

# Artificial Intelligence in News Images: A Cross-Cultural Visual Content Analysis

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# INTRODUCTION Background: There have been increasing concerns and anxiety about the future relations between human and Al. Gap: While some studies examined the popular media coverage of Al, the ways in which Al is visually constructed have been largely neglected. Purpose: Considering the significant influence of images on public perception, I conducted a cross-cultural visual content analysis of news images in the U.S. and China. OBJECTIVES How did the news images in two countries depict human in reports about Al? How did the news images in two countries present Al?

# **METHODS**

countries portray human-Al relations?

How did the news images in two

100 OF

# I. Sampling Design

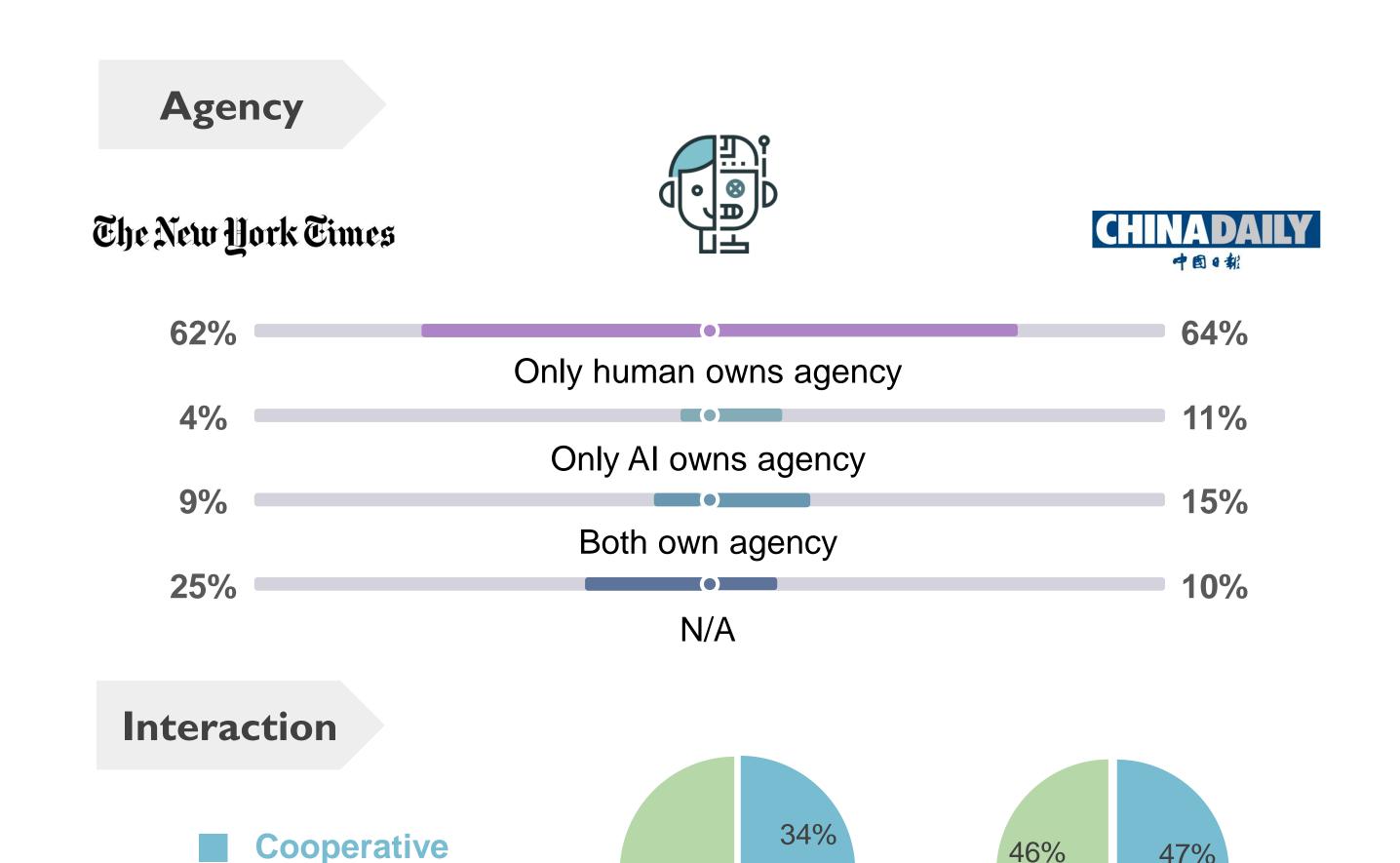
- ► Database: Nexis Uni & Online News Portal
- ➤ Search Terms: artificial intelligence; A.I./AI; machine learning
- ► Time Frame: 01/01/2017 03/01/2019
- ▶ Newspapers: The New York Times (NYT) vs. China Daily (CD)
- Sampling Frame: ranked by relevance → first 100 articles
- ► Sample: 225 images in NYT vs. 144 images in CD
- ► Unit of Analysis: each image

### 2. Measurement

- ► Human Presence: frequency; occupation; emotion
- ► Al Presence: physical forms; settings/scenarios
- ► Human-Al Relations: inclusion/exclusion; size; position; agency; interactive modes

### RESULTS I. Human Presence NYT Frequency Occupation 26% 18% 10% 38% The New York Times China Daily 2. Al Presence Settings **Forms** NYT: 19.1% NYT: 23.6% ► CD: 34.4% ► CD: 54.1% **Humanoid Robots** Conference/Expo/Forum/Summit 3. Human-Al Interaction Size Inclusion Human bigger ■ Human only ■ Al only ■ Co-occur ■ N/A than Al 25.00% 20.00% 15.00% 43% 33% 53% Equal Al bigger size than human **Position CHINADAILY** The New York Times 45% 40% Only human at the center 29% 34% Only AI at the center 15% 21% Both at center 11% 5%

Neither human nor Al at center



# DISCUSSION

The New York Times

### Findings

Competing

N/A

- Current news images paid significantly more attention to human than AI.
- ► Al has also been occasionally entitled prominence in news discourse.

# Implications

► It is dangerous and unethical to give exclusive focus on AI.

China Daily

Adopt a human-centered approach: highlight the necessary role of humans

### Limitations

- Small sample size
- Static images only
- Different nature of newspapers
- Audience's meaning making

### Future

- Expand the dataset
- Examine diverse and interactive visual content
- Investigate audience reception to images

## REFERENCES

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