Loyola Marymount University

AI Ethical Issues in Cultural Context:
Application of the "Culture Cube" in the AI-FORA case studies

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Using the Culture Cube as part of the overall AI-FORA evaluation strategy

Purpose of session:

Using the culture cube approach, *identify and situate AI ethical issues within cultural context (will be introduced to emic and etic perspectives)*

1. **16:20-18:15 Overview, Walk-shop, and Group Discussion (with breaks)**
   - Overview of evaluation strategy ("contextualized AI"), culture cube and sample application
   - "Walk-shop" to contextualize AI ethical issues using the Culture Cube (emic approach)
   - Group Discussion on observations

2. **18:30-19:30 Worldcafé**
   - Explore Hofstede's cultural dimensions (etic approach) as part of AI contextualization.

Culture and AI FORA Evaluation Strategy

"Contextualized AI"

AI

- Used for Decision-Making (Power)
- Used to allocate resources/ benefits (Control)

Culture

- …Values inform exercise of power and control through AI
- …Values inform culture-specific parameters of AI and what is considered "fair"

Culture and AI FORA Evaluation Strategy

"Contextualized AI"

AI data as social mirror

- How can "bad" AI data be used to reflect upon cultural values and biases in relation to different groups?
- How can such (negative) data help shed light on what groups may be "vulnerable" within a particular context?
- What does "good" AI data look like? *Does it reflect what is or what ought to be, and according to whom?*

Culture is not neutral

- How do definitions of "vulnerable" populations reflect a culture's social context as well as cultural values?
- *Intersectionality.* How do different social forces manifest in distinct ways for persons based on their different identities (gender, age, religion, race, ethnic group, sexual orientation, for example)?
- What populations remain…
  - Underserved?
  - Unserved?
  - Inappropriately served?

Culture and AI FORA Evaluation Strategy

Triangulation of data

“Desktop” Research

Observations/survey

Feedback from AI implementation

Multi-stakeholder ”gamification” workshops

Interview data

Less Participatory

More Participatory

Culture and AI FORA Evaluation Strategy

Etic and Emic Perspectives

ETIC (”outsider” view)
Cross-Cultural Perspective

- Universal standardized concepts or frameworks that can facilitate cross-cultural comparisons. Asks **How do cultures vary on a particular dimension?**
- Example: *Hofstede’s Cultural Value Dimensions (power distance, uncertainty avoidance, etc)*

EMIC (“insider” view)
Culture-Specific Description

- Articulation of culture-specific concepts or frameworks that enable deeper appreciation of a particular cultural context. Asks **What is the meaning of a particular issue [AI] within a culture?**
- Example: *Who is considered a “vulnerable” group and why?*

Development and Use of the Culture Cube

How can cultural contexts be made more visible?

Original Context: Need for articulating cultural influences

Organizations do not fully articulate the cultural values and assumptions underlying their approaches, even when cultural issues are of central interest.

A tool to identify EMIC elements

Identifies common areas of description that may vary across cultural projects without specifying content or *a priori* theoretical assumptions

Development and Use of the Culture Cube

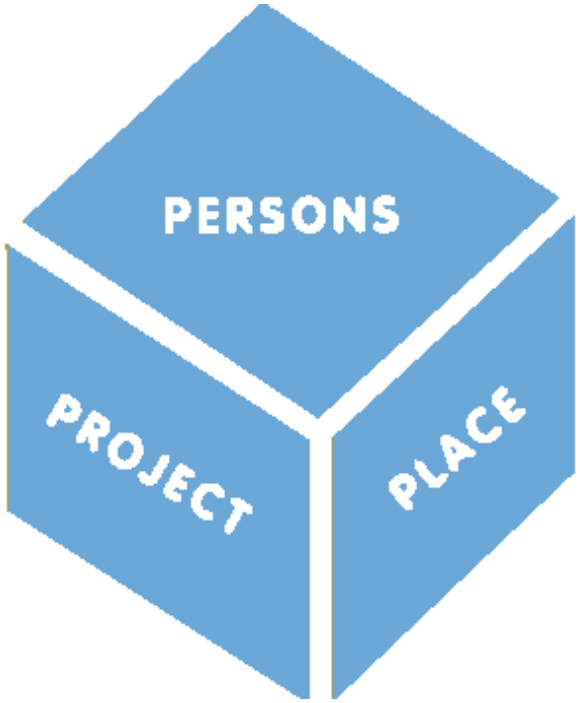
How can cultural contexts be made more visible?

Outer: Description of visible AI-FORA case study elements

Inner: Articulation of invisible cultural influences within AI-FORA case studies

Abe, J., Grills, C., Ghavami, N., Xiong, G., Davis, C., & Johnson, C. (2018). Making the invisible visible: Identifying and articulating culture in practice-based evidence. *American Journal of Community Psychology*, *62*(1-2), 121-134. http://dx.doi.org/10.1002/ajcp.12266

AI Case Studies and the Culture Cube
Visible Dimensions (3 Ps)



