

# Seeing the Signal, Missing the Meaning: A Branch Dissociation Hypothesis of Affective Perception and Misattribution in Emotional Intelligence

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## Abstract

Emotional intelligence research often treats accurate emotion perception as interpersonally beneficial. This paper argues that the benefit depends on what happens next. A perceiver may accurately register another person's affective shift while misattributing its cause, especially under self-relevant ambiguity (when the perceiver themselves could be the trigger). We propose the *Branch Dissociation Hypothesis*: affective signal uptake (Branch 1 of the four-branch model) and situated, real-time attribution (a critical subcomponent of Branch 3) are mechanistically separable individual differences. Their dissociation produces a previously undertheorised diagnostic profile, *interpretive miscalibration*: high signal uptake paired with miscalibrated attribution and high subjective confidence. The profile may share an interpretive pathway with rejection sensitivity, hostile attribution bias, and paranoid cognition in non-clinical populations. The framework refines the four-branch model rather than rivalling it, and is constructionist-compatible; it complements recent calls to reconnect ability EI measurement to emotion theory (Hoemann & Mortillaro, 2024) by identifying a structural gap within Branch 3 itself. Confident misreading produces a *committed interpretive stance* (expressed behaviourally, suppressed expressively, or rerouted into entrenched cognitive filtering), while non-detection produces none, in line with action-tendency accounts of emotional construals (Frijda, 1986; Scarantino, 2017). Two methodological tools are proposed: *Branch-Residualised Interpretation*, a scoring approach that isolates attribution accuracy from detection accuracy; and the *Self-Referential Attribution Task* (SRAT), a paradigm designed to surface the profile under self-relevant ambiguity. Nine falsifiable predictions follow.

**Keywords:** emotional intelligence, situated attribution, rejection sensitivity, hostile attribution, emotion perception, measurement, self-referential bias

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**A note on this version (v4).** Changes from v3: abstract restructured; Section 4 reframes the asymmetry mechanism as committed interpretive stance, grounded in action-tendency theory (Frijda; Scarantino, 2017); Prediction 9 (Stance mediation) added, taking the count from eight to nine; Figure 3 made grayscale-safe; conclusion updated to match. Scope, named constructs, and methodological tools unchanged.

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## 1. The Dinner-Table Observation

Consider two people at a dinner party.

The first notices nothing. Conversations rise and fall around her. She registers the words but not the affect underneath. When her companion goes quiet midway through the meal, she does not notice. When her host's smile tightens, she misses it. She is not unkind, simply not attuned. We would say she has low emotional perception, and we would predict, correctly, that her interpersonal life is somewhat impoverished by it.

The second person notices everything. Every flicker across his companion's face registers. Every small shift in vocal tone is detected. The slight cooling of the host's smile is logged before the host herself is aware of it. He is, by any conventional measure, highly emotionally perceptive. On a simple aggregate-scoring reading of EQ, this perceptual sensitivity should make him an interpersonal asset. It does not. He reads each affective shift as being about himself: his companion's quietness as displeasure with him, the host's tightened smile as a coded reproach, his colleague's distracted gaze as confirmation that he is being judged. His micro-detections converge with the affective signal that other observers would register. His attributions of cause systematically diverge from where intersubjective consensus and predictive outcome would place them.

This paper argues that the second person represents a diagnostically distinct profile whose components are documented separately across personality and clinical literatures but have not been joined within the emotional intelligence framework. Its central novel claim is the following. *Affective signal uptake and situated causal attribution are separable within emotional intelligence. Their dissociation becomes consequential under self-relevant ambiguity, where sufficient cue uptake (whether sensitivity-driven or*

*criterion-driven) paired with miscalibrated attribution and subjective confidence produces misdirected action rather than non-response.* The profile maps onto well-documented clinical and personality phenomena, namely rejection sensitivity, hostile attribution bias, and paranoid cognition in non-clinical populations, that have been treated as separate constructs but share a common structural feature: heightened uptake of affective or threat-relevant cues paired with systematic misattribution of their cause. We propose that the profile is best understood as a dissociation between Branch 1 (perceiving emotions) and a specific subcomponent of Branch 3 (understanding emotions), namely the situational, real-time attribution of the cause of detected affect, which we will refer to throughout as *situated affective attribution*. The structural claim will be referred to as the **Branch Dissociation Hypothesis**, and the high-uptake, low-attribution profile as **interpretive miscalibration**. What is genuinely new here is not attributional bias, well-attested in clinical and personality psychology, nor branch separability, assumed by the four-branch model, but the architectural conjunction joining the two: a specific high-uptake, low-attribution profile, isolable through residualised branch-level scoring, most diagnostically active under self-relevant ambiguity. The framework is built to be compatible with constructionist commitments and is offered as a refinement within the four-branch model rather than as a rival to either tradition; the constructionist objection is engaged directly in Section 6.1.

The argument has three parts. *First*, perception and situated attribution are mechanistically distinct in a way the field has acknowledged in principle but not pursued in measurement: aggregate EQ scores hide the dissociation, and Branch 3 of the MSCEIT measures general affective knowledge rather than situational causal attribution. *Second*, the high-uptake, low-attribution profile is asymmetrically costly where detected cues are ambiguous, relationally consequential, and likely to trigger self-referential interpretation. *Third*, the dissociation has implications for measurement and intervention.

The paper proceeds as follows. Section 2 sets out the four-cell typology. Section 3 locates the claim within the EQ literature. Section 4 develops the asymmetry claim against three convergent literatures. Section 5 distinguishes the construct from seven adjacent frameworks. Section 6 addresses the constructionist objection and proposes a measurement strategy and an elicitation paradigm. Section 7 articulates nine numbered predictions. Section 8 sets out boundary conditions, a research agenda, and practical implications. Section 9 names the four contributions. Section 10 concludes.

## 2. A Four-Cell Typology

The dissociation is most easily seen by crossing two dichotomies. On one axis, individuals vary in **affective signal detection**: their tendency to register that an affective signal is present and to identify its approximate quality, where “register” is read in the constructionist-compatible sense of signal uptake rather than as decoding of an observer-independent emotional fact. On the other axis, they vary in **situated attribution accuracy**: the convergence of their attributions of the cause of a detected signal with intersubjective consensus and with predictive outcome, and (where an experimental design provides one) with the structurally fixed cause set up by the design. We use “accuracy” throughout in this calibration-to-consensus-and-outcome sense; the constructionist reframing is taken up directly in Section 6.1. Crossing the two axes yields four profiles (Figure 1). We name each formally to facilitate cross-paper reference.

**Cell 1, *Affective Underdetection (low detection, low attribution)***. The conventional picture of low emotional intelligence: the individual neither detects affective signals reliably nor, when forced to attend, attributes them well. Their interpersonal life is impoverished, but the impairment is global and visible. Others tend to compensate, treating them as affectively obtuse rather than actively damaging. Outcomes are poor but predictable.

**Cell 2, *Calibrated Attribution (high detection, high attribution)***. This is the profile that the EQ literature has implicitly treated as the upper anchor. Signal uptake and causal attribution both converge with intersubjective consensus and predictive outcome. A colleague’s flat tone is read as fatigue rather than displeasure, a partner’s silence as preoccupation rather than rejection, a client’s hesitation as uncertainty rather than mistrust, and outcomes confirm the reading. This is what most readers will recognise as genuine high EQ.

**Cell 3, *Signal-Limited Attribution (low detection, high attribution)***. An underexplored cell that lies outside the present scope. The individual detects poorly but attributes accurately given clear input. They function well in contexts where affect is made explicit and poorly where subtle detection is required. They depend on others to surface affect; once surfaced, they handle it accurately.

