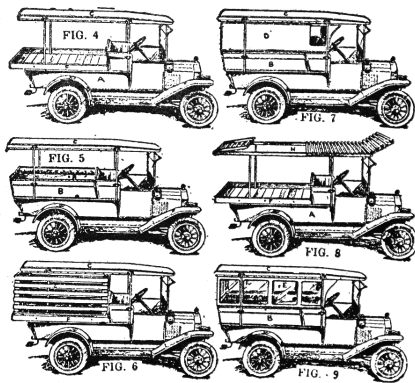




Embedded Researcher ROLE BOOK



Figs. 4 to 9, showing different body constructions which can be assembled from the parts shown in Fig. 10.

Dear Embedded Researcher,

Henry Ford said it best, *“If you always do what you’ve always done, you’ll always get what you’ve always got.”*

Collectively, we want to move towards flourishing lives in welcoming communities. And that requires fresh approaches and next practices. The question is: where do those fresh approaches and next practices come from?

They come from seeing problems and opportunities in new ways. And that’s where you come in. As an Embedded Researcher, you’ll spend time with people to identify opportunities for doing things differently. You ‘ll have permission to inquire about why things are the way they are, and to explore what could be. All from a place of curiosity and learning, rather than oversight and accountability.

In your job as a support worker, social worker, coordinator, specialist or manager, you might be used to sharing your expertise with others. After all, part of what it means to be a professional is drawing on your body of knowledge and experience.

In the role of embedded researcher, you’re starting from the perspective of not knowing. Your agenda is to listen, to understand, and to reflect back. It’s not to diagnose or to directly intervene.

It won’t always be easy. Transitioning between roles will take some practice. But, congratulations on breaking important new ground with us. You’re helping build a pipeline of information and ideas that can drive growth and change.

So, thank you. And let the adventure begin.

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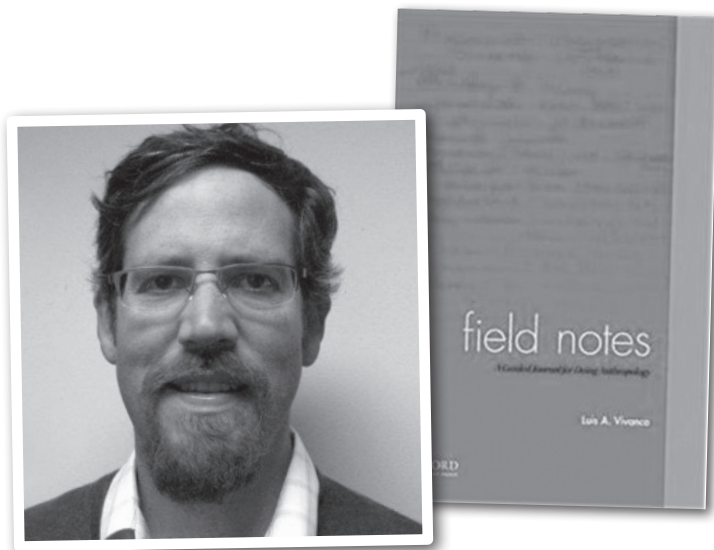
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How to use this book?

This role book is your guide to the Embedded Design Researcher role. It shares the rationale for the role, the underlying principles, methods, frameworks, plus a few tips and tricks.

Some of the exercises and content are drawn from Luis A. Vivanco's 2017 "Field Notes: A Guided Journal for Doing Anthropology". This is a hand pocketbook for research.

We see this role as a prototype, which means we'll be working alongside you to test how it works, what you need, and how to improve the set-up, coaching, and support. We need your honest feedback, reflections, and ideas.



Get ready for a Deep Dive!

As an embedded researcher you come in at the Setup for the Deep Dive.

**You are
here**

1. Open Events

Learning events to get curious and exposed to new ideas. Get in touch with like-minded professionals & organizations serious about change.

2. Quick Dive

Interested to continue the journey? Here your organization goes through a taster of R&D methods in your own context.

3. Deep Dive Setup

Committed? This is where you are setting-up the roles, routines, and narratives for ongoing R&D.





4. Deep Dive

Your new internal research team will do bottom-up research to find out where could be the starting points for change.

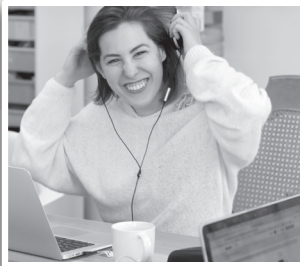


6. Grounding

Embed new solutions in your organization, and internalize new practices and values.

5. Develop & test

Your internal team goes on a mission around pain points and opportunities identified in the Deep Dive.



What happens in this stage?

Learn about your role

We explain the role, and you let us know if that interests you!

Get trained

As an embedded researcher, you'll receive five days of training in research methods, principles and practice.

Prepare to launch

As a research team, you'll design an event to introduce yourselves to your organization, plus you'll launch a survey

Get dates in

You'll work with your culture curators to set a weekly routine, and begin to plan the research.

THE ROLE

Being embedded: A way forward for ethnographic research

SJ Lewis

Durham University, UK

AJ Russell

Durham University, UK

Ethnography

12(3) 398-416

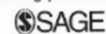
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Abstract

At a time when ethnography (as both method and methodology) is seen to be 'at risk' from strictures placed upon it by ethics approval procedures and the like, it is increasingly valued by the wider, non-academic community. This is particularly true of organizations involved in processes that aim to effect change (social, cultural, behavioural), and individuals who are, like the ethnographers, trained and encouraged to be reflexive practitioners. Based primarily on a case study of research with a new public health organization (Fresh: Smoke Free North East), we propose an approach to ethnographic practice which we term 'embedded' (but which others may choose to describe as collaborative) as a means to securing the future of ethnography. We identify the key

Want more background about Embedded Research?
Here's a short article.

What does it mean?

Here you are with this new title: Embedded Researcher. You'll be learning how to do something called design research. It's one-part mindset, one-part methods. It is being present in everyday contexts where the work of your organization happens and where people supported by your organization live, work, and play. It is experiencing "the mundane and sacred, brash and mundane aspects of life there, and through observations, encounters, and conversations, coming to understand it" (Lewis and Russell).

Let's break down the words embedded, design, and researcher

'Embedded'	'Design'	'Researcher'
You are a staff member of your organization, familiar with the people and the environment.	You are looking for opportunities for experimentation and change.	You are stepping back to inquire what happens, for whom, when, where, why, and how. You are also confronting your own biases and assumptions.
You'll help to map the organizational landscape and to identify habits, motivations, and preferences of staff, individuals, and families. We do this to be able to celebrate the great stuff happening and to name starting points for change.		

We can boil down the role in terms of curiosity, creativity, and reflexivity. Embedded researchers are insatiably curious about how things work and how they might work better. They ask questions and play back observations in order to spark conversation and ideas. And they do all of this from a place of openness and creativity, rather than judgment and accountability. Indeed, embedded researchers are able to explore - rather than evaluate - different points of view, their own included.

Another way to frame the role is in terms of data and evidence. These days there's lots of talk about evidence-based practice and data-driven decisions. But most of that data and evidence comes from the top-down. Embedded researchers build up a base of bottom-up data and evidence. That is, data that comes from people's lived realities and evidence that comes from testing fresh practice.

An origin story

A brand spanking new role

Embedded researchers are focused on **insider-led change**. The role comes from painful lessons learned trying to create change from the outside-in.

It was way back in 2016, and our design team set-up shop at a drop-in centre in downtown Toronto. Our goal was to co-develop new supports for street-involved adults. And while we had lots of engagement from the centre's leadership team, we had not done the legwork to bring on board managers and frontline staff. Looking back, it's not surprising that our process sparked worry and later push-back. Staff felt frustrated. Who were we to come in and ask questions? Didn't we know that they had tried many things before?

That's why we think creating a team of insiders makes so much more sense. As insiders, you'll understand where staff are coming from. You'll have an appreciation of the organization's history and cultural quirks. Plus, as Embedded researchers, you'll be participating in a long and robust tradition of **Action Research**.

Action Research

Action Research is the term for research conducted by and for those taking action. The reason to do action research is to bring about more intentional practice. Social service work can be tough. There are lots of demands. It's only natural to ask, 'Am I making a difference?'

Action Research helps people who are on-the-job step back to acknowledge what is working, what isn't working, and what could shift. Indeed the kind of data that emerges is first and foremost for people and practitioners, not for funders, licensors, accreditors, etc.

Your next chapter

First up: Taking a deep dive!

After getting trained-up as embedded researchers, you'll gear up for the Deep Dive. This is a 3-month process to find out where there is appetite and untapped resources for change. It's about recognizing that experimentation and change can only happen when people are motivated, feel capable, and have the opportunity to do things differently.

During the Deep Dive, you'll spend time with staff, individuals, families, and key stakeholders to identify appetite & opportunities for change in up to five areas: services, human resources, team practice, partnerships, leadership, and data.

