

Automating Common Design Methods with ChatGPT

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This paper investigates the use of ChatGPT for automating two common design methods, Photographic Interviews and Observations to Insights. Designers would have previously considered these methods challenging to automate due to their abstract and personal nature, but recent developments in AI have made automation possible. In this paper, ChatGPT acts as three separate interview personas and acts as the interviewer. The personas each “take photos” about an interview theme through generative AI, and the interviewer generates observations about the photos. ChatGPT generates insights about the persona and the interview theme from those observations.

Appendix

Trial 1

Interviewer: Generate a list of 5 photos and a short description of each that a 35-year-old Caucasian female teacher might take during a photographic interview focused on the theme of 'home'. Known for her deep involvement in her local community through teaching and volunteer work, the photos should capture her personal interpretation of 'home', including scenes from her daily life at home, her interactions with family and friends, and moments that represent comfort, warmth, and belonging. These images should reflect her perspective on what home means to her, encompassing both the physical space and the emotional connections that define her sense of home.

ChatGPT: Certainly! Here's a list of five photos that a 35-year-old Caucasian female teacher might take during a photographic interview focused on the theme of 'home', capturing her personal interpretation of this concept:

1. Family Dinner Scene: A photo capturing a warm, intimate family dinner at her home. The table is set with homemade food, showing her family gathered around, engaged in lively conversation. This image represents the comfort and love found in shared meals and the joy of togetherness.

2. Quiet Reading Nook: A cozy corner of her home dedicated to reading and relaxation. This photo shows a well-lit nook with a comfortable chair, surrounded by bookshelves filled with books. It's a personal space for solitude and reflection, symbolizing the importance of personal time and space in her concept of home.

3. Backyard Gardening: An image of her tending to her garden in the backyard. This photo highlights her connection with nature and the joy of nurturing plants. The garden is a space for relaxation and enjoyment, reflecting her love for the outdoors as part of her home.

4. Community Volunteer Work: A photo of her engaging in volunteer work, perhaps teaching a class or organizing a local event. This image shows her commitment to her community and how her sense of home extends beyond her physical house, including the neighborhood and people around her.

5. Evening Relaxation with Pets: A heartwarming photo of her relaxing at home in the evening with her pets. This could show her sitting on a couch with a cat on her lap and a dog by her side, highlighting the comfort and unconditional love pets bring to her sense of home.

Each of these photos combines elements of her daily life, her interactions with family, friends, and community, and moments that embody comfort, warmth, and belonging, offering a holistic view of what 'home' means to her.

Interviewer: Please generate each of these photos. The photos should be from the perspective of the subject, as if they have been taken with a camera.

ChatGPT:



Fig. 2.1 (left) ChatGPT-generated image, titled "Family Dinner Scene"



Fig. 2.2 (right) ChatGPT-generated image, titled "Quiet Reading Nook"



Fig. 2.3 (left) ChatGPT-generated image, titled "Backyard Gardening"



Fig. 2.4 (right) ChatGPT-generated image, titled "Community Volunteer Work"

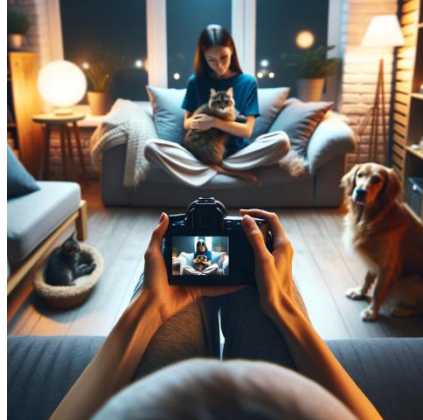


Fig. 2.5 ChatGPT-generated image, titled "Evening Relaxation with Pets"

Interviewer: Please generate a list of objective and factual observations you can make about these photos.

ChatGPT: Here are objective and factual observations about the photos:

1. Family Dinner Scene:

- The photo features a dining table set with plates, glasses, and utensils.*
- There are people seated around the table, appearing to be engaged in conversation.*
- Food items are visible on the table, suggesting a meal setting.*
- The lighting is warm, creating a cozy atmosphere.*
- The environment suggests an indoor dining room.*

2. Quiet Reading Nook:

- The photo shows a chair surrounded by bookshelves filled with books.*
- A cushion is visible on the chair, indicating comfort.*
- The nook is well-lit, possibly by natural light.*
- The setting is indoors, likely in a corner of a room.*

- The shelves are stocked with a variety of books, suggesting a personal library.