**Cell 4, *Interpretive Miscalibration (high detection, low attribution)***. This is the diagnostic profile of the present paper. The individual registers affective signal at or above the level of an average observer but constructs causal attributions that systematically diverge from intersubjective consensus and from predictive outcome, most often through self-referential bias. A colleague’s flat tone is read as displeasure

with the self, a partner's silence as relational withdrawal, a client's hesitation as personal mistrust. The signal uptake converges with what other observers would register; the cause attribution does not. The interpersonal cost can be high, and, under conditions specified later, higher than the cost incurred by Cell 1.

	<b>Low situated attribution accuracy</b>	<b>High situated attribution accuracy</b>
<b>High affective signal detection</b>	<b>Cell 4</b> Interpretive Miscalibration ( <i>diagnostic profile</i> )	Cell 2 Calibrated Attribution
<b>Low affective signal detection</b>	Cell 1 Affective Underdetection	Cell 3 Signal-Limited Attribution

Figure 1. The Branch Dissociation typology. Cell 4 (highlighted) is the diagnostic profile of the present paper.

The four cells are stylised; in practice both axes are continuous. The diagnostic claim is the prediction that residual variance in situated attribution accuracy, after controlling for detection accuracy, predicts interpersonal outcomes in a direction the perception-only EQ literature has not anticipated. Measurement implications are taken up in Section 6.

### 3. The EQ Literature and the Hidden Dissociation

The four-branch model (Mayer & Salovey, 1997; Mayer et al., 2008) organises emotional intelligence into four hierarchically arranged branches: Branch 1, *perceiving emotions*; Branch 2, *using emotions to facilitate thought*; Branch 3, *understanding emotions*; and Branch 4, *managing emotions*. The present paper concerns Branches 1 and 3. The model has been operationalised most influentially in the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT; Mayer, Salovey, Caruso, & Sitarenios, 2003), which scores each branch separately and combines the scores into a composite. Adjacent traditions, including Bar-On's mixed model (Bar-On, 2006), the trait EQ approach (Petrides & Furnham, 2001), the situational-judgment EQ tradition (MacCann & Roberts, 2008), and Goleman's competency framework (Goleman, 1998), vary in detail but share a sequential architecture in which perception feeds into understanding, which in turn supports use and management. The construct validity of MSCEIT branch scores has been examined both critically (Maul, 2012; Roberts, Schulze, & MacCann, 2008) and from within

the ability-EI tradition (Brackett, Rivers, & Salovey, 2011); the present paper's argument should be read as adjacent to the critical literature.

The architecture is conceptually clean. The empirical practice has been less so. Three features of how EQ has been studied have, in combination, hidden the dissociation we describe.

First, **composite scoring**. The most-cited findings linking EQ to interpersonal, romantic-relational, and occupational outcomes (Joseph & Newman, 2010; Jardine, Vannier, & Voyer, 2022; Miao, Humphrey, & Qian, 2017) rely on aggregate scores rather than branch-level analysis. When branches are analysed separately, intercorrelations are moderate, suggesting genuine differentiation. The field has nonetheless treated branch differentiation as secondary methodological concern rather than substantive theoretical question.

Second, the **structure of the MSCEIT understanding items**. Branch 3 of the MSCEIT measures understanding through tasks identifying which emotion blends combine into more complex emotions, or which sequences follow specified life events. These tasks measure general affective knowledge: that grief follows loss, that frustration can mask hurt, that pride and shame are not identical. They do not measure situated affective attribution: the real-time identification of the cause of a specific detected signal in a specific interpersonal context. An individual exhibiting interpretive miscalibration could plausibly score normally on MSCEIT understanding items: the failure is not low general emotion knowledge but systematic self-referential misattribution under ambiguity. The instrument was not built to detect this failure (cf. Maul, 2012, on the construct-validity gap between MSCEIT scoring and situational emotion-related judgment). The point is not that Branch 3 is wrong or that the present construct collapses into it. The point is that situated affective attribution is a distinct subcomponent of, or neglected operationalisation within, what Branch 3 was meant to measure. The present argument is therefore narrower than the broader construct-validity critique of the MSCEIT advanced by Maul (2012) and Roberts, Schulze, and MacCann (2008): we accept the four-branch architecture as theoretically coherent, and identify a measurement gap within Branch 3 rather than rejecting the branch structure as such.

Situational-judgment extensions of the EQ-measurement programme, notably the Situational Test of Emotional Understanding and the Situational Test of Emotion Management (MacCann & Roberts, 2008), move closer to context-embedded assessment than the original MSCEIT items. They remain, however, normative-judgment tasks rather than tests of real-time causal attribution under self-relevant ambiguity, and are therefore not designed to detect interpretive miscalibration as we describe it. Recent EQ measure-

ment has narrowed but not closed the gap the present paper identifies.

Recent work in this journal has argued more broadly that ability EI measurement should reconnect to emotion theory in order to design stimuli, scenarios, and response options coherently, drawing variously on basic-emotion, dimensional, appraisal, and constructionist frameworks (Hoemann & Mortillaro, 2024). The present paper agrees with that diagnosis and complements it. Where Hoemann and Mortillaro emphasise the choice of theoretical framework for stimulus design and criterion-setting, we identify a structural gap *within Branch 3 itself* that survives any of those design choices, namely the absence of situated causal attribution under self-relevant ambiguity. The two contributions are complementary: theirs is about how emotion theory should inform what EQ tests measure; ours is about which Branch 3 subcomponent is currently missing from what they measure.

Third, the **laboratory ecology of EQ research**. Most EQ measurement uses stimuli (photographs of facial expressions, vignettes describing emotional situations) in which the perceiver–target relationship is neutral and the perceiver has no personal investment. Interpretive miscalibration is most diagnostic precisely when self-relevance is present. The phenomenon is largely invisible in the standard paradigm because the paradigm strips away the conditions under which it emerges.

Taken together, these features mean that the EQ literature has not so much rejected the dissociation as failed to test for it: the dominant measurement practice aggregates the branches whose separation matters most, uses understanding items insensitive to the relevant failure mode, and tests in conditions where the failure mode is least likely to surface. The hypothesis we advance is not that the existing literature is wrong, but that it has been measuring something that, on closer inspection, has two separable parts, and the second of the two may explain outcome variance the field has not yet isolated.

#### **4. The Asymmetry: Why High Detection Without Situated Attribution Can Be Worse Than Low Detection**

The four-cell typology contains an empirical claim that is, on its face, counterintuitive: that Cell 4 (Interpretive Miscalibration) can produce worse encounter-level interpersonal outcomes than Cell 1 (Affective Underdetection) under specifiable conditions. The claim is counterintuitive because a simple aggregate-scoring interpretation of EQ predicts a monotonic relationship between perception and outcome, where more perception is better. We argue that the relationship is not monotonic in the high-detection, low-

attribution cell, and that the asymmetry holds primarily in contexts where detected cues are ambiguous, relationally consequential, and likely to trigger action.

