

DNBE Staff-Student Research Projects (SSRPs)

Introduction Staff-Student Research Projects (SSRPs)

- 2016-2018
- Envisaged as a way to support more opportunities for **collaborative** research experiences to take place between staff and students within the Department. Potential range of positive outcomes identified that cut-across research, teaching, and employability goals.
- 2016 secured QR budget to pilot this within DNBE (five SSRPs). DNBE funded 12 SSRPs for 2017, and 9 SSRPs in 2018.
- Good practice taken from **SURE**: Sheffield Undergraduate Research Experience (<http://www.sheffield.ac.uk/sure/301>)

SSRPs Key Guidelines (1)

- **Projects must be seen to be of equal benefit to staff and students** e.g. encouraging participating students to pursue further research based study and generally improving employability skills and experiences.
- Typically, the project team will consist of one or two academics working with one student.
- **QR funded bursaries** (£180 per week plus expenses, and other associated research costs - up to £500)
- Projects must be no more than 8 weeks in length and must be delivered between mid-June and mid-September.
- SSRPs should result in **clear academic outcome(s)** e.g. peer-reviewed publication, conference paper etc.

SSRPs 2016 (pilot)

2016 SSRP - Extended Pilot

- **Funded five SSRPs across DNBE** (Principal Supervisors: Angela Maye-Banbury, Gabriel Tang, Kev Spence, Liz Laycock, Lynn Crowe and Cate Hammond).
- Gabriel's student Adam Rich's submission, **"The Application of Auxetics in Architecture"** won the **YOUNG DESIGNER'S COMPETITION** as part of the **IABSE (International Association of Bridge and Structural Engineering)** conference.



"Adam's IABSE project was supported by the sponsorship from the University's Staff Student Research Project (SSRP), which aims to promote a culture of research within the Department of Natural and Built Environment. By giving students the opportunity and resources they need to undertake a research project, alongside the supervision of a member of staff."



<https://www4.shu.ac.uk/mediacentre/double-award-win-hallam-architecture-graduate>

SSRP 2016 Reflections: Angela

- The SSRP initiative has been proven to be highly effective in enabling academics and students to work collaboratively in generating primary data. Working with my own student XI Zhang (now graduated with first class honours in BSc Planning), we further developed a research methodology designed to harness the oral housing histories of Beijingers pre Communism. Existing housing studies scholarship has neglected this theme.
- The project resulted in the collation of 8 further detailed interviews, all now transcribed and ready for analysis. I intend to write a piece for Urban Studies based on my analysis of the interviewees' housing pathways.



TITLE The Housing Pathways of the Chinese Community in Sheffield: An Oral History Approach

RESEARCHERS Dom NG and Angela Maye-Banbury

Focus of the Research

This study, co led by Angela Maye-Banbury and Dom NG, has documented the housing histories of the Chinese community in Sheffield across the generations. An oral history informed approach was used to explore individuals' housing pathways. The way in which sociocultural identity is manifested in the home across the generations will be explored. This is the first study of its kind in Sheffield to use oral history in documenting the housing histories of the Chinese community. The project is therefore intended to help preserve the cultural heritage of the Chinese in Sheffield in an era of liquid modernity.

Research Objectives

The study intends to address the following objectives:

- (i) What new insights regarding the changing nature of Chinese sociocultural identity may be revealed using oral history?
- (ii) To what extent are theoretical constructs relevant to 'home' and 'place' relevant to the Chinese sociocultural identity as revealed by oral history and story telling?
- (iii) How might the cultural heritage of the Chinese community be preserved in an era of liquid modernity?

What we have achieved so far

To date, seven detailed oral history interviews have been completed by Dom NG with Sheffield Chinese community. The interviews have revealed people's unique accounts of emigration from China to the UK then Sheffield. Respondents ages ranged from early twenties to over eighty.

Emergent Themes

- Racial passing more prevalent with young generations (British Born Chinese); respondents' recognised the importance of their Chinese heritage but to different degrees as manifested through speaking Cantonese, food and participation in Chinese festivals (new year; lunar festival). Sociocultural identity is complex and relative to context
- Emigration from Hong Kong to England was very challenging for the older respondents who left Hong Kong when in their early teens. Employment was in the form of food outlets, targeting areas where no Chinese fast food was available. This impacted on younger generations' education as families moves from place to place.
- Sheffield was 'home' to younger generations; the city seen as welcoming and inclusive for the most part. Parents wanted their children to do well academically. But respondents reported bullying at school. Older interviewees considered Hong Kong as their primary home.
- Both older and young generations reluctant to open up about their experiences but for different reasons.



