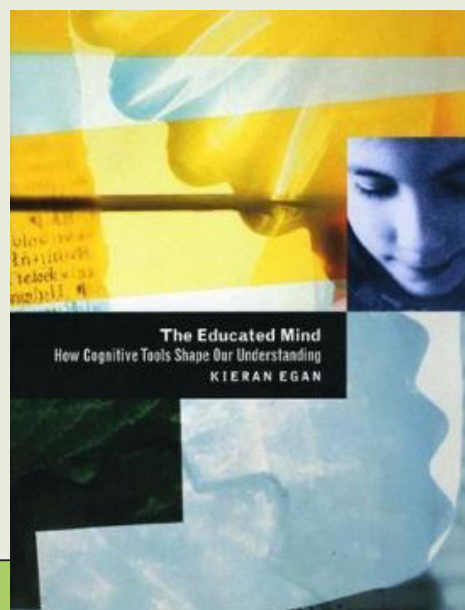


## (A) Egan’s Sources of Ideas

Kieran Egan is a humble man. He did not claim to have created a new theory of understanding. Rather he saw himself piecing together various threads and ideas in disparate fields to become *Five Kinds of Understanding*. No doubt Egan is erudite and he had done a wonderful synthesizing job. So where are the sources of his ideas and what are the outcomes of his synthesis?

Egan has read hundreds, if not thousands, of books, mainly in classics, cultural history, philosophy, psychology, and anthropology. *The Educated Mind* (1997) has a reference list of over 200 titles. Among the books he read, some essential ideas stood out from a few dozen writers, from Greek thinkers to present-day psychologists, whose ideas Egan selected and synthesized. I tried to reconstruct a list below:



**Table 1: Sources of Egan’s Ideas**

	People / Scholars	Main Ideas selected by Egan
Greek Classics	Homer Herodotus Hippocrates Thucydides	Oral culture, myths and epics Record of history Early theoretic thinking Narratives
18th Century	Wordsworth Herder	Romanticism, Imagination Language, Mythic Understanding
19th Century	Giambattista Vico Max Muller Nietzsche Herbert Spencer G. Stanley Hall	Poetic imagination, mythical consciousness Mythic Understanding Binary Opposites Cultural Recapitulation Theory Cultural Recapitulation Theory
20th Century	Cassirer Levi-Straus Whitehead Vygotsky Luria Piaget	Language, myth, symbols and culture Mythology / Mythic Understanding Romanticism, Stage of Understanding Language and Thinking Orality, illiterate culture Stages of Development
Contemporary	Steven Pinker Howard Gardner & Ellen Winner Nelson Goodman Barbara Hardy Max Black Noam Chomsky Merlin Donald Susan Carey David Olson Paul Ricoeur Richard Coe Walter Ong	Language universals Metaphor Metaphor Narrative Metaphor Language Acquisition Device Pre-historic Mimetic culture, Somatic understanding Children’s mind Literacy, orality Hermeneutics Language abstraction Orality, Rhetoric

## (B) How did His Ideas Develop?

Egan was born in Ireland, raised and educated in England and the USA, and settled in Canada for his academic life. Understandably he was imbued with English culture and he acknowledged that he was influenced by William Wordsworth (1770–1850), a great British poet of romanticism. It is likely that in his formative years, Egan studied Wordsworth’s poems and writings in some depth, which became his source of inspiration. Egan took Wordsworth as a “greatly underestimated educated thinker who foolishly expressed his ideas in verse” (1997, p. 279). Egan conspicuously paid tribute to Wordsworth at the end of his book: “I have tried to draw on and develop this ideas. For each of the “literate” kinds of understanding—Romantic, Philosophic, and Ironic—I have emphasized the particular intellectual tools that support imaginative flexibility” (1997, p. 279).