The mechanism is straightforward once stated. Detection without accurate attribution produces no committed interpretive stance toward the target; the individual notices something is happening but has not taken a position about it. Detection with confident misattribution produces a committed-but-wrong stance, which then propagates to interpersonal outcome through whichever channel the perceiver does not regulate away. Three channels are relevant. *Behaviourally*, the colleague's flat tone, read as displeasure with the self, may elicit defensiveness, pre-emptive apology, or accusatory communication. *Expressively*, even when overt response is suppressed, the stance leaks through atmospheric coolness, micro-expression, prosodic distance, and silent withdrawal, all of which the target can detect without being able to point to a discrete act. *Cognitively*, each subsequent encounter is filtered through the prior misattribution, so the misreading entrenches and compounds across interactions without requiring fresh behaviour to do its damage. The high-detection, low-attribution individual is not necessarily *silent*; the individual is *committed* to a specific (wrong) reading, and that commitment leaks through whichever channel is open. Cell 1, in contrast, has nothing to leak: no committed reading, no propagating stance, no compounding entrenchment. The danger is amplified when attributional error is paired with high subjective confidence, because confident misreading is held with the certainty that resists revision under correcting evidence.

Structurally, this is an action-tendency argument rather than an overt-action argument. Theoretical accounts that treat the *action tendency* generated by emotional construals as the principal cognitive-behavioural payoff (Frijda, 1986; Scarantino, 2017) note that action tendencies can be expressed, inhibited, or rerouted. The asymmetry between Cell 4 and Cell 1 is therefore an asymmetry of *committed action tendency*: Cell 1 generates none, because no committed reading is in place; Cell 4 generates one, and incurs the costs through whichever channel of expression, suppression, or cognitive entrenchment the perceiver does not regulate away.

The empirical case rests on three established literatures, rejection sensitivity, hostile attribution bias, and paranoid cognition in non-clinical populations, that describe individuals who plausibly fit components of the high-uptake, low-attribution profile and document worse outcomes than those of low-detection controls. Each is treated below; Section 4.4 is explicit about what they do and do not establish.

#### ***4.1 Rejection sensitivity as a partial case***

Rejection sensitivity (RS), developed in the Downey laboratory across an extensive literature (Downey & Feldman, 1996; Romero-Canyas et al., 2010), describes individuals who anxiously expect, readily perceive, and intensely react to rejection cues. The empirical pattern across thirty years is consistent: high-RS individuals show heightened uptake of cues consistent with rejection, lower detection or response thresholds for negative-affect facial expressions, increased attention to potentially rejecting cues (Berenson et al., 2009), more vivid memory for rejection-relevant information, and elevated physiological reactivity to rejection cues (Downey, Mougios, Ayduk, London, & Shoda, 2004). Aggregate EQ scoring would treat this elevated uptake as an asset.

The empirical pattern reveals the opposite. High-RS individuals report more relationship dissatisfaction, conflict, loneliness, and depression. The RS literature documents that the mechanism is not failure to detect signal but systematic misattribution of its cause: ambiguous cues are read as personally rejecting, neutral cues as ambiguous, minor negative cues as catastrophic. RS frames this as a personality-clinical phenomenon. We propose it can also be read, structurally, as a clinical instantiation of an EQ-architectural failure mode, on the understanding that the RS evidence base does not by itself demonstrate the full Branch Dissociation profile. We return to the limits of the inference in Section 4.4.

#### ***4.2 Hostile attribution bias***

Hostile attribution bias (HAB), originally documented in conduct-disordered children (Dodge, 1980; Dodge & Crick, 1990) and extended to adults (Wilkowski & Robinson, 2008), describes the tendency to interpret ambiguous social cues as hostile in intent. High-HAB individuals are not under-detecting cues but over-attributing hostile intent to detected cues. Their interpersonal outcomes are worse than low-HAB individuals': more aggression, more conflict, lower-quality relationships.

HAB and interpretive miscalibration are structurally similar but differ in input domain: HAB is over-attribution of hostility to ambiguous behavioural cues; interpretive miscalibration is over-attribution of self-relevance to ambiguous affective cues. The two are likely correlated empirically (shared attributional machinery), but not identical: the relationship is parallelism with domain difference.

### ***4.3 Paranoid cognition in non-clinical populations***

A smaller but illuminating literature, Kramer's work on paranoid cognition in organisational settings (Kramer, 1994, 1998), documents that healthy adults under evaluative scrutiny, including new employees, members of low-status groups in high-status organisations, and individuals undergoing performance review, exhibit transient hyper-vigilance to interpersonal cues paired with biased interpretation. They take up more affective signal than under neutral conditions and read more of it as being about themselves. The literature treats this as a context-dependent state, but the structural pattern resembles what RS and HAB describe in trait form: heightened uptake, biased attribution, worse outcomes.

### ***4.4 What the Existing Literatures Do and Do Not Establish***

The convergence across three literatures is suggestive but should not be over-read. Each literature documents components of the profile we describe, not the full profile. Specifically, the existing evidence base supports the following.

It supports *heightened affective cue uptake* in the relevant populations: lower detection or response thresholds for negative affect (RS; Berenson et al., 2009), increased attention to ambiguous behavioural cues (HAB), and elevated vigilance under evaluative scrutiny (paranoid cognition). The RS literature has not, to our knowledge, run signal-detection-theoretic  $d'$ -prime analyses cleanly separating sensitivity from criterion shift; most evidence is reaction-time, attention-allocation, neural-response, and memory-bias data. This is closer to "liberal response criterion" than "high perceptual accuracy" in the strict signal-detection sense. A high-RS individual may say "the smile cooled" more often than a control, but this reflects criterion shift rather than necessarily superior discrimination. The framework's measurement contribution is partly motivated by this gap: separating perceptual sensitivity from response criterion within a residualised score requires the kind of within-subject design the present paper proposes. Importantly, the framework does not require uptake to be globally elevated; selectively elevated uptake of negatively-valenced or threat-relevant cues is sufficient for the misattribution mechanism to operate. The most likely empirical pattern, consistent with the rejection-sensitivity, hostile-attribution-bias, and paranoid-cognition literatures, is that Cell 4 perceivers are selectively threat-attuned rather than globally hyper-attuned. This selective pattern would not collapse the construct into trait neuroticism, because the diagnostic profile is not high uptake alone but the combination of high uptake, miscalibrated attribution, and high subjective confidence; neuroticism does not, by itself, predict that combination.

It supports *systematic misattribution of self-relevance under ambiguity*: ambiguous cues read as personal rejection (RS), ambiguous behaviour read as hostile intent (HAB), neutral evaluative situations read as personally threatening (paranoid cognition). This is the attribution side of the profile, and the evidence here is reasonably strong.

It supports *worse interpersonal outcomes* for individuals high on each of these constructs.

Two empirical pointers warrant noting. The dissociation between performance-based and self-report measures of emotional functioning (Mauss & Robinson, 2009) matches the pattern Branch-Residualised Interpretation is designed to isolate. Work on the Geneva Emotion Recognition Test (Schlegel, Grandjean, & Scherer, 2014) suggests laboratory recognition accuracy does not straightforwardly predict interpersonal outcomes, a finding the four-cell typology accommodates. Affect-infusion accounts (Forgas, 1995) provide a candidate mechanism for self-relevant biasing of attributional judgments under ambiguity.

What the evidence does *not* yet establish is the full conjunction of (a) perceptual accuracy in the signal-detection-theoretic sense, (b) low situated attribution accuracy, and (c) worse outcomes than affective underdetection, jointly within a single sample within the EQ measurement framework. The combination of heightened cue uptake and miscalibrated attribution under ambiguity, well-attested separately in personality and clinical literatures, has not been recognised within EQ as a perception-to-attribution failure mode. The Cell 4–Cell 1 asymmetry is a prediction the existing partial evidence makes plausible, not a confirmed finding; testing the joint profile directly, using Branch-Residualised Interpretation (Section 6.2) and the Self-Referential Attribution Task (Section 6.3), is the research-programme contribution the paper offers.