3. Backyard Gardening:

- The photo depicts a garden scene with various plants and flowers.*
- There are visible gardening tools, indicating active gardening work.*
- The setting is outdoors, likely in a backyard.*
- The presence of both flowers and vegetables suggests a mixed garden.*
- The photo captures hands working with the plants, implying personal involvement in gardening.*

4. Community Volunteer Work:

- The photo includes glimpses of people in a community setting.*
- There are indications of an organized activity or event.*
- The environment appears to be a public or communal space.*
- Hands are visible in the foreground, suggesting active participation.*
- The setting seems to be indoors, possibly a community center or school.*

5. Evening Relaxation with Pets:

- The photo shows a person sitting on a couch with a cat on their lap and a dog beside them.*
- The setting is indoors, likely a living room.*
- The environment appears cozy, with comfortable furnishings.*
- The lighting is soft, suggesting evening or night time.*
- The presence of pets indicates a domestic and relaxed atmosphere.*

Interviewer: Given only these observations, what else can you assume about the person taking the photos? What insights can you draw?

ChatGPT: Based on the objective observations of the photos, here are some assumptions and insights about the person taking them:

1. *****Interest in Family and Community****: The presence of family members in the dinner scene and involvement in community activities suggest that the photographer values family connections and community engagement. This indicates a person who likely invests time and effort in nurturing relationships both at home and in her wider social environment.*

2. *****Love for Reading and Learning****: The existence of a personal reading nook with many books implies that the photographer has a keen interest in reading and possibly learning. This could suggest a well-read individual who values education and personal growth.*

3. *****Connection with Nature****: The gardening photo shows hands-on involvement with plants, indicating a connection to nature and enjoyment in outdoor activities. This interest in gardening could reflect a need for tranquility and a passion for nurturing life, as well as a preference for spending leisure time in natural settings.*

4. *****Comfort in Personal Space****: The evening scene with pets and the reading nook both highlight the photographer's appreciation for comfortable, personal spaces at home. This suggests a person who values relaxation and tranquility in her living environment, seeking comfort in quiet and cozy settings.*

5. *****Pet Lover****: The presence of pets and the relaxed interaction with them in the home setting indicate that the photographer is a pet lover. This can imply a nurturing personality and an appreciation for the companionship and comfort that pets provide.*

6. *****Active Lifestyle****: The various activities captured, from gardening to volunteering, suggest an active lifestyle. The photographer seems to engage in diverse activities that balance personal interests and social responsibilities.*

7. ***Appreciation for Simple Pleasures***: The focus on everyday scenes like dining with family, reading, gardening, and spending time with pets suggests that the photographer finds joy and fulfillment in the simple pleasures of life. This could indicate a person who values the ordinary yet meaningful aspects of daily living.

These assumptions are based on the observed scenes and the activities they depict, offering insights into the values, interests, and lifestyle of the person behind the camera.

Trial 2

Interviewer: Generate a list of 5 photos and a short description of each that a 50-year-old Hispanic male chef, who recently immigrated to an English-speaking country and faces a language barrier, might take during a photographic interview focused on the theme of 'comfort'. Known for his culinary skills and his adjustment to a new cultural environment, the photos should showcase his interpretation of comfort, including scenes of him cooking traditional dishes, moments of quiet reflection in his new surroundings, and interactions with others where non-verbal communication is key. These images should capture how he finds and creates comfort in his daily life, despite the challenges of language and cultural adaptation.

ChatGPT:

1. *In the Kitchen*: A photo of the chef in his vibrant, bustling kitchen, preparing a traditional dish from his native country. The image captures the chef's focused expression and skilled hands as he adds spices to a steaming pot, surrounded by an array of colorful ingredients. This scene symbolizes his connection to his cultural roots through cooking.

2. *Quiet Reflection*: A serene image of the chef sitting alone in a peaceful park, gazing thoughtfully at a small notebook. Trees and a tranquil pond are in the background, suggesting a moment of quiet reflection in his new environment. This photo reflects his contemplation and adaptation process.

3. *Market Exploration*: The chef is pictured in a lively local market, pointing at fresh produce and conversing with a vendor through gestures. His face shows enthusiasm and curiosity as he navigates this new culinary landscape, learning and communicating non-verbally.

4. *Culinary Lesson*: A warm, engaging photo of the chef teaching a cooking class. He's showing a diverse group of students how to prepare a

traditional dish. Despite the language barrier, his expressive gestures and the attentive faces of his students convey a shared love for food and learning.

