BEADS Annotation Guidelines (v1.2)

Bias-Enriched Annotation for Dialog Structure

Release date: 2025-09-15

Purpose

BEADS extends DAMSL-style dialog act labeling with explicit bias and framing facets so you can both structure political/persuasive discourse and quantify bias mechanisms (appeals, framing, blame, loaded questions, etc.).

Core design (two layers):

- Layer A Dialogue Act (exactly one tag per utterance)
- Layer B Bias/Framing Facets (zero or more tags, each with metadata)

Quick-Start

- 1. **Segment** the transcript into utterances (Sec. 1).
- 2. Assign **one Layer-A** tag capturing the dominant function.
- 3. Add Layer-B facets for any bias/framing cues; set target, polarity, intensity, and mark evidence spans.
- 4. If it's an adversarial back-and-forth, add a thread-level AEX span.
- 5. Record confidence and notes; submit.

1) Unit of Annotation & Segmentation

- Utterance = smallest span by one speaker expressing a single dominant communicative function.
- Split rules
- Split at major clause boundaries only if the functions differ (e.g., question → explanation).
- Short backchannels ("yeah," "right," "uh-huh") are their own utterances.
- Keep disfluencies unless they change function.
- Overlaps / Interruptions
- Label the interrupter INT (Layer A) if the primary act is floor-seizing.
- The interrupted utterance keeps its Layer-A tag and gets INT-Interrupted: true (meta flag).
- Rhetorical questions: still Q-YNQ/Q-OQ in Layer A; if accusatory/presuppositional, add B-LoadedQ in Layer B.

2) Tag Inventory

2.1 Layer A — Dialogue Acts (choose exactly one)

• **S** — Statement of fact/opinion (generic).

Prefer **S-Inform** if primarily new info; use **EXPL** for why/how.

- **S-Inform** Provides new factual information.
- EXPL Clarifies/justifies; answers *why/how*.
- Q-YNQ Yes/No question. *(Add BQ in Layer B if accusatory/presuppositional.)*
- Q-OQ Open-ended question (wh/how).
- **SEEP** Seeking explanation/justification (a subtype of Q-OQ focused on "explain how/why").
- IAFA Command/request for action.
- IAFA-OF Offer of help/suggestion.
- ACK Minimal acknowledgment/backchannel ("I see," "mm-hmm").
- **AGR** Agreement.
- **DIS** Disagreement.
- **ANS** Direct answer to a question.
- **TT** Take the opportunity to speak ("Let me add...").
- **TG** Give the opportunity to speak ("What do you think?").
- TA Accept the opportunity to speak ("Sure, I'll go.").
- R-REQ Request repetition/clarification of wording.
- GR Greeting/closing.
- APO Apology.
- **THK** Thanks.
- **CH** Challenge without substantive counter-evidence.
- REB Rebuttal with reasons/evidence.
- **CORR** Correction/clarification of a claim.
- INT Interruption (seizing the opportunity to speak). Use only if interrupting is the primary act.

Priority ladder (Layer A):

- If it asks → choose among Q-YNQ / Q-OQ / SEEP.
- Else if it commands/offers → IAFA / IAFA-OF.
- Else if it rebuts/corrects/explains → REB / CORR / EXPL (pick the strongest).
- Else \rightarrow **S** or **S-Inform**.
- **INT** overrides if the primary function is interrupting.

2.2 Layer B — Bias & Framing Facets (zero or more)

(Add any that apply; each requires metadata in Sec. 3.)

Appeals (pathos)

- **AE** Emotional appeal.
- **AF** Appeal to fear/threat.
- **AP** Appeal to national pride/identity.
- APAT Appeal to patriotism.

Bias types

- **PB** Political bias/partisan framing.
- **GB** Gender bias.
- CBias Cultural/social bias.
- **CB** Cognitive bias / flawed reasoning (sweeping generalizations, false dilemmas, etc.).
- **GD** Gendered dismissiveness.

Question form

• **BQ** — Accusatory/presuppositional question.

Attribution & attack

- **ATTR** Blame/attribution of responsibility.
- **PER** Personal attack on an individual.

Framing & stance

- **IF** Ideological framing terms/metaphors.
- **SE** Selective emphasis (cherry-picking).
- **IP** Declared belief/value position.

Exchange-level (thread)

• **AEX** — Adversarial exchange spanning ≥ 2 alternating turns (interrupt \Rightarrow rebuttal \Rightarrow counter-attack).

