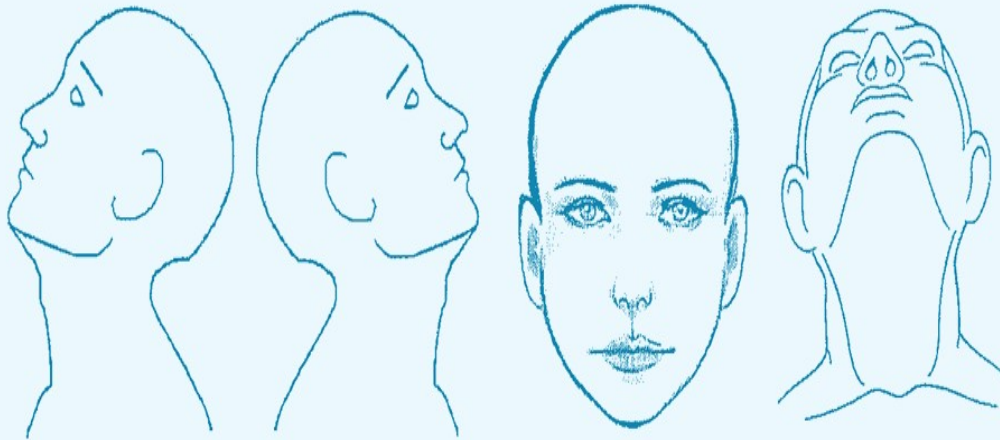


DESIGNMIND



Collection No 7  
**BEHIND DESIGN**

# Finding Design Research in the Criminal Justice System

Ryan Menefee  
JANUARY 19, 2017

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This Texas prosecutor used a design thinking approach to transform how police departments investigated a misunderstood violent crime.

As design researchers, we take off to various corners of the globe to immerse ourselves in other peoples' contexts. Personally, I'm always looking to evolve the design research craft itself. Another way to say it is that I'm always looking for design researchers in the wild: people who may never have heard of design thinking or been exposed to ethnographic design research methods, yet who have created similar structures and tools to help elicit and organize this qualitative data. I most recently found this in a place no one expects to be inspired: jury duty.

#### **A DESIGN RESEARCHER IN THE WILD**

In early 2016, I was randomly selected to serve on a Grand Jury in Austin, TX. Eleven randomly selected citizens and I spent three months listening to prosecutors present nearly 700 felony offenses for indictment. These presentations were based largely on the offense report written by a patrol officer. But one prosecutor who presented to the Grand Jury also relied on an additional tool that was completed by patrol officers at the scene of a crime — and, it was a tool of her own making.

Kelsey McKay is a prosecutor who specializes in strangulation-related crimes. She presented to my Grand Jury weekly, and it was over the course of these months that I came to understand why a single prosecutor would be dedicated to a single violent offense: strangulation is widely misunderstood and, as a result, very difficult to prosecute.

When McKay first began prosecuting strangulation cases in 2009, she realized that strangulation was not being taken seriously enough

by anyone: not by victims themselves, or by first responders and medical staff.

Failure to identify strangulation can be fatal for victims: strangulation can cause blood clots to form in the victim's carotid arteries, and if those clots break free and travel to the brain, it can result in death that is days or weeks removed from the strangulation event. "For years I noticed the discharge paperwork would 'diagnose' them with an abrasion or contusion," McKay tells me over email, "but not mention anything about the risk of swelling, delayed death from strangulation, possible long-term health consequences, and possible stroke."

Prosecuting strangulation itself can actually save lives: one study found that 43% of women murdered in domestic assaults had been strangled in the preceding 12 months. For McKay, the first step to protecting these women was to increase her chance of convicting her perpetrator for strangulation at trial. The most effective approach, she learned, was to call an expert witness who could tie a range of evidence—the victim's visible and non-visible traumas and statements the perpetrator said, and other elements—to the act of strangulation itself.

But strangulation is difficult to prosecute because, like other forms of domestic violence, victims are unlikely to cooperate with an investigation or trial, fearing for their safety from their aggressors. McKay estimates that 60-80% of all domestic violence victims do not cooperate fully with either an investigation or trial.

This presented McKay with a challenge: when most victims don't cooperate with an investigation or trial, how could she be sure there were documented signs and symptoms of strangulation that an expert witness can explain to a jury? The answer: "Using first responders in a new way," McKay recalls, "to do the entire investigation at the scene."

