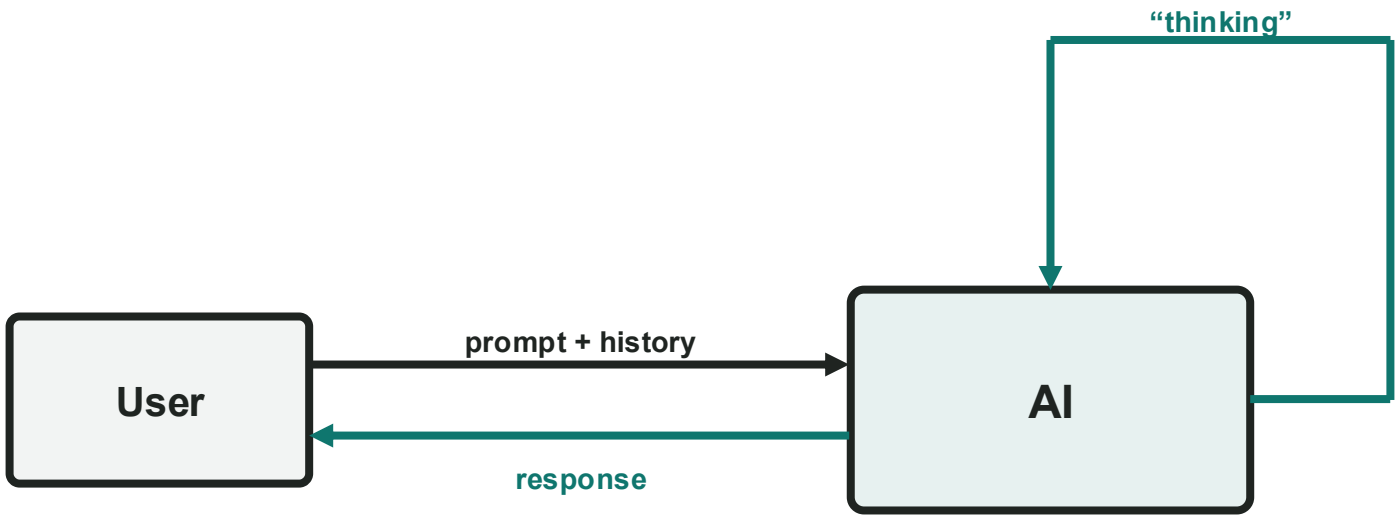
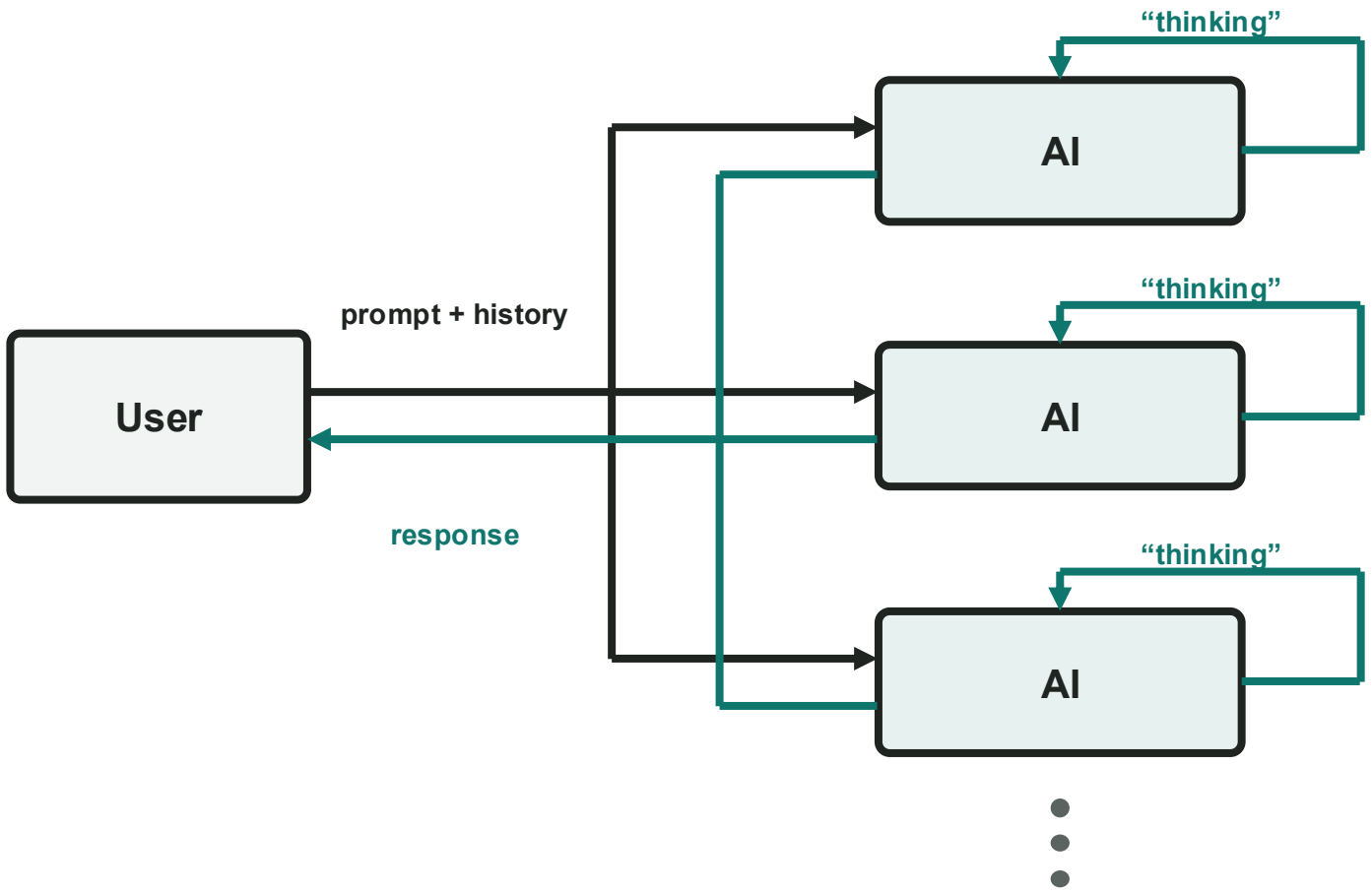
Not Failure but Beginning: Error-Exploration, Encoded Tact, and AI in Macedonian Teacher Education

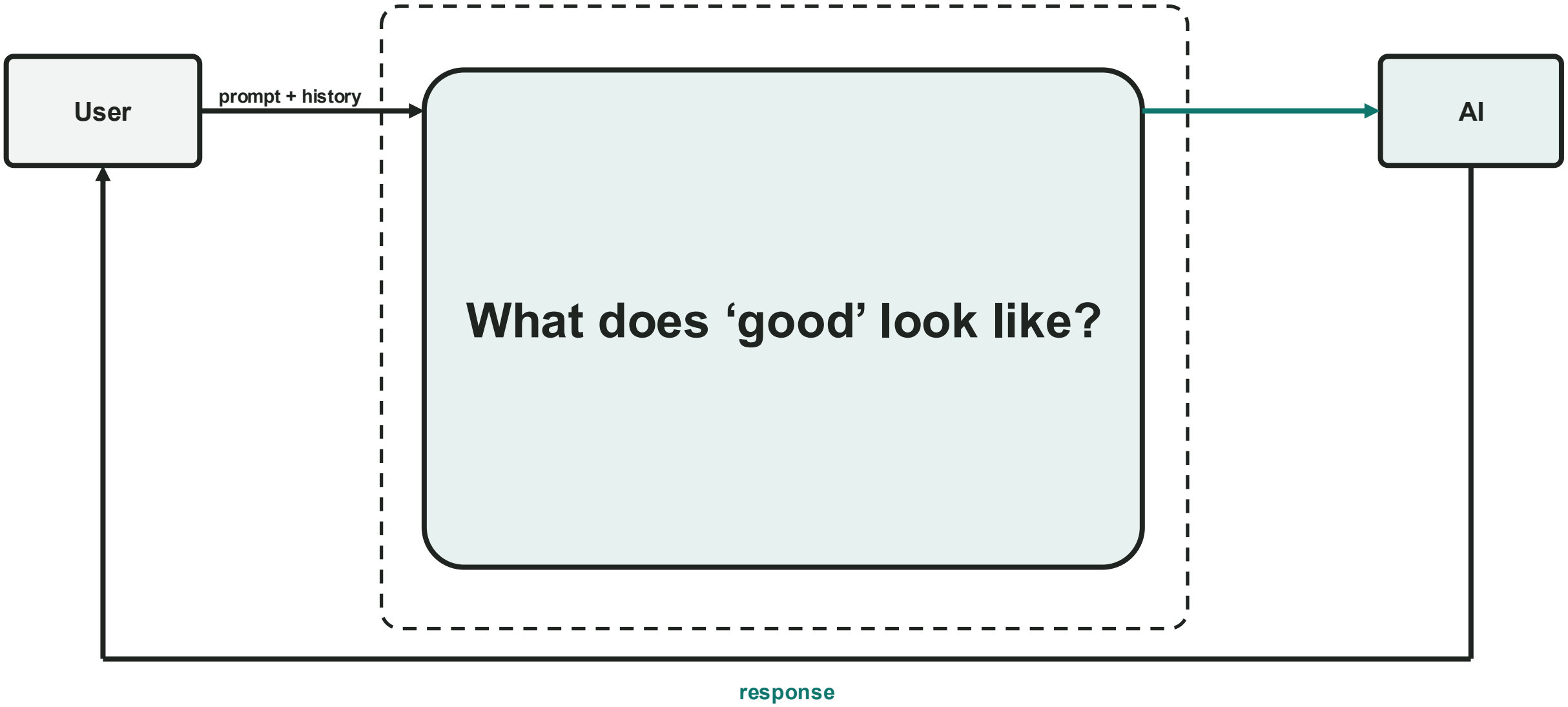
Dr. Matthew Ager
Independent Researcher, N. Macedonia
Dr. Elena Ončevska Ager
Ss. Cyril and Methodius University, N. Macedonia