## **5. Distinguishing the Construct from Adjacent Frameworks**

The Branch Dissociation Hypothesis occupies territory adjacent to several established constructs. We address seven that are most likely to be raised as potential redescrptions of phenomena already named in the literature.

### ***5.1 Empathic accuracy***

Empathic accuracy (EA), developed since the early 1990s (Ickes, 1993, 2009; Stinson & Ickes, 1992), measures how accurately an observer infers a target's specific thoughts and feelings during interaction.

EA is the closest neighbour to the present proposal; the two must be distinguished carefully. Naturalistic extensions (Zaki, Bolger, & Ochsner, 2008) and recent reviews (Hodges, Lewis, & Ickes, 2015) document the breadth of the EA literature and the absence of self-relevance manipulations within it.

Three distinctions matter. First, *content versus cause*. EA, in its own paradigm vocabulary, measures content accuracy: the observer's ability to identify what the target is thinking or feeling, scored against the target's own report. Interpretive miscalibration concerns causal and self-relevance attribution: not the content of the target's affective state, but the perceiver's attribution of its cause and of its self-relevance. An observer can converge with the target's report on content (high EA) while diverging from intersubjective consensus and predictive outcome on cause attribution by, for example, attributing the target's upset to themselves rather than to its likely cause (low situated attribution accuracy on self-relevance). Second, *paradigm reach*. The dominant EA paradigm uses cooperative dyadic interactions in which the target's thoughts and feelings are not, in general, about the observer. Interpretive miscalibration is most diagnostic precisely when the observer is a candidate cause of the target's affect, when self-relevance is genuinely ambiguous; the EA paradigm has largely not tested this case. Third, *framework affiliation*. The EA literature has developed largely parallel to, rather than within, the EQ measurement tradition. Our proposal is internal to the EQ framework: a refinement of the perception-to-attribution relationship within the four-branch model, not a free-standing construct adjacent to it.

## 5.2 Hostile attribution bias

HAB is treated in Section 4.2; the relationship is parallelism in distinct input domains, with shared chronic-accessibility machinery but distinct operationalisations.

## 5.3 Theory of mind and mentalising

Theory of mind (ToM) describes the capacity to attribute mental states; ToM-literature deficits are documented in autism, schizophrenia, and certain developmental conditions. Interpretive miscalibration is not a capacity claim: the individuals it describes mentalise extensively and effortfully. The failure is mentalising *accuracy* under affective ambiguity with potential self-relevance. The relationship to ToM is layered: ToM provides the capacity that interpretive miscalibration deploys badly. The distinction parallels that between cognitive and affective ToM (Shamay-Tsoory, 2011); the present construct concerns calibration *within* affective ToM rather than capacity *for* it.

#### 5.4 Alexithymia

Alexithymia, in the Toronto Alexithymia Scale tradition (Bagby, Parker, & Taylor, 1994), describes difficulty identifying and describing one's own emotions and an externally-oriented thinking style. It bears on a different axis than interpretive miscalibration. Alexithymic individuals are typically *under*-detectors of affect, both their own and, in some accounts, others' (Grynberg et al., 2012), placing them closer to Cell 1 than Cell 4; the two constructs are likely inversely correlated rather than overlapping. We note alexithymia to forestall the misreading that any deficit in emotional functioning is a deficit in detection.

#### 5.5 Metacognitive monitoring

The metacognition literature (Dunlosky & Metcalfe, 2009; Fleming & Lau, 2014) documents dissociations between subjective confidence and accuracy. Interpretive miscalibration can be read as a species of metacognitive miscalibration: confidence about a wrong attribution. We accept the layering and decline the reduction: metacognitive miscalibration is content-neutral; interpretive miscalibration is content-specific, concerning systematic over-attribution of self-relevance to detected affective signal. The relationship is genus and species; empirical connection would be a productive extension.

#### 5.6 Predictive-processing accounts

The predictive-processing tradition (Seth & Friston, 2016; Barrett & Simmons, 2015) treats social perception as iterative updating of a generative model under priors. Strong self-referential priors would pull interpretation toward the self, which is precisely what the Branch Dissociation Hypothesis predicts. The Hypothesis is consistent with predictive-processing framings without requiring them; chronically high precision on self-referential priors is a candidate mechanism for direct empirical test.

#### 5.7 Appraisal theory

Appraisal theories (Scherer, 2009; Frijda, 1986; Ellsworth & Scherer, 2003) treat emotion as the output of structured evaluation along dimensions including relevance, goal-congruence, agency, and coping potential. Appraisal accounts typically explain *the perceiver's own emotional response*; the Branch Dissociation Hypothesis concerns *the perceiver's attribution of another's affect*. The two are not in competition; the overlap is substantive where appraisal extends to social and interpersonal appraisals. The "agency" dimension (who or what caused the eliciting event) maps onto the causal-attribution component of situated affective attribution: self-referential bias is, in appraisal-theoretic terms, systematic over-attribution of

agency to the self under ambiguity. Roseman's (1996) appraisal taxonomy makes agency-attribution explicit, and MacCann and Roberts's (2008) Situational Test of Emotion Understanding was built on Roseman's framework. The Branch Dissociation Hypothesis identifies *which* appraisal dimension (agency under self-implicating ambiguity) the EQ measurement tradition has under-tested, with the gap localised within Branch 3 rather than between branches. This is the appraisal-theoretic complement to Hoemann and Mortillaro's (2024) argument that EI measurement should be theory-anchored. The framework imports the agency-attribution component into the EQ measurement tradition, which has not historically engaged with appraisal-theoretic vocabulary, and addresses the boundary question of why attribution belongs in EQ rather than general social cognition: emotions are relational, take objects, and have causes; identifying the cause is part of understanding the emotion.

### ***5.8 The theoretical core and three anticipated objections***

The framework's core claim is that affective signal uptake and situated causal attribution are separable within emotional intelligence; their dissociation becomes consequential under self-relevant ambiguity, where sufficient cue uptake plus miscalibrated attribution plus subjective confidence produces misdirected action rather than non-response. The resulting profile, interpretive miscalibration, is theoretically distinct from simple low EQ because it produces misdirected action rather than mere absence of action.

Three theoretical objections deserve direct engagement. *First, that the framework is "attribution theory under a new name."* Attributional bias has been developed extensively across personality and clinical traditions, but it has not been placed inside the perception-to-attribution transition of the EQ framework, nor has the high-uptake, low-attribution profile been theorised as asymmetrically costly within an EQ-architectural failure mode. The novelty is the architectural location of the failure, not the existence of attributional bias itself. *Second, that Branch 1 and Branch 3 are already separate in the four-branch model.* The model separates perception and understanding in principle, but it does not isolate situated causal attribution as a critical subcomponent of understanding, nor theorise this profile as distinctly costly. The framework refines the model rather than replaces it. *Third, that the "high detection" premise may be empirically unstable,* since what looks like high detection in the supporting literatures may reflect criterion shift, threat bias, or vigilance rather than perceptual sensitivity in the strict signal-detection-theoretic sense. The framework's theoretical base is therefore *sufficient affective signal uptake to enable attributional action*, not strict perceptual superiority; the profile that matters is signal uptake, miscalibrated attribution, and subjective confidence in conjunction, restricted to the conditions specified in Section 4.