5. Family Meal: The final photo shows the chef enjoying a meal with his new friends or neighbors. The table is filled with dishes he prepared, and everyone is laughing and sharing stories. The chef's joyful expression highlights his sense of belonging and comfort in this new community.

Interviewer: Please generate each of these photos. The photos should be from the perspective of the subject, as if they have been taken with a camera.

ChatGPT:



Fig. 3.1 (left) ChatGPT-generated image, titled "In The Kitchen"

Fig. 3.2 (right) ChatGPT-generated image, titled "Quiet Reflection"



Fig. 3.3 (left) ChatGPT-generated image, titled “Market Exploration”

Fig. 3.4 (right) ChatGPT-generated image, titled “Culinary Lesson”



Fig. 3.5 ChatGPT-generated image, titled "Family Meal"

Interviewer: Please generate a list of objective and factual observations you can make about these photos.

ChatGPT: Based on the generated photos, here are some objective and factual observations:

1. In the Kitchen:

- The photo shows a close-up of hands, presumably belonging to the chef, as they add spices to a pot.*
- There are various colorful ingredients visible around the pot, indicating a cooking environment.*
- The focus is on the hands and the pot, with the background slightly blurred.*

2. Quiet Reflection:

- This image depicts a person sitting in a park setting, with trees and a body of water in the background.*
- The individual is looking at a small notebook or journal.*
- The setting appears tranquil and secluded, suggesting a moment of solitude.*

3. Market Exploration:

- The photo shows an interaction between the chef and a market vendor, with the chef pointing at produce.*
- The setting is a market, as indicated by the presence of fresh produce and stall structures.*
- The chef's expression conveys enthusiasm and engagement.*

4. Culinary Lesson:

- This image captures a cooking class scenario with the chef demonstrating a cooking technique.*
- There are several onlookers or students, indicating a group learning environment.*
- The setting is indoors, likely a kitchen or a cooking class room.*

5. Family Meal:

- The photo shows a group of people gathered around a table filled with various dishes.

- The scene suggests a communal meal, with people interacting and sharing food.

- The chef is part of this gathering, indicating a social or communal setting.

These observations focus on the visual elements present in each photo, without interpretation or subjective analysis.

Interviewer: Given only these observations, what else can you assume about the person taking the photos? What insights can you draw?

ChatGPT: Based on the objective observations from the photos, we can make some assumptions and draw insights about the person taking the photos:

1. Passion for Cooking and Culinary Skills:

- The focus on cooking in several photos, especially the one showing skilled hands preparing a dish, suggests a deep passion for cooking. This indicates that the person is likely a chef or someone heavily involved in culinary arts.

2. Cultural Connection and Heritage:

- The presence of traditional dishes and the emphasis on cooking might imply a strong connection to their cultural or ethnic heritage. It suggests that the chef values and possibly seeks to share his cultural background through food.

3. Adaptation to a New Environment:

- The photo in the park and the market scene suggest an exploration or adaptation to a new environment. This could imply that the person is in a place different from where they originally come from, possibly highlighting their journey of cultural adaptation and exploration.

4. Social Interaction and Community Engagement:

- *The images of teaching a cooking class and enjoying a meal with others indicate a level of social interaction and community involvement. This suggests that the chef values sharing experiences and connecting with people, possibly as a way to bridge cultural gaps or language barriers.*

5. Reflective and Observant Nature:

- *The photo showing quiet reflection in a park setting hints at a contemplative and observant nature. It suggests that the person taking the photos values moments of solitude and reflection, possibly as a means of personal adaptation or creativity.*

6. Non-Verbal Communication:

- *The market scene, where the chef communicates through gestures, points to an ability or necessity to rely on non-verbal communication. This could imply a language barrier or a preference for expressive, non-verbal forms of communication.*

These insights are drawn from the content and context of the photos, assuming that the scenes depicted are meaningful to the photographer and reflect aspects of their personality, interests, and experiences.

Trial 3

Interviewer: Generate a list of 5 photos and a short description of each that a 5-year-old Black child might take during a photographic interview focused on the theme of 'community'. Before the interview, it is known that this child expresses themselves more through actions and visual interactions than words. The photos should highlight their understanding and experience of community, capturing interactions with family, playtime with friends at the local park, and their engagement in community events or activities. These images should reflect the child's perspective on their community and how they connect with it in their everyday life.

ChatGPT:

1. Family Gathering at Home: A photo showing a lively family gathering in a cozy home. The child's relatives, a mix of elders and young family members of various ages, are smiling, conversing, and enjoying a

homemade meal together. This image captures the warmth and closeness of the family, highlighting their bond and the child's sense of belonging.

