

Bringing the interview data, RiR data, and systems maps data together: current thoughts

Dr Heeseo Rain Kwon

Post-doc in Healthier Urban Development, Dep. of Real Estate and Planning, Henley Business School, University of Reading
h.kwon@henley.reading.ac.uk

Overseen by: Prof Kathy Pain

Background, purpose and types of data

- Kathy and Rain are leading this piece of **bringing the three datasets together** and updating the WP1 methods document with the epistemological and ontological positioning
- **Purpose of bringing the data together**
 - To provide basis for **triangulation** and inform the development of implementable intervention ideas and strategies
 - To **prepare more quantifiable data** that can be used for various analysis and modelling along with the WP2 epidemiology and economic data
- **Types of data**
 - **Interview data:** text (transcript), Nvivo file, text (interview team summaries), text (transdisciplinary summaries)...
 - **RiR data:** in various forms -> will get to this in later slides
 - **Systems maps data:**
 - 1) Visualisation of interview data: images (relational diagrams from interviews)
 - 2) Workshop data: Processed workshop findings in different forms (tables, lists...), text (workshop notes), images (relational diagrams generated at workshops)

Key points from brainstorming meetings with RiRs and WP3

- **Key points from the brainstorming meetings with the RiRs (Sian and Anna)**
 - RiR observations have been collected/recorded in **various forms** (e.g., notes, materials from meetings) **in different ways** for BCC and GMCA.
 - Difficult to organise these into usable data without clear scoping, and also because the **observations are ongoing**. In fact, a lot of the **important observations are in the minds of Sian and Anna**.
 - Would be good to collect the same/similar form of data from Sian and Anna in terms of their observations regarding WP1 Phase 1 RQs as of Jan/Feb 2022.
- **Current thoughts**
 - Kathy and Rain, together with Sian and Anna, will develop a set of Qs for Sian and Anna to respond (either verbally with auto-transcription or by text)
 - We'll design this set of Qs based on the WP1 Phase 1 RQs and the interview Qs developed by seven teams (but especially those used for BCC/GMCA interviews).
 - Will be good to focus on the case studies: Streets for All for GMCA and Frome Gateway for BCC

Key points from brainstorming meetings with RiRs and WP3

- Key points from the brainstorming meetings with WP3 (Neil and Pablo)

Visualisation of interview data (“mental maps”):

- NVivo query to generate report for parts that contain causal/relational words -> Manually create causal loop diagram using Vensim (takes Pablo’s time)
- To minimise Pablo’s time and enhance accuracy of these maps, would be good for Pablo to generate base diagrams with minimum interpretation and each interview team to finalise the mental maps

Workshops (collection of new data)

- Exploratory method with limits to be taken into account: small sample size, sample not necessarily representative, short time given for participants to create causal loop diagram together on Miro board
- At minimum, data collected from workshops can be used for corroboration. Workshop participants can be contacted again for further input.

Four suggestions of data integration that can be used in combination

1. A high-level summary table by a set of key themes

- Output: a table that presents key text extracts side by side by a set of key overarching themes

— Example:

<https://journals.sagepub.com/doi/full/10.1177/160940691201100502>

Themes	WP1 Phase 1 Interview	WP1 Phase 1 RiR	WP3 Phase 1 Workshop
TBD	Short extract from the transcripts	Short extract from the answers to Qs given by RiR	Short extract from the workshop notes (or transcript from recording)