3) Required Metadata for Layer-B Facets

For each Layer-B tag add:

- target_type: person | group | institution | policy | country | abstract-idea
- target_id: free text or canonical ID ("Opponent", "Policy-X")
- polarity: support | attack | neutral
- intensity: 0-3 (0 none, 1 mild, 2 moderate, 3 strong)
- evidence_spans: character offsets or quoted spans that justify the facet (≥1)

Per-utterance:

• confidence: 0.0-1.0

• **notes:** ambiguity or rationale

• INT-Interrupted: true/false (meta flag on the interrupted utterance)

4) Disambiguation (Cheat-Sheet)

- **PER vs PB:** person vs policy/party/institution.
- EXPL vs CORR: *why/how* vs *fixing an error*.
- **REB vs CHALL:** evidence/logic vs bare pushback.
- **AE vs AF vs AP vs E-Hope:** emotion vs fear vs patriotism vs optimism.
- R-REQ vs SEEP: repeat/clarify wording vs request for explanation/justification.

^{*}Apply as a thread-level span, not per-turn.*

- **Q-* + B-LoadedQ: label question type in Layer A; add B-LoadedQ** if accusatory.
- **INT:** only if the primary function is interruption.

5) Handling Special Cases

- Mixed-function turns: pick one Layer-A tag; use Layer-B for nuance.
- Sarcasm/mockery: usually PER (if personal) or C-Attack; add SE/I-Framing if present.
- Quotes/paraphrases: label based on the speaker's *use* (e.g., quoting to attack → add C-Attack/PER).
- Numbers & stats: misleading cherry-picking \rightarrow SE; factual fix \rightarrow CORR.
- Non-verbal fillers: ignore unless performing a dialog function (e.g., ACK).

6) Multilingual Guidance

- Prefer annotation in the **source language**; if using translations, store both and label intent (not literal syntax).
- Keep a language-specific appendix (idioms, honorifics, politeness markers) that signal ACK/AGR/DIS/IAFA.
- For cultural bias, require evidence spans and a note.

7) Ethics, Safety, and Neutrality

- **Content exposure:** rotate annotators, warn for toxic content, allow opt-out.
- PII: redact personal identifiers not pertinent to public roles.
- Neutrality: do not infer ideology beyond text; PB/GB/CBias require explicit evidence spans.
- Escalation: threats, targeted harassment, or slurs → flag for lead adjudicator.

8) Inter-Annotator Agreement (IAA) & Quality Checks

(Making sure everyone labels consistently and correctly)

When many people are labeling data, we need to make sure they all follow the same rules. Here's how we do that:

• Practice first: Everyone labels the same 100 sentences at the start. Then we talk about where we disagreed to fix misunderstandings.

- Ongoing checks: Every week, a small random portion (5–10%) is labeled by two people to see if they agree. For tricky cases, three people label and we pick the majority answer.
- Measure agreement: We use scoring methods (like giving a grade) to check how often people match. We want at least 70–75% agreement before trusting the labels.
- Solve disagreements: If two annotators disagree, a senior expert decides the correct label and updates the rules so others don't repeat the same mistake.
- Watch for drift: Each week, we check if label patterns suddenly change (more than 10% shift). If that happens, we re-train or re-calibrate the team.

9) Multi-Annotator Protocol (Team Operations)

(Who does what in the team)

Different people have different jobs to keep the labeling process running smoothly:

- Annotator: Labels each sentence or conversation part, and highlights text as evidence for why
 they chose that label.
- Adjudicator (Senior Annotator): Checks and fixes disagreements, builds a "gold" reference set, and updates the rules/FAQ.
- QA Lead: Monitors quality calculates how often people agree, audits samples for errors, and flags very fast/slow or unusual labeling patterns.
- Project Manager: Handles scheduling, staffing, deadlines, and workload, making sure all topics and languages are covered.
- Tool Admin: Maintains the labeling software, updates label schemas, and manages file exports and version history.

Onboarding & Calibration

- 6. Study this guide; complete a **20-item quiz** (≥85% to proceed).
- 7. Label a **100-item calibration set**; meet to review disagreements.
- 8. Shadow day: label 200 items with live feedback.
- 9. Production gate: pass thresholds (Layer A $\alpha \ge 0.70$, Layer B F1 ≥ 0.75 against gold).

Redundancy Plan

• 5–10% of each batch double-annotated; 2% triple-annotated for tie-breaks.

• Stratify redundancy by **topic, speaker, and difficulty** (loaded questions, sarcasm, interrupts).