Next stages

We now need to type up all the transcripts. Then we can begin to analyse the interviews using open coding. We can then begin to focus on research outputs such as a journal paper and a video.

Dom NG's reflections on the experience to date

Dom said: "Absolutely fantastic experience, allowing me to progress my research interests further and opening up more opportunities to look into the intimate details of different housing pathways of the Chinese community in Sheffield. The ability to evaluate different methodological research techniques and utilise oral history. (The research) is helping improve attributes further e.g. time keeping, organising, risk assessing etc.. essential for normal day and professional life."



Reflections: Lynn Crowe, Cate Hammond, and postgrad student Nikky Wilson

- Successful SSRP project over the summer working with a postgrad student, Nikky Wilson, to support some contract research with us into National Parks and major development - recently completed with much government and national media interest.
- Nikky completed much of the basic research investigations into previous schemes on line, as well as transcribing all our telephone interviews. She was a huge help to the field research.
- Cate, Nikky and I hope to complete some academic papers later this year.



SSRPs 2017

Lead Supervisor	Second Supervisor	Student Researcher	Project title	Agreed Minimum output: Indicative title/ journal below
Carolyn Gibbeson	Aimee Ambrose	Rachel Squire	The stigmatisation of high rise	Gibbeson, Ambrose and Squire, (in prep) The stigmatisation of high rise, <i>People, Policy and Place</i>
Kaeren Harrison	Cate Hammond	Gabrielle Appiah	Major residential development: A role for public space in delivering environmental and social objectives? A case study of Kingswood urban extension Hull.	Harrison, K. Hammond, C and Appiah, G. (in prep) 'Major residential development: A role for public space in delivering environmental and social objectives? A case study of Kingswood urban extension Hull'. <i>People, Policy and Place</i>
Anna Hawkins		Jess Swiffen	A critical exploration of equality of access to Geographic fieldwork in Higher Education.	Hawkins, A. Holmes, N. and Swiffen, J. (in prep) 'A critical exploration of equality of access to Geographic fieldwork in Higher Education', <i>The Journal of Geography in Higher Education</i> .
Naomi Holmes	Ian Rotherham	Saul Oliva Cabrera	Discovering shadow woods and investigating landscape change in the Peak District	Holmes, N. Rotherham, I and Cabrera, S. (tbc)

Lead Supervisor	Second Supervisor	Student Researcher	Project title	Indicative title/ journal
Kevin Spence	Rebecca Sharpe	Samira Emadi	The effects of rainfall and land cover use on river water quality in NW England	Spence, K. Sharpe, R. and Emadi, S. (in prep)The effects of rainfall and land cover use on river water quality in NW England, <i>International Journal of Geographical Information Science</i> OR <i>Journal of Spatial Science</i>
Rob Storrar	Naomi Holmes	Molly Jones	Glacial geomorphology of Ladakh, Indian Himalayas, as a tool for assessing natural hazards and water supply in remote mountain communities.	Storrar, R. Holmes. N. and Jones, M. Glacial geomorphology of Ladakh, Indian Himalayas, as a tool for assessing natural hazards and water supply in remote mountain communities. <i>Journal of Maps</i>
Julia Udall	Sam Vardy	Leslie Lam	Mapping Diverse Economies: Pedagogical tools for transformation	Udall, J. Vardy, and Lam, L. (in prep) Mapping Diverse Economies: Pedagogical tools for transformation
Richard White		Alex Hinchcliffe	Exploring intersectional animal rights-based activism within Sheffield.	White, RJ and Hinchliffe, A. (in prep) "Geographies of Intersectional Activism" <i>in Nocella, White and Socha (2018) Critical Animal Geographies in Action.</i>

Design governance and green infrastructure in large scale residential development: A case study of Kingswood urban extension Hull

Introduction

The concept of multi-functional green infrastructure and its role in achieving both environmental and social planning objectives is now well established. However there has been little empirical work to understand the extent and nature of green infrastructures being incorporated within contemporary residential development.

This study explored the planning and implementation of green infrastructures over a 20 year period within the context of a major urban residential extension to the north of Hull.