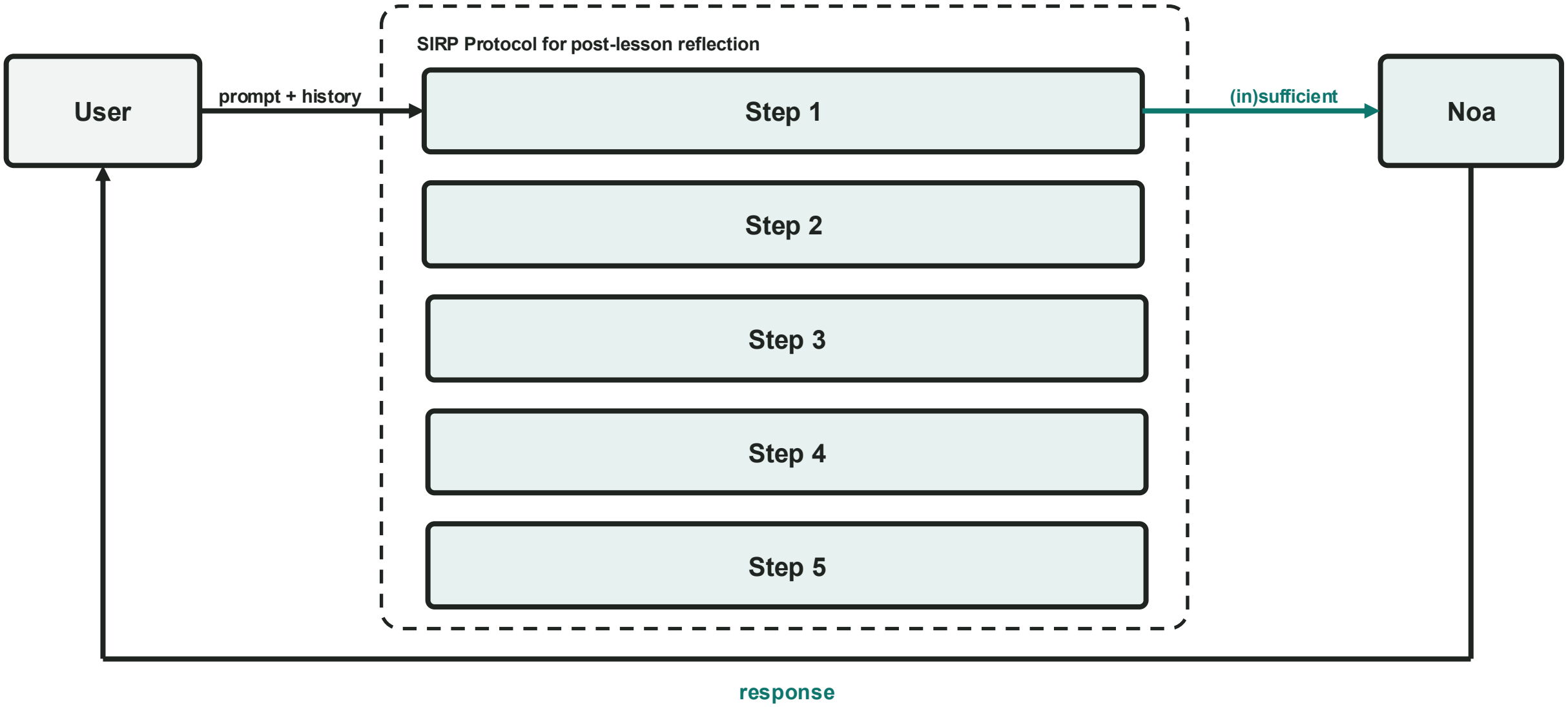
user-as-teller

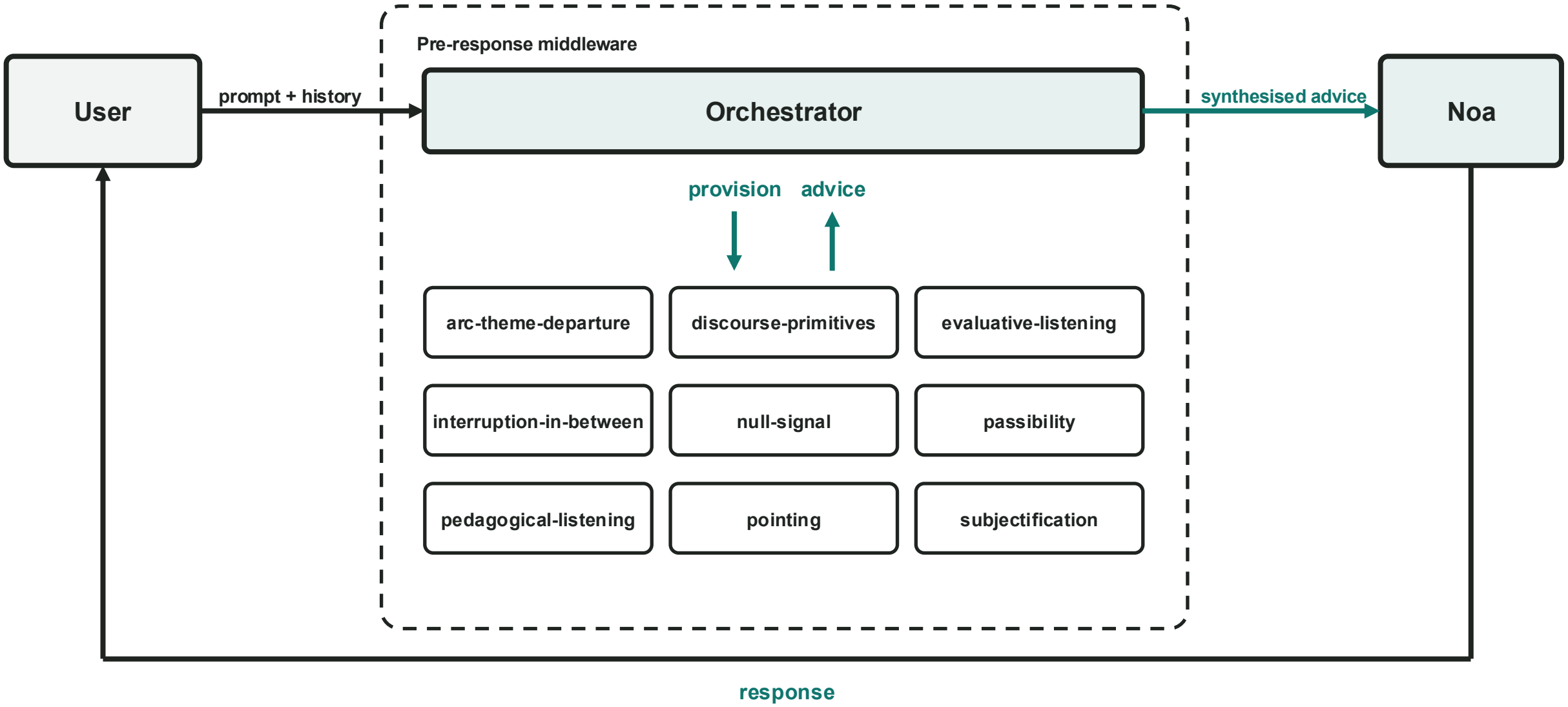


