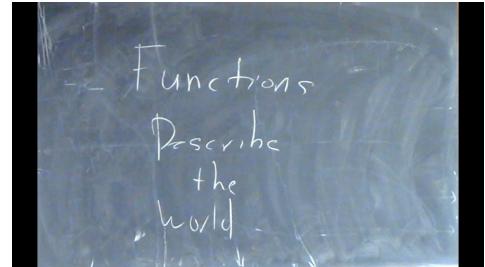


1 Lecture “On Mathematical Maturity” (Thomas Garrity)

What is the object? A recorded lecture by mathematician Thomas Garrity on “mathematical maturity.”

Real-world context / history: Delivered in 2017 to undergraduates and K–12 educators, the talk frames mathematical maturity as the intuition and creativity needed to tackle unfamiliar problems.

Relation to the prompt: While published proofs in mathematics are objective, the *production* of such knowledge relies on subjective elements (intuition, pattern-spotting, abstraction). Hence, mathematics blends an objective end state with subjective means, limiting complete objectivity in its creation.



2 Gua Sha Tool (Traditional Chinese Medicine)



What is the object? A scraping tool used in Traditional Chinese Medicine (TCM), believed to “release toxins.”

Real-world context / history: Practiced for centuries and transmitted culturally (e.g., gifted within families), Gua Sha persists despite a lack of support from evidence-based biomedicine and known risks like skin damage.

Relation to the prompt: Scientific medicine aims at objectivity through falsifiability, controls, and statistics; TCM often appeals to tradition and anecdote. Divergent standards of justification reveal how cultural commitments constrain the attainment and spread of objective medical knowledge.

3 Ravel — *Piano Concerto for the Left Hand in D major*

What is the object? A concerto composed by Maurice Ravel for pianist Paul Wittgenstein, who lost his right hand in World War I.

Real-world context / history: Popular summaries cast it as an inspiring gesture of compassion; in fact, it was a paid commission, and later disputes arose over Wittgenstein’s departures from Ravel’s score.

Relation to the prompt: Short-form, emotionally charged retellings simplify and omit complexities, shaping what audiences “know.” Historical knowledge is filtered through selection and perspective, so complete objectivity in history is elusive.

