

AI-Generated News Image Codebook

Purpose

Conduct affect-based analysis of real-life, human selected vs. AI-generated images from news headlines

3 part codebook

- a. Emotion impression of images (with and without textual context)
- b. Photojournalism ethics
- c. Image characteristics

Any questions? Contact

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Paik, S. Bonna, S., Novozhilova, E., Gao, G., Kim, J., Wijaya, D., Betke, M. (2023). The Affective Nature of Generative News Images: Impact on Visual Journalism. *Affective Computing + Intelligent Interaction (ACII) Conference of the Association for the Advancements of Affective Computing (AAAC)*. MIT Media Lab, Cambridge, MA. USA. 11- 13 Sept. 2023.

Emotion impression of images (with and without textual context)

1. **[Human emo w/o headline]** - How does the **human-selected image** make you feel in terms of emotions (**without looking at the news headline**)?
(dominant) Select one of the 12 emotions
 - 1 - Anger (negative)
 - 2 - Disapproval (negative)
 - 3 - Fear (negative)
 - 4 - Sadness (negative)
 - 5 - Confusion (negative)
 - 6 - Curiosity (ambiguous)
 - 7 - Realization (ambiguous)
 - 8 - Surprise (ambiguous)
 - 9 - Relief (positive)
 - 10 - Approval (positive)
 - 11 - Admiration (positive)
 - 12 - Excitement (positive)
2. **[AI emo w/o headline]** How does the **AI-generated image** make you feel in terms of emotions (**without looking at the news headline**)?
(dominant) Select one of the 12 emotions
3. **[Human emo w/ headline]** - Did your emotional impression of the **human-selected image** change **after reading the headline**?
(dominant) Select one of the 12 emotions
4. **[AI emo w/ headline]** Did your emotional impression of the **AI-generated image** change **after reading the headline**?
(dominant) Select one of the 12 emotions

Photojournalism ethics [\(link\)](#)

5. Context

**“Photographs are not merely images, but a lens into a specific situation or event. As such, they should be centered not just on creating a beautiful image, but also on illuminating the circumstances surrounding the image.”*

- a. **[Human context]** How specific/tailored/circumstantial do you think the image is, in regards to the news headline?
 1. Very much
 2. Much
 3. Somewhat
 4. Little
 5. Not at all
- b. **[AI context]** - How specific/tailored/circumstantial do you think the image is, in regards to the news headline?
 1. Very much
 2. Much
 3. Somewhat
 4. Little
 5. Not at all

6. Informative

**“Photojournalists tell a story that would be difficult to capture with words alone. The images they present can be vehicles for educating the public. A photo should be able to convey an entire story, but without words.”*

- a. **[Human informative]** Without reading the headline, do you feel like the image alone is descriptive enough for you to grasp that this is a news story?
(*goal of this question: analyze image's standalone power to tell a news story)
 1. Definitely
 2. Probably
 3. Possibly
 4. Probably not
 5. Definitely not
- b. **[AI informative]** - Without reading the headline, do you feel like the image alone is descriptive enough for you to grasp that this is a news story?
(*goal of this question: analyze image's standalone power to tell a news story)
 1. Definitely
 2. Probably
 3. Possibly
 4. Probably not
 5. Definitely not

7. Impact + Tangibility

**Impact: Images can make it easy for viewers to digest a large amount of information in a single frame. Often a user can see a single picture and immediately know what the broader story is about.*

**Tangible: Photographs can add another dimension or layer to a news story. When an image is added to an article, it makes it possible for viewers to better visualize or understand the events being discussed. The story becomes more real.*

- a. [Human impact] Do you think the image (when seen with the headline) added more emotional weight/nuance to the news headline?
1. Very much
 2. Much
 3. Somewhat
 4. Little
 5. Not at all
- b. [AI impact] Do you think the image (when seen with the headline) added more emotional weight/nuance to the news headline?
1. Very much
 2. Much
 3. Somewhat
 4. Little
 5. Not at all

Image characteristics

8. Composition sophistication (Human) - How photo-technically sophisticated is the human-selected image? *Consider the news headline while assessing the following questions.

- a. # of objects/individuals: Are there multiple objects and/or individuals?
 1. There are only one object/individual
 2. There are a few objects/individuals (2-4ish)
 3. There are a handful of objects/individuals (5-10)
 4. There is a crowd
- b. Depth of field/Focal point - Is there a clear focal point (e.g. focus on an object or individual and blurred background)?
 1. Very much (when fully blurred)
 2. Much (clear that object is centered; background still clear/visible)
 3. Somewhat
 4. Little
 5. Not at all

9. Composition sophistication (AI)

- a. # of objects/individuals: Are there multiple objects and/or individuals?
 1. There are only one object/individual
 2. There are a few objects/individuals (2-3ish)
 3. There are a handful of objects/individuals (5-10)
 4. There is a crowd
- b. Depth of field/Focal point - Is there a clear focal point (e.g. focus on an object or individual and blurred background)?
 1. Very much (when fully blurred)
 2. Much (clear that object is centered; background still clear/visible)
 3. Somewhat
 4. Little
 5. Not at all

10. Sophistication comparison (Human + AI) - Between the two images, which one feels more “sophisticated”/higher-quality?

- 1 - Human
- 2 - AI
- 3 - Both
- 4 - Neither