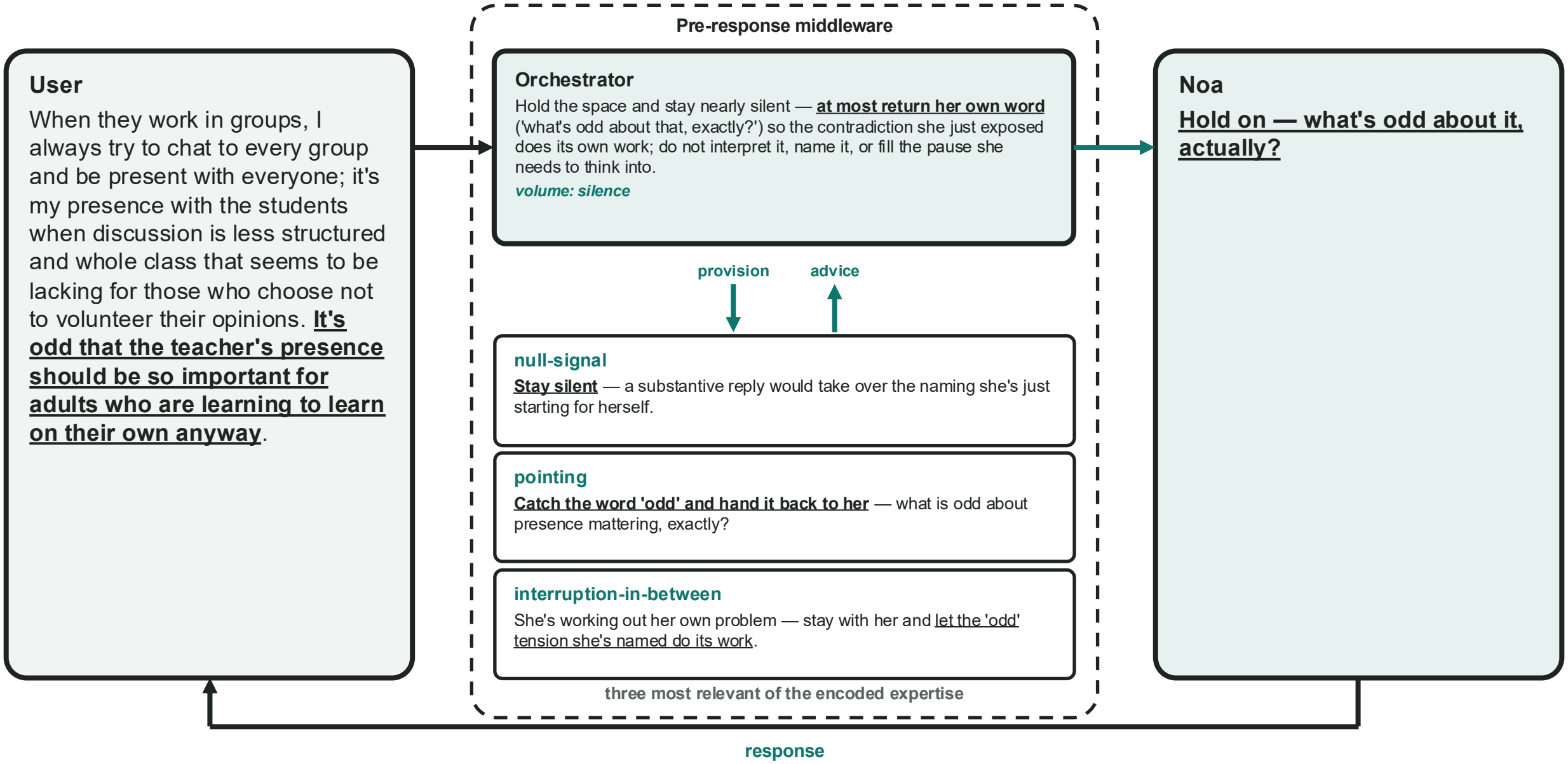
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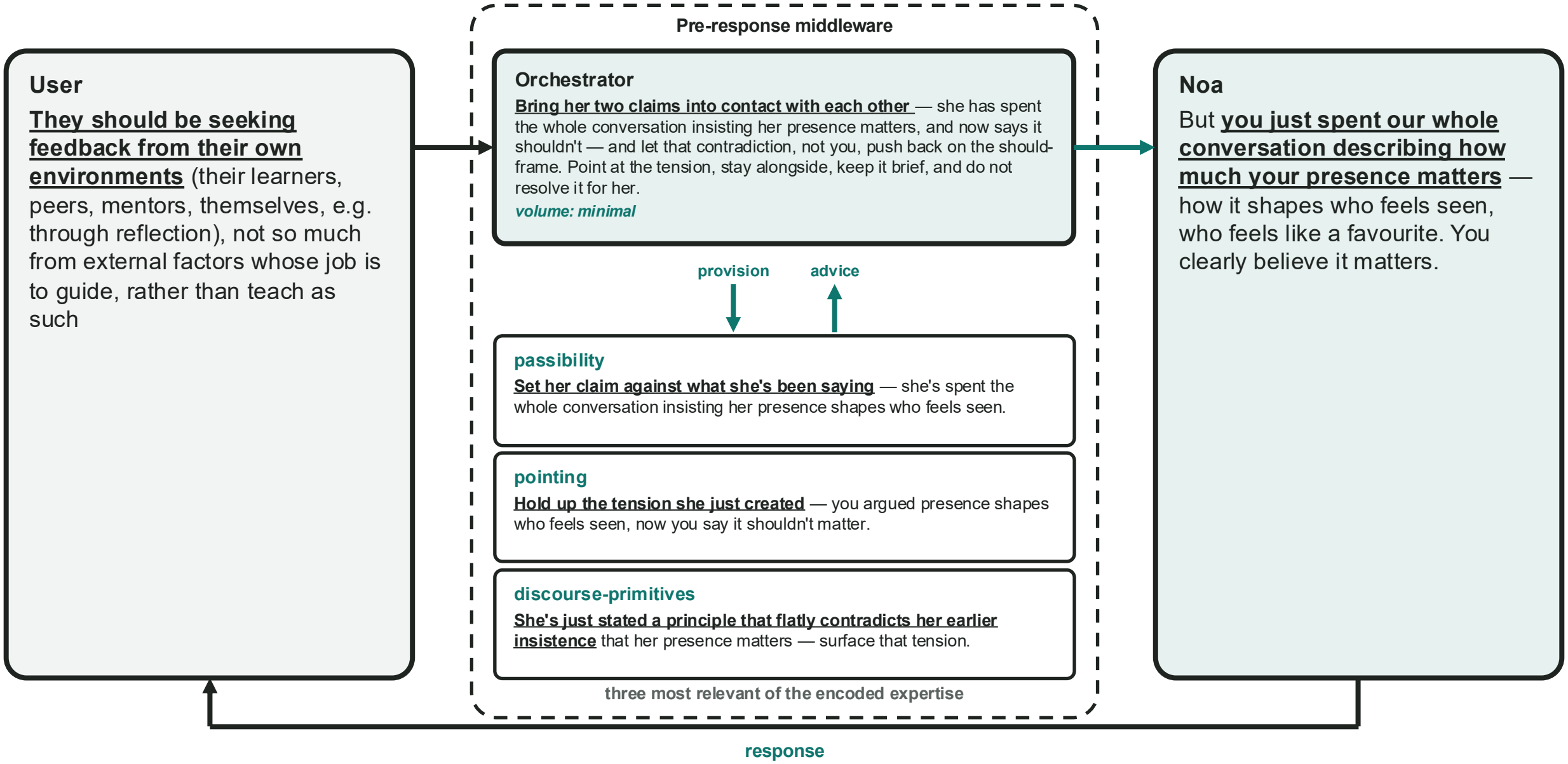


