

PREPTalks

New perspectives for emergency managers



Visual + Effective Communication for Emergency Information

Claudine Jaenichen

Agenda

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Introductions (5 minutes)

Watch the PrepTalks (20 minutes)

Discussion (30 minutes)

Introduction



- Claudine Jaenichen is an information designer specializing in the relationship between design and cognition. Her recent work in applied design research serves a precise communicative role for, or in, cognitive demanding events.
- She is an associate professor of design at Chapman University. She also serves on the Executive Board for the Design Network for Emergency Management, the Board of Governors for the Communication Research Institute, and the Executive Board for the International Institute of Information Design.

Topic 1: Human Psychology and Emergencies



- **Denial:** Our brains want to normalize situations – to fit what is happening into previous experiences. If we don't have training or experience with a specific emergency, we will create a non-disaster context that seems to make sense.
- **Deliberate:** The deliberation, or “milling,” phase is when people want to confirm the danger and potential actions with others and seek more information.
- **Decide:** This moment occurs when individuals accept the reality of the situation and decide to act (or not).

Topic 1: Human Psychology and Emergencies



- How can community leaders provide opportunities for people to practice evacuation plans?
- If schools are conducting drills – how are students encouraged to have their families talk about and practice drills?
- How do your messages and your outreach encourage individuals' belief that they are empowered to act, and a belief that those actions can save their lives?

Topic 2: Visual Design Basics

Visual design is using rules for images, colors, fonts, and other elements to successfully communicate with a purpose consistently and repeatedly.

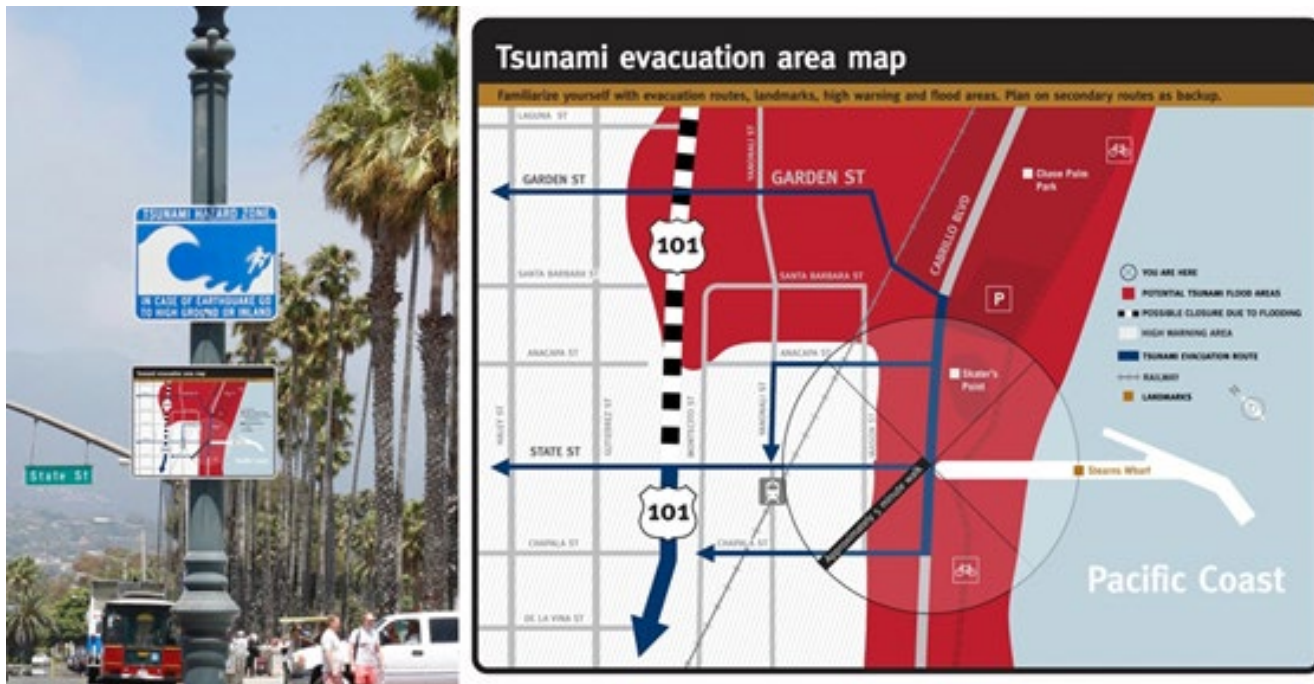
Design Elements

- Lines: connect two points and can be used to help define shapes, make divisions, and create textures.
- Shapes: self-contained areas. To define an area, the graphic artist uses lines, color, and/or texture.
- Color palettes: used to differentiate items, create depth, add emphasis, and/or help organize information.

Design Principles

- Unity: all elements on a page visually or conceptually appear to belong together.
- Gestalt: helps users perceive the overall design as opposed to individual elements.
- Space: Incorporating space into a design helps reduce noise, increase readability, and/or create illusion.