## NEW TOOLS OF THE TRADE

DESIGNING

McKay began gathering her knowledge of the signs and symptoms of strangulation into a tool she could distribute to patrol officers. In the summer of 2013, McKay released a new tool to the Austin Police Department for evidence collection: the Strangulation Supplement to the Assault Victim Statement. McKay also began training the Austin Police Department's new cadets how to use the tool, and why the evidence was being collected.

**AUSTIN POLICE DEPARTMENT - STRANGULATION SUPPLEMENT**  
TO BE COMPLETED IN ADDITION TO AVS

CASE # \_\_\_\_\_ DATE OF ASSAULT \_\_\_\_\_ TODAY'S DATE \_\_\_\_\_

**VICTIM INFORMATION**  
TO BE COMPLETED BY POLICE OFFICER

Victim's Name (last, first, middle) \_\_\_\_\_ DOB \_\_\_\_\_ R/S \_\_\_\_\_

• Method and/or Manner (how was Victim strangled)  One Hand - R  One Hand - L  Two Hands  Forearm  Knee/Foot  
 Chokehold Other (explain) \_\_\_\_\_

• Is the Suspect right or left handed?  Right Handed  Left Handed

• Estimate how long you were strangled \_\_\_\_\_ Minute(s) \_\_\_\_\_ Second(s) Multiple times?  Yes # \_\_\_\_\_  No

• Estimate Pressure Used (check)  1  2  3  4  5  6  7  8  9  10 (1=WEAK-10=EXTREMELY STRONG)

• Suffocated?  Yes  No \_\_\_\_\_ Minute(s) \_\_\_\_\_ Second(s) What was used? \_\_\_\_\_

• What did Suspect say during strangulation/suffocation? \_\_\_\_\_

• What did the victim say during the strangulation? \_\_\_\_\_

• Describe Suspect's demeanor during strangulation/suffocation? \_\_\_\_\_

• Describe how Suspect's face looked during strangulation/suffocation? \_\_\_\_\_

• What made Suspect stop? \_\_\_\_\_

• What did Victim think was going to happen during strangulation/suffocation? \_\_\_\_\_

• Has Suspect strangled/suffocated you before?  Yes # \_\_\_\_\_  No

• Did you attempt to physically stop the strangulation?  Yes  No Describe: \_\_\_\_\_

• Were you shaken simultaneously while being strangled?  Yes  No

**VICTIM'S SYMPTOMS**  
TO BE COMPLETED BY POLICE OFFICER

SYMPTOMS	DURING	AFTER	VOICE CHANGES	SWALLOWING CHANGES
unable to breathe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Painful to speak	<input type="checkbox"/> Neck tenderness
difficult to breathe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Raspy/hoarse voice	<input type="checkbox"/> Trouble swallowing
physical pain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Coughing	<input type="checkbox"/> Painful to swallow
rapid breathing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Unable to speak	<input type="checkbox"/> Neck pain
shallow breathing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Whispering	<input type="checkbox"/> Other _____
coughing up blood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other _____	
nausea	<input type="checkbox"/>	<input type="checkbox"/>		
vomiting/dry heaving	<input type="checkbox"/>	<input type="checkbox"/>		
dizziness	<input type="checkbox"/>	<input type="checkbox"/>	Explain other _____	
headache	<input type="checkbox"/>	<input type="checkbox"/>		
feel faint	<input type="checkbox"/>	<input type="checkbox"/>		
disoriented	<input type="checkbox"/>	<input type="checkbox"/>		

• Loss of consciousness?  Yes  No  Victim not sure Unexplained Injury? Describe \_\_\_\_\_

• Any change or loss of hearing during/after strangulation/suffocation?  Yes  No Describe \_\_\_\_\_

• Any change or loss of vision during/after strangulation/suffocation?  Yes  No Describe \_\_\_\_\_

• How did your body/head feel during/after strangulation/suffocation? Describe \_\_\_\_\_

• Did the victim...  Urinate  Defecate  Feel the urge to do one or both? \_\_\_\_\_