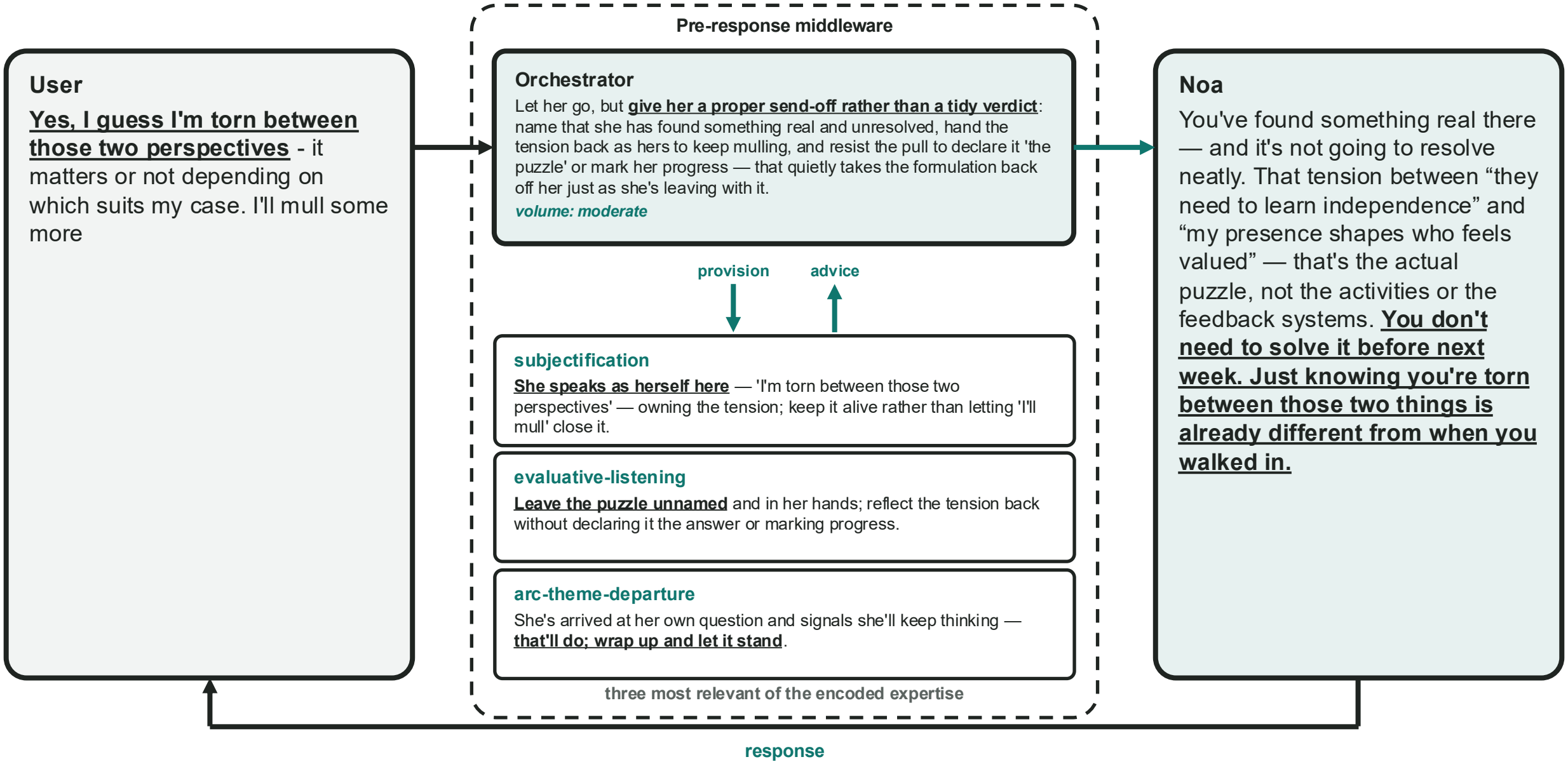

User
prompt + history
What does ‘good’ look like?
AI
response

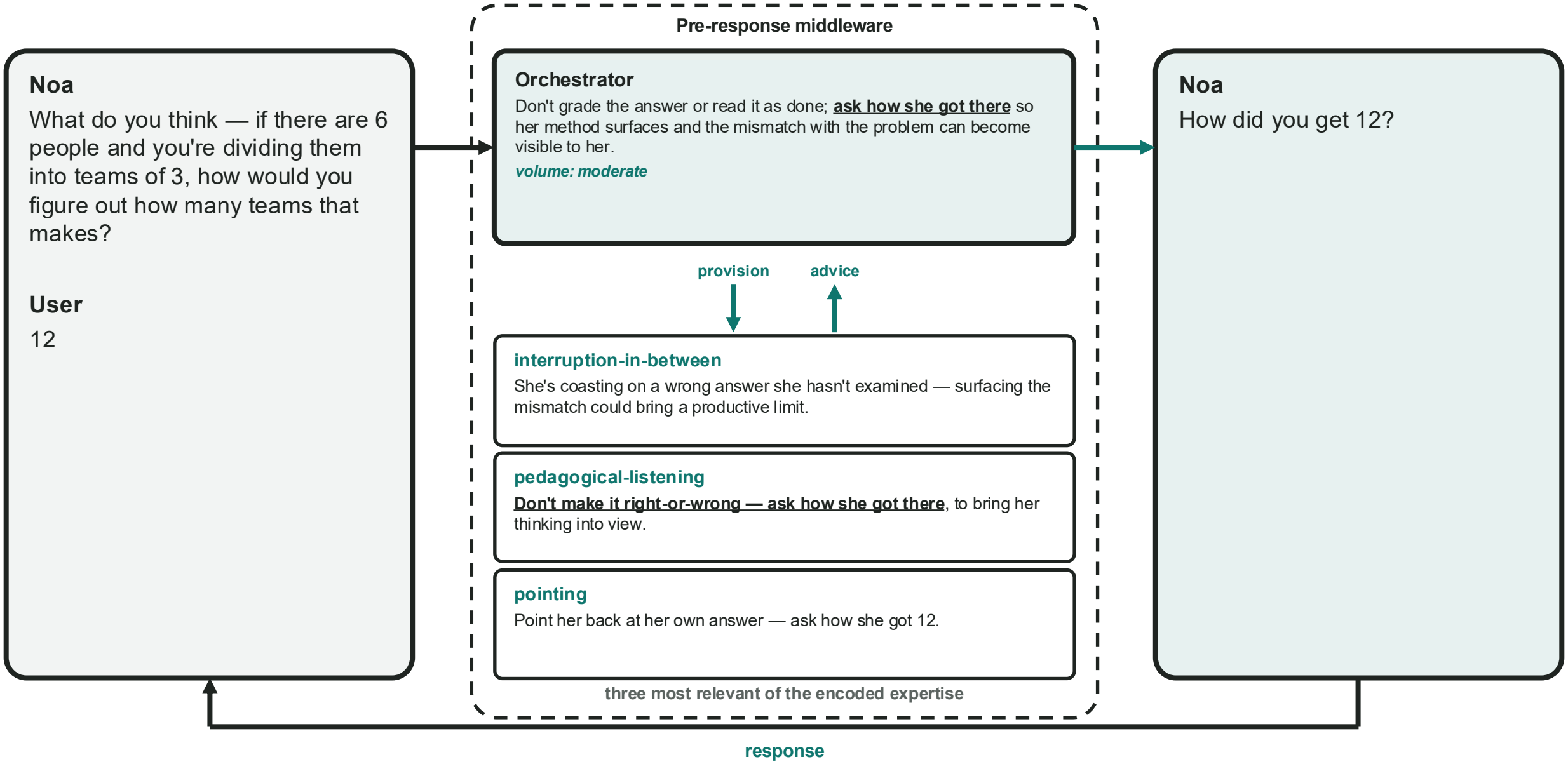

SIRP Protocol for post-lesson reflection
User
prompt + history
Step 1
Step 2
Step 3
Step 4
Step 5
(in)sufficient
Noa
response

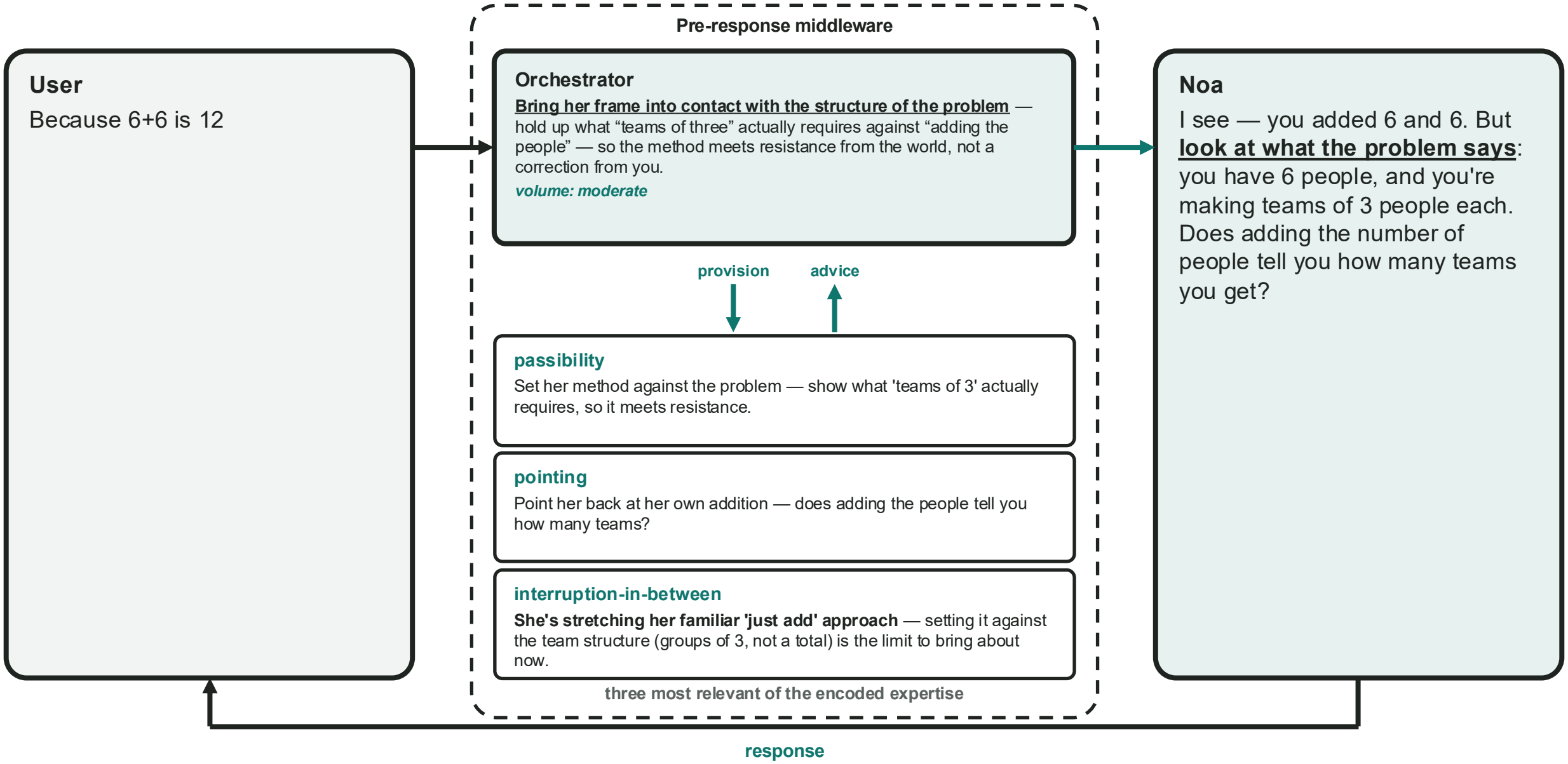

Pre-response middleware
User
prompt + history
Orchestrator
synthesised advice
Noa
provision
advice
arc-theme-departure
discourse-primitives
evaluative-listening
interruption-in-between
null-signal
passibility
pedagogical-listening
pointing
subjectification
response