Next Up: Going on missions!

Out of the deep dive process, you'll help to name areas for action. Where are the most significant pain points? Where are there untapped resources to leverage? Where is the most energy, commitment, and will, inside and outside of the organization? These areas of action are what we'll call missions.

Around a mission, we will form a crew to do more research, generate specific ideas, test those ideas, and embed practices. Mission crews will be made up of stakeholders with a stake in the challenge and in the solutions. You will lend your new research skills to these mission crews.

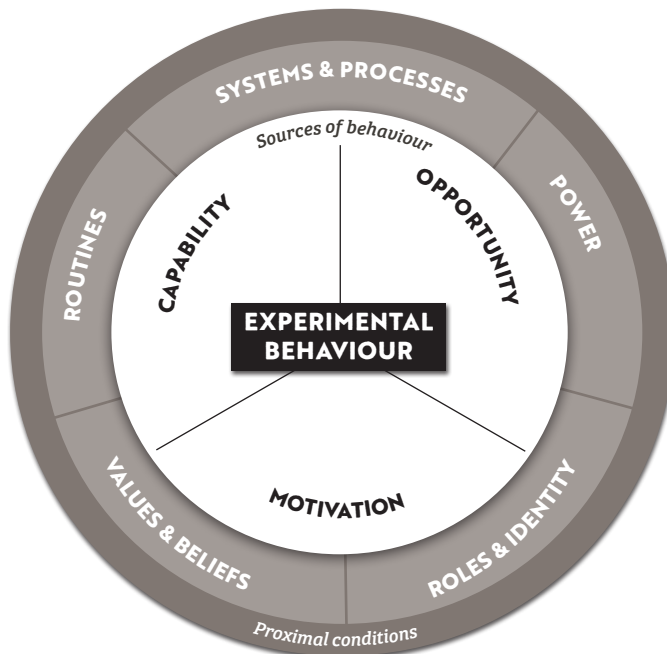
Your research question...

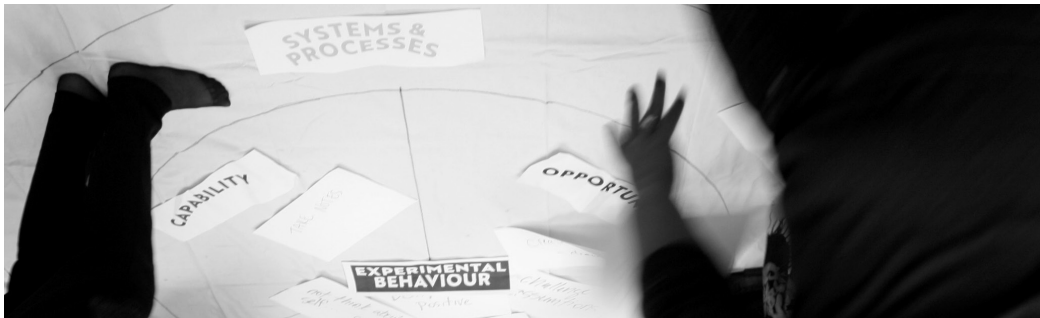
All good research starts with a juicy question or two. So here are yours:

What is the ground for experimentation within your organization?

- > Where is experimentation happening and leading to better outcomes for people?
- > How can we shape the conditions for individuals & staff to experiment towards flourishing outcomes?

We'll walk you through this framework to help identify experimental behaviours, and the environmental conditions that shape behaviours!





EXPERIMENTAL BEHAVIOUR

What people are doing, saying, and thinking when they are developing alternatives to the status quo to improve outcomes.

Sources of this behaviour:

OPPORTUNITY

factors outside the individual that make the behaviour possible, or prompt it (e.g time, space, permission)

MOTIVATION

What goes on inside an individual's head to energize or drive behaviour (e.g goals, emotions, preferences)

CAPABILITY

the know-how and confidence to enact behaviour (e.g knowledge, skills)

Proximal conditions influencing behaviour:

SYSTEMS & PROCESSES

The infrastructure and tools which enable (or dis-enable) experimentation. We'll explore which systems, processes & tools underpin people re-inventing work.

POWER

How status, authority, and agency is distributed between people & across organizations. We'll explore who has it, and how it shows up throughout the organization. It influences if people served and their staff are likely to experiment.

ROLES & IDENTITY

The stories people or organizations tell themselves about what they do, where they come from, and where they are going. We'll explore concepts like 'client,' 'self advocate,' 'coach,' and 'worker'. How does an organization define people?

VALUES & BELIEFS

What people or organizations hold to be true, and defines their purpose. We'll explore how daily experiences of people served and staff are shaped by what the organization holds to be true. What (or who) an organization values gives rise to beliefs that influence behaviour, also experimental behaviour.

ROUTINES

The way in which people or organizations spend their time, do work, and change up work. We'll explore people's daily activities - meetings, planning, activities, evaluations, hiring, training... How an organization calls people to do these daily activities influences experimental behaviours.

Q&A

What will your days look like?

As an embedded researcher, you will be spending about a day a week immersed in different parts of your organization and the community it serves. You'll be wherever fellow staff, individuals, and families spend their time - be that in their offices, programs, at Tim Horton's, in living rooms, parks, etc.

What will you be doing?

Your aim is to explore the conditions for experimentation and change. What shapes whether individuals, staff, and families try new things and move closer to better outcomes? You'll be learning how they see their roles, what matters to them, and where they see the future. Your methods of inquiry will be observing, shadowing, interviewing, and having informal conversations.

What is the role not?

Embedded researchers are not auditors, evaluators, performance managers, spies, moles, tattle-tales, snoops, spooks, CIA, MI6, FBI. You are not reporting directly to the Executive Director, the board, or management. You are part of a team seeking to have honest, open conversations with the people who make up your organization. There are no right or wrong answers to any of the questions you will be asking.

How much time?

Time will be negotiated with your Culture Curators. We estimate about 5 days of training, and about a day/week over a two to three month period for the initial research. Along the way, you'll receive 1:1 coaching from the Grounded Space team.

Who will you be working with?



Embedded Research Team - you will be part of a team of four to six Embedded Researchers within your organization.



Grounded Space Cohort - other agencies are part of the Grounded Space Collective as well. You'll get to know & swap insights with their Embedded Researchers and Culture Curators too.



Culture Curator(s) - a role taken on by one or more people in your agency. They are the link between your organization and Grounded Space. They will be your primary contact points: convening the Embedded Research team, creating an open place for learning, troubleshooting challenges, and communicating out.



Grounded Space Team - designers, experienced researchers, and fellows who provide training, coaching, and support in methods and approaches.

Where does all the research go?

All the information embedded researchers collect will be consensual. That means individuals, families, and staff do not have to participate. They will sign consent forms and can choose to use pseudonyms or be anonymous.

We will be aggregating what we learn and presenting the overarching themes back to individuals, families, and staff as part of an open reflection

process. Where we use particular stories, we will check back with the person and make sure they are comfortable. We can blur photos and make sure people aren't recognizable.

We hope the information will help us frame future experimentation work. It will surface opportunities for both celebration and further exploration. It will not be used for discipline or performance.



2/3

PRINCIPLES

Qualitative research is not like collecting blackberries. Ethnographic facts are not simply sitting around, waiting to be picked up or discovered. Fieldworkers make observations and ask members of the community about what they have been seeing and hearing” - J. Fabian, 1971 in L.A. Vivanco, 2017.

What is / What could be

Where does the knowledge to solve social challenges and prompt social change come from? Embedded Design Research is rooted in a value set that says knowledge is constructed and contextual. That is, there are many truths. They are situated in time, place, systems, and culture.

As researchers our task is to surface different people’ truths and the contexts they inhabit: their ways of making meaning of the world. As embedded *design* researchers our task is to move one step further: from making sense of ‘what is’ to generating ideas for ‘what could be.’ Indeed the goal is to actively create new knowledge and new contexts.

That may sound super abstract, but it is actually quite a departure from the typical ways of knowing. The traditional empirical paradigm says there is a single objective reality. So the job of research is to find that reality, not to create new realities.

We’ll stop the meta philosophizing there, but we can articulate six principles to make our constructivist value set a little more practical. We’ve thrown a few exercises in to try and bring the principles to life.

Overview of principles:

Understand what is	Explore would could be
Principle 1: Curiosity over judgment.	Principle 4: Open up possibilities.
Principle 2: Show and tell.	Principle 5: Find the positive deviants.
Principle 3: ‘Being with’ over ‘solving for’.	Principle 6: Surface motivations over deficiencies.

Principle 1:

Curiosity over Judgment

Embedded researchers are fascinated by the world. We have a desire to explore, inquire, and learn new things. Instead of searching for that one truth, we are searching for the conditions that give rise to different truths.

For example: while some of us living in Canada might not believe spirits live in our gardens, people in many cultures (like Ireland) believe in them strongly. They even leave offerings for them and feel their presence daily. What constitutes a ‘truth’ or ‘fact’ can differ by context - the question is, why? What has shaped individual beliefs, and communal cultures? Where are the points of influence?

