



# Understanding Critical Thinking: A Minimal English Approach

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# Critical Thinking (CT) in Education

- Regarded as a core competence among the twenty-first-century skills
- An array of CT courses, programmes and activities across the educational levels have been introduced (Law & Miura, 2015).
- Studies report that students in Asia are generally weak in CT (e.g. Turner, 2006).
- Dominant definitions of, and criteria used to measure, CT are culturally biased against Asian students (e.g. Grosser & Lombard, 2008).





# Problematization

- However, what exactly is CT?
- Do we assume that all educators know and have a shared understanding of what it is?
- CT is supposed to be a pan-human faculty (i.e., regardless of culture).
- To explain it, we must use pan-human concepts, not English ones.
- Otherwise, we end up understanding it from an English perspective.
- Our understand of CT thus becomes 'ethnocentric' or, more specifically, 'Anglocentric' (Wierzbicka, 2013).





# Anglocentrism (an example)

- Take 'stress', a widely discussed idea in 'well-being', as an example.
- Consider WHO's "[doing what matters in times of stress](#)", a guide that comes in a number of languages.
- The Chinese version uses the phrase 'yali' (压力), which is semantically close to 'pressure'.
- However, stress is not pressure and the idea of 'stress' doesn't seem to exist in Chinese culture.
- If Mandarin were the world language, we would probably be talking about 'yali' ('pressure') instead, not stress.





# CT Frameworks and Models

- CT models and strategies – e.g., Bloom's(1956) taxonomy of educational objectives; Toulmin's (1958; 2003) model of argument; Facione's (1990) The Delphi Report; Beyer's (1995) evaluative thinking model; and Paul & Elder's (2008;2020) CT framework
- King and Kitchener (1994) proposed stages of critical and reflective thinking. The goal is to help students achieve the higher stages of development of critical thinking as a result of their experiences.
- Kronholm (1996) provides an instructional model that helps students advance their critical thinking skills through seven phases of instruction and related activity.





# Definitions of CT

- “Active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends” (Dewey, 1933, p. 9)
- “The ability to think critically ...involves three things: (1) an attitude of being disposed to consider in a thoughtful way the problems and subjects that come within the range of one's experiences, (2) knowledge of the methods of logical inquiry and reasoning, and (3) some skill in applying those methods (Glaser, 1941).
- “Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action” (Scriven and Paul 1987).





# Definitions of CT

- “Purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or contextual considerations upon which that judgment is based” (Facione 1990, Table 1).
- “Critical thinking is skilled, active interpretation and evaluation of observations, communications, information, and argumentation as a guide to thought and action” (Fisher and Scriven 1997, p. 20).
- “The practice of identifying, having, and giving good reasons for one's beliefs, values, and actions, given one's goals of truth and avoidance of error” (Possin, 2002).
- “The articulated judgment of an intellectual product arrived at on the basis of plus-minus considerations of the product in terms of appropriate standards (or criteria)” (Johnson, 2014).





# The problems

- Inconsistency and vagueness.
- Complex metalinguistic terms.
- Consider: “The articulated judgment of an intellectual product arrived at on the basis of plus-minus considerations of the product in terms of appropriate standards (or criteria)” (Johnson, 2014).
- What does it mean?
- It implies that to understand CT, one needs to understand the concepts *articulated*, *intellectual product*, *plus-mins considerations*, etc.





# A clear explanation of CT

- To explain CT, we cannot rely on complex English.
- We must explain CT in terms that are minimally English in meaning.
- The explanation must also be maximally clear.
- In sum, the English we use to explain CT must be maximally clear and minimally ethnocentric.





# Enter NSM

- In the early 70's, Wierzbicka started a journey to discover pan-human concepts (Wierzbicka, 1972).
- Decades of study have led to the discovery of over 60 such concepts (Sadow, 2020).
- They are called semantic primes: e.g., I, YOU, SOMETHING, THINK, KNOW, WANT, FEEL, GOOD, BAD, LIKE THIS.
- Semantic primes can combine universally to constitute the *natural semantic metalanguage* (NSM).





# NSM and Minimal English

- NSM's offshoot, Minimal English, is more practical.
- Minimal English allows the use of more complex structures that are nonetheless cross-translatable with minimal loss or gain in meaning.
- NSM and Minimal English can help us better understand CT.
- They can help us explain CT to students.





# A proposed explanation (part 1)

Some people are like this:

“When people like them think ‘It is like this’ about something, they can think in the same way because of this.

These people do not think at the same time, ‘It is good if I can know why it is like this.’

If other people say something like this to them ‘It is not like this’, these people can think that they say something untrue.”

It is bad to be like this.





# A proposed explanation (part 2)

It is good if it is like this:

“When people think ‘It is like this’ about something, it is good if I can know why they think like this.

It is good if I can know why it is like this.

It is good if I can think like this at the same time: ‘Maybe it is not like this. I want to know more. I want to do something because of this.’”





# What the explanation tries to capture

- It is bad for one to accept what one's associates think or say without question.
- It is bad not to consider alternative opinions.
- When people uphold an idea, it is good to know where they are coming from.
- It is good to question the idea.
- It is good to find out more about the idea.





# Discussion and conclusion

- The proposed Minimal English explanation is easy to understand and can be expressed in any language.
- It can be applied to most disciplines and in everyday lives.
- CT does not belong to just HE.
- Scholars and students who question accepted theories exercise CT.
- Ordinary people who question old wives' tales also exercise CT.



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