



Stolle Creative
empathy • strategy • design

After designers conduct research, the data must be synthesized to bring clarity out of chaos. The sense-making process lays a foundation for ideation and prototyping. Thorough synthesis can help ministry leaders imagine new possibilities for ministries that are grounded in empathy rather than assumption.

Design Synthesis

The Path to Discovery

Imagine Luke 24. Two disciples are walking the seven-mile stretch from Jerusalem to Emmaus. Their teacher is gone. Dead. But some friends reported that he wasn't in the tomb.

They feel overwhelmed. Unsure. Exhausted. Discouraged.

As they head home, processing what has happened, they begin talking to a man. It's Jesus. But they don't recognize him.

Even as Jesus opens up the Scriptures to the disciples on the road, and their hearts burn, they don't recognize him.

They continue to doubt the resurrection.

Even as the disciples welcome this surprisingly knowledgeable traveler in for a meal, opening their home and their lives to a stranger, they don't recognize Jesus. They continue to doubt the resurrection.

And then Jesus takes the bread. The cup.



Supper at Emmaus by He Qi, from Art in the Christian Tradition, a project of the Vanderbilt Divinity Library, Nashville, TN. Original source: heqigallery.com (source)

Suddenly, the disciples realize who he is.

Jesus is alive? Risen? Such a leap hadn't seemed reasonable, even if the reports from the women and Peter pointed to a

different possibility. After three days, the dead don't simply become undead.

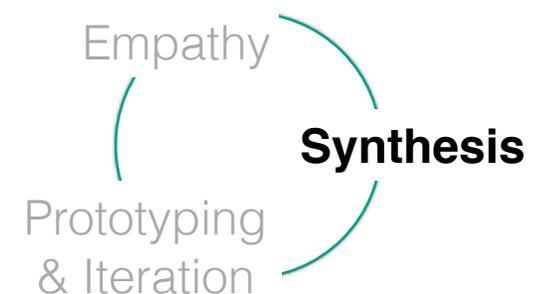
The disciples witness the resurrected Jesus firsthand, which requires them to reorient their thinking. To make sense of this new reality. To put it into context.

These post-resurrection encounters also have a groundedness to them. Physical evidence. Sensory engagement. Touching, hearing, seeing, eating, drinking. Christianity is not a transcendent escape from the world. Instead, the holy is made tangible.

This can be a helpful image when moving from empathetic research to synthesis. The outcome isn't always clear, but the designers revisit their observations. What's been seen, seen, heard, touched, and felt point the designer toward so much more and compel the groups into interpretation and action. It's an interplay between the physical and the holy.

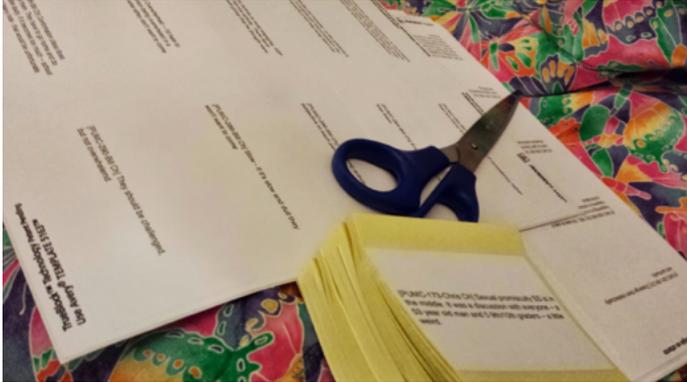
Sense-Making in Design

Design research is an important part of the design thinking process, but there's still a large gap between conducting empathetic research and making something. That's where synthesis comes in.



Synthesis is often hidden from view, so the sense-making part of the process can seem magical; only the most talented, creative people have fresh ideas. Thankfully, this isn't true. Instead, designers use a number of tools to rigorously and systematically process what they've heard and seen, transforming empathy into a lot of ideas. Sometimes hundreds. After the bad and mediocre ones are edited out, a few good concepts remain, which can be prototyped and refined through multiple iterations.

Tip: After conducting research, it's tempting to start to generate ideas based on what was observed in the field. But wait—don't ideate. At least not yet. Taking time to synthesize gives the group space to consider both the depth and breadth of participants' experiences and the nuances of different contexts. Plus, it reduces the likelihood of using research stories to "proof-text" an idea someone had in mind before any research whatsoever. Not every insight from the research will be a brand new discovery, but soaking in the stories from the field should bring the group to a new place of caring and understanding.)