Because we don’t believe there are ‘right’ / ‘wrong’ ways of doing or being, we adopt an approach of non-judgment. The fancy shmancy anthropological term for this is “cultural relativism”: we do not evaluate another group of people by our own personal truths and biases.

This is really the foundational principle of Grounded Space: we seek to understand, not to judge. Other people’s preferences and habits may seem strange to us, but their way of being in the world comes from somewhere. And that’s what we want to gently probe: why have they come to believe certain things and act in certain ways? What shapes their values, motivations, and behaviours? Knowing this is the key to prompting change.

So...how will this play out for you? While shadowing, observing or interviewing fellow staff and individuals, you might see or hear something that you don’t like or don’t agree with. Provided no abuse or harm is being caused, your role as a researcher is to replace the judgy part of your brain with the super curious part. Separate some of the emotions that might arise, and try to focus on the question ‘why’. Why are they doing what they’re doing? What lies behind their actions? It’s always surprising what you’re likely to find out when you can hold the space for inquiry.

Change the statement

Read the statement below and try responding to the statement first from a place of curiosity and then from a place of criticism. What's the difference for you? How does it feel to operate from one mindset versus the other? What's hard? What's easy?

Situation

From a place of curiosity

From a place of criticism

A little boy and his sister are at the front of the grocery store, waiting for their mom.

No one says anything at a staff meeting. Several people's arms are crossed. A couple of other people play with their phones.

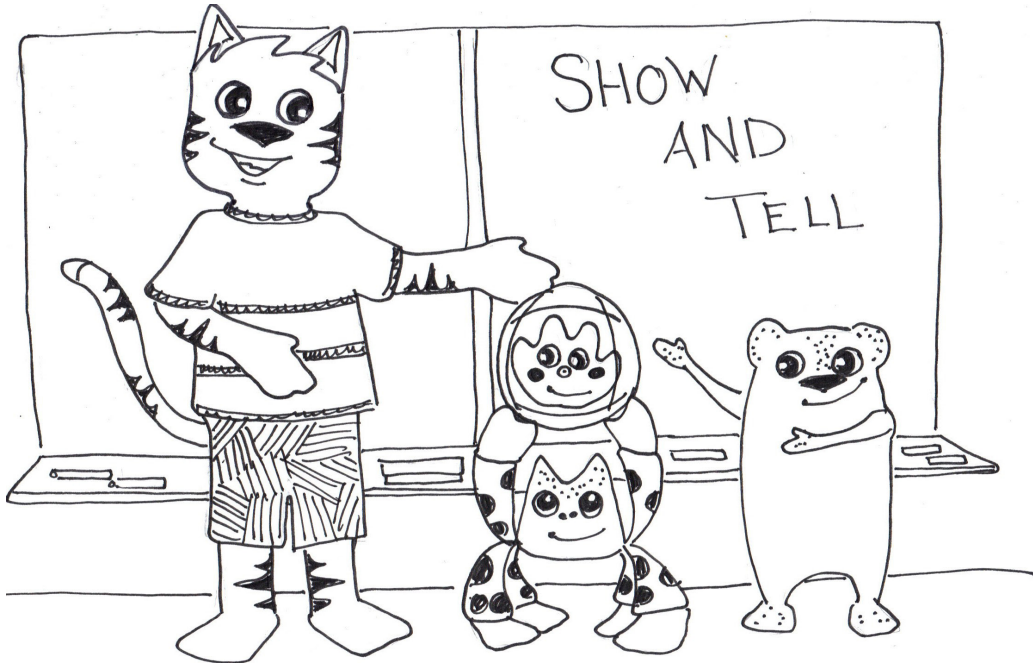
A group of young people are at the Night Mall. They are in a pack, shouting, laughing, and gesturing. They are loud. You can't hear your conversation with your partner.

Take a stroll (inspired by Kerri Smith)

One of the best ways to cultivate a curious mindset is to engage your senses. Choose one of these activities to help!

- 1) Walk down the street - only looking at the left hand side. Draw what you see. Now switch to the right hand side of the street. Record what you see.*
- 2) Lie down on the grass or the floor.. Write down everything you hear, see, and smell.*
- 3) Go to a bus stop, coffee shop, or public place. Write down as many questions as you can for 5 minutes.*

Principle 2: Show & tell



Context is pretty darn powerful. When we go to the library, we tend to talk quieter. When we go to a sports game, we tend to yell and scream. That's because there are certain social norms and protocols that shape our behaviour across contexts. The thing is, we're often not aware or able to articulate shifts in our behaviour, let alone those norms and protocols.

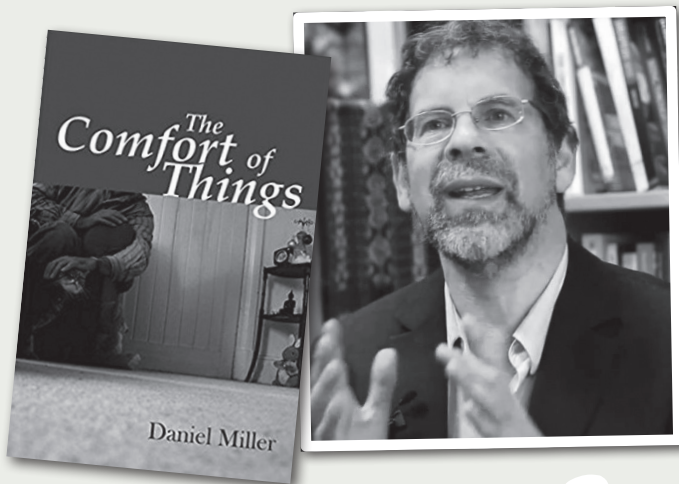
Rather than just ask questions, then, embedded researchers adopt a principle of show and tell. They recognize that since knowledge is contextual, they have to be in the person's context, seeing how they interact with what is around them. Good questions come from being immersed, and using the physicality of the space and the objects in the environment to prompt deeper reflections and sense-making.

The story of stuff

Go back to your desk or work space, and write a list of every physical object you have there. What's on the walls, on the desk, in the drawers?

What do you think the physical objects say about your preferences, habits, and values?

For inspiration, there's a great book "The Comfort of Things" that uses the objects in a person's house to reveal the stories of their lives. Want a copy? See your studio bookshelf!



Principle 3:

‘Being with’ over ‘solving for’

Working in the human services field, we’re pretty used to identifying needs and problem solving. With embedded design research, we have to get used to a new normal: spending time with people to see and hear their needs, motivations, and aspirations - but not immediately intervening or jumping into solution mode.

Anthropologists call the type of observational practices you will be engaged in the “emic” perspective. This means that you’re observing through the lens of the people you are researching / working with. The opposite is the “etic” perspective - which is observing through the broader lens or gaze of the social system.

Indeed, as embedded researchers, our aim is to be with people, not as a worker responsible for certain deliverables or outcomes, but as a sponge to soak up what’s happening. When we’re in interventionist or solution mode, we’re often listening for certain things. We’re waiting to advance our agenda. With embedded research, there is no agenda other than being present, focused, and understanding. The only exception to this is where you see abuse or harm being caused. In these instances, you have an ethical obligation to intervene and to call the Culture Curator.

Listening without interjecting

At your next staff meeting, take twenty minutes to practice your observational skills. Spend those 20 minutes just watching and being present. Try to clear your mind, and free it from any back-of-mind running commentary. Rather than listening to make a point or to participate, listen with the intent of really hearing what everyone is saying and how. What words do they use? Who speaks? Who doesn't?

Record a transcript of events here...

Then, ask yourself:

- > Were there times you felt like interjecting? Describe what was happening.*
- > How did it feel not to interject, but to just let what was happening play out/ let others take the lead?*
- > Write down 3 tips that helped you suspend judgment.*

Principle 4:

Open up possibilities

We seek to understand people's lives in the round: their values, preferences, interactions, motivations, hidden needs, and desires. We also seek to understand what shapes their values, preferences, interactions, motivations, hidden needs and desires. What are people's' reference points? What's the scope of their prior experience?

You see, what we've been exposed to impacts what we think is possible. People living on the margins, with few resources and meaningful opportunities, may hold a narrower set of future possibilities. As embedded researchers, we want to broaden people's set of future possibilities and help them imagine what could be. We do that by showing people multiple options of future states and ideas to react to. These are what we call 'engaging' methods, and they move beyond conversation and observation to visualizing future states. All so that we can gain a more accurate picture of their preferences and aspirations, and so that we do not inadvertently hold people back based on their backgrounds.

Imaginative Limits

To illustrate how our reference points shape our aspirations, try a thought experiment.

(1) Take five minutes to brainstorm the places you would most like to visit for a holiday.

(2) Now, head to Google maps. Scroll through a map of the world. Try googling 'most surprising holiday destinations.' Compare your two lists.