### 5.9 What the novelty consists in

The novelty can be stated positively as a conjunction of three claims. *First*, the profile, hidden by aggregate EQ measurement and by existing Branch 3 instruments, can be isolated by residualised branch-level scoring under self-relevant ambiguity. *Second*, this profile structurally unifies a set of personality and clinical phenomena the field has treated as separate. *Third*, the profile predicts worse outcomes than affective underdetection in a specifiable subset of contexts: ambiguous, relationally consequential, action-eliciting affective cues. None of the three claims is novel on its own. The novelty is the architecture that joins them, and it generates differential predictions distinguishing the framework from rejection sensitivity (RS). *First*, residualised scores from EQ-architecture instruments are predicted to explain interpersonal-outcome variance over and above RS scores; if RS were the entire story, the residual should be redundant. *Second*, the framework predicts the profile in populations where RS is absent or low, including high-status individuals whose miscalibration takes the form of over-attribution of self-relevance to authority-positional cues rather than rejection cues. *Third*, interventions targeting attribution rather than rejection-anxiety should generalise across these populations, whereas RS-specific interventions should not. The framework is not a redescription of RS but an architecture-level claim about which Branch-3 subcomponent fails.

## 6. The Constructionist Objection, a Measurement Strategy, and a Proposed Paradigm

### 6.1 The constructionist objection

A reader familiar with the constructionist programme (Barrett, 2006, 2017; Russell, 2003; Lindquist, 2013; Gendron & Barrett, 2009; Lindquist et al., 2012; Wilson-Mendenhall et al., 2011) will object that the framework presupposes a problematic transmission model. On the constructionist view, emotions are not sent from a target to be detected accurately or inaccurately by an observer; they are constructed in the perceiver from interoceptive, conceptual, and contextual inputs. The notion of detection accuracy assumes a fact of the matter about what the target is feeling, prior to and independent of the observer's construction. Constructionism rejects this.

We accept the seriousness of the objection and engage with it. Even on a fully constructionist view, two processes occur: registration of bodily, vocal, postural, and contextual signal from the target, and

construction of an interpretation by integrating that signal with the perceiver's priors, state, and self-relevant concerns. These need not be coextensive in their accuracy. Some perceivers register signal well and construct interpretations that converge with intersubjective consensus and predictive utility; others register signal well but construct interpretations that systematically diverge from consensus and fail predictively. The dissociation, in constructionist language, is between the fidelity of signal registration and the calibration of interpretive construction. Constructionism on this reading does not eliminate the dissociation; it relocates the work the dissociation does, from "perceiving correctly versus incorrectly" to "registering signal versus calibrating its construction." We acknowledge a stronger constructionist objection: that under modern psychological constructionism, perception and prediction are not sequential but co-constitutive, so even our two-process reframing preserves a sequential architecture constructionism rejects. We accept this concession. The framework's substantive claim survives it, however, because what residualisation isolates is a behaviourally consequential individual-difference variable: variance in how a perceiver's interpretation of detected affective signal converges with predictive utility for interpersonal outcome, regardless of whether the underlying perception-construction process is sequential, parallel, or fully integrated. Reframing the dissociation in terms of predictive-outcome calibration rather than intersubjective consensus alone removes the implicit appeal to a privileged categoriser, and the framework remains testable: the question becomes whether the residual variance predicts behavioural outcomes, not whether it tracks a metaphysically privileged correctness criterion. The framework is therefore offered as a refinement compatible with constructionist commitments rather than as a transmission-model holdout.

### *6.2 Branch-Residualised Interpretation as a measurement strategy*

The dissociation faces a measurement-confound problem. Any task requiring interpretation also requires detection as input; an observer cannot interpret a signal they have not detected. Naive interpretation scores are contaminated by detection variance, and the diagnostically interesting profile (high detection, low situated attribution) cannot be cleanly identified using interpretation scores alone.

The principled solution is to score situated attribution as the residual after regressing it on detection accuracy. We refer to this as **Branch-Residualised Interpretation**. Detection is measured using existing instruments (Reading the Mind in the Eyes Test, Baron-Cohen et al., 2001; Diagnostic Analysis of Non-verbal Accuracy, Nowicki & Duke, 1994; or purpose-built stimuli). Situated attribution is measured using tasks that hold detection demands constant but vary the attribution required: what is the cause of the detected affect, and is the perceiver among its candidate causes? The residualised score captures variance

in attribution accuracy unattributable to detection accuracy; the diagnostic profile becomes operationally tractable as the residual on the low end (Figure 2).

The residualised approach has methodological costs. It requires within-subject measurement of both branches with adequate reliability, and situated-attribution tasks that are genuinely separable from detection. Building such tasks is the central methodological contribution that empirical work on the construct will need to make. We sketch design principles below. Residualised scores should therefore be interpreted cautiously: their reliability depends on the reliability of both component measures and on the stability of the detection-to-attribution relation across tasks, samples, and contexts. Initial validation studies should also measure and statistically control for baseline state-anxiety and acute stress to isolate the trait component of Branch-Residualised Interpretation from state-driven variance.

Before treating the residual as a substantive psychological construct rather than as leftover variance, three pre-validation steps are required. *First*, cross-task intercorrelation: residuals from at least two methodologically distinct situated-attribution tasks should correlate at a magnitude consistent with measurement of a common latent construct rather than task-specific noise. *Second*, factor structure: on a holdout sample, latent-variable modelling should establish whether the residual loads on a single factor or fragments into task-bound components. *Third*, reliability under realistic conditions: simulation should characterise how the residual behaves when component reliabilities are moderate (.7–.8), and whether regression-toward-the-mean artefacts inflate or attenuate outcome correlations. Each is a precondition for the construct-level claims that follow. We therefore recommend that any first empirical paper using Branch-Residualised Interpretation report all three diagnostics before treating the residual as a basis for inference about Cell 4 membership.

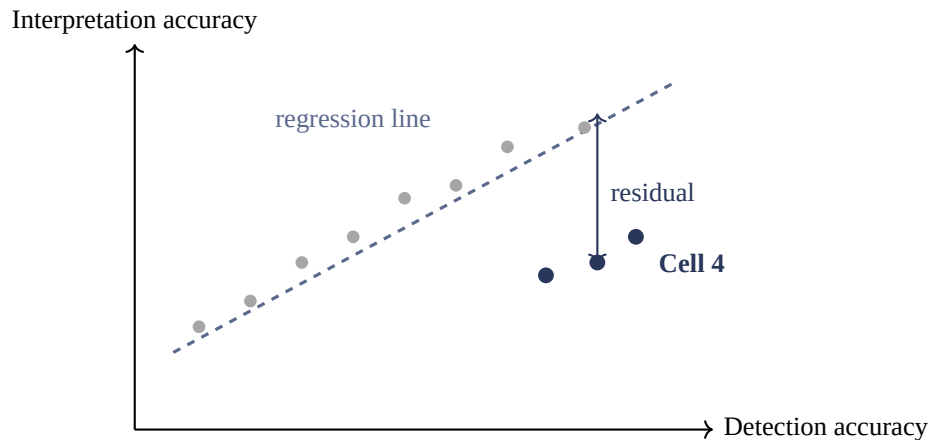


Figure 2. *Branch-Residualised Interpretation, schematic.* Each point represents one perceiver. The dashed line is the regression of interpretation accuracy on detection accuracy across the sample. Cell 4 perceivers (dark points) appear as below-the-line outliers at the high-detection end. The residual (vertical arrow) is the construct of diagnostic interest.

### 6.3 The Self-Referential Attribution Task

We propose a paradigm, the **Self-Referential Attribution Task (SRAT)**, designed to elicit the dissociation under the conditions where it is most diagnostic. The “self-referential” qualifier draws on the self-reference effect literature (Rogers, Kuiper, & Kirker, 1977; Symons & Johnson, 1997), extended here from the memory domain in which it was originally documented to the causal-attribution domain. The paradigm has three design principles.