During synthesis for a confirmation ministry project, the design team ended up preparing and sorting over 3000 sticky notes filled with quotes and observations from ethnographic interviews. While it was a lot of information to manage, posting the interviews on the wall helped the group discover organic relationships in the data. The process spurred conversation and collaboration, and even served as an invitation to visitors who saw the boards and were drawn in to read participant quotes.

Externalizing Data

While conducting interviews and hearing stories, it's useful to capture notes and photos and to record the session. These come in handy during the synthesis process, as designers externalize quotes, observations, and even seemingly insignificant moments from the research.

The level of detail falls along a spectrum, but on the most rigorous end, designers transcribe the entire interview. Transcription is time-consuming—one hour of interview can take three or more hours to transcribe. While services can do this, the design team benefits from typing the sessions themselves. Listening to the participants' voices brings the researcher back into the interview, noticing new things and re-engaging that empathy music.

Transcripts can be typed as text documents, though a spreadsheet can be useful to export into different formats down the road. Often, I'll set up the following columns in a spreadsheet: interview number, time stamp, line number, speaker, and quote. I'll type up the interview, starting a new row for each new speaker or a discrete thought. Then I mail-merge this into a document and print on paper or mailing labels. This makes it easier to externalize and work with the interview data while still being able to trace the comment back to the source if I need to regain context.

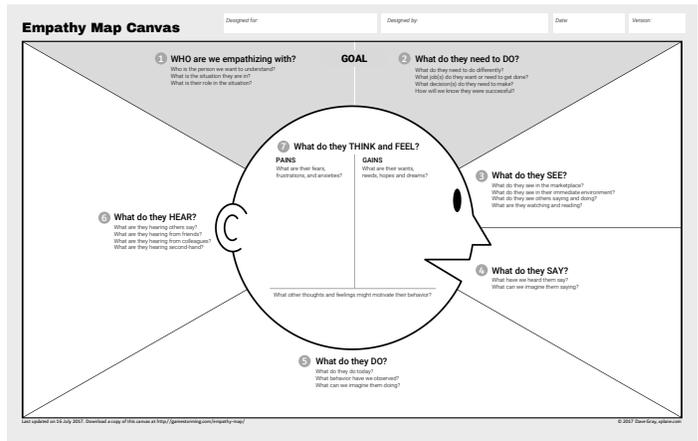
Regardless of format, the important thing is getting an interview out so the words can occupy a physical space

on sticky notes, walls, and pin boards. These tools allow flexibility in moving around research data in organic ways that aren't constrained by the default settings coded into software by an engineer somewhere.

Another bonus? A room covered in photos and quotes and stories invites people into the meaning-making process. As the team pours over each interview, discussing the data, contextualizing, noticing connections, and even debating the significance of a statement, they develop a deeper understanding of participants' pains, joys, and struggles. Which shapes how the team envisions new solutions.

Empathy Map Canvas

In the book *Gamestorming*, Dave Gray, Sunni Brown, and James Macanufo present a tool called an Empathy Map, which has been recently updated after use across many design and business contexts. The revised canvas provides a framework to complement efforts to develop empathy for others by identifying their goals, noting observable behaviors and influences, and imagining the person's internal motivators, fears, and desires. Businesses tend to use this canvas to get in the mind of a type of user composited from research and what they know about their audience. However, the canvas is also useful for processing interviews, one person at a time.



An Empathy Map Canvas is one of many frameworks that can be used to process an empathetic interview. After it's complete, the canvas can be used as a communication tool to help others understand and empathize with the interview participant. ([source](#))

Try It: Empathy Map Canvas

To use this synthesis method, start with these steps:

1. **Create the canvas.** Print out the canvas or sketch it onto a board or large sheet of paper.
2. **Complete the Goal section.** Define who the subject is and what they need or want to do. When using the empathy map to process an interview, you may want to revisit this section after filling in the rest of the canvas in case reading your notes reveals new information about the subject's goals.
3. **Work clockwise around the outside of the canvas.** Start with external, observable data and look