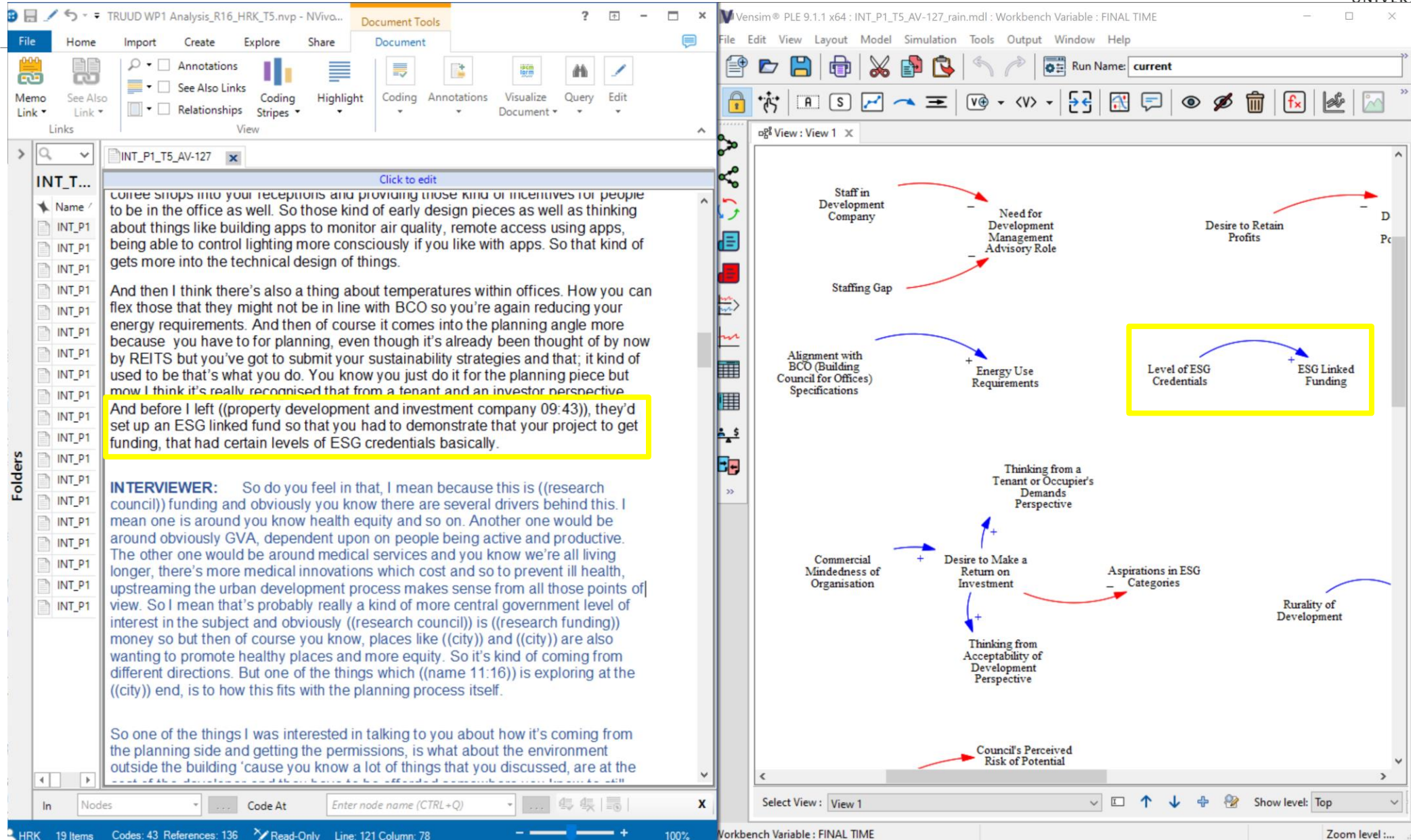
Difficulty: What kind of overarching themes? It is challenging to even create such table for interview data only.

Table 2. Two Extracts From an Extensive Text Illustrating Interwoven Texts

Original field notes	Subtheme	Selected interview transcriptions
... The group members talk their way to both content and form in an apparently unstructured manner with a lot of free association. Has this something to do with the group? The stroke victims? ...	Unstructured route to form and content in the learning programme	H: Some of it has been clarified already but you can say that when new elements appear they are also thrown in. But I do believe that the teaching aspects are discussed at the beginning but not as much as we're used to. Because in a way the main point is what the users say about what they need and that there is room for questions in the group, then something really important has already been achieved and that it's not run as lectures—that's very difficult to avoid. But you can avoid some of it by making room for questions. So the observation that it's not discussed much is indeed correct.
A participant tells us about a difficult situation involving undesired prolonged erection. He was afraid. The nurse gives him specific details about alternatives and tells him that he can go to outpatient clinic. They talk about the difference between having a partner and wanting a partner in such a situation. Another person starts to talk. He has talked quite a lot before. He tells the others that by accident he got to know about the outpatient service. The nurse is quick to reply. She says yes, he could come to her if he so DESIRED! Everyone laughs. This triggers off some black humour and comments.	Art of conversation and humour	H: ... And you have to have a sense of humour—lots of humour. Humour is a fantastic tool. From the start of this it has been important to use humour, whether it has something to do with frustration or anything else. You can break off something or make a point. Both humour and black humour are fantastic tools, and we use them. R: To some extent it's about communication skills, isn't it? H: Yes, that's very true. And about listening. We have two ears and two eyes and one mouth.