*First, the affective signal in each stimulus should be unambiguous as signal but ambiguous as cause.* The target is clearly experiencing affect (a confederate’s expression, prosody, or posture leaves no doubt something is being felt) but the cause is open across two or more candidates, of which the perceiver is one.

*Second, self-relevance is manipulated systematically.* Stimuli vary across three conditions: clearly other-directed (cause unambiguously not the perceiver), genuinely ambiguous (perceiver one of several candidate causes), and clearly self-directed (perceiver unambiguously implicated). The ambiguous condition is diagnostic; the others serve as upper and lower comparison anchors.

*Third, the cause of the confederate’s affect is fixed by the experimental design rather than inferred from self-report.* The situational cause is set in advance and known to the experimenter but not to the perceiver. Confederate self-report is not used as comparison criterion (constructionist critics would reasonably reject

the subjective-narrative layer it introduces); the design-fixed situational cause does not raise that issue. The choice is methodological, not metaphysical: the SRAT does not claim a target-side fact about what the confederate is “really” feeling, only a design-fixed fact about the situation in which the affect arose. Without that, the construct cannot be measured; with it, the residualised situated-attribution score isolates the variance the Hypothesis predicts will be diagnostic.

*Confidence is measured alongside attribution.* On every trial, the perceiver indicates both attribution and subjective confidence. The diagnostic signature of interpretive miscalibration is error paired with high confidence; what distinguishes Cell 4 from honest uncertainty is incorrect self-referential attribution combined with unwarranted certainty. Trial-level confidence ratings make this combination measurable and connect the SRAT to the metacognitive-monitoring literature (Section 5.5).

A pilot SRAT could be built using video stimuli of trained confederates, with self-relevance manipulated by varying whether the perceiver is told the affect arose when they were present, were being discussed, or were unconnected. As an illustrative item, a participant might view a confederate exhibiting clear but ambiguous-cause negative affect (e.g., a sigh and a brief downward gaze) and then be asked to attribute the cause among four candidates: the participant themselves, the confederate’s own preceding situation, a third party, or a non-social cause. The participant’s response is scored against the design-fixed situational cause (or, where the experimenter judges it methodologically appropriate, against confederate self-report, with the constructionist caveat noted above). The methodological care is in the calibration of ambiguity; the construct stands or falls on whether the diagnostic condition is genuinely ambiguous on its face.

Demand characteristics are a known risk; mitigation follows the rejection-sensitivity laboratory tradition: between-subject self-relevance manipulation, cover stories disguising diagnostic intent, and post-experimental probes for participant suspicion. Validating ambiguity is itself a methodological task. We propose a two-stage pre-test. *Stage one* collects attribution distributions for each candidate stimulus from an independent pilot sample without self-relevance manipulation; a stimulus qualifies for the ambiguous condition only if its attribution distribution is dispersed across multiple causes (e.g., no single cause receiving more than 50% of attributions, entropy exceeding a pre-specified threshold). *Stage two* tests whether self-relevance manipulation moves the distribution in the predicted direction in a separate pilot sample. Stimuli failing either stage are revised or dropped. The procedure follows calibration practices in other ambiguity-sensitive paradigms and is the methodological gate that turns the SRAT from a conceptual paradigm into an instrument (Figure 3).

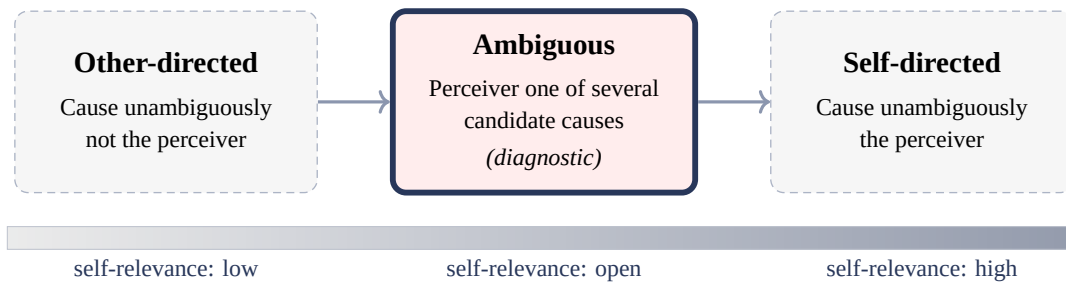


Figure 3. The Self-Referential Attribution Task varies self-relevance across three conditions while holding affective signal clarity constant. The ambiguous condition (centre, heavy solid border) is diagnostic of interpretive miscalibration; the dashed-border conditions serve as upper and lower comparison anchors. The gradient strip below indexes the underlying self-relevance dimension.

#### 6.4 A note on artificial systems

Artificial systems performing emotion classification provide a useful contrast case in the SRAT: they lack first-person self-implication and should not generate the self-referential bias the framework describes, though they may inherit other attributional biases from training data. The AI contrast is offered as illustrative; readers who find it out of scope can disregard P6 without affecting the rest of the prediction set. The empirical case is developed elsewhere.

## 7. Nine Predictions

The Branch Dissociation Hypothesis generates nine numbered predictions of varying riskiness, each falsifiable using existing instruments or extensions of them, and each open to other researchers as a programme of work.

**P1. Residualised score.** When situated attribution accuracy is regressed on detection accuracy, the residual is predicted to explain variance in interpersonal outcomes (relationship satisfaction, conflict frequency, occupational performance) over and above either branch alone, composite EQ scores, and trait neuroticism, negative affectivity, and trait anxiety. The discriminant-validity claim is built into the prediction.

**P2. Asymmetry.** Cell 4 (Interpretive Miscalibration) is predicted to be associated with worse encounter-level interpersonal outcomes than Cell 1 (Affective Underdetection) in contexts where detected affective cues are ambiguous, relationally consequential, and likely to trigger self-referential interpretation, holding general cognitive ability, trait neuroticism, negative affectivity, and trait anxiety constant. If the

asymmetry does not survive these controls, the construct collapses to known affective-trait variance and the framework is falsified at the construct level. Longer-horizon aggregate-outcome differences depend on contingencies set out in Section 8.1.

**P3. *Paradigm sensitivity.*** The asymmetry is predicted to be stronger in tasks that introduce self-relevance than in standard EQ measurement tasks; within-subject variation in self-relevance is predicted to produce within-subject variation in attribution accuracy.

**P4. *Clinical convergence.*** Measures of rejection sensitivity, hostile attribution bias, and non-clinical paranoid cognition are each predicted to correlate with Branch-Residualised Interpretation at small-to-moderate magnitude or larger, with the strongest associations emerging under self-relevant ambiguity. A common-factor structure across the three is plausible but is offered as a stronger exploratory hypothesis rather than a primary prediction.

**P5. *Intervention heterogeneity.*** Detection-side EQ training (micro-expression recognition, prosody training) is predicted to produce positive returns on interpersonal outcomes in Cells 1 and 3 but attenuated, null, or potentially negative returns in Cell 4. Existing meta-analytic heterogeneity in EQ-training effects is predicted to be partly explained by the cell distribution of trainees.

**P6. *Artificial-systems gap.*** Current vision-language systems performing emotion classification may outperform high-detection, low-attribution human participants on the SRAT under self-relevant ambiguity, while showing no comparable advantage on standard EQ tasks that lack self-relevance manipulations. The prediction is that the human–AI gap is moderated by self-relevance, not that AI is generically more emotionally intelligent than humans. The empirical case is developed elsewhere.