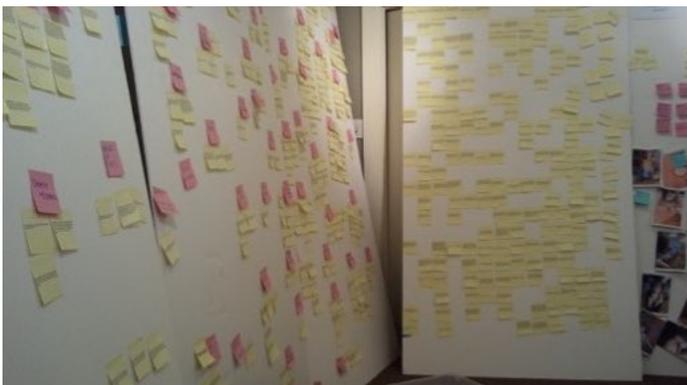
through your transcript or interview notes to see what the participant saw, said, did, and heard. Post the participant's statements on the empathy map.

4. **Fill in the Think and Feel sections.** Turning to the space inside the head, post utterances from the interview that relate to the subject's fears, wants, and motivators.
5. **Step back.** Take a look at the completed canvas. Does the Goal section still make sense? Update as needed. Ideally, keep your empathy maps posted while you complete synthesis and even as you begin to ideate and prototype. This keeps your interview participants front and center.

Affinity Diagram

Creating an affinity diagram is a great way to sift through and make sense of large sets of data by organizing ideas, quotes, or other data points into groups based on natural relationships. The term was coined by Japanese cultural anthropologist Jiro Kawakita in the 1960s and quickly became popular in the business community.

Affinity diagrams can be used in a number of situations where a team needs to sift through a lot of information. From interviews to brainstorming sessions to user feedback, it's a very flexible tool to notice relationships and bubble up themes in a way that respects and honors the individual bits of data while pointing toward opportunities for design. Plus, it's highly visual, so a team can literally see the magnitude of a topic and how its size compares to other categories.



An affinity diagram is a versatile synthesis tool to discover themes that naturally arise from the research data. A design team can make and remake groupings and visually see what topics emerge as most important to participants—as well as gaps that might be worth addressing during ideation.

Try It: Affinity Diagram

To use this synthesis method, start with these steps:

1. **Externalize the data.** Print out the transcripts or write highlights onto sticky notes or postcards.
2. **Group data points.** Cluster the sticky notes or postcards based on what seems to fit together in an organic way. Ideally, do this in conversation with one or two other people; discussing and

interpreting communally may reveal new relationships that you wouldn't notice otherwise.

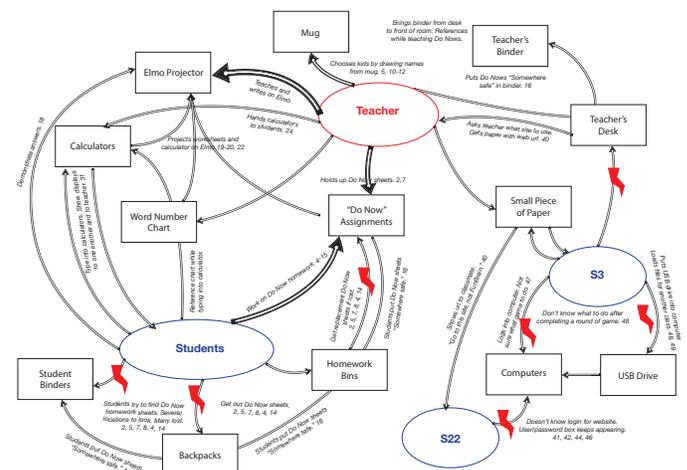
3. **Make and remake clusters.** Continue forming groups until you run out of data points. If any of the groups seem large and unruly, break into smaller, more specific affinities.
4. **Identify themes.** Label the affinity groups with short phrases or statements that capture what's happening within. How does the data relate to one another?
5. **Remember...** This work is subjective. Data can be combined and connected in an infinite number of ways, so consider setting a time limit. Repeat the activity later and notice new connections.

Visual Model

Visual models are another way to synthesize observations from field research and may take a number of forms. Some examples include:

- **flow charts:** mapping out steps in a process or relationships between people and objects, along with breakdowns
- **artifact documentation:** sketching all the physical objects a person mentions in the interview to see what they perceive as most valuable or significant
- **physical space diagrams:** documenting a space to see how people move through it—or don't
- **relationship maps:** using names and arrows to visually depict relationships between people and to understand who has influence over others

Modeling engage a different part of the brain than language-driven frameworks. While the method may sound intimidating to people who don't consider themselves artistic, the diagram serves as a visual way of thinking. As people gather around a board and start sketching boxes, arrows, circles, and text, they process what they learned in the interview. Plus, the visuals invite others to debate and ask questions and respond.



