assessment of the project's value, any interest associated with the DOI can be tracked, and acknowledgements in future research or papers will be officially logged.

The digital identifier for this project is:
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Sustainable Development is the vital practice of ensuring all the world's citizens have equal opportunities to live better lives. This visionary Future Experiences project by the Innovation School's graduating B.Des Product Design students proposes new practices, projects and directions of research to support those involved with international development. It demonstrates how design and development together can help to deliver a more sustainable, inclusive, ethical and prosperous future for everyone, everywhere.

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