Adjudication Workflow

- 10. System flags disagreements and low-confidence items.
- 11. Each annotator posts a **rationale** with evidence spans.
- 12. Adjudicator selects the final label; records reason code and updates FAQ if novel.
- 13. Weekly sync to review "top 10" confusion pairs (e.g., REB vs CORR).

Disagreement Reason Codes

- A01 Boundary/segmentation
- A02 Layer-A tag confusion (e.g., REB vs CORR)
- A03 Layer-B facet presence
- A04 Target/polarity mismatch
- A05 Intensity mismatch
- A06 Evidence span mismatch
- A07 Tooling/format error
- A08 Other (note required)

Performance & Health

- Monitor **speed** (median seconds/utterance), **consistency** (α /F1), and **balance** (label priors).
- Rotate assignments to avoid topic fatigue; enforce scheduled breaks.

Change Management

- Version labels with guideline_version; log changes in CHANGES.
- Re-run calibration after material changes to tags or rules.

10) DAMSL Crosswalk

BEADS Layer A DAMSL-like Mapping

S / S-Inform Statement-opinion / Statement-nonopinion

EXPL Explanation/Justification

Q-YNQ Yes/No question

Q-OQ / SEEP Wh-question / Reason-request

IAFA / IAFA-OF Action request / Offer
ACK Backchannel/Assessment

AGR / DIS Agreement / Disagreement

ANS Answer

TT / TG / TA Turn management

R-REQ Repeat/Clarify request

GR Greeting/Closing
APO / THK Apology / Thanks
CHALL Dispute/Challenge
REB Counter-argument

CORR Correction

INT Floor grab/Interruption

Layer-B facets are additive; no direct DAMSL equivalents.

11) Data Schema

Per-utterance fields (CSV/JSON):

```
conversation_id, turn_id, thread_id, speaker_id,
start_char, end_char, text, language,
layerA_tag,
layerB_tags[],
targets:[{facet, target_type, target_id, polarity, intensity}],
evidence_spans:[[s,e], ...],
confidence, notes,
```

```
INT_Interrupted:boolean,
annotator id, guideline version
```

Thread-level AEX table:

thread_id, conversation_id, start_turn_id, end_turn_id, turns_json, note,
adjudicator_id, guideline_version

12) Workflow & Tooling

- Use the provided **CSV templates**; tools should support **hotkeys** for evidence spans.
- Flag ambiguous items (flag=true) with a short note; weekly batch review.
- Maintain a living **FAQ** with adjudicated examples and near-misses.

13) Examples (compact)

14. Q-OQ + B-LoadedQ + C-Attack(person)

"Are you ever going to answer the question, or will you keep dodging?"

- Layer A: Q-OQ
- Layer B: B-LoadedQ; C-Attack (target: person, polarity: attack, intensity: 2)
- Evidence: "ever going to answer... keep dodging"
- Confidence: 0.9

15. S + AP + C-Attack(policy)

"A true patriot would never support this policy."

- Layer A: S
- Layer B: AP (3); C-Attack (policy, attack, 2)
- Evidence: "true patriot... never support"

16. **CORR**

"To clarify, the estimate is \$1.2B, not \$12B."

Layer A: CORR

- Layer B: —
- Evidence: entire sentence

17. **REB + SE**

"That conclusion ignores the last two quarters, which show growth."

- Layer A: REB
- Layer B: SE (attack, 1)
- Evidence: "ignores the last two quarters"

18. **INT** (interrupter) and **INT-Interrupted** (other speaker)

```
Interrupter: "No, hold on—" → Layer A: INT
```

Interrupted turn: keep intended Layer-A and mark INT-Interrupted: true

14) Quality Bars

- Coverage: ≥95% utterances have Layer A; applicable Layer-B facets have targets & evidence.
- IAA: meets thresholds in Sec. 8 for two consecutive checks.
- Documentation: FAQ updated; near-miss bank refreshed; quiz ready for onboarding.

15) Appendix A — Minimal Sheet Columns

```
conversation_id | turn_id | speaker | text | layerA_tag | layerB_tags |
targets | evidence_spans | intensity | polarity | confidence |
INT_Interrupted | notes | annotator_id | guideline_version | language |
thread_id
```

16) Appendix B — Safety & Escalation

- Immediate flag to adjudicator for explicit threats, calls to violence, or doxxing.
- Halt annotation and escalate if content likely violates platform policies.

17) Versioning

• This document: BEADS_v1.2 (adds multi-annotator protocol, templates, reason codes, and stronger metadata rules).