FACE	EYES AND EYELIDS	NOSE	EARS
<input type="checkbox"/> Red or flushed	<input type="checkbox"/> Petechiae to R eye	<input type="checkbox"/> Petechiae	<input type="checkbox"/> Petechiae on ear(s)
<input type="checkbox"/> Petechiae	<input type="checkbox"/> Petechiae to L eye	<input type="checkbox"/> Scratch(es) or abrasion(s)	<input type="checkbox"/> Bleeding from ear(s)
<input type="checkbox"/> Scratch(es) or abrasion(s)	<input type="checkbox"/> Petechiae to R eyelid	<input type="checkbox"/> Swelling	<input type="checkbox"/> Bruising/discoloration/ petechiae behind ear(s)
<input type="checkbox"/> Sweating	<input type="checkbox"/> Petechiae to L eyelid	<input type="checkbox"/> Other _____	<input type="checkbox"/> Swelling
<input type="checkbox"/> Bruising	<input type="checkbox"/> Blood in eyeball(s)		<input type="checkbox"/> Other _____
<input type="checkbox"/> Other _____	<input type="checkbox"/> Other _____		
Explain other _____			

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MOUTH	UNDER CHIN	CHEST	SHOULDERS
<input type="checkbox"/> Bruise(s)	<input type="checkbox"/> Redness	<input type="checkbox"/> Redness	<input type="checkbox"/> Redness
<input type="checkbox"/> Swollen tongue	<input type="checkbox"/> Scratch(es)/abrasion(s)	<input type="checkbox"/> Scratch(es)/abrasion(s)	<input type="checkbox"/> Scratch(es)/abrasion(s)
<input type="checkbox"/> Swollen lip(s)	<input type="checkbox"/> Laceration(s)	<input type="checkbox"/> Laceration(s)	<input type="checkbox"/> Laceration(s)
<input type="checkbox"/> Scratch(es)/abrasion(s)	<input type="checkbox"/> Bruise(s)	<input type="checkbox"/> Bruise(s)	<input type="checkbox"/> Bruise(s)

<input type="checkbox"/> petechiae in palate <input type="checkbox"/> other	<input type="checkbox"/> fingernail impression(s) <input type="checkbox"/> other	<input type="checkbox"/> Other _____	<input type="checkbox"/> Other _____
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<b>NECK</b>	<b>HEAD</b>
<input type="checkbox"/> Bruises <input type="checkbox"/> Tenderness/pain <input type="checkbox"/> Finger mark(s) <input type="checkbox"/> Scratch(ies)/abrasion(s) <input type="checkbox"/> Fingernail impression(s) <input type="checkbox"/> Bruise(s) <input type="checkbox"/> Ligature mark(s) <input type="checkbox"/> Petechiae <input type="checkbox"/> Swelling <input type="checkbox"/> Other	<input type="checkbox"/> Petechiae on scalp or head <input type="checkbox"/> Laceration(s) <input type="checkbox"/> Scratch(ies)/abrasion(s) <input type="checkbox"/> Hair pulled <input type="checkbox"/> Bump(s) <input type="checkbox"/> Other _____

**\*\*\*PLEASE TAKE PHOTOGRAPHS\*\*\***  
Diagram all injuries on the Victim

Describe any other injuries or symptoms \_\_\_\_\_

<b>OFFICER CHECKLIST</b>
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- If strangled/suffocated with object(s), photograph object(s) and collect for evidence.
- Document where the object(s) was/were found in the Offense Report.
- Determine if jewelry was worn by either party (ring(s), necklace(s), watch(es), etc.). Photograph / look for patterns and photograph.
- If defecation or urination in clothes, collect clothes as evidence.
- If Victim vomited, take a photo of vomit.
- Call On-Call Domestic Violence Detective if you need assistance.
- Call On-Call Domestic Violence Detective if Victim is transported to the hospital from injuries due to strangulation/suffocation.
- Advise on future symptoms (headaches, throat/neck pain, etc.) Advise victim that she/he should be with somebody, and should not be alone for 24 hours. Who will you be with? \_\_\_\_\_ Contact number: \_\_\_\_\_
- If Victim is transported to the hospital from injuries due to strangulation/suffocation then an officer **NEEDS** to standby at hospital until relieved by the On-Call Domestic Violence Detective.
- PHOTOGRAPH SUSPECT: hands, arms, face, chest and any areas where Suspect states any injuries/contact occurred.

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This tool is remarkable from a design research standpoint: while its goal is to provide the prosecutor with the evidence they need for trial, it has been designed with complete empathy for both the victim of strangulation and for the patrol officer using the tool to collect evidence.