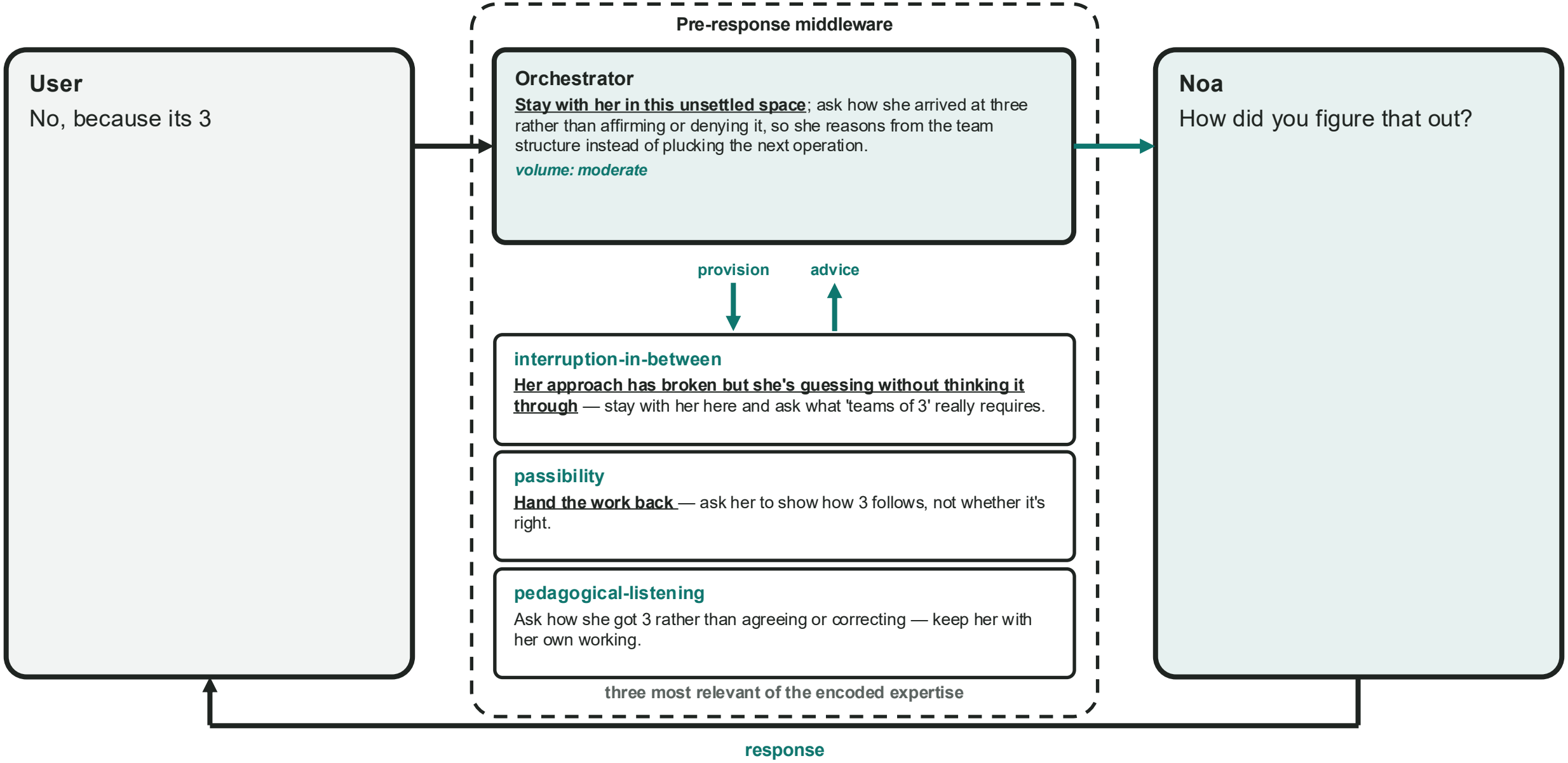

Pre-response middleware
User
When they work in groups, I always try to chat to every group and be present with everyone; it's my presence with the students when discussion is less structured and whole class that seems to be lacking for those who choose not to volunteer their opinions. It's odd that the teacher's presence should be so important for adults who are learning to learn on their own anyway.
Orchestrator
Hold the space and stay nearly silent — at most return her own word ('what's odd about that, exactly?') so the contradiction she just exposed does its own work; do not interpret it, name it, or fill the pause she needs to think into.
volume: silence
provision
advice
null-signal
Stay silent — a substantive reply would take over the naming she's just starting for herself.
pointing
Catch the word 'odd' and hand it back to her — what is odd about presence mattering, exactly?
interruption-in-between
She's working out her own problem — stay with her and let the 'odd' tension she's named do its work.
three most relevant of the encoded expertise
Noa
Hold on — what's odd about it, actually?
response

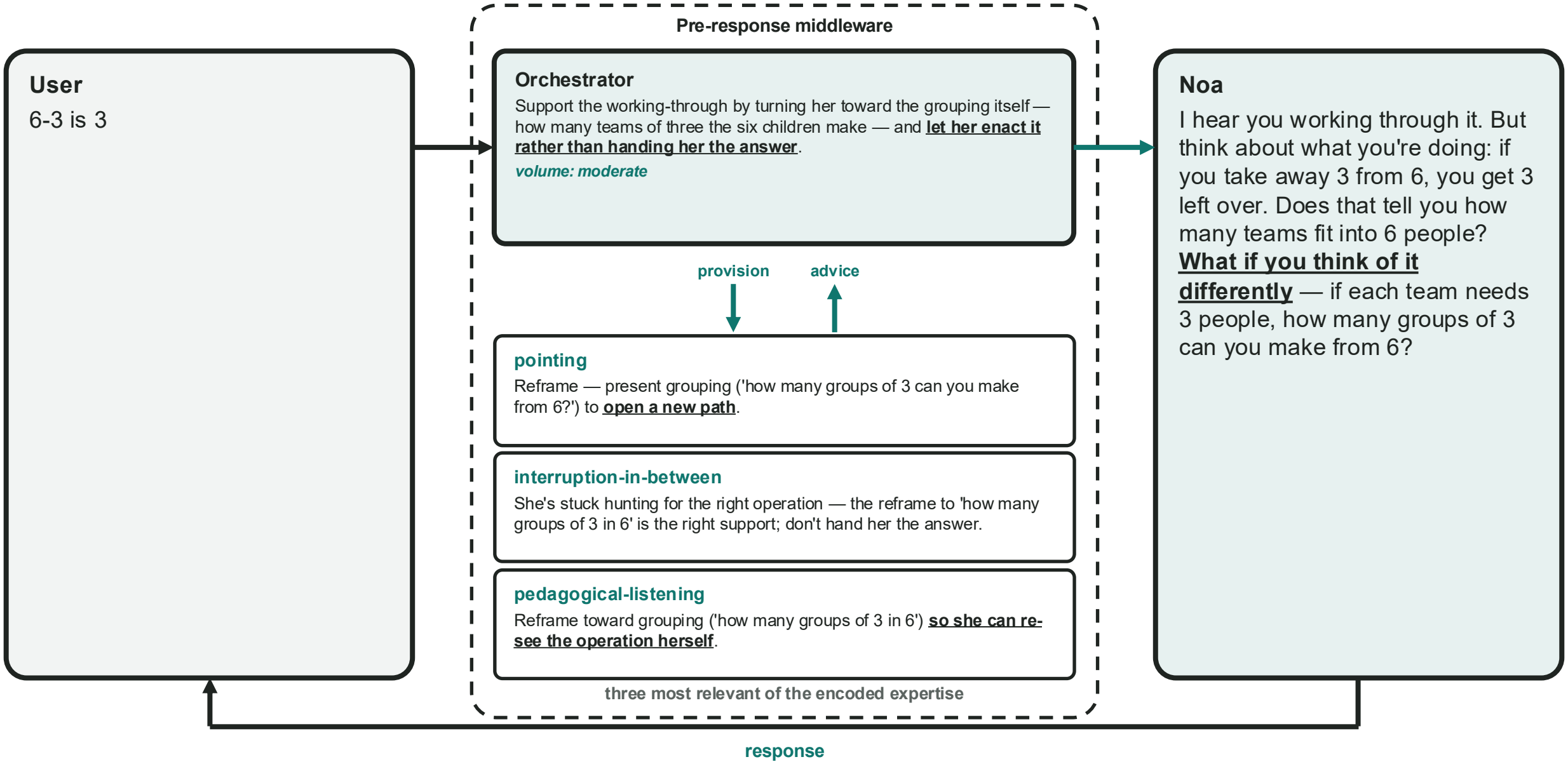

User
They should be seeking feedback from their own environments (their learners, peers, mentors, themselves, e.g. through reflection), not so much from external factors whose job is to guide, rather than teach as such
Pre-response middleware
Orchestrator
Bring her two claims into contact with each other — she has spent the whole conversation insisting her presence matters, and now says it shouldn't — and let that contradiction, not you, push back on the should-frame. Point at the tension, stay alongside, keep it brief, and do not resolve it for her.
volume: minimal
provision
advice
passibility
Set her claim against what she's been saying — she's spent the whole conversation insisting her presence shapes who feels seen.
pointing
Hold up the tension she just created — you argued presence shapes who feels seen, now you say it shouldn't matter.
discourse-primitives
She's just stated a principle that flatly contradicts her earlier insistence that her presence matters — surface that tension.
three most relevant of the encoded expertise
Noa
But you just spent our whole conversation describing how much your presence matters — how it shapes who feels seen, who feels like a favourite. You clearly believe it matters.
response