The design team conducted a contextual inquiry in a classroom. Afterward, to explore the relationships between people and objects in the class, the designers created a flow model. The lightning bolts represent breakdowns and workarounds in the system.

Try It: Visual Model

To use this synthesis method, start with these steps:

1. **Determine what information you want to represent.** Consider the model types outlined above. What information do you want to understand? Would one of these or another way of visually depicting relationships, objects, or actions aid in sense-making?
2. **Start sketching.** Using a whiteboard or paper, start sketching out the relevant people/objects/spaces. Label as needed. Use arrows to depict movement or relationships.
3. **Assess and iterate.** Re-draw your model several times, evaluating and refining. Maybe even ask someone else to look at it and describe what's happening to see if it's communicating what you want to represent.

Mixed Methods

Consider using multiple synthesis frameworks during the sense-making process to gain a more robust understanding of and empathy for participants. For example, empathy maps and affinity diagrams work well together. Where empathy maps dive deep into an individual's experience, affinity diagrams can reveal connections and relationships across interviews.

Tip: Empathy maps, affinity diagrams, and visual models are only three of the many frameworks designers use to make sense out of research. While they are very flexible for a number of situations, some research projects may call for a different set of approaches like journey maps, the POEMS framework (People, Objects, Environments, Messages, Systems), 2x2 matrixes, design principles, and more. The articles, books, and toolkits noted at the end of this handout offer additional information about the design process, including alternative approaches to synthesis and ideation.

The Power of Insights

After developing empathy, externalizing everything, and synthesizing the data, it's time to develop ideas for how to address the problems surfaced through the generative research. Developing a core set of insights bridges the gap between research themes and ideation.

"An insight is a provocative statement of truth about human behavior that may be wrong, but is stated as fact."

- Jon Kolko

In contrast to some forms of market research that are trying to generalize from a small population to a much larger group, generative research seeks to provoke new possibilities for design. To inspire designers when they're thinking about new or different ways to address wicked problems.

That's where the provocative part of an insight comes in. And acknowledging that it's ok to be wrong. The goal is to crack open possibility.



An insight is a provocative statement that points to an underlying human behavior. A good insight applies across multiple research activities (not just drawn from one or two interviews) and inspires the design team with ways to take action. On a confirmation project, the team came up with an insight that a weekend retreat is more impactful on a student's faith than a year of youth group. Image: Jarek Tuszynski ([source](#))

For example, interviews with youth workers, teens, and parents frequently surfaced stories about retreats and other special events that were impactful. Friendships formed on a canoe. Aha moments during a hunger simulation. Activities that taught youth new ways to pray. Laughter and tears around campfires. Out of this came an insight that "One weekend retreat has more impact than one year of youth group."

On another project, the research team discovered that parents took over in contexts where their children were supposed to be completing a creative activity. In some cases, the parents intervened to relieve their children of frustration or failure. In other instances, the adults didn't seem to have their own creative outlets or permission to play, so when the opportunity arose, they dove in—and sucked the joy out of the activity for the children. This led to an insight that "Adults are vampires to kid play."

These insights might not be accurate, but they are grounded in research, highlight pain points, and provoke different ways to think about a problem. A sharp insight populates the designers' imaginations with ideas for how to address problems participants face.

Tip: Some approachable methods for ideation are reframing, semantic zoom, insight combination, "how might we," and brainstorming. Check out the links at the end of this handout to dig into resources to support ideation, prototyping, and iteration.

Synthesis Tips

As you prepare to synthesize your research, keep these in mind:

- **Externalize everything.** Get your data out of notebooks and computers and recording devices and into the space in front of you. If possible, designate a "war room" or other dedicated space for the research to live as you move from synthesis into ideation and prototyping.
- **Tell stories.** Work with others to tell and retell stories from the field. Storytelling itself is a meaning-making effort and puts data into context.