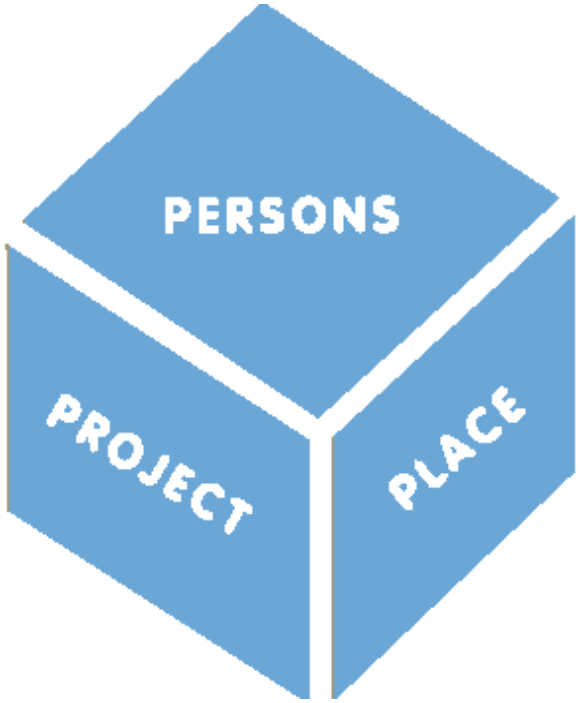
PERSONS
Actor Network Map: Who is involved? Who are defined as vulnerable?

PROJECT
What is the type of AI system used and focus of project?

PLACE
Where does this project take place, organizationally and geographically?

Adaptation based upon: Gallimore, R., Goldenberg, C.N., & Weisner, T.S. (1993). The social construction and subjective reality of activity settings: Implications for community psychology. *American Journal of Community Psychology, 21(4)*, 537-560.

Example Application: USA
Visible Dimensions (3 Ps)



PERSONS

Actor Network Map: 42 Service Providers serving children and adolescents (5-18 yrs?) in Peoria, IL
African American priority population

PROJECT

What is the type of AI system used and focus of project? Unity Point Health using AI-based referrals (IRIS) matching individuals to services

PLACE

Where does this project take place, organizationally and geographically? Peoria, IL --high density / worst zip code for priority population

Adaptation based upon: Gallimore, R., Goldenberg, C.N., & Weisner, T.S. (1993). The social construction and subjective reality of activity settings: Implications for community psychology. *American Journal of Community Psychology, 21(4)*, 537-560.

AI Case Studies and the Culture Cube
Invisible Dimensions (3 Cs)

CULTURE (CONTEXT, COMMUNITY)
Assumptions, values, and norms
(especially related to AI fairness/equity)

CAUSES
Sources of challenges
(including AI-related inequities)

CHANGES
Systems desired and AI-use outcomes
(from multi-stakeholder workshops)

Adaptation based upon: Kleinman, A. (1988). *The illness narratives: Suffering, healing, and the human condition.* New York, NY: Basic Books

Example Application: **USA**

Invisible Dimensions (3 Cs)

CULTURE (AND COMMUNITY)

Assumptions, values, and norms

- Low service use may be viewed as resulting from ineffective referrals
- To what extent are available services assumed to be culturally appropriate?
- In the US, "evidence-based practices" (mainstream MH interventions) more valued than "practice-based evidence" (high community credibility)

CAUSES

(Potential) Sources of challenges

- Potential sources of AI-related bias: What is origin of referral requests for services for children by population: Parents? Schools? Courts?
- What types of services are recommended for which populations?

CHANGES

(Potential) Systems desired and AI-use outcomes

- Increased access to services viewed as effective and culturally responsive by participants?
- Referrals provided in a timely way in response to participant-defined needs and preferred services?

Adaptation based upon: Kleinman, A. (1988). *The illness narratives: Suffering, healing, and the human condition.* New York, NY: Basic Books

With Prof. Gerhard Kruip

WALK-SHOP AND GROUP DISCUSSION: IDENTIFYING AI ETHICAL ISSUES IN CONTEXT

Indicators for ethical problems

(Gerhard Kruip)

General distinction:

Theoretical rationality	Practical rationality
"What is?"	"What should we do?
Descriptions	Prescriptions
Analysis of causes	Analysis of reasons

Indicators for ethical problems

(Gerhard Kruip)

Feelings: sense of injustice, indignation, shame

Language: evaluative terms, like “good”, “right” or “bad”, “evil”, “wrong”; certain proverbs

Conflicts: intra-personal, inter-cultural, or inter-personal, e.g. between economic interests and respect of human dignity

Perceived dangers for solidarity, peace, social order

Culture Cube Dimensions and Indicators of Ethical Issues

Group A Culture

What cultural assumptions are made regarding AI and fairness/equity? *(beliefs/judgments)*

Group B Causes

Where are inequities located? What system issues emerge? *(feelings/facts)*

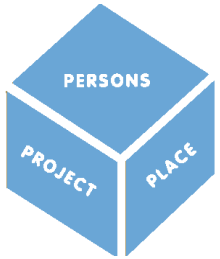
Group C Changes

What AI-related system changes are considered desirable?
(needs and values)

Walk-Shop

Discussion

How can you apply what you heard about AI-related ethical issues to your own context? How can the culture cube dimensions help you identify and situate these ethical issues within your own cultural context?



Culture

What cultural assumptions are made regarding AI and fairness/equity? *(beliefs/judgments)*

Causes

Where are inequities located? What system issues emerge? *(feelings/facts)*

Changes

From your cultural perspective, what AI-related changes are considered desirable? *(needs and values)*

"Contextualized AI"

GROUP DISCUSSION: IDENTIFYING AND SITUATING AI ETHICAL ISSUES IN CULTURAL CONTEXT