**P7. *Cross-cultural moderation.*** The asymmetry is predicted to be moderated by cultural variation in self-construal (Markus & Kitayama, 1991). Individuals with strongly independent self-construals are predicted to show greater self-referential bias under ambiguity; individuals with strongly interdependent self-construals are predicted to show greater other-referential bias of a structurally analogous form. The dissociation should generalise; the directional bias should not.

**P8. *Developmental trajectory.*** Interpretive miscalibration is predicted to emerge developmentally during periods of heightened self-relevant evaluation (early adolescence, role transitions in adulthood) and to be predicted in childhood by attachment-related measures of expected rejection.

**P9. *Stance mediation.*** The Cell 4 / Cell 1 outcome asymmetry is predicted to be mediated by the

perceiver's committed interpretive stance toward the target, indexed at two levels. *Index 1, behavioural-response frequency*: self-reported overt responses (defensiveness, withdrawal, pre-emptive apology, accusatory communication, or similar relationally-consequential responses). *Index 2, target-reported stance*: the relational partner's perceptions of perceiver warmth, engagement, and felt judgement, which capture the expressive and atmospheric leakage of stance even when overt response is suppressed. When either index is included as a mediator, the direct path from cell membership to encounter-level outcome should attenuate substantially; with both indices included, the indirect path through stance should carry the bulk of the asymmetry effect. If the asymmetry persists with both indices controlled, the mechanism is not stance-mediated and the framework's central explanatory claim is incorrect. State anxiety, baseline reactivity, and trait neuroticism should be controlled to isolate stance-mediation from arousal-driven response.

P6 and P8 are the riskiest of the nine; P1, P2, and P9 are the most directly testable using existing branch-level data and standard mediation analysis.

## 8. Boundary Conditions, Open Questions, and Practical Implications

### 8.1 Boundary conditions

Four boundary conditions deserve flagging; the fourth (*social-ecological symmetry*) is the most consequential for applied use and is treated last because it depends on the architecture established by the other three. *First, signal floor effects*. In conditions of very low affective signal there is nothing to misinterpret; the Hypothesis predicts effects in conditions of moderate-to-high signal clarity, not in noise. *Second, motivated access*. Self-relevance does not always degrade attribution. In long-standing relationships where the perceiver has accumulated diagnostic information about the target, self-relevance gives privileged access. The Hypothesis applies most cleanly when the perceiver's prior on the target is weak relative to their self-referential priors. *Third, time horizon*. The Cell 4–Cell 1 asymmetry is a function of time horizon. Short-term, a single Cell 4 misattribution typically produces a more visible cost than a single Cell 1 non-detection. Over years and decades, costs may converge or diverge depending on whether miscalibration produces relationship dissolution (removing future opportunities for it) or chronic damage, and whether non-detection produces career stagnation or benign incompetence. The asymmetry claim is strongest at encounter scale and progressively more contingent over longer horizons. *Fourth, social-ecological symmetry*. The framework assumes a roughly symmetric social ecology in which self-referential attri-

bution under ambiguity is, on average, a calibration error. In contexts of substantial status asymmetry, identity-based threat, or prior interpersonal harm, self-referential attribution may track real signal rather than miscalibration. A junior employee correctly reading authority-figure coldness, a minoritised group member correctly inferring bias-driven affect, or a trauma survivor correctly identifying boundary-related cues should not be classified as interpretive miscalibration even when their attributions diverge from majority consensus. The framework should be applied with explicit acknowledgement of this confound, and the residualised score interpreted in light of perceiver position within the social ecology. Cross-position variation in the asymmetry (gender, race, neurotype, status) is an empirically tractable question worth integrating into the research agenda (Section 8.2).

## 8.2 Open questions

The Hypothesis opens a research agenda we cannot ourselves complete. We list the questions we regard as most generative.

- (i) *Re-analysis of existing branch-level EQ data.* Many published studies report MSCEIT subscale scores. A meta-analytic re-examination of branch-level data, applying Branch-Residualised Interpretation, would test P1 and P2 without requiring new data collection. Where the same datasets include behavioural-outcome measures, mediation analysis on the existing data would also speak to P9.
- (ii) *Clinical extensions.* The Hypothesis predicts that interpretive miscalibration will be elevated in populations characterised by self-referential interpersonal bias: borderline personality features (Linehan, 1993), social anxiety disorder, post-traumatic stress with interpersonal aetiology. The therapeutic implication is that interventions targeting attribution rather than detection, particularly cognitive-behavioural protocols developed for rejection sensitivity (Romero-Canyas et al., 2010) and the broader DBT-tradition work on interpretation under affective load, should generalise.
- (iii) *Neural correlates.* Connectivity between regions implicated in interoception (anterior insula), self-referential processing (medial prefrontal cortex, posterior cingulate), and social-affective inference (temporoparietal junction, superior temporal sulcus) provides candidate neural signatures of the dissociation. The Hypothesis predicts that individuals high on Branch-Residualised Interpretation will show distinctive patterns in self-referential network engagement under ambiguous social stimuli.

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- (iv) *Cross-cultural validation.* P7 makes a specific claim about self-construal moderation that requires cross-cultural data sets. WEIRD-sample bias (Henrich, Heine, & Norenzayan, 2010) is a particular risk for a construct rooted in self-referential bias.
  - (v) *Computational modelling.* Bayesian and predictive-processing accounts of social perception (Baker, Saxe, & Tenenbaum, 2009; Seth & Friston, 2016) provide a natural formal language for the dissociation. Chronically high precision on self-referential priors should produce exactly the pattern Cell 4 describes.
  - (vi) *Lifespan and measurement-equivalence questions.* Whether Branch-Residualised Interpretation operates as a stable individual-difference variable, a state-dependent variable, or a stable-but-state-modulated hybrid is an open empirical question with methodological consequences; cross-sectional and longitudinal data across the lifespan would test P8 and connect the EQ framework to developmental and aging literatures on social cognition.
  - (vii) *Intervention design and evaluation.* P5 implies that the EQ-training industry operates on a heterogeneous return surface. A registered evaluation of detection-side versus attribution-side training, stratified by initial cell membership, would test the prediction directly.

### 8.3 Practical implications

If the Branch Dissociation Hypothesis is correct, the framework has practical implications across at least four applied domains, each addressing a different audience and each carrying a specific testable recommendation. Each implication below is also, in effect, a falsification test of the framework. If the Hypothesis is correct, the implications follow; if it is wrong, the predicted intervention asymmetries should fail to materialise in well-powered tests. The applied domains are therefore both audiences and tribunals.

*Clinical practice.* The framework predicts that interventions targeting attribution rather than detection should be the recommended approach for populations characterised by self-referential interpersonal bias. Borderline personality features, social anxiety disorder, and post-traumatic stress with interpersonal aetiology have distinct aetiologies; the framework predicts that each can produce interpretive miscalibration through its own pathway, and that all three may benefit from attribution-targeted protocols. Cognitive-behavioural protocols developed for rejection sensitivity (Romero-Canyas et al., 2010), and dialectical-behaviour-tradition work on interpretation under affective load (Linehan, 1993), already do this kind of work and should generalise to interpretive miscalibration beyond the rejection-specific domain. The

diagnostic implication is that clinicians should distinguish patients with attribution-side problems from those with detection-side problems, because a general-purpose “emotion-perception training” protocol may help one group and harm the other.

