

Detection and Recognition Thresholds: Noticing a Difference without Naming It

Culinary Judgment and Taste Chemistry — Ahmad Issam Maadarani

Official article information

Article author Ahmad Issam Maadarani	Article number 8346	 Scan to verify the article
Article code —	Protection number —	
Reference —		

By **Ahmad Issam Maadarani**

This essay separates detecting a difference, recognising taste quality and rating intensity. One threshold result must not become a comprehensive judgment of professional ability or product quality.

1. Different tasks

Detection asks whether a participant distinguishes a sample from a reference under specified conditions. Recognition asks about the quality or taste type. A person may notice a difference without naming it accurately. Each test needs success criteria, presentation method and decision procedure rather than a broad label of sensitivity. The estimated threshold depends on the measurement task and its implementation.

2. Human comparative evidence

Wise and Breslin studied detection and recognition for sour and salty stimuli [\[WISE13\]](#). Some individual-difference measures correlated weakly despite repeat-test reliability, while other methods altered the pattern. This cautions against treating measures as interchangeable. It does not establish complete separation in every case or offer a comprehensive test of culinary expertise.

3. Different from intensity and quality

Threshold concerns performance near a specified detection or recognition boundary. Describing a clearly perceptible suprathreshold effect is another task. Quality assessment adds a criterion and purpose to a complex dish. A lower threshold does not establish greater liking or fairer judgment; identical thresholds do not establish identical experience in actual portions.

4. Hypothetical example

A judge distinguishes two broths but cannot tell whether taste, aroma or texture accounts for it. That demonstrates discrimination in the task, not causal knowledge. Immediate attribution to salt adds an untested claim. Proceed to independent description and a new comparison without disclosing an expected answer before recording what the participant perceived.

5. Design and reporting

Specify reference, choice procedure, repetition and threshold estimation rule, accounting for chance performance appropriate to the task. Separate selection from naming. One success or failure cannot classify a judge: examine reliable performance in the required domain. The essay gives no home concentrations for test substances and does not use results for health diagnosis or universal professional eligibility.

6. A reference contribution

“Distinguished a difference under these conditions but did not identify its type” is useful evidence, not an incomplete result to fill with guessing. It helps target training toward

discrimination, vocabulary or criterion interpretation. Threshold use in culinary judging remains a limited application proposal rather than proof of worldwide superiority.

7. A Discussion Worksheet

Field	Question	What to Record
Detection	Was a difference discriminable?	Task and success rule.
Recognition	Was the quality named?	An answer separate from selection.
Generalisation	What does the result measure?	Domain boundaries without a comprehensive title.

Philosophical arguments belong to the author. Applications and worksheets are unvalidated proposals, and examples are hypothetical. This article presents no new experimental dataset, claim of worldwide priority or claim that this text has undergone peer review.

8. References and Source Limits

1. **[WISE13]**Wise, P. M., & Breslin, P. A. S. (2013). Individual differences in sour and salt sensitivity: detection and quality recognition thresholds for citric acid and sodium chloride. *Chemical Senses*, 38(4), 333–342. DOI: 10.1093/chemse/bjt003.[Original research](#)

Human comparison of detection and recognition with measurement-method effects.
Source use: publication metadata and abstract; the full text was not reviewed for this edition.

Suggested citation: Maadarani, Ahmad Issam (2026). “Detection and Recognition Thresholds: Noticing a Difference without Naming It”. Analytical essay, version 1.0, 4 October 2026.

© 2026 Ahmad Issam Maadarani.