For the victim, the tool is designed to gather information in more manageable chunks (changes in breathing, hearing, vision, etc.), rather than, say, simply capturing the answer to “describe the events.” It also eschews medical terminology for a familiar tone.

For the patrol officer, the tool appreciates that the officer may not regularly respond to strangulation calls. It prompts officers to ask questions they normally would not ask, but are important for trial (e.g. “What did the Victim think was going to happen during strangulation/suffocation?”). It goes further to instruct the officer

how to complete the investigation, whom to call in specific scenarios, and includes a shot list of photos to be taken at the scene.

What I find instructive in McKay's work is how to scale design research. We tend to work on clearly defined design problems, which nicely translates into a readily available population of subjects to recruit. But what if that weren't the case? What if the target population were small, or only available at unpredictable intervals (imagine some design problems in the health and wellness space)? McKay provides the blueprint for how to prepare hundreds of researchers to gather information in the field: design and disseminate a tool that empathizes with both the subject and its occasional user, and augment the tool with training so the user is prepared to elicit pertinent information from the subject when the opportunity arises.

McKay's tool and training are already a success: in the 18-month period before and after the introduction of the strangulation supplement, the number of filed offenses increased 36%. Travis County is on track to have nearly 600 filed strangulation offenses in 2016. McKay has also taken her message on the road, and trained over a dozen law enforcement agencies on strangulation and shared with them her experience in deploying tools and training to patrol officers.

I'm inspired by this example of a design researcher in the wild: a prosecutor, trying to deliver justice for victims of a misunderstood crime, creates a critical tool and its accompanying training that we, as professional design researchers, can learn from. I encourage other designers to continue searching for examples of design research in the wild. There is inspiration to be found about how we can grow and evolve our own design research craft, and it enables us to approach even the most mundane exercises of citizenship with curiosity and willingness to be surprised.

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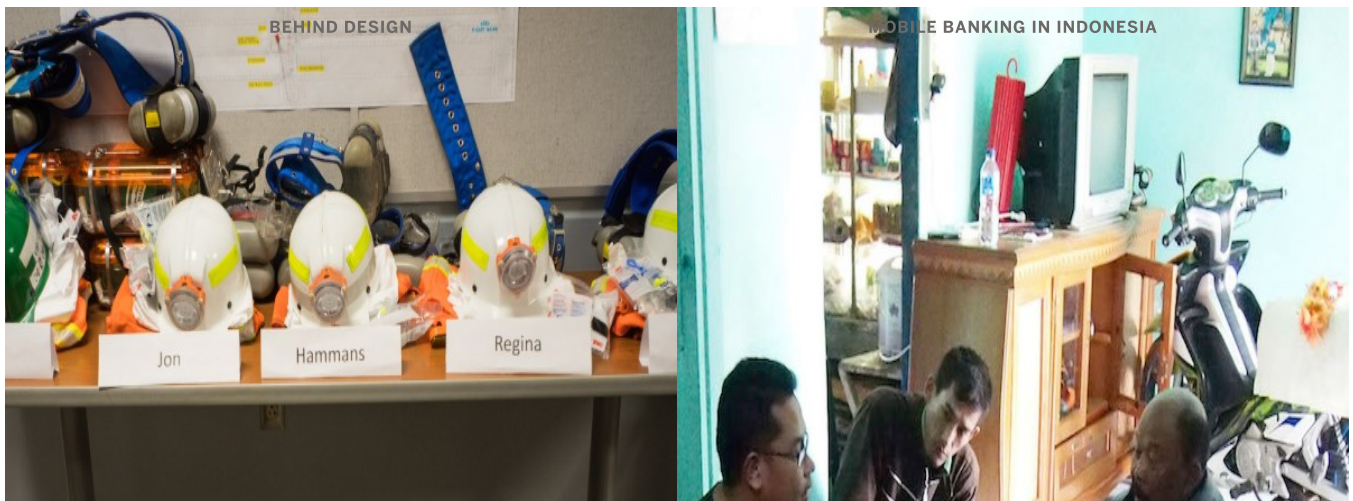
## RYAN MENEFEE

*Ryan helps companies across industries uncover customer insights through design research and translate those insights into new products and experiences. He is based in Austin.*

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