2. Playtime at the Local Park: An image of children of diverse backgrounds playing together at a vibrant, sunlit park. The focus is on a group of kids, including the child photographer, engaged in an animated game of tag, emphasizing the joy and freedom of childhood play and the importance of friendships in their community.

3. Community Garden Visit: A photo depicting the child helping in a community garden, surrounded by lush greenery and colorful flowers. The child, along with other community members of different ages, is planting seedlings. This image reflects the child's connection to nature and their role in fostering community growth and sustainability.

4. Street Art Exploration: A picture capturing the child's fascination with a colorful mural on a community building. The mural is vibrant and depicts scenes of community life. The child's awe and interest in the artwork showcase their appreciation for local culture and the visual beauty of their surroundings.

5. Local Festival Participation: An image from a local festival, with the child dressed in traditional attire, surrounded by music, dance, and cultural activities. The child is seen participating eagerly, demonstrating their involvement and pride in their community's heritage and celebrations.

Interviewer: Please generate each of these photos. The photos should be from the perspective of the subject, as if they have been taken with a camera.

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ChatGPT:



Fig. 4.1 (left) ChatGPT-generated image, titled "Family Gathering at Home"

Fig. 4.2 (right) ChatGPT-generated image, titled "Playtime at the Local Park"



Fig. 4.3 (left) ChatGPT-generated image, titled "Community Garden Visit"

Fig. 4.4 (right) ChatGPT-generated image, titled "Street Art Exploration"



Fig. 4.5 ChatGPT-generated image, titled "Local Festival Participation"

Interviewer: Please generate a list of objective and factual observations you can make about these photos.

ChatGPT: 1. Family Gathering at Home:

- The photo depicts a group of people indoors.

- *There are both adults and children visible.*
- *A dining table with food is present.*
- *The environment appears to be a home setting.*

2. *Playtime at the Local Park:*

- *The setting is an outdoor park.*
- *Multiple children are visible, engaged in play.*
- *The environment is green with grass and trees.*
- *The children are wearing casual, outdoor play clothes.*

3. *Community Garden Visit:*

- *The photo shows an outdoor garden setting.*
- *People of various ages are present.*
- *Garden elements like plants, flowers, and gardening tools are visible.*
- *The participants are engaged in gardening activities.*

4. *Street Art Exploration:*

- *The focus is on a colorful mural on a building wall.*
- *The mural is vibrant and artistic.*
- *No people are directly visible in this photo.*
- *The setting appears to be an urban area.*

5. *Local Festival Participation:*

- *The setting is an outdoor, festive environment.*
- *Cultural decorations and possibly musical instruments are visible.*
- *People are wearing traditional or special attire.*

- *The atmosphere suggests a communal or celebratory event.*

Interviewer: Given only these observations, what else can you assume about the person taking the photos? What insights can you draw?

ChatGPT: Based on the objective observations from the photos, several assumptions and insights about the person taking the photos can be made:

1. *****Connection to a Diverse Community****: The variety of settings (home, park, garden, urban area with street art, and a festive environment) suggests that the photographer is connected to a diverse community. They have access to both indoor family settings and outdoor public spaces, indicating a well-rounded social and environmental exposure.*

2. *****Active and Engaged Lifestyle****: The presence of activities like playing in the park, gardening, and participating in a festival implies that the photographer is actively engaged in their surroundings. This suggests an interest in participating in and experiencing a variety of community events and activities.*

3. *****Interest in Cultural and Community Events****: The images from the festival and the street art indicate an interest in cultural and community events. This implies a curiosity or appreciation for cultural expressions and community gatherings.*

4. *****Family-Oriented****: The photo of a family gathering suggests a connection to and value for family interactions. This indicates a familial support system and a sense of belonging within a family unit.*

5. *****Appreciation for Nature and the Outdoors****: The garden and park settings reflect an appreciation for nature and outdoor activities. This could suggest a value for environmental beauty and outdoor recreation.*

6. *****Youthful Perspective****: The focus on play and participation in activities typically enjoyed by younger individuals implies that the photographer might be young or young at heart, with a playful and explorative approach to life.*

7. *****Observational Skills****: The variety of photos capturing different aspects of community life suggests that the photographer has a keen observational eye and is able to capture diverse moments and experiences effectively.*

These insights, drawn from the photographic content, provide a glimpse into the photographer's environment, interests, and possibly their values and lifestyle.