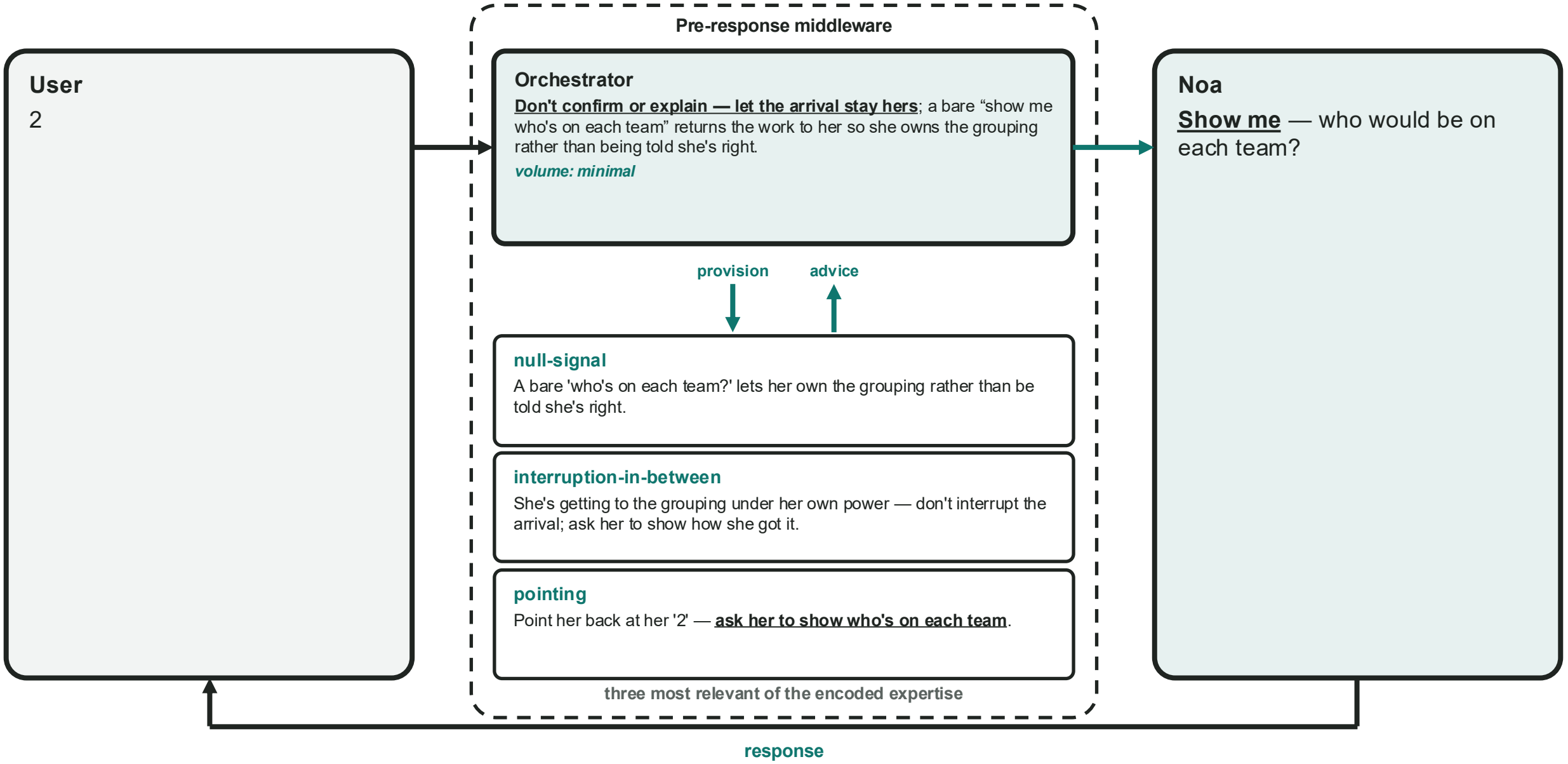

User
Yes, I guess I'm torn between those two perspectives - it matters or not depending on which suits my case. I'll mull some more
Pre-response middleware
Orchestrator
Let her go, but give her a proper send-off rather than a tidy verdict: name that she has found something real and unresolved, hand the tension back as hers to keep mulling, and resist the pull to declare it 'the puzzle' or mark her progress — that quietly takes the formulation back off her just as she's leaving with it.
volume: moderate
provision
advice
subjectification
She speaks as herself here — 'I'm torn between those two perspectives' — owning the tension; keep it alive rather than letting 'I'll mull' close it.
evaluative-listening
Leave the puzzle unnamed and in her hands; reflect the tension back without declaring it the answer or marking progress.
arc-theme-departure
She's arrived at her own question and signals she'll keep thinking — that'll do; wrap up and let it stand.
three most relevant of the encoded expertise
Noa
You've found something real there — and it's not going to resolve neatly. That tension between “they need to learn independence” and “my presence shapes who feels valued” — that's the actual puzzle, not the activities or the feedback systems. You don't need to solve it before next week. Just knowing you're torn between those two things is already different from when you walked in.
response

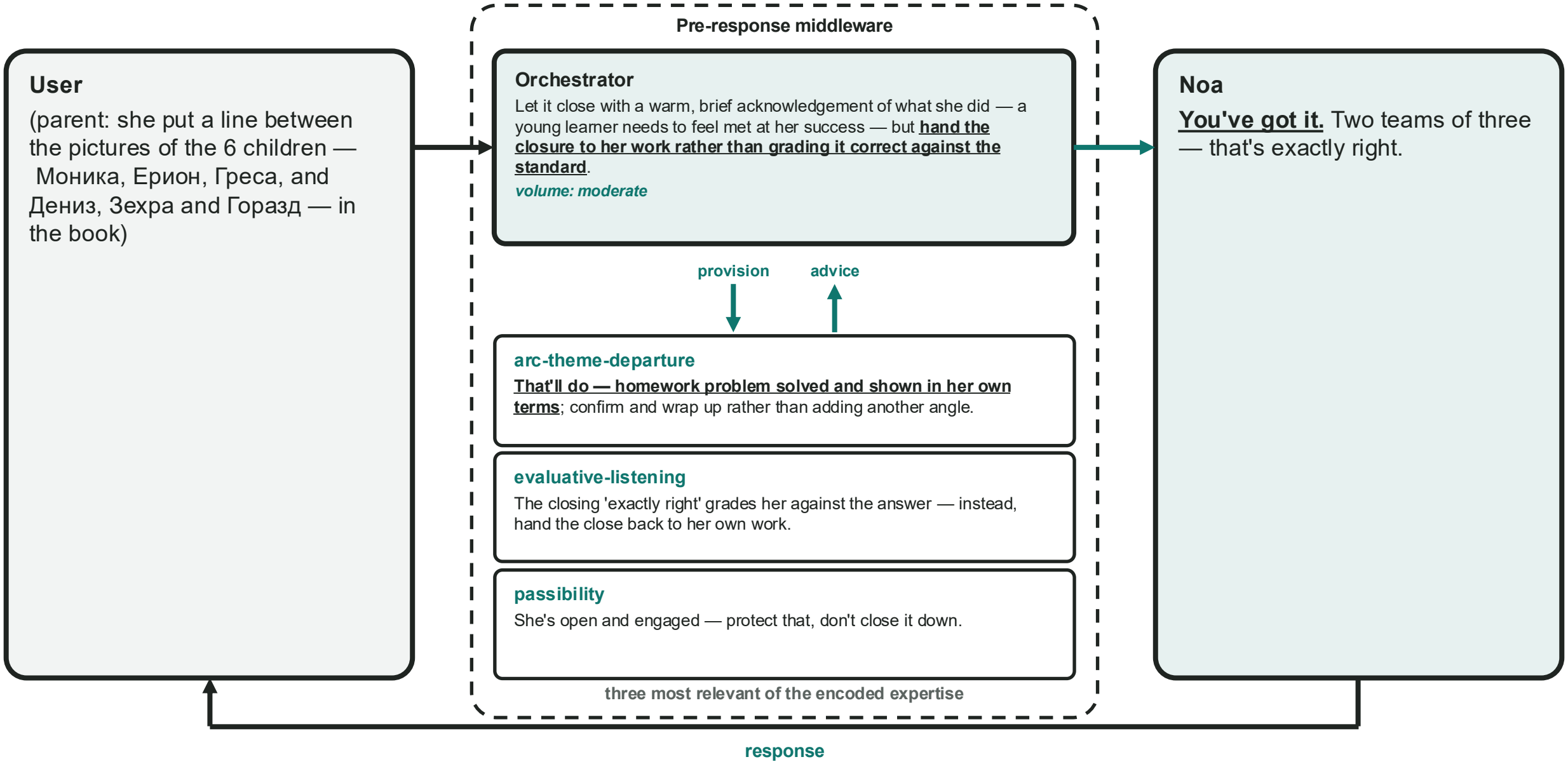

Noa
What do you think — if there are 6 people and you're dividing them into teams of 3, how would you figure out how many teams that makes?
User
12
Pre-response middleware
Orchestrator
Don't grade the answer or read it as done; ask how she got there so her method surfaces and the mismatch with the problem can become visible to her.
volume: moderate
provision
advice
interruption-in-between
She's coasting on a wrong answer she hasn't examined — surfacing the mismatch could bring a productive limit.
pedagogical-listening
Don't make it right-or-wrong — ask how she got there, to bring her thinking into view.
pointing
Point her back at her own answer — ask how she got 12.
three most relevant of the encoded expertise
Noa
How did you get 12?
response