Topic 2: Visual Design Basics



- How are your evacuation maps, infographics, and other visual communication materials developed?
- Identify ways that you can include the visual standards adopted by the Design Network for Emergency Management in your communication materials.



Topic 3: Improve Evacuation Information with Personas

A persona is a composite representation of a segment of the population that you want to consider when planning for evacuation, alerts, or sheltering, just to name a few.

For emergency management, develop personas by asking questions like:

- What are the socio-economic characteristics of this persona?
 - What is their access to alerts and warnings?
 - What are some challenges they face in the event of an evacuation warning?
 - Do they have children? To what extent are they aware of the evacuation plans of their children's schools and/or caregivers?
 - What is their prior experience or training?
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- Identify if another government office in your jurisdiction developed personas for your community.
 - Consider a project to create, or expand on existing, personas for use in all of your emergency management planning.



Topic 3: Improve Evacuation Information with Personas

“Joe”—the retiree



Persona Joe, 79 years old, has been living in the same city since his early twenties. He is married of 51 years and have shared the births of seven grandchildren. Joe and his spouse are retired and live in a residential home for active

seniors. Their adult children live other states and rely on medical transport to get them to-and-from errands, outdoor activities and doctor appointments. Joe requires a cane to walk due to a permanent knee disability. Ten

years ago they had to evacuate their home due to a wild fire.

Characteristics	Modality	Daily demands	Evacuation event	
FAMILY <ul style="list-style-type: none"> <input type="checkbox"/> Parent/Guardian <input type="checkbox"/> Single parent <input checked="" type="checkbox"/> Grandparent <input type="checkbox"/> Caretaker <input type="checkbox"/> Dependent PROFESSION <ul style="list-style-type: none"> <input type="checkbox"/> Student <input type="checkbox"/> Employed <input type="checkbox"/> Self-employed <input type="checkbox"/> Unemployed <input checked="" type="checkbox"/> Retired Demand Group <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Permanent resident <input type="checkbox"/> Employee—live in another city <input type="checkbox"/> Living in city less than 6 months <input type="checkbox"/> Visitor/Tourist 	TRANSPORT NEEDS <ul style="list-style-type: none"> <input type="checkbox"/> Personal car <input type="checkbox"/> Shared household car <input type="checkbox"/> Public transport <input type="checkbox"/> Walk/Bike <input checked="" type="checkbox"/> Medical transport DAILY ACTIVITIES <ul style="list-style-type: none"> <input type="checkbox"/> Drop-off/Pick-up schoolchildren <input type="checkbox"/> Carpool <input type="checkbox"/> Commute to school or office <input type="checkbox"/> Public transport to school or office <input checked="" type="checkbox"/> Other 	50% OF THE DAY I AM... <ul style="list-style-type: none"> <input type="checkbox"/> Driving <input checked="" type="checkbox"/> At home/errands <input type="checkbox"/> At work <input type="checkbox"/> At school <input type="checkbox"/> Other 25% OF THE DAY I AM... <ul style="list-style-type: none"> <input type="checkbox"/> Driving <input checked="" type="checkbox"/> At home/errands <input type="checkbox"/> At work <input type="checkbox"/> At school <input type="checkbox"/> Other 25% OF THE DAY I AM... <ul style="list-style-type: none"> <input type="checkbox"/> Driving <input checked="" type="checkbox"/> At home/errands <input type="checkbox"/> At work <input type="checkbox"/> At school <input type="checkbox"/> Other 	NOTIFICATION <ul style="list-style-type: none"> <input checked="" type="checkbox"/> I <i>do know</i> how I would be notified to evacuate if I were not at home <input type="checkbox"/> I <i>do know</i> how I would be notified to evacuate if I were at home <input type="checkbox"/> I <i>don't know</i> how I would be notified to evacuate my home <input checked="" type="checkbox"/> I would call the police/fire dept for more information <input checked="" type="checkbox"/> I would rely on the news/radio <input checked="" type="checkbox"/> I would rely on neighbors LIMITATIONS <ul style="list-style-type: none"> <input type="checkbox"/> There is a language barrier if I was given verbal evacuation instructions only in English (this also includes sign language) <input type="checkbox"/> I am visiting, or just moved, and unfamiliar with the city <input checked="" type="checkbox"/> Myself or a family member has special medical/physical needs <input checked="" type="checkbox"/> I don't have access to a cell phone or the internet 	FAMILY WHEREABOUTS <ul style="list-style-type: none"> <input type="checkbox"/> I <i>do know</i> the evacuation process at my child/children's school <input checked="" type="checkbox"/> I <i>do know</i> the evacuation process at my own, or spouse's, workplace <input type="checkbox"/> I <i>don't know</i> the evacuation process at my child/children's school <input type="checkbox"/> I <i>don't know</i> the evacuation process at my own, or spouse's, workplace <input type="checkbox"/> I would not evacuate until I pick-up my child/children from school <input type="checkbox"/> I would not evacuate until I pick-up my aging parent(s) from the convalescent home/hospice EXPERIENCE/TRAINING <ul style="list-style-type: none"> <input checked="" type="checkbox"/> I have evacuated before <input type="checkbox"/> I have not evacuated before

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