> What was different about your first holiday destination list from your second?

> How did external prompts & inspiration influence your preference set?

Principle 5:

Find the positive deviants

Exceptions and extremes are real creative fodder. We're on the hunt for what are called the positive deviants or the positive deviant moments. Positive deviants are the surprising exceptions - the people who have managed to find their own workarounds to challenges. Perhaps they've been resilient in the face of incredible trauma. Or maybe they've cobbled together supports despite big barriers. We want to know how they've coped, managed, or even flourished. Because therein lies the clues for effective interventions and practices. By understanding what's already worked, we can reinforce and replicate these bottom-up solutions.

On the other end of the spectrum, we want to know what hasn't worked, what's unhelpful, what's boring, what's bad. Probing both ends of the continuum - the good and the bad - helps to expose people's underlying logics and decision-making criteria. And this can help us to generate better, more grounded ideas for change.

The good and the bad

Let's try on exceptional thinking. First, think about your last AMAZING day. Draw or write what happened. Next, think about your last TERRIBLE day. Draw or write what happened. Compare the two. What are your own criteria for what makes a good versus bad day?

- > What were the conditions that enabled your AMAZING day? What were the conditions that gave rise to your TERRIBLE day?*
- > If you were to generate ideas to increase the number of amazing days you have, what would you do?*

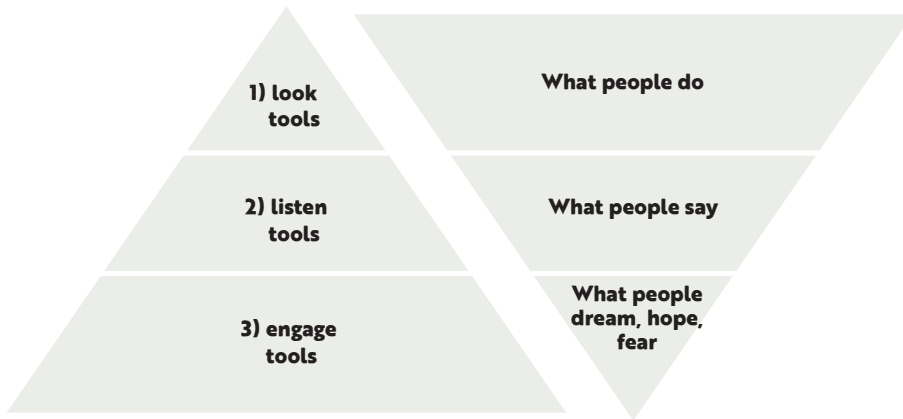
Principle 6:

Motivations over Deficiencies

Motivations carry more generative power than deficiencies. Rather than use research to point out what people do wrong, we like to use research to unearth people's motivations to do better and to identify the assets they could draw on. We want to find out what makes people tick and what might attract and engage them over time. What are their interests, their passions, and their motivational hooks? What would compel or drive them forward? Is it external forces (e.g. threat of punishment) or internal forces (e.g. desire to achieve). Cracking motivation is essential for learning, growth, and change.

METHODS

Three buckets of tools



If values and principles are the why, methods are the how. Methods are the ways in which we actually go about doing research. As embedded researchers, you'll kinda be like a cocktail mixologist, mixing, matching, and shaking up different methods and tools. We can group those different research methods and tools into three buckets: those that are about (1) looking, (2) listening, and (3) engaging.

1) Look tools	2) Listen tools	3) Engage tools
<ul style="list-style-type: none"> > 'Day in the life' shadowing > Point-in-time observation > Spatial mapping 	<ul style="list-style-type: none"> > Language & Sounds > Interviews 	<ul style="list-style-type: none"> > Prompts > Co-design sessions & Journey mapping > Artifact collection > Probe packs

1) Look tools

> Day in the Life Shadowing



What is it?

Shadowing is a research method where you follow a person in their context, doing whatever it is they are doing. It helps you to understand how people behave in their own environments and to map the factors that seem to shape what they do.

It's pretty straightforward: you accompany someone as they go about their regular tasks and activities. As you go, jot down everything they interact with in your notebook - this might be other people, or objects, or systems. We typically prepare our notebooks with topics to observe and reminders to record certain events. We don't interrupt or ask questions during this process; there is plenty of time for that later. This is the time for quiet observation.

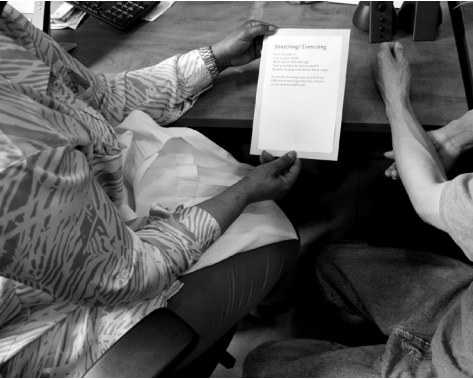
Story Spotlight

Mike spent a few hours shadowing a manager at an agency for senior adults. He observed how little the manager moved around. Most of her time was taken up answering emails and making phone calls. The manager was communicating a huge amount, mostly from her desk. She seemed to be spending about 80% of her time dealing with emergent fires and doing administrative duties. There was little opportunity for interacting with senior adults. And no time for next day, next week, let alone future, planning.

Core Takeaways

- It's all about observing
- Ask why, why, why, why?

> Point-in-time Observation



What is it?

Point-in-time observation is more directive and focused than shadowing. You are observing a particular event, moment, or interaction of interest. And you are engaging your senses (especially seeing and hearing) to get a real feel for time as it unfolds.

Observations involve looking around you with fresh eyes, as if you have never been there before. Who are the people in the space? How are they interacting with one another? What are they talking about? How is the space laid out? What do you find on the walls? Describe the furniture. What strikes you as interesting and what is happening there? What are your questions about it?

Observations are also recorded in notebooks (see the section: tips for taking notes). You can take photographs of what you see (posters, signs, calendars etc), and make audio recordings of sounds (traffic, nature etc).

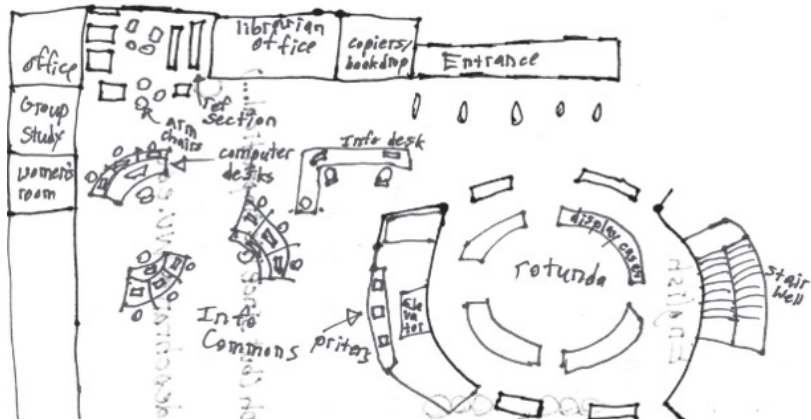
Story Spotlight

Jodi was an Embedded Researcher at a shelter for street-involved adults. She helped the staff team do laundry one afternoon. For 3 hours she ran up and down, getting soap, helping clients load their laundry, waiting with clients for dryers to come free, etc. What really surprised her, were the conversations she had while waiting for the laundry. Conversations in the main space of the shelter were superficial, but by the laundry she talked with folks about politics, future dreams, blockages to moving forward etc. The laundry was relatively quiet without many interruptions. Jodi started brainstorming how to turn the mundane doing of laundry into an activity that prompted folks to reflect about personal change.

Core Takeaways

- Observe using your senses (hearing, seeing, smelling) to understand people in naturally occurring situations - work, school, home etc.
- Observe through the lens of people you spend time with; suspend judgment and opinions.

> Spatial Mapping



What is it?

The use of space is an important aspect of any culture - be it an organization, a community, or a family. The allocation of resources, who stands or sits where, the places where daily tasks are performed etc. all provide meaning about relationships and dynamics.

Through mapping a space or process, the researcher can visualize what happens and gain an understanding of the subtleties of a setting. How does a setting shape behaviour?

Mapping is a visual activity. Start by drawing a large square on a piece of paper. Begin by paying attention just to the form of the space. Mark areas such as common spaces, walkways or pathways that people take, or sites of significance etc. Once you've mapped the space, start adding details about what happens in the space such as who spends time in what parts, or the flow of traffic in and out of the space etc.

One technique to bring dynamism and more meaning into using the mapping tool is to ask a people to help you, this is often called Participatory Mapping. While mapping the space together you can ask them to point out areas of significance to them. For example,

in a map of a city block - you can ask them to point out where to get the best coffee, or where to find a public bathroom.