2. Using systems maps as a way to integrate

Seems that simple links are less useful



The image displays two software windows side-by-side. The left window is NVivo, showing a document titled 'INT_P1_T5_AV-127' with a text excerpt highlighted in yellow. The right window is Vensim, showing a systems map diagram with various nodes and causal links.

NVivo Document Content:

corree shops into your receptions and providing those kind of incentives for people to be in the office as well. So those kind of early design pieces as well as thinking about things like building apps to monitor air quality, remote access using apps, being able to control lighting more consciously if you like with apps. So that kind of gets more into the technical design of things.

And then I think there's also a thing about temperatures within offices. How you can flex those that they might not be in line with BCO so you're again reducing your energy requirements. And then of course it comes into the planning angle more because you have to for planning, even though it's already been thought of by now by REITS but you've got to submit your sustainability strategies and that; it kind of used to be that's what you do. You know you just do it for the planning piece but now I think it's really recognised that from a tenant and an investor perspective

And before I left ((property development and investment company 09:43)), they'd set up an ESG linked fund so that you had to demonstrate that your project to get funding, that had certain levels of ESG credentials basically.

INTERVIEWER: So do you feel in that, I mean because this is ((research council)) funding and obviously you know there are several drivers behind this. I mean one is around you know health equity and so on. Another one would be around obviously GVA, dependent upon on people being active and productive. The other one would be around medical services and you know we're all living longer, there's more medical innovations which cost and so to prevent ill health, upstreaming the urban development process makes sense from all those points of view. So I mean that's probably really a kind of more central government level of interest in the subject and obviously ((research council)) is ((research funding)) money so but then of course you know, places like ((city)) and ((city)) are also wanting to promote healthy places and more equity. So it's kind of coming from different directions. But one of the things which ((name 11:16)) is exploring at the ((city)) end, is to how this fits with the planning process itself.

So one of the things I was interested in talking to you about how it's coming from the planning side and getting the permissions, is what about the environment outside the building 'cause you know a lot of things that you discussed, are at the

Vensim Systems Map:

The diagram illustrates a complex system of causal links between various nodes. Key nodes include:

- Staff in Development Company
- Staffing Gap
- Alignment with BCO (Building Council for Offices) Specifications
- Need for Development Management Advisory Role
- Energy Use Requirements
- Level of ESG Credentials
- ESG Linked Funding
- Desire to Retain Profits
- Thinking from a Tenant or Occupier's Demands Perspective
- Commercial Mindedness of Organisation
- Desire to Make a Return on Investment
- Thinking from Acceptability of Development Perspective
- Aspirations in ESG Categories
- Rurality of Development
- Council's Perceived Risk of Potential

The diagram uses red arrows for negative links and blue arrows for positive links. A yellow box highlights the link between 'Level of ESG Credentials' and 'ESG Linked Funding'.

When the interviewee explains/unpacks something important in detail, can be very usefully put into relational/causal diagram

2. Using systems maps as a way to integrate

TRUUD WP1 Analysis_R16_HRK_T5.nvp - NVivo...

Document Tools

File Home Import Create Explore Share Document

Annotations See Also Links Relationships Coding Stripes Highlight Coding Annotations Visualize Document Query Edit

INT_P1_T5_AV-127

Click to edit

But thanks awfully ((name 40:40)) for participating and giving up your time and your career and your current plans sound really interesting, challenging I must say but also interesting. I hope you manage to build a good team around you.

INTERVIEWER 2: I do have one quick follow up question actually. You mentioned that you will be, well like holding in-hand, in terms of taking someone from throughout the development process and just wondering your thoughts on in that process where would be the place that this consideration regarding health and wellbeing are likely to fall off or any legal challenges that you already see or anticipate, etc.

INT_P1_T5_AV-127: Um so where it falls off. I think there'll be a lot of debate when you get to the sort of funding stage but I don't think it'll necessarily fall off because I think it's so high on the agenda at the moment. Where could it fall off? I think that really comes to when you get to the occupier and how important it is to them and how they then occupy the building and measure their use of the building. So quite often when I was at ((property development and investment company 42:19)), we would draft leases and tenant occupation guides and incorporate requirements from planning that they would have to provide data of their occupation, energy usage, etc and we would make it requirements in our leases but that falls away. You know I would say, and this is a massive not good research but stab in the dark, I would say a good proportion of occupiers never report that data. It never circles back to the planners and the planners never follow it up. To be a bit cynical, it's a bit of a tick box exercise. So that's where I would say it falls off and it's the circular economy not properly being looked at if you like as well. Yes, and I don't think at the moment – I don't think because it's thought to be that tangible benefit, the planners or the developers or the funders follow up. They just let it go 'cause it's the occupier's responsibility, then a building gets sold and then it's gone.