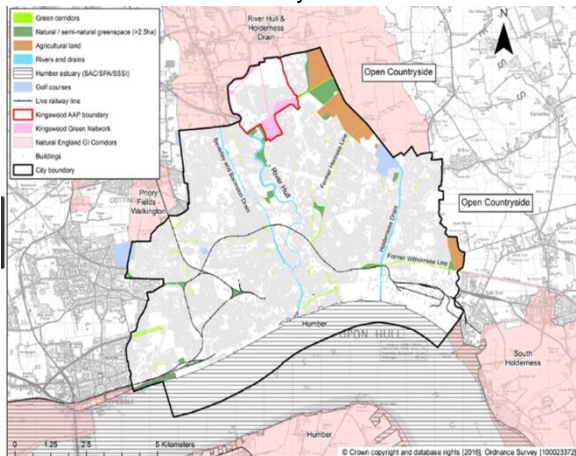
Research team

Gabrielle Appiah (Geography and Planning 2016-17)

Catherine Hammond

Kaeren van Vliet

The team are grateful to the SSRP initiative for funding the project and to the people of Kingswood and the officers of Hull City Council for their time



Research aims

- 1 To explore how planning practitioners where conceptualising green infrastructure and what priority green infrastructure was given in the planning process
- 2 To identify the range of approaches to delivering green infrastructure
- 3 To audit the green infrastructure delivered
- 4 The importance to and understanding of the roles of green infrastructure by residents

Methodology

A theoretical framework based on a design governance (Carmona 2015, 2017) was developed to support a mixed methods case study consisting of:

- Semi-structured qualitative interviews with key practitioners
- Spatial coding of infrastructure implemented
- Policy review
- Resident questionnaires

Emerging findings

Initial findings from the research were presented at the Planning Theory and Research Conference in Belfast in September 2017:

- Chronological shifts in the material green infrastructures delivered
- Holistic understanding by planning practitioners
- Shifting role from visual/amenity to social cohesion and now to environmental and health
- Engagement with all aspects of design governance, formal and informal, to implement green infrastructure
- Utilised as both a negotiating tool and an negotiated outcome within the planning process
- Reflective transfer of knowledge forward by planners
- Priority for residents in key areas of health and wellbeing

The presentation was well received and attracted an invitation to Freiburg to explore potential for collaboration.

Contribution to knowledge

The study makes a contribution to understanding both the conceptions of green infrastructures by both practitioners and residents. In particular it focuses on key shifts in the role and perceptions of green infrastructures and the relationship to implementation.



Staff-Student Research Project 2017

Sheffield
Hallam
University

Discovering shadow woods and investigating landscape change in the Peak District National Park: Wetland sites in Burbage Moor

Saúl Oliva Cabrera, Joe Leach, Naomi Holmes* & Ian Rotherham

Department of the Natural and Built Environment, Sheffield Hallam University

*N.Holmes@shu.ac.uk

Aim of the project.

Findings in palaeoecology through palynology and peat-stratigraphical studies have proven to be essential for land management, restoration and conservation of the landscape, as well as a very precise way of discovering the woodland history. Given the ancient woodland legacy of the Peak District, this project aims to enhance the already existing data and boost the scientific background that is behind current landscape management. By analysing pollen, beetle fossils and smelting markers, this project will draw a framework to help us better understand the natural causes and human effects over the landscape's evolution.



Figure 1. Burbage Moor sampling site A.

SSRPs in 2018

2018 Title

Project Leader 1 Project Leader 2

1 Luke Bennett Helen Reardon

New Uses for Old Hangars: a study of the afterlife of abandoned Cold War airbases, 30 years after fall of the Berlin Wall

Motives, Values and Contingencies: Stories of Ethical Practice in Architecture

2 Cristina Cerulli

Palaeolimnological evidence of Holocene environmental change in south east Iceland.

3 Naomi Holmes Rob Storrar

‘LiDAR Scanning the Architecture and Architectural Technology Exhibition’ (including postgraduate courses MArch & MSc TA)

4 Paul King

Fuel filled stories: how the oral history method reveals residents' stories of energy consumption over.

5 Angela Maye-Banbury Barry Goodchild

2018 Title

Project Leader 1

Project Leader 2

Characterising riparian ecohydrology in small, headwater streams prior to major interventions: a case study in the Sheffield Lakelands

Towards the development of innovative interfaces for spatial mapping of cultural infrastructure.

High spatial and temporal resolution UAV-based measurement of glacier 'microvelocity': and surface elevation changes as a tool for understanding the link between glacier hydrology and velocity

Multi-functional green infrastructures?: A case study of the English peri-urban residential context.