Story Spotlight

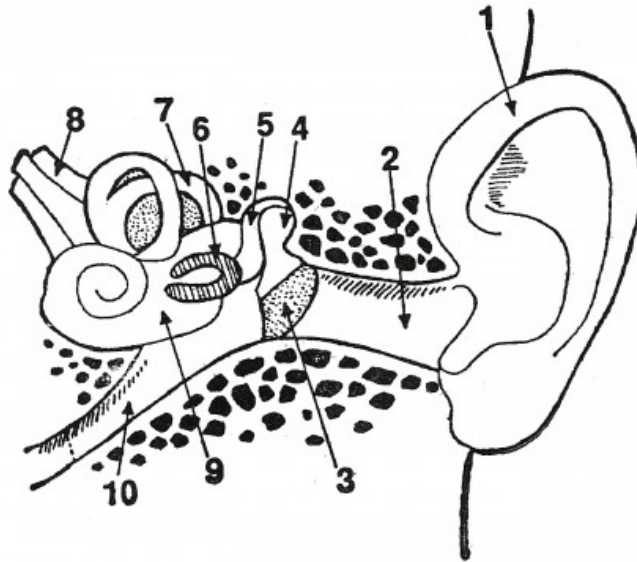
Denise was doing research in a town in the South Pacific where the small dirt roads of the community weren't signposted or marked. One afternoon she took out her notebook and sketched the roads. She asked the people around her to help make an accurate sketch. What emerged was amazing! Turns out all the roads did have names that everyone used. In the end they created the first map of the area with named streets. She also learned why streets were given their names- for example hip-hop street was named after a group of boys there who once won a hip hop dance competition.

Core Takeaways

- Mapping is a visual way to learn about subtleties of a setting and relationships people have with the setting / space.
- If you think you can't draw, start by drawing a large square demarcating the space, and then sketch out the forms- roads, rooms, furniture, etc.

2) Listen tools

> Language & Sounds



What is it?

The way people converse, their tone of voice, the number of pauses, and the speed can all speak volumes about people's state of mind, their relationships, their needs, etc. Language and sound analysis (often called discourse analysis) looks beyond the content of what people say to focus on how they say it. Based on volume and tone, is it an informal or formal conversation? Is it friendly or disciplinary? Is it directive or creative?

You might try recording snippets of conversation on your phone, or creating a transcript that highlights the way in which something was communicated: loud or soft, short or long. You can also try counting types of words used - adjectives, nouns, verbs. The underlying structure in our speech patterns can tell us about roles, power dynamics, and emotions.

> Interviews

What is it?

Interviews are where we ask specific questions to get inside someone's head and elicit desired information. Where observations help us capture what people do, interviews help us capture what people think and feel. There are actually three different types of interviews - the structured, semi-structured and the unstructured interview.

The structured interview is useful when you have very specific information you wish to collect. The structured interview is often used to collect quantitative data such as in surveys. Questions might focus on when and what and frequency of occurrence. The structured interview is also often a set number of standardized questions that are asked to different people in order to get a sense of how a population responds to something particular.

If what you want to learn about are themes and patterns, or if you have a research question you are interested in exploring, you would use the semi-structured interview.

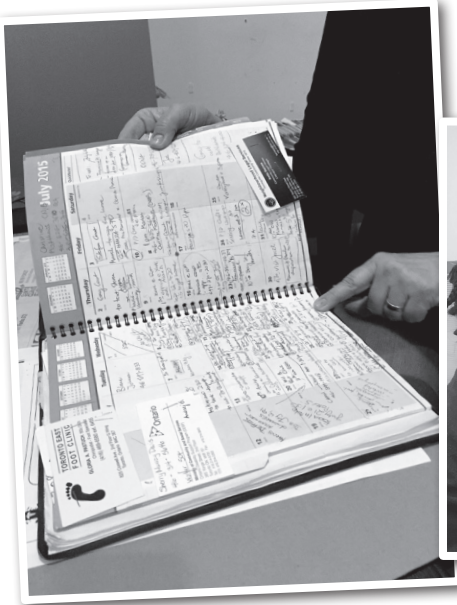
The semi-structured interview is the middle ground between the other two. The researcher knows the themes they want to learn about but the exact questions change, as well, as the ordering of the questions.

Unstructured interviews are considered to be the opposite of the structured interview in that the researcher asks very open ended questions that are explorative rather than having a particular research agenda in mind. Questions might be: "tell me about yourself", or "tell me about a time that you did this" or "tell me a story" etc. Unstructured interviews are explorative as researchers don't have a particular research question in mind but are open to where the research subject takes them.

Good interviews have three acts:

Part 1: Introduction - where you introduce yourself (with a smile) and thank the person for taking the time to talk to you. You describe the purpose of the conversation and the topic (without going into too much detail to influence answers) and get informed consent (written, if needed). You can use some of the information you get in this initial conversation for some warm-up questions such as "oh you live in x neighbourhood? What do you like to do for fun there?".

Part 2: Body - Once you've covered the introductions and formalities and had a bit of fun, it's time to dig into the interview. Ask your questions. Don't be afraid of pauses or gaps in the conversation, give people time to think.



Part 3: Conclusion - Once you have the information you were looking for (and more), and you feel like you are approaching a natural conclusion, or the end of your scheduled time, make a gentle transition to the wrap up. You can say something like “that’s it for my questions” and ask them if they want to add anything or if they have any questions they want to ask you. If they don’t, thank them again for their time and let them know how they can get in touch with you if they wish.

Story Spotlight

Sophie was a frontline worker and embedded researcher who was looking to answer the research question: how do staff at an organization plan their daily activities with their clients? Sophie wrote a list of some specific questions to ask - “when do you decide what you and your client will be doing that week?” “How do you decide?” “How do you document it?” “What tools do you use?”

Sophie’s questions sparked an interesting broader discussion about independence and dependence, and what the role of staff is? Where are their perceived boundaries? The conversation provided rich data, about something Sophie hadn’t even thought to ask about.

Core Takeaways

- Use structured interviews when you have specific data/ information you want to find out about.
- Use semi-structured interviews when you know the themes you want to research but might not use the exact questions in every interview.
- Use unstructured interviews when you are in an exploratory phase of your research.

3) Engage tools

> Prompts

What is it?

Prompts are like the ‘grease’ on the interview wheel. They can be used to break the ice and help start the conversation. Prompts also can help the interviewee find language to talk about a topic they might not have previously thought much about. This is particularly the case when the questions are about imagining something different or something in the future.

Prompts are usually tangible tools made ahead of time that we bring into interviews and conversations. In the preparation stage, when we decide what type of information we hope to elicit, we also figure out what tools might help to surface the information. Examples of prompts include journey maps, cards with pictures on them, or controversial statements we ask them to respond to or rank in a particular order. Follow up questions are then asked about their answers.

We often use two types of prompts: conversational and projective prompts

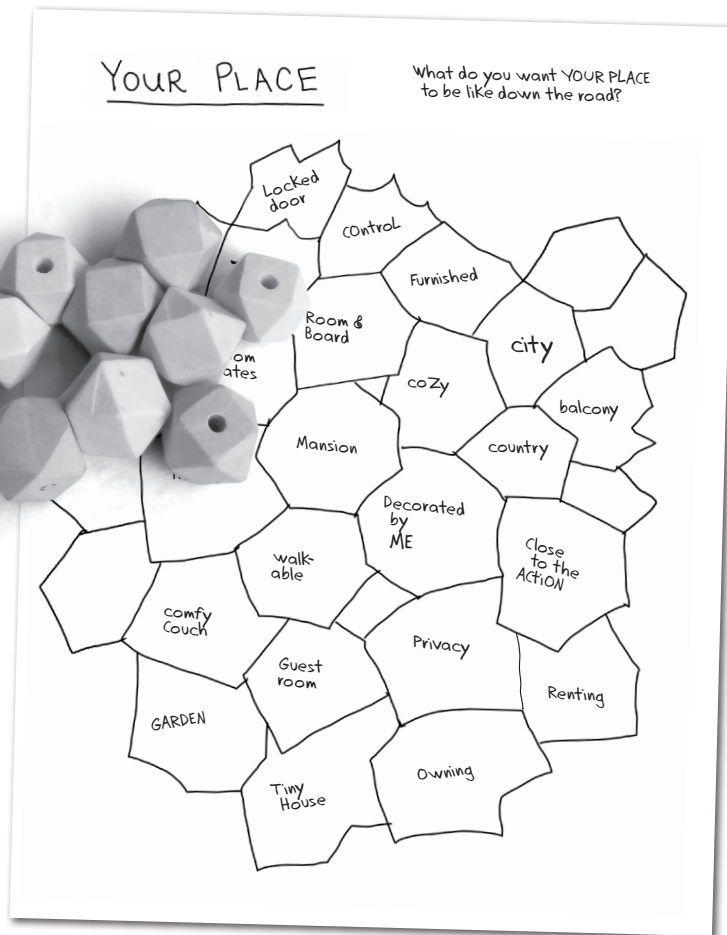
Conversational prompts help us to dig deeper to understand people’s histories and values. Timelines ask people to draw the shape of key moments or emotions such as the highs + lows of their day. Network maps ask people to position themselves and their network by closeness, by roles, or by type of support. Picture prompts use images around relevant

themes - stress, family, drug addiction, organization etc. to understand attitudes. And card decks, which display pictures or logos, are used to learn about people’s attitudes and experiences of the world around them.