INTERVIEWER: That's really, really brilliant ((name 43:34)), thank you.

Transcript ends 43:36

In Nodes Code At Enter node name (CTRL+Q)

HRK 19 Items Codes: 43 References: 136 Read-Only Line: 429 Column: 79 100%

Vensim® PLE 9.1.1 x64: INT_P1_T5_AV-127_rain.mdl : Workbench Variable : FINAL TIME

File Edit View Layout Model Simulation Tools Output Window Help

Run Name: current

View: View 1

Process as Driver for Planning & Design Officers

Difficulty for Planning & Design Officers

Disconnect in Process

Workload of Planning & Design Officers

Not sure what 'difficulty' and 'process' is being referred to exactly here

Importance of Health & Wellbeing to Occupier

Importance of Health & Wellbeing to Occupier in How They Occupy the Building

Importance of Health & Wellbeing to Occupier in How They Measure Their Use of the Building

Prominence of Health & Wellbeing on Agenda

Focus on Circular Economy

Likelihood of Health & Wellbeing Falling Off

Health Related Data Followed up by Planners

Incorporation of Health Followed up by Planners or Developers

Health Seen as a Tangible Benefit

Belief that Health & Wellbeing is the Occupier's Responsibility

Health Related Data Circled Back to Planners

Proportion of Occupiers Reporting Health Related Data

Select View: View 1 Show level: Top

Workbench Variable: FINAL TIME

Zoom level: ...

Four suggestions of data integration that can be used in combination

2. Using systems maps as a form that cuts across the three datasets

- **Method**
 - **Interview data:** Each interview team extracts the most important parts of the interview transcripts that they would like to diagrammatise (let's try keep it maybe around 10% of the interview?) -> Pablo puts the text into diagrams and generates one mental map per interview team (with alpha-numeric labels) -> Each interview team reviews/edits/finalises the mental maps.
 - **RiR data:** Rain extracts the most important parts of the answers to Qs given by RiRs -> Pablo generates one mental map each -> Rain reviews/edits/finalises
 - **Systems workshop data:** Pablo puts together relational/causal loop diagrams generated from workshops
 - The three datasets above can be combined/corroborated.
- **Output:** Seven systems maps that represent each stakeholder group (local government, Bristol city council, national government, Bristol developers, real estate, business management and Greater Manchester), two systems maps that represent the observations of each RiR (GMCA and BCC), and system map/s generated from the workshops

Participants first asked what (if anything) was missing from this part along with any other feedback

- Hopefully, the summary mental map for each interview team will look something similar to this.
- Will be good to aim to use them to identify areas for further zoom-in and inform the design of the further investigation (e.g., follow-up likert scale questionnaire for the interviewees and workshop participants to potentially give weights to variables)

Four suggestions of data integration that can be used in combination

3. Ex-post likert-scale survey for interviewers (methodology used in the medical research e.g., autism diagnostic interview)

- **Method:**
 - Use interview, RiR and systems maps data together to inductively identify areas that need further investigation
 - Design a short survey/questionnaire with clear likert-scale/categorical options to choose from
 - Survey the interviewers (N=15)
 - Difficult to make quantitative analysis but can use this to compare/corroborate findings
- **Output:** Raw data of survey results (excel; csv), tables and charts comparing the responses from different stakeholder groups

Four suggestions of data integration that can be used in combination

4. Likert-scale questionnaire/survey for interviewees and workshop participants

- **Method:**
 - Use interview, RiR and systems maps data together to inductively identify areas that need further investigation
 - Design a short survey/questionnaire with clear likert-scale/categorical options to choose from
 - Survey the interviewees and workshop participants (which include BCC and GMCA/TfGM officers) (N=100+)
 - Make quantitative analysis as needed and use it to link with the epidemiology and economic data and various modelling approaches
- **Output:** Raw data of survey results (excel; csv), tables and charts comparing the responses from different stakeholder groups