- | | | |
|---|-------------------------|--------------------------|
| 6 | Alexandra Savage | Jon Bridge |
| 7 | Rebecca Sharpe | Keith McKoy |
| 8 | Rob Storrar* | Andrew Jones |
| 9 | Kaeren van Vliet | Catherine Hammond |

Multidisciplinary

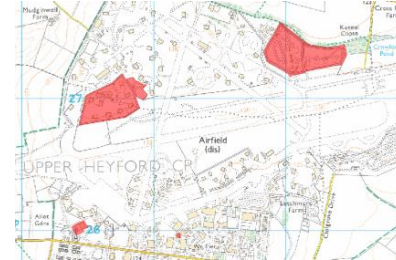
Cross-collaboration across DNBE

*Cross funding with GoGlobal (SSRPs undertaken with in Iceland)

New uses for old hangars: A study of the afterlife of abandoned Cold War airbases, 30 years after fall of the Berlin Wall

Academic team: Luke Bennett & Helen Reardon (DNBE, Real Estate).
Student Researcher: Phil Kokoszka (MSc Quantity Surveying)

- Employed a case-study approach to consider three Cold War military airbases (RAF Upper Heyford, Alconbury, and Molesworth) and the way in which they have or have not transitioned to post-military use.



STUDENT AND STAFF REFLECTIONS

Student reflections

- **"Conducting a number of stakeholder interviews with a wide range of study participants** has enhanced my interviewing skills significantly. This will be beneficial for the upcoming primary data collection phase of my MSc dissertation.
- **The extensive literature review undertaken as part of this project has allowed me to improve my secondary data research skills.** This will help my identify and appraise literary sources more effectively when resuming work on my MSc dissertation literature review after completion of the project.
- **Interacting with a wide range of stakeholders** through the course of this project – developers, local authorities, community groups – has allowed me to widen my knowledge of the built environment and the complex relationships that are present. This knowledge provides a better understanding of the context within which my future Quantity Surveying role will occur."

Staff Reflections (Cate, 2017 & 2018)

"In 2017 Kaeren Van Vliet and I completed an SSRP Project on **Multi-functional green infrastructures?: A case study of the English peri-urban residential context**. The research explored resident use and perceptions of green infrastructure; planning policy development; planning governance for the design and implementation; Professional perceptions of green infrastructure

- It has enabled us to get some really in depth research material which would not have been possible otherwise.
- We have presented different aspects of the research at the annual UK/Ireland planning Research Conference in 2017 and 2018.
- We have written a draft paper on **Resident perceptions of the function, roles and value of peri-urban green infrastructure in contemporary residential development: A case study of Kingswood: Hull** which we are going to submit to a REFable journal.

This year (2018) we used our SSRP to follow up the research and provide further data with which to **analyse changing patterns in the implementation of green infrastructures in the English peri-urban residential context between 1990 and the present day**. This has involved the morphological analysis of different phases of the development from 1990 to the present day using a mix of google earth and site visits. Different types of Green Infrastructure have then been mapped for different time periods. "

SSRP : Spatial and temporal cultural heritage infrastructure

Supervisors: Dr Rebecca Sharpe & Dr Keith McKoy

Student: MSc GIS student Jie Qi

Aim: To analysis Twitter data to explore the spatial and temporal cultural heritage infrastructure of Sheffield.

Outputs:

- New collaboration between D&S and ACES staff (Dr Suvodeep Mazumdar).
- Work to input into a external grant submission.
- The SSRP outputs are expected to contribute to one conference paper and at least one journal article.
- Work to feed into a wider project with greater publication potential.
- The SSRP student has gained valuable confidence and research experience and is now looking for PhD opportunities.
- Collection of new data and data analysis knowledge which will help to develop new UG and PG teaching.

In Conclusion... valuing SSRPs

For Students:

- ☐ Brings additional 'academic' experiences, and with it greater confidence and awareness.
- ☐ Harnesses core and transferable research skills: time management; team work; presentation and poster skills.
- ☐ Provides topics for dissertations and PhDs
- ☐ Relevance for CVs and future employability.

For Staff

- ☐ Allows research mentoring (experienced researcher/ new researcher) to take place
- ☐ Fosters new collaborative research/ teaching synergies
- ☐ Research can be used as a basis to inform larger external research bids
- ☐ Promotes new opportunities for collaborative writing and other forms of research dissemination (e.g. conference presentations)