Projective prompts help us to go wider to understand people’s preferences and aspirations. Story sets are profiles of people (where they come from and where they are going) and are used to talk about aspirations and goals. Fake services are a set of brochures for services or programs that could exist in the future and help us understand preferences and latent needs. Value ranks are cards with provocative statements and beliefs that help us learn about what people think is true and important. Outcome cards are statements that people are asked to rank in order following a question such as “what 3 outcomes are most important to you?”

Story Spotlight

When Julian was working with young people at a residence for street kids, he wanted to find out what kind of space they would want to live in when they left the residence. Julian chose to use a conversational prompt tool he called bubbles. The tool was a sheet of paper with a bunch of bubbles containing words describing living spaces - condo, guest room, comfy sofa, etc. Julian asked youth to place glass beads on the words that reflected what they wanted for themselves in terms of housing in the future. %



of the youth Julian used this tool with placed beads on the words: farm, nature and animals. When this was reflected back to the ED and staff of the organization they were surprised! They had never thought about creating opportunities for youth to spend time outside the city. They started brainstorming about organizing work-for-stay arrangements for youth on farms!

Core Takeaways

- Interviews don't have to be limited to paper, pen and asking questions. Prompts, which are tangible tools to help spark and direct conversation, are a useful part of the research toolkit.
- Projective prompts are especially useful for finding out attitudes towards the future, how things could be different, and articulating hard concepts such as personal values.

➤ Co-design sessions & Journey mapping

What is it?

Co-design sessions can help us to probe social norms, expectations, and preferences. They give us clues as to how people operate in groups, and the types of ideas that resonate versus fall flat.

The discussion is guided by a facilitator, while another team member documents the conversation. Group sessions are often useful in generating collective views and experiences, as well as the meanings behind those views. The facilitator can also use the context of multiple participants to probe deeper and search for conflicting and contrasting views. They can also bring interactive exercises and early ideas to the table to get reactions and feedback. Journey mapping is a favorite interactive exercise where people are guided through making a physical map of a service experience: what happened, the highs, the lows.

Difficulties of group sessions are to balance

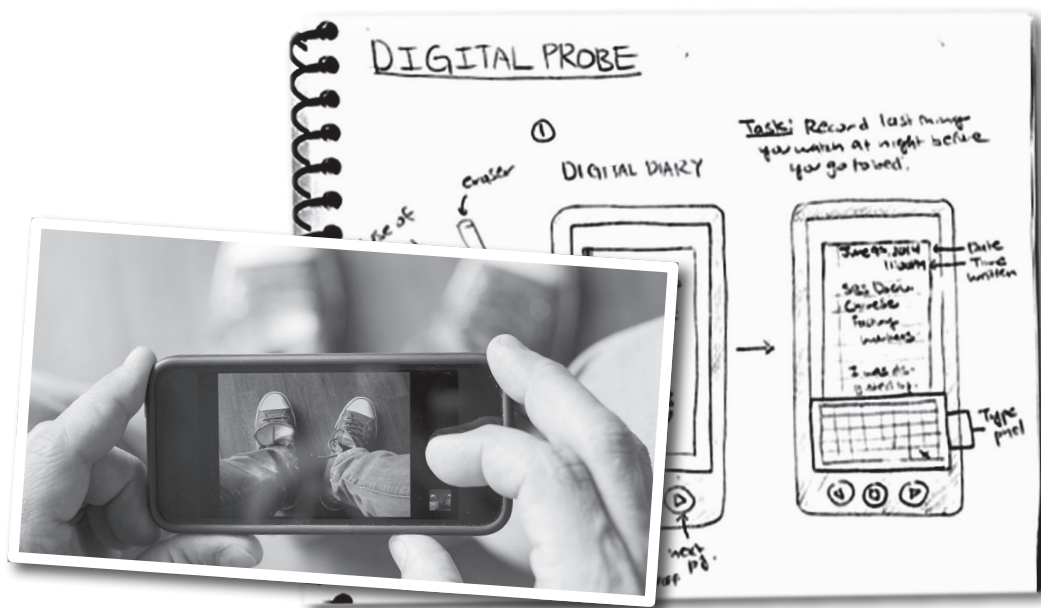
power dynamics within the group, and balance extroverted personalities who might talk a lot, with quieter personalities. Social norming, or agreeing with the majority or consensus, might also be a risk of group sessions.

Story Spotlight

While working on a project mapping the landscape of miners in Colombia, Cynthia used group sessions to find out what miners really cared about. Cynthia led the the group in a discussion about their vision (individual and collective visions) for the landscape and the future of their relationship with the land.

Core Takeaways

- Group sessions are good for generating collective views and early stage ideas.
- Group sessions are useful if you want to understand how group norms influence individual behaviour.



➤ Artifact Collection

What is it?

Things and stuff are often deeply laden with meaning - and serve as terrific prompts for further conversation. You may ask people to show you their calendars, or what they carry on them, or the people they call most often, or the apps they find most useful, or the memorabilia they feature in their house. Having a referential object can often ground the conversation, and helps to make otherwise abstract concepts (e.g time, social networks) far more tangible and explorable.

SENSE-MAKING

Sense-making tools

What kind of data?	Raw notes (What)	Capture sheets (What)
What format?	Notebooks filled with scribbles, drawings, quotations from interviews and observations.	Summary sheets used to transfer the most important quotes and numbers from your notebook into a standard format.
Looks like...?	2 notebooks >1 for what you're seeing & hearing (your observations) >1 for what you're feeling (your reflections)	A template to fill out
Why?	It's good practice to separate out your verbatim notes from your personal thoughts & interpretations.	This will help us to aggregate data and compare across sites and across time.

Once you’ve looked, listened and engaged, then what? These mixed methods produce heaps of raw data. Moving from raw data to interesting information to actionable knowledge takes time and space for collective sense-making. Here’s the products you can expect to make (with lots of coaching) along the way...

Stories	Insights	Opportunities & Ideas
(About whom?)	(So what / I wonder ...)	(Now what & What if...)
<p>Written narratives, with photos (if possible) that humanize a person and give some context. They contain direct quotes and are ‘thick’ with description.</p> <p>A long written narrative is called an ethnographic story. A short one-pager summary of a person is called a profile.</p>	<p>What do your raw notes, capture sheets, and stories seem to be saying about your research question? An insight is your hunch about what might be going on, rooted in the data, that tells us where to focus attention or where to act.</p>	<p>An opportunity is an area for further inquiry or action. It should drop out of an insight. It’s helpful to frame these as ‘what ifs’...</p> <p>Within an opportunity area, we might generate lots of concrete ideas. Each idea goes on a separate piece of paper, and can be visualized or brought to life.</p>
<p>A photo story, a video, a written story</p>	<p>Statements on post-it notes, grouped themes</p>	<p>Drawings, stories of the future, names of ideas</p>
<p>This helps to build empathy and to broaden our understanding of people.</p>	<p>This helps us to identify groupings of folks with similar needs, motivations, and aspirations. It’s easier to design for a group than an individual.</p>	<p>This helps us to move from straight research into idea generation.. These ideas are then shared back with people to prompt further conversation and reflection.</p>

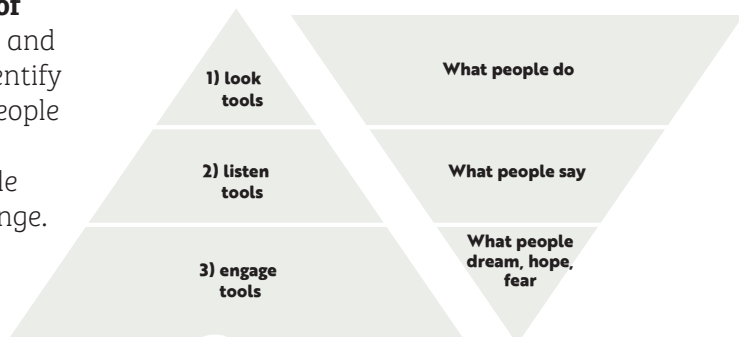
Top 3 Take-Aways

A picture is worth a thousand words. So, here are three pictures to summarize what you've just read: the core concepts of embedded design research.

