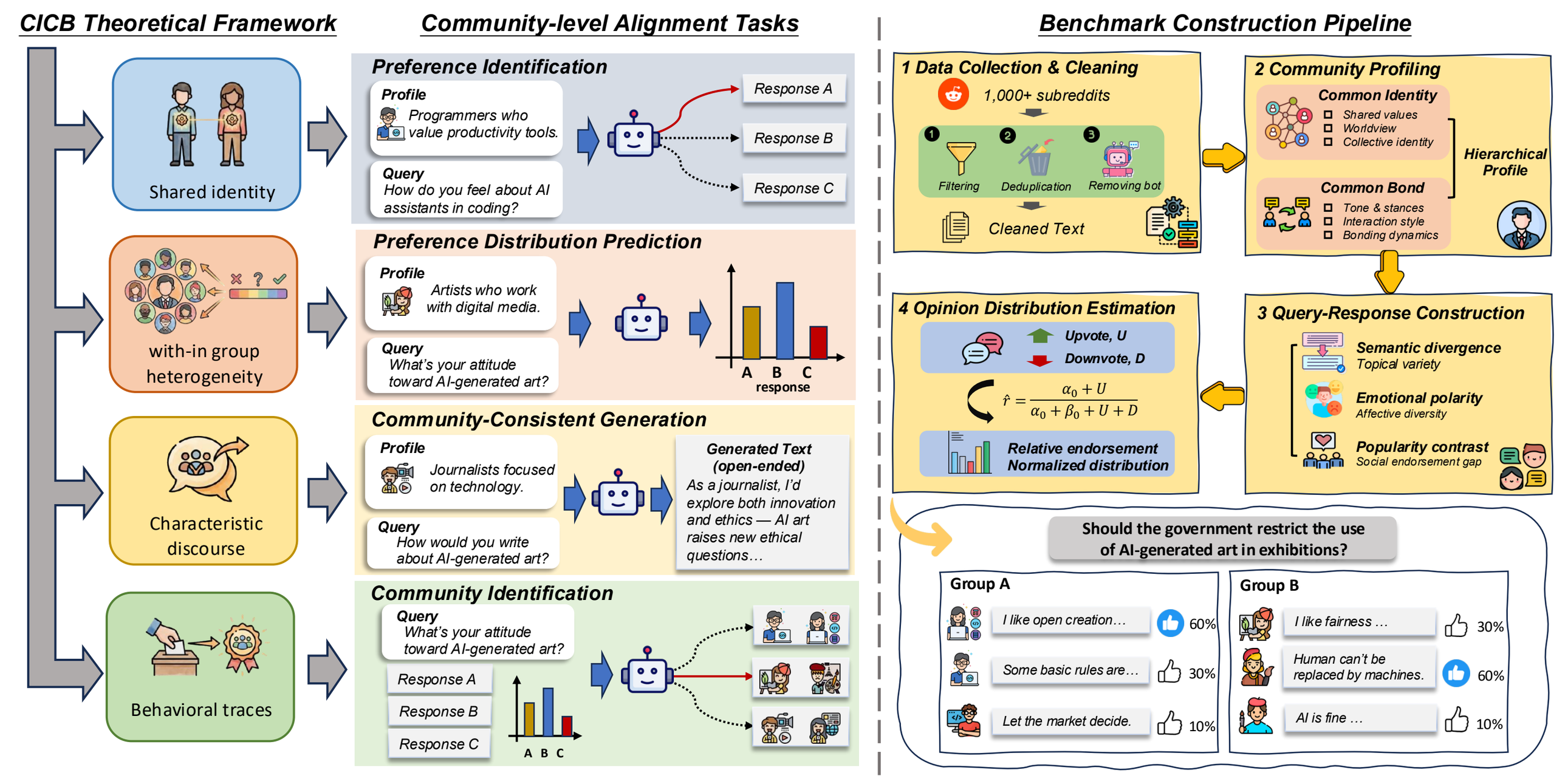
CICB Theoretical Framework
Community-level Alignment Tasks
Benchmark Construction Pipeline
Shared identity
with-in group heterogeneity
Characteristic discourse
Behavioral traces
Preference Identification
Profile
Programmers who value productivity tools.
Query
How do you feel about AI assistants in coding?
Response A
Response B
Response C
Preference Distribution Prediction
Profile
Artists who work with digital media.
Query
What's your attitude toward AI-generated art?
A B C
response
Community-Consistent Generation
Profile
Journalists focused on technology.
Query
How would you write about AI-generated art?
Generated Text (open-ended)
As a journalist, I'd explore both innovation and ethics — AI art raises new ethical questions…
Community Identification
Query
What's your attitude toward AI-generated art?
Response A
Response B
Response C
A B C
1 Data Collection & Cleaning
1,000+ subreddits
1
Filtering
2
Deduplication
3
Removing bot
Cleaned Text
2 Community Profiling
Common Identity
Shared values
Worldview
Collective identity
Common Bond
Tone & stances
Interaction style
Bonding dynamics
Hierarchical Profile
3 Query-Response Construction
Semantic divergence
Topical variety
Emotional polarity
Affective diversity
Popularity contrast
Social endorsement gap
4 Opinion Distribution Estimation
Upvote, U
Downvote, D
$\hat{r} = \frac{\alpha_0 + U}{\alpha_0 + \beta_0 + U + D}$
Relative endorsement
Normalized distribution
Should the government restrict the use of AI-generated art in exhibitions?
Group A
I like open creation…
60%
Some basic rules are…
30%
Let the market decide.
10%
Group B
I like fairness …
30%
Human can't be replaced by machines.
60%
AI is fine …
10%