- **Seek patterns + novelty.** Pay attention to “extreme users,” but also seek patterns. Outliers can provoke new understanding and make sure you aren’t simply designing for the mainstream, but patterns can help you uncover trends and behaviors that are easier to build on.
- **Aim for quantity over quality.** This is particularly true when ideating. Most ideas won’t work, but give yourself permission to entertain even terrible concepts; the judgment step happens later.
- **Hold as many possibilities in tension for as long as possible.** Avoid the temptation of honing in on one idea too quickly and losing out on other chances for innovation. You may even consider prototyping a few ideas to get feedback and refine your focus.



Faster horses. Image: photophilide (source)

More Than a Luxury

A youth director joined the design team for a two-day sense-making workshop. As the event wrapped, he said he enjoyed the immersive nature of the synthesis but struggled figuring out how to translate the process into his own context. It felt like a luxury to spend a few days outside the day-to-day pressures of ministry.

Synthesis shouldn't be a luxury for teams that want to create ministries from a place of empathy rather than assumption. Without sense-making, the impact of generative research is severely limited. Furthermore, there is a much higher risk that the group will simply continue the same ministry programs and proposals in place prior to interviewing participants. It's easy to fall into that trap without cultivating time and space for inference-based meaning making.

“If I had asked people what they wanted, they would have said faster horses.”

- attributed to Henry Ford

To some, the quote attributed to Ford reinforces the notion that people don't know how to articulate what they want or need. So it's not worth interviewing them. When design researchers hear this quote, they recognize the power of synthesis. On the surface, people are asking for faster *horses*—but what they really want is *faster*.

Design Challenge

Want to put design thinking into practice? Start here!

1. Revisit your interviews.

If possible, transcribe them and prepare them for printing. At the very least, go back through your notes, recordings, and photos to get back in empathy mode.

2. Externalize your research.

After transcribing, consider printing out the entire interview in a format that's easy to cut and post. (One option is to do a mail merge and print onto labels that you can peel and attach to sticky notes.) The key is to have discrete utterances that you can move and manipulate as you synthesize.

3. Choose your method(s).

When you think about your research, which approach or combination of approaches (Empathy Map Canvas, Affinity Diagram, or Visual Model) is most compelling? Who will be participating? How do you want to structure the synthesis process?

4. Synthesize.

Hold a workshop or a series of sessions where you can immerse yourself in the research and start to identify themes, trends, and insights. Try to include a few people in the synthesis process who can lend different points of view.

5. Share your findings.

Share what you learned with key stakeholders who will have a vested interest in the outcome of the research and resulting ministry. Maybe even check back with the participants to see whether the themes and insights resonate with their experiences.

6. Ideate. Prototype. Test.

You've identified your biases and set a focus. You've conducted research. You've made sense of the mess. Keep returning to this research as you generate a bunch of possibilities for next steps. Then start to prototype one or more on a small scale, and build in feedback loops to refine, redirect, and deepen your empathy.

Designing with others? Spread the love and have all the team members transcribe interviews. When you gather for sense-making, talk through the stories as a group. Much like the Bible is meant to be read in community, synthesizing together offers a richer understanding of what's happening and how it can call you into action.

Next Steps

Check out stollecreeative.com/resources for more articles, books, and toolkits on synthesis and ideation. Go forth and design!

Learn More

For more on synthesis, ideation, and prototyping, check out these resources:

Articles & Books

- “[Abductive Thinking and Sensemaking: The Drivers of Design Synthesis](#)” by Jon Kolko
- “[Design Thinking](#)” by Tim Brown (Harvard Business Review)
- “[Updated Empathy Map Canvas](#)” by Dave Gray
- [101 Design Methods](#) by Vijay Kumar
- [Exposing the Magic of Design](#) by Jon Kolko
- [Gamestorming](#) by Dave Gray, Sunni Brown, and James Macanufo
- [Thinkpak: A Brainstorming Card Deck](#) by Michael Michalko
- [Well-Designed: How to Use Empathy to Create Products People Love](#) by Jon Kolko

Toolkits

- Artefact’s Designing for Empathy Toolkit artefactgroup.com/wp-content/uploads/2016/08/Empathy-toolkit_0622.pdf
- Austin Center for Design resource library library.ac4d.com
- frog design Collection Action Toolkit frogdesign.com/work/frog-collective-action-toolkit
- IDEO’s Design Kits designkit.org/resources
- Stanford d.school resources dschool.stanford.edu/resources