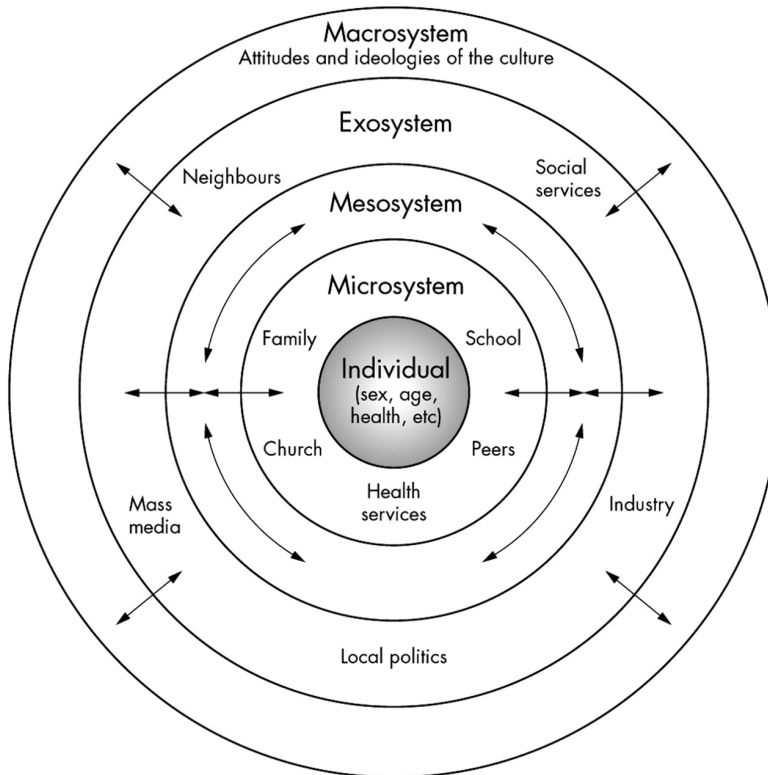
(1) Make values explicit. What we deem to be important influences what data we collect, how we derive meaning from information, and how we act on the knowledge we learn. We must be honest and reflexive so that we can open the doors for others to do the same.



(2) Blend multiple ways of knowing. Look, listen, and engage in order to identify gaps between what people do, say, and want. In the gaps come possible opportunities for change.



(3) Appreciate the whole context. People's behaviours are a product of what's inside their heads, their relationships, their interactions with institutions like work and school, and their interface with broader systems and cultural ideas. As embedded design researchers, we zoom in and zoom out to focus on the whole, not just the parts. Ideas for change come from all levels.



Tips & tricks

Descriptions

How do you explain walking around with a notebook tucked under your arm, counting the number of times the phone rings? And how do you explain it in a way that minimizes other people's fears of what they think you are doing there?

Phrases you could use in your description:

- *I'm here gathering stories about the place and people*
- *I'm here to learn from you and see the place from your perspective*
- *I'm here to understand what it's like being a staff here / being a user here.*

Words to avoid in your description:

- *Evaluation*: you're not here to evaluate or assess what is right or wrong.
- *Management*: you aren't reporting individual specifics back to anyone.
- *Research*: this is a tricky one. Some people get anxious when they see you as an expert doing research on them. If you use the word, you'll want to clarify it's a different type of research.

Rebuttals

It's pretty natural for staff and users to express concern. They may even make offhand comments, like, "Oh are you here to snoop around again?" Here, it's really comfortable to clarify that we aren't spies or snoops and to ask them to share what their concerns are.

Before you've spent time with them, you can say:

- There is no obligation to participate
- Their contribution can be anonymous
- Show them some of the tools and types of questions you are going to be asking
- Show them the consent form - especially the part about how their information is going to be used/ stored.

After you've spent time with them, you can:

- Offer your notes for them to read
- Destroy the notes pertaining to them if they ask you to.
- Offer to sit down and talk with them in more detail about their specific concerns.

Breaking the ice into conversation

When you have the time and resources to spend years with the people you are wanting to learn about it's easy to build on your existing social rapport and have fruitful and non-threatening conversations. But what do you do when you only have one or two hours? And when you don't know the person well?

We like to start every conversation or tool with an introduction, an explanation, and an ice breaker that sets the tone for the kind of conversation we want to have. Here are a few ways you can do this. This is not an exhaustive list, you can invent your own!

1. Share something about yourself: how your day has been going. Starting with a 'normal' conversation will help set a tone of equality and ease.
2. Acknowledge the weirdness: point out that it is weird to have someone ask questions about things that might seem obvious, or to have someone follow them around for an hour or two. Laying the 'weirdness' of the exercise out on the table might open opportunities for laughter and put them at ease.
3. Objects as ice breaker: Depending on where you have your conversation - in their office, or in a cafeteria etc. you can pick an object on their desk or something on the walls and ask them about it. "Oh you have a cat, I love cats!"
4. Drawing prompts: You can start by saying that this isn't going to be your 'typical interview' etc. That we use all sorts of prompts and tools. You can suggest you guys start with a drawing prompt. If you are not in their office but somewhere impersonal like the local Tim Horton's you could start by suggesting that you both draw a picture of a favourite person served. Talk about the picture and the person. This exercise is a good reminder that our work focuses on the people we are serving.

Out with the old

Chances are a lot of the spaces in which your research will be carried out will not be new to you. That means as an insider, your observations will be framed by your experiences. You might be carrying some pre-existing assumptions.

“Making Strange” is a habit an insider ethnographer can adopt to develop a more detached and objective viewpoint from which to interpret data. The aim is to ‘de-familiarize’ oneself with the place and the people in order to observe and ask questions from fresh eyes and with “surprise”.

- 1) Look for mysteries in the workplace - what is unknown or puzzling? What don't you understand, and how can you try to solve that unknown? For example: what is irrational or strange about a colleague's behavior in the workplace? Through research can you get to the bottom of this to gain greater understanding of why, what and how come?
- 2) Childish curiosity -this strategy is about taking on the perspective of a toddler who constantly asks why, why, why? Toddlers are curious about why things are, as they try to make sense of how the world works. For example: during shadowing you might see a staff member following a certain protocol with a client. You might be very familiar with the protocol based on your own work, but ask questions about the step by step process and
- 3) Put empathy on the side -in the research moment your hat is to understand culture and process not problem solve, as best as you can, put your training to help and your empathetic lens on hold. Your colleagues can take-over while you are in research mode.

Insider/ Outsider Accounts

Take an everyday activity you do (eat a meal or tie your shoes, for example) and:

- (1) Write 250 words describing each step in the process from your own perspective
- (2) Write 250 words about it in an intentionally distancing “objective” mode, as if you were observing yourself doing it from afar .
- (3) Which of these accounts reads “better” to you? Why?
List the advantages and disadvantages of each account.



Visible Bias

All humans are biased. That's why reflexivity is so important for embedded design researchers. That means recognizing the personal characteristics that shape what you see and how you see it. Your gender, socioeconomic background, world-view etc. all frame the world around you.

Peggy McIntosh (McIntosh 1997) uses the metaphor of an “invisible knapsack” to explain this. She writes that the privilege that comes with having light-coloured skin is “like an invisible weightless knapsack of special provisions, assurances, tools, maps, guides, codebooks, passports, visas, clothes, compass, emergency gear, and blank checks” that allows whites a range of social action and acceptance not accorded to those with darker skin (In Vivanco 2017).

Observing while doing

Anthropologists call the blend of observing while doing “participant observation.” Basically you are doing what they do, as they do it and observing throughout. It's a bit tricky as you have to keep track of what you are doing and experiencing at the same time as what others are doing and how they are doing it.

As staff at the organization you are in a terrific position of being able to “observe while doing” when you aren't wearing your Embedded Researcher's hat. See if you can continue using your observation lens while going about your everyday work. Check on yourself in a few weeks and see what you have learned and whether you are able to observe while doing.

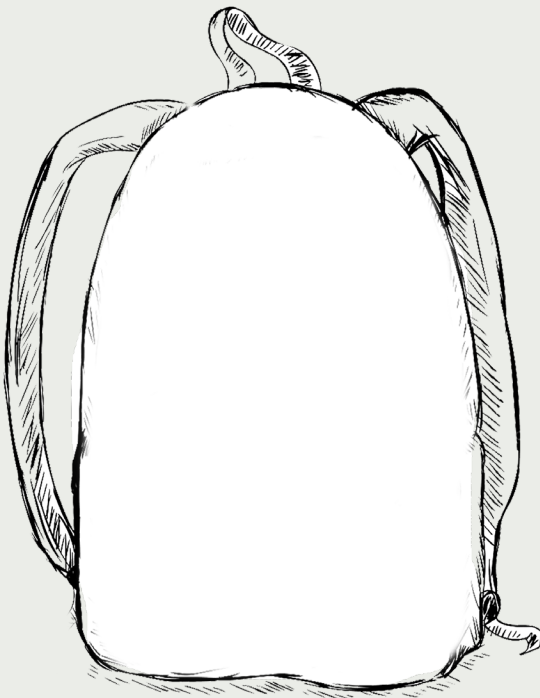
Observing while doing might disrupt note taking since you don't want to interrupt what's going on to take notes. There are tips for how to take notes while doing below.