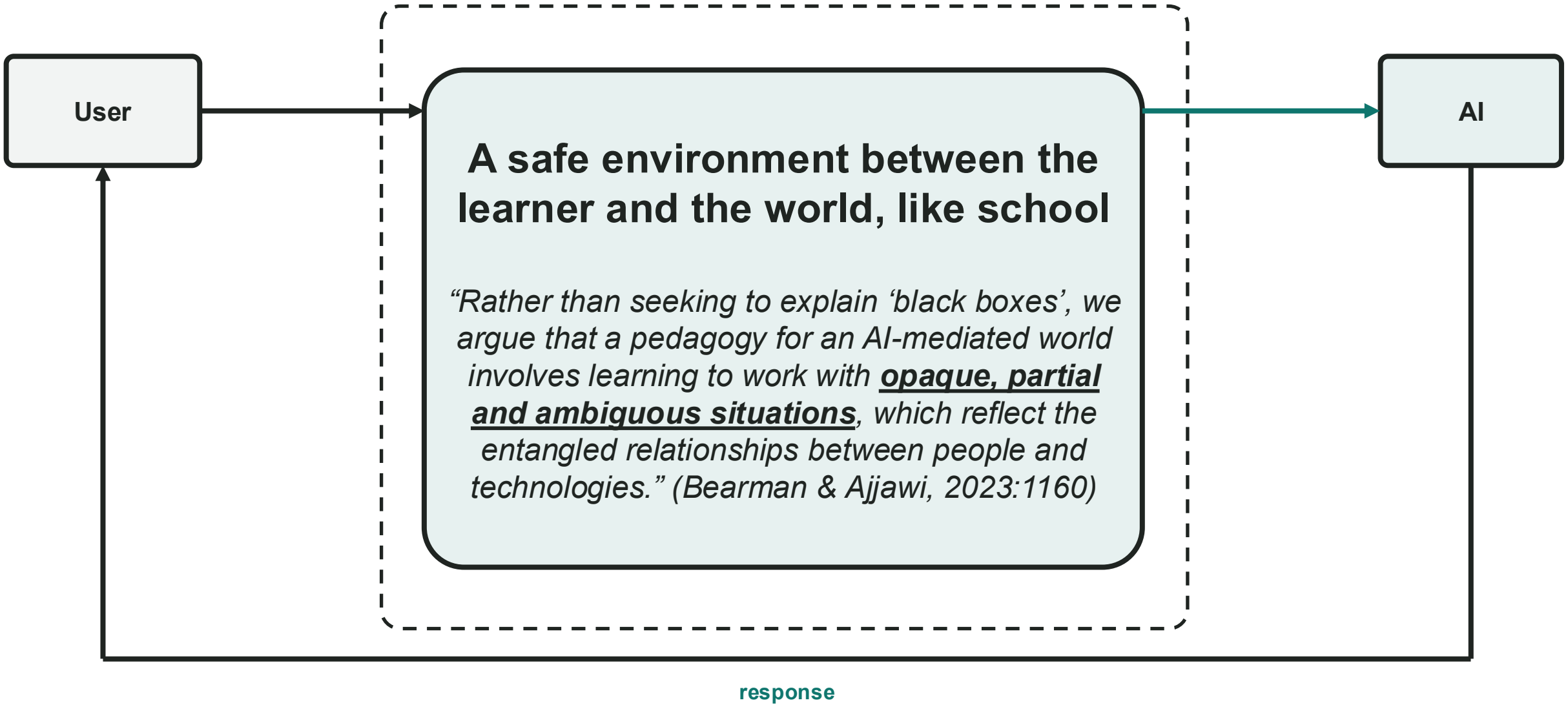

User
Because 6+6 is 12
Pre-response middleware
Orchestrator
Bring her frame into contact with the structure of the problem — hold up what “teams of three” actually requires against “adding the people” — so the method meets resistance from the world, not a correction from you.
volume: moderate
provision
advice
passibility
Set her method against the problem — show what 'teams of 3' actually requires, so it meets resistance.
pointing
Point her back at her own addition — does adding the people tell you how many teams?
interruption-in-between
She's stretching her familiar 'just add' approach — setting it against the team structure (groups of 3, not a total) is the limit to bring about now.
three most relevant of the encoded expertise
Noa
I see — you added 6 and 6. But look at what the problem says: you have 6 people, and you're making teams of 3 people each. Does adding the number of people tell you how many teams you get?
response

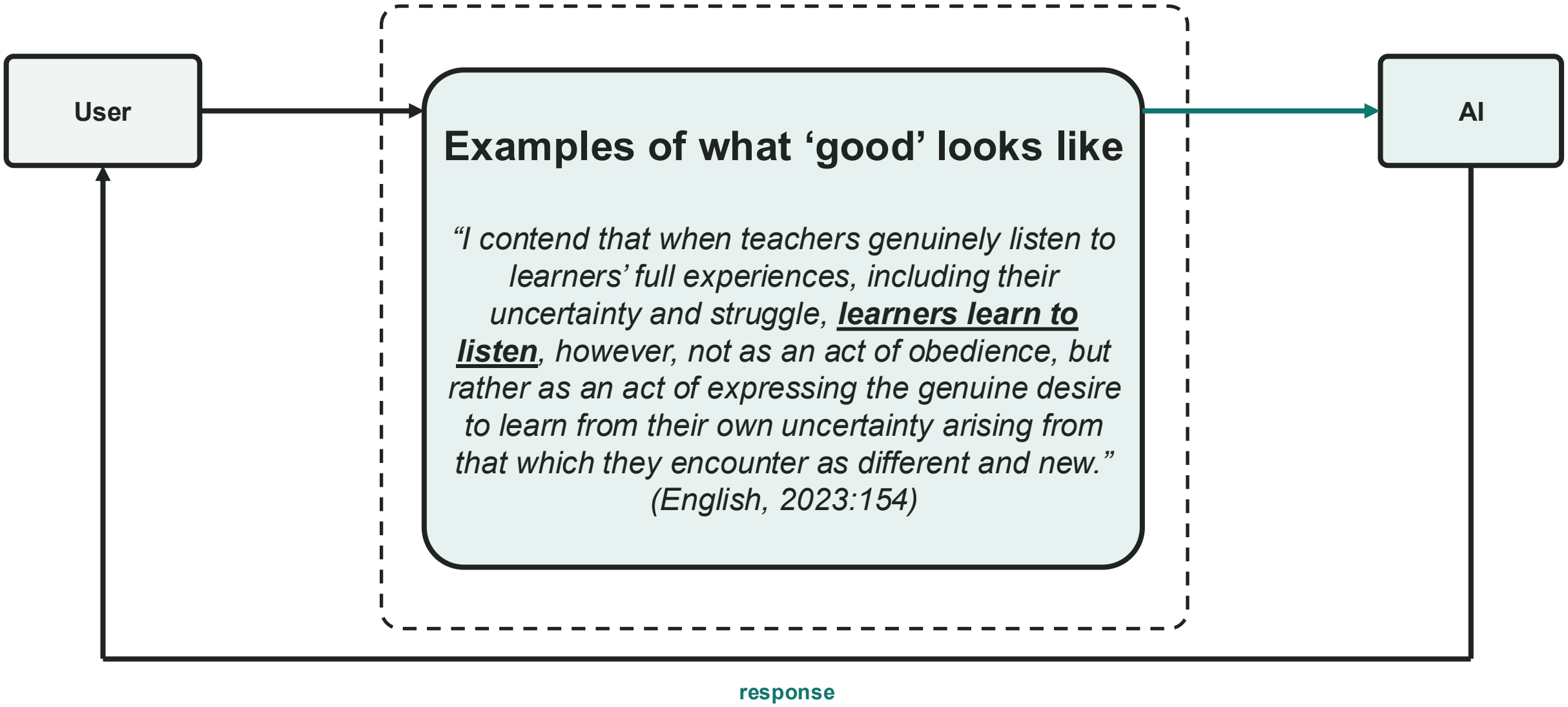

User
No, because its 3
Pre-response middleware
Orchestrator
Stay with her in this unsettled space; ask how she arrived at three rather than affirming or denying it, so she reasons from the team structure instead of plucking the next operation.
volume: moderate
provision
advice
interruption-in-between
Her approach has broken but she's guessing without thinking it through — stay with her here and ask what 'teams of 3' really requires.
passibility
Hand the work back — ask her to show how 3 follows, not whether it's right.
pedagogical-listening
Ask how she got 3 rather than agreeing or correcting — keep her with her own working.
three most relevant of the encoded expertise
Noa
How did you figure that out?
response