*Organisational and leadership selection.* The EQ-assessment industry dominant in human-resources and leadership-selection contexts scores Cell 4 individuals as high-EQ on aggregate measures. The framework predicts that some high-aggregate-EQ candidates carry interpersonal risks aggregate scores miss. Branch-residualised scoring, applied alongside conventional EQ measures, would identify these candidates without requiring existing instruments to be discarded. Conditional on empirical validation, high-stakes EQ-based selection should consult branch-level scores rather than composites.

*Coaching and self-development.* Cell 4 individuals are unlikely to benefit from further perceptual training; detection is already high and the work is on attribution. The framework distinguishes two pathways: detection-side work for Cells 1 and 3; attribution-side work for Cell 4. A self-development literature dominated by detection-side prescriptions is mismatched to the population most in need of help.

*Educational and assessment contexts.* School-based and university EQ programmes that target detection alone may show the heterogeneous returns P5 predicts; programmes including attribution-side modules should outperform single-track programmes on average. The MSCEIT and adjacent instruments need not be replaced: the framework suggests they can be supplemented by Branch-Residualised Interpretation as an additional score from existing branch-level data. Validation on existing large-N MSCEIT datasets is the lowest-cost path to confirming the framework’s practical relevance, and features in the open-questions list (Section 8.2).

Of these implications, the intervention pathway is the most directly testable and is articulated formally as P5.

## 9. Contributions

The paper offers four contributions to the EQ literature, listed here for clarity rather than ambition.

*Theoretical contribution.* The Branch Dissociation Hypothesis. The four-branch model in principle accommodates separable measurement of perception and understanding, but the dominant empirical practice has aggregated them. The hypothesis names the architectural conjunction (high detection paired with low situated attribution under self-relevant ambiguity) that the personality and clinical literatures

collectively imply but have not previously formulated within the EQ framework. The contribution is a refinement of the existing model rather than a replacement; the architecture is preserved and the measurement gap is named.

*Methodological contribution.* Two reusable tools. *Branch-Residualised Interpretation* provides a scoring strategy in which situated attribution accuracy is regressed on detection accuracy and the residual is treated as the construct of diagnostic interest. The *Self-Referential Attribution Task*, with its associated two-stage validation procedure for ambiguity calibration, provides an elicitation paradigm designed to surface the diagnostic profile under conditions that standard EQ tasks have stripped away. Both tools are open for adoption, modification, and falsification by other researchers.

*Empirical-programme contribution.* Nine numbered falsifiable predictions (Section 7) and a seven-item research agenda (Section 8.2). P1 and P2 are testable using existing branch-level MSCEIT data without new data collection. P5 is testable through registered evaluation of EQ-training programmes stratified by initial cell membership. The remaining predictions span clinical (P4), cross-cultural (P7), developmental (P8), and human-AI (P6) domains. The programme is intended to be portable across investigators and laboratories.

*Practical contribution.* Four applied domains, addressed in Section 8.3: clinical practice, organisational selection, executive coaching, educational psychology, and assessment-industry reform. Each carries a specific recommendation that the existing framework, scored at branch level, can already begin to support, and a specific empirical question that would test the recommendation directly (Figure 4).

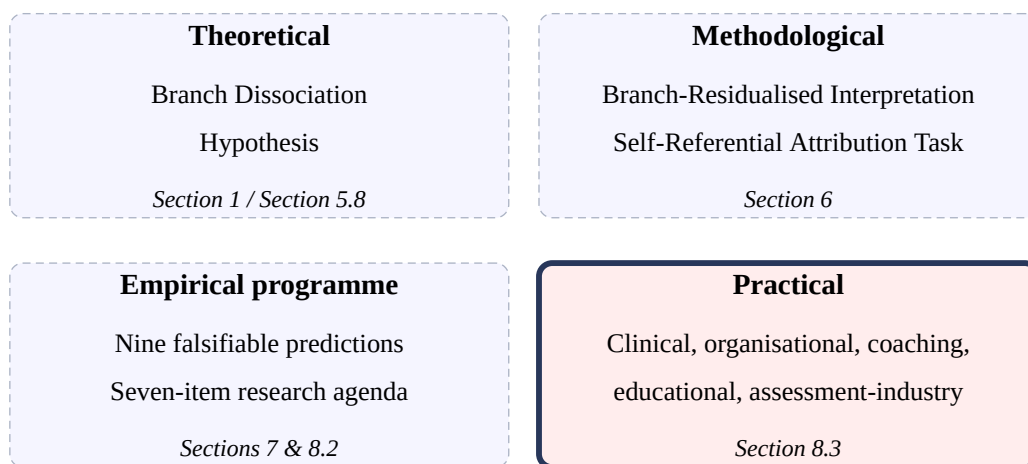


Figure 4. The paper's four contributions to the EQ literature, with section cross-references. The practical contribution (centre, heavy solid border) integrates the prior three into four applied domains.

## 10. Conclusion

The paper offers four contributions: a *theoretical* refinement, the Branch Dissociation Hypothesis, naming the architectural conjunction of high detection and low situated attribution under self-relevant ambiguity; a *methodological* one, comprising Branch-Residualised Interpretation as a scoring strategy and the Self-Referential Attribution Task as an elicitation paradigm; an *empirical-programme* one, comprising nine numbered predictions (Section 7) and a seven-item research agenda (Section 8.2), with P1, P2, and P9 testable using existing branch-level data and standard mediation analysis; and a *practical* one, addressed in Section 8.3 across clinical, organisational, coaching, educational, and assessment-industry domains. Each is open for adoption, modification, and falsification by other researchers.

The four-branch model of emotional intelligence has served the field well, but its measurement practice has hidden a dissociation that the model in principle accommodates. Perception (Branch 1) and the situational, real-time attribution component of understanding (Branch 3) are not coherent within individuals to the degree that aggregate scoring assumes. The Branch Dissociation Hypothesis predicts that the diagnostic profile of high detection paired with low situated attribution, what we call interpretive miscalibration, may produce worse interpersonal outcomes than affective underdetection in contexts where misattribution commits the perceiver to a wrong reading that propagates through behavioural, expressive, or cognitive channels. The asymmetry is structurally predicted by the difference between an uncommitted noticing (which non-detection produces) and a committed-but-wrong interpretive stance (which detection-without-attribution produces). The three convergent literatures discussed earlier provide partial evidence for components of the profile, on the explicit understanding that the existing evidence does not yet jointly demonstrate the full architectural claim.

The framework refines rather than replaces the existing model. It suggests branch-level rather than aggregate scoring as standard, residualised measurement of situated attribution (Branch-Residualised Interpretation), an elicitation paradigm sensitive to self-relevant ambiguity (SRAT), and intervention design that distinguishes detection-limited from attribution-limited cases. Nine numbered predictions and seven open questions are offered to other researchers.

The dinner-table observation is not a curiosity but a clinically and interpersonally consequential phenomenon the EQ framework has the resources to explain. The present paper makes those resources explicit and specifies what is needed conceptually and methodologically to take them seriously, within

the limits of what existing evidence supports. The framework is a refinement of emotional-intelligence theory, showing that affective perceptiveness is not inherently adaptive unless coupled with calibrated situated attribution. The next step is empirical.

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**Data availability.** No new data were collected for this preprint; the contribution is theoretical. Future empirical work arising from the framework will be deposited under separate records as it is conducted.

**Ethics.** No human or animal participants were involved in the research reported in this preprint; ethics approval is not applicable.

**Open materials.** This preprint, including its named constructs (Branch Dissociation Hypothesis; interpretive miscalibration; Branch-Residualised Interpretation; Self-Referential Attribution Task), is released under the Creative Commons Attribution 4.0 International (CC BY 4.0) licence and is open for adoption, modification, and falsification by other researchers.

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