Unpacking your invisible knapsack

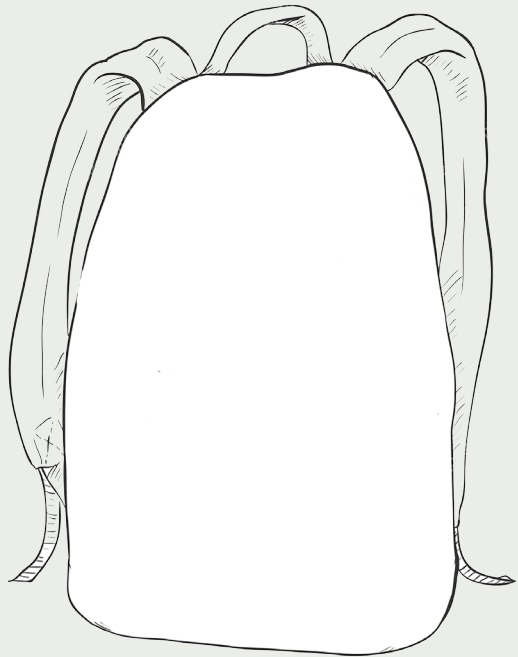
What do you think your tacit (unknown) biases are?

Try to come up with at least four on each side:

Your privileges



Biases others may carry about you



> Choose one privilege and one bias. How do you think you might limit or manage their impact on your research?

Practice observing while doing

To practice observing while doing. Identify an activity you not very familiar with, but one you can participate in - a running club, a yoga class, eating at a cafe you don't know, joining in a festival or parade etc. Join the activity for 30-45 minutes and jot down notes about what you observe and experience.

- > Describe how you “participated” - what was your involvement,*
- > Describe how and when you took notes.*
- > What was difficult about this exercise?*
- > What new insights did you develop about the community or activity you were involved in that you didn't know before joining?*



Asking good questions

Luis Vivanco writes that “in addition to observing and listening, asking questions is the lifeblood of ethnographic field methods” (2017, 73). Asking questions is a main strategy for eliciting information.

Good questions are one’s that do more than elicit “yes” or “no” answer- but they come in many different flavours. Here are some different categories of questions that can elicit useful data (adapted from Spradley 1979, in Vivanco 2017).

- Questions that ask for generalities: Asking about what’s “typical”, such as “Tell me about a typical day in your life”, or “what kinds of tasks do you generally perform in your job?”.
- Questions about experience: Asking about specific personal experiences, such as “Could you tell me about how you felt when....?” or “What was it like when... (event, situation)?”
- Detail oriented questions: These are often posed as follow-up questions, such as “Could you explain what was happening in your life when...?” or “Can you give an example of...?”
- Questions that elicit native categories: Asking questions about how an individual refers to or conceptualizes something, such as “How do you refer to..?” or “What is the difference between a... and a... ?”
- Questions that ask for stories: Asking individuals to tell you stories about what you’re interested in learning, such as “Can you tell me a story about...?”

Note taking



What is it?

Taking notes is a practical matter of getting down on paper various details of social interaction and snippets of conversation so we don't forget them. Notes "are a means to an end", an essential ingredient in jogging and correcting our memories when analyzing and writing about the details of people's lives later on.

You don't always know what is going to be useful later on in the analysis phase, so try to jot down as much as possible including - word for word direct quotes, descriptions about smells and sounds, what people were wearing, what the emotion was like etc.

Good notes are ones that avoid generalizing, write down what you see and hear with as much description as you can. They avoid opinion words like "bad", "horrible" "strange" (there is place for these words later in your reflection journal). Also avoid projecting internal states and emotions onto the people you are speaking with or observing. Instead of saying someone was angry or sad, just describe their affect and behaviours. You don't know how someone feels inside or a person's motives.

Story Spotlight

When Delila was doing immersive research with a community, she didn't always have time to write extensive notes in her notebook in the moment. So she created a system - a small notebook which she carried around to document what she did, key words and quotes throughout the day. If something around her was really really interesting, she would often excuse herself and go to the bathroom where she would frantically try to document words and phrases by sending herself text messages on her cell phone.

No matter whether it was early or late, whenever Delila returned home she would spend at least 30 minutes expanding what she had written during the day in a word document on her computer. She knew that she would be using these notes for a long time and they needed to be thorough and accurate.

Core Takeaways

- Your research is only as good as the documentation you take back home with you.
- Taking notes requires discipline & routine.
- Try not to generalize or speculate other people's emotions.

Practice exercise

Ask a friend if you can take notes for 7-10 minutes on him or her performing an everyday activity, such as washing dishes, fixing a bike, cooking a meal etc. Think of yourself as a fly on the wall for this exercise, and jot down notes on what you observe while it's happening following the principles above. Don't worry about getting down what the person might be saying, just focus on describing movements, actions and effects.

Writing in shorthand

Shorthand is a symbolic writing method that increases the speed and brevity of writing when compared to longhand.

Tips for writing in shorthand:

- Choose symbols for common words (such as w with a line above it to represent 'with')
- Stay consistent with your choice.
- Eliminate less important words such as the, at, in etc.
- You don't need to write complete sentences, just capture the meaning, or keywords / phrases.
- Describe the smells, sounds etc that will help jog your memory when you write your notes up later.

Writing standing up and on the run

As you know well, social service agencies are busy places. Staff, especially, juggle many tasks at the same time. So, when you are following a staff around, how are you going to capture your observations and thoughts in your notebook?

Tips for writing while on the run:

- Use a hard surface to write on - a clipboard or a hard book or find a wall to lean against.
- The notes don't have to be neat, they just have to be legible (enough).
- Pause when you need to jot down your notes.
- Use pencil rather than pen which needs to be held upright.

Organizing your notebook

A notebook contains within it a variety of information types - notes from meetings, to do's, things you want to read, names of contacts who you want to get in touch with, ideas etc.

We're sure all of you already have different techniques and methods for organizing information in your notebooks. But in case you're looking for some more inspiration, we asked our designers and social scientists how they organize their notebooks and distilled their practices into some key tips.

- Annotate the information types: Use different colours or symbols, or draw text boxes or underline the different kinds of information. For example: ideas for the future can always be found in a red box, and books and articles you want to read can always be underlined in green. If you will have a lot of different types create an index or menu.
- Clips + pockets: Attach small bull clips or paste a homemade envelope or pocket onto the front or back cover of your notebook. These are handy for storing handouts or printouts you want to keep.
- To Do Lists: The best to do lists are the handy and visible. Use a large sticky note or tape a piece of paper onto your notebook's front cover. Because it's sticky you can move it if you need to change notebooks.
- Use the corners - Corners are an underutilized part of a notebook, but they have so much potential! Allocate specific corners for particular information types. For example you can always put the date in the top right corner, or ideas for the future in the bottom left corner.
- Illustrate your notes: Sometimes drawing a diagram or a sketch is a helpful way to record information. For example drawing your own emojis helps to record a conversation's emotions.
- Different sections: If you write different types of notes such as project notes, meeting notes, reflective notes, call notes etc. You might want to divide your notebook into sections for each.

Recording what you see - taking photos

We have put a lot of emphasis into note taking, and you will be using special note books we've created throughout the research process. However, there are other formats you can use to help you record what you observe and hear.

Audio recordings - Audio recordings are great to listen to in the future as they not only capture direct quotes, but they also record the tone with which something was said -sarcasm, sadness, laughter. They also capture the context - birds chirping, cars whizzing by, people talking in the background, interruptions etc. No special equipment is needed, just use a voice recorder app on your phone.

Video recordings - An excellent way to document every detail. Also no special equipment is needed, you can use the video function on your phone. (Tip here - hold your phone horizontal, and lean it against something sturdy to minimize shaking).

Camera - We probably use this tool the most. Photos help us illustrate our ethnographies, and help us remember the faces of all the people we speak to. When we work with service users we often print out the photos and return them back. It's easy to use your phone as a camera.

Before recording anyone, ask for their consent. The consent forms we will provide you with will ask specifically about what they are comfortable with or not comfortable with in terms of their image being recorded.

Consent

Qualitative researchers follow guidelines for consent - the central premise of the guideline is "do no harm" - avoid harm to dignity and body and material well being, especially when research is conducted among vulnerable populations (For more see American Anthropology Association Ethical Guidelines).

Grounded Space is working in partnership with your organization. Your ED and senior level managers are all on board and have given their permission for us to be doing research in the space.

When you start shadowing and interviewing staff in the organization and / or service users, you will need to ask for verbal and written consent.

We have consent forms prepared for you to use. These consent forms give the person choice over how we use their data -including if we use their name, or give them an alias, and if we can take photos and voice recordings.

What people tell you is confidential, and will be anonymized when shared back with the organization, unless you have reason to believe the person is at risk of harming themselves or others. Then, you have to break your confidentiality and let your Culture Curators know.

Research & harm?

Do you think this research process has the risk of producing harm?

How do you think you can reduce the risk of this occurring?

On the flip side, do you think this research has the potential to lead to social good?