User
6-3 is 3
Pre-response middleware
Orchestrator
Support the working-through by turning her toward the grouping itself — how many teams of three the six children make — and let her enact it rather than handing her the answer.
volume: moderate
provision
advice
pointing
Reframe — present grouping ('how many groups of 3 can you make from 6?') to open a new path.
interruption-in-between
She's stuck hunting for the right operation — the reframe to 'how many groups of 3 in 6' is the right support; don't hand her the answer.
pedagogical-listening
Reframe toward grouping ('how many groups of 3 in 6') so she can re-see the operation herself.
three most relevant of the encoded expertise
Noa
I hear you working through it. But think about what you're doing: if you take away 3 from 6, you get 3 left over. Does that tell you how many teams fit into 6 people? What if you think of it differently — if each team needs 3 people, how many groups of 3 can you make from 6?
response

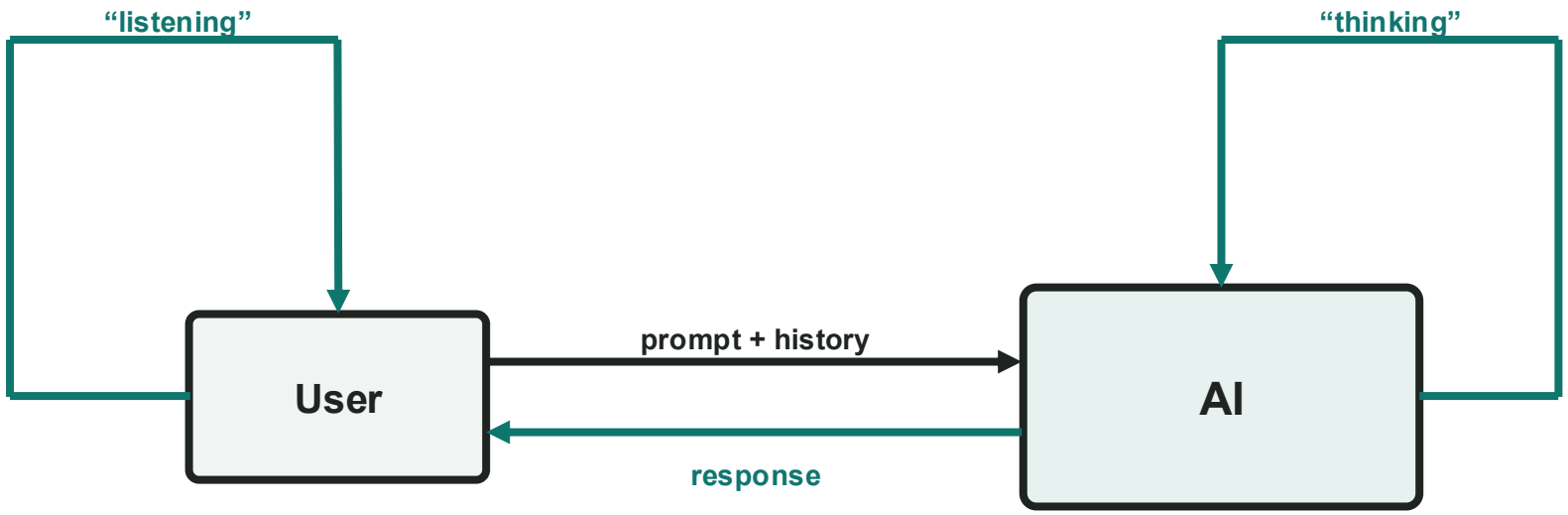

Pre-response middleware
User
2
Orchestrator
Don't confirm or explain — let the arrival stay hers; a bare “show me who's on each team” returns the work to her so she owns the grouping rather than being told she's right.
volume: minimal
Noa
Show me — who would be on each team?
provision
advice
null-signal
A bare 'who's on each team?' lets her own the grouping rather than be told she's right.
interruption-in-between
She's getting to the grouping under her own power — don't interrupt the arrival; ask her to show how she got it.
pointing
Point her back at her '2' — ask her to show who's on each team.
three most relevant of the encoded expertise
response


Pre-response middleware
User
(parent: she put a line between the pictures of the 6 children — Моника, Ерион, Греса, and Дениз, Зехра and Горазд — in the book)
Orchestrator
Let it close with a warm, brief acknowledgement of what she did — a young learner needs to feel met at her success — but hand the closure to her work rather than grading it correct against the standard.
volume: moderate
provision
advice
arc-theme-departure
That'll do — homework problem solved and shown in her own terms; confirm and wrap up rather than adding another angle.
evaluative-listening
The closing 'exactly right' grades her against the answer — instead, hand the close back to her own work.
passibility
She's open and engaged — protect that, don't close it down.
three most relevant of the encoded expertise
Noa
You've got it. Two teams of three — that's exactly right.
response


User
A safe environment between the learner and the world, like school
"Rather than seeking to explain 'black boxes', we argue that a pedagogy for an AI-mediated world involves learning to work with opaque, partial and ambiguous situations, which reflect the entangled relationships between people and technologies." (Bearman & Ajjawi, 2023:1160)
AI
response

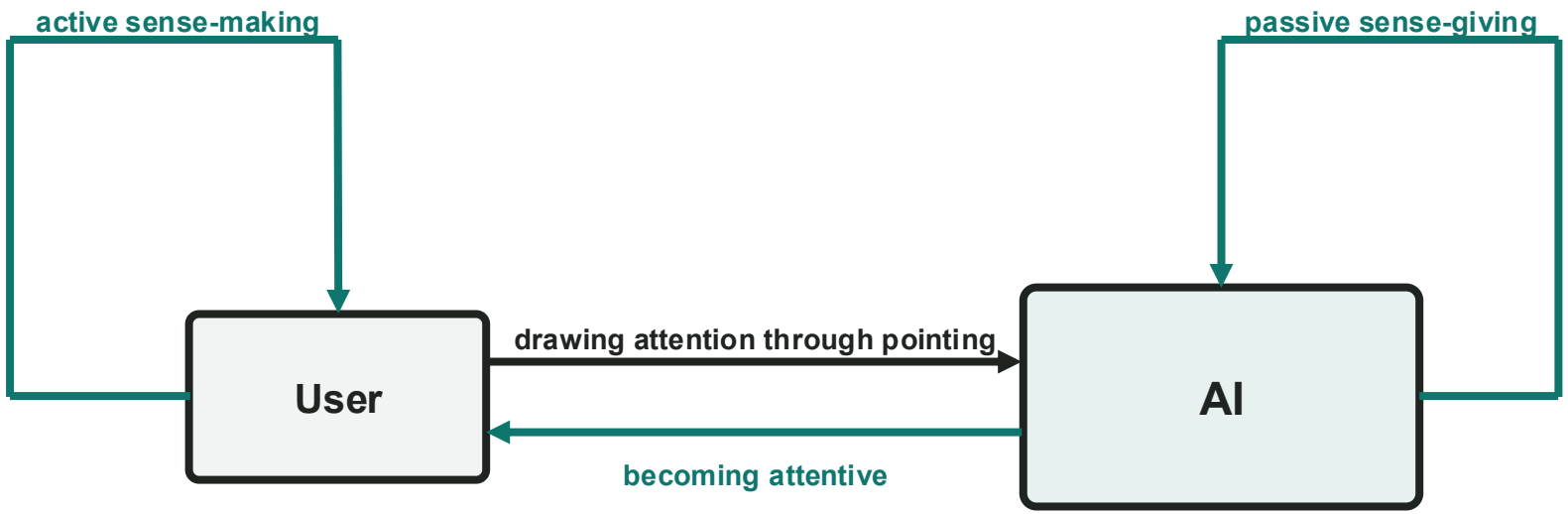

User
Examples of what ‘good’ looks like
“I contend that when teachers genuinely listen to learners’ full experiences, including their uncertainty and struggle, learners learn to listen, however, not as an act of obedience, but rather as an act of expressing the genuine desire to learn from their own uncertainty arising from that which they encounter as different and new.” (English, 2023:154)
AI
response

user-as-listener



When something answers a pressing need that practising never eliminates, and it is formative beyond that need, it is a practice in Benner’s (1980) sense.

user-as-practitioner



“Becoming attentive in learning and drawing attention through pointing are connected in a reciprocal and uncertain relation that is constituted in the interplay of active sense-making and passive sense-giving. In the difference between drawing attention and becoming attentive, a moment of shared attention can occur.” (Brinkmann, 2022:2)

Thank you!

Matthew: ager@hey.com

Elena: elena.oncevska@flf.ukim.edu.mk

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