Egan spent years in Simon Fraser observing and teaching children. It appeared he had “inherited” Wordsworth’s lens of looking at children. When Egan postulated his theory of understanding, mythic, romantic, and philosophic understanding are in its core; these ideas were originated from Wordsworth. According to Egan:

Wordsworth wrote extensively and insightfully about education, . . . . He characterizes childhood perceptions and understanding as vivid, bright, and rich—using terms similar to those used by nearly all who have written extensive autobiographies of childhood, and who try to recapture in words a sense of intimate participation in a vividly sensed world (Coe, 1984). That early childhood perception is then disturbed, and the vividness fades “into the light of common day.” . . . In *Intimations of Immortality* Wordsworth makes two responses to this development of a sense of reality. On the one hand, there is a profound and irredeemable sense of loss. “But yet I know, where’er I go, / That there hath passed away a glory from the earth.” On the other hand, he recognizes that something survives after all, something of the early splendor that is “a master-light of all our seeing” and that can continue to vivify the “years that bring the philosophic mind.” (1997, p. 101)

### (C) Timeline of Thinkers on Cultural History

But Wordsworth is just an insightful poet. His insights must be sustained with theories and facts. The most important “facts” come from history, or facts of our cultural history, which are more important than “scientific facts” from psychological experimentation. When Egan published his first book, *Plato, Piaget and Scientific Psychology* (1983), he was already critical of Piagetian findings. As he observed more children and developed his *Primary Understanding* (1988) and *Romantic Understanding* (1990), he began to conceptualize a cultural theory of understanding with the insistence on the importance of imagination.

A comprehensive theory of understanding is hard to come by, but Egan tried to represent it in the progress of cultural history with a historical timeline. First there was mimetic culture where sociality came into being. Then orality and myths developed with an evolutionary advantage. When language and thought grew in co-evolution, literacy or writing became an important invention to push language and thought to a high plateau. Next came romanticism where thought became both descriptive and discursive. All these were encapsulated in cultural recapitulation theory.

As Egan conceptualized his theory of understanding within a historical timeline, he drew upon ideas for dozens of scholars. About ten of them stood out in pioneering these ideas; except for Merlin Donald who are Egan’s contemporaries, all these eminent scholars spread from the 18th to 20th centuries whose ideas and work lent support to Egan’s theories.

**Table 2: Major Thinkers on Cultural History**

Pre-linguistic Cognition	Orality & Myth	Literacy, Language & Thought	Romanticism
<ul style="list-style-type: none"> <li>Merlin Donald</li> </ul>	<ul style="list-style-type: none"> <li>Herder</li> <li>Vico</li> <li>Muller</li> <li>L. Strauss</li> </ul>	<ul style="list-style-type: none"> <li>Vygotsky</li> <li>Lurica</li> </ul>	<ul style="list-style-type: none"> <li>Wordsworth</li> <li>Whitehead</li> </ul>
Mimetic Culture	Oral Culture	Written Culture	Scientific Culture
	Invention of Language	Invention of Writing	Invention of Science

So it is true that Egan’s theory is not new. With its genesis from Wordsworth, it is a synthesis of the past three centuries on cultural history from Vico to Herder, from Muller to Levi-Strauss, and from Vygotsky to Luria. It was then re-conceptualized as cultural recapitulation theory initiated by Spencer and developed by Hall. Egan then supported it with “evidence” of the ancient and the contemporary, the former being “historical” evidence and interpretation of Greek classics and the latter being “scientific” evidence of psychology, anthropology, linguistics, and even neuro-physiology.

### (D) Egan’s Own Summary of Five Kinds of Understanding

So what are these distilled wisdoms of cultural history that Egan put forward to us? Egan summarized them as five kinds of understanding:

“We begin with the Somatic and Mythic kinds, whose basic forms are genetically programmed as a result of our evolutionary history; they come with the human body, in its senses and brain, and with the development of an oral language. Thereafter our general learning capacity comes increasingly into play, enabling us, more laboriously, to develop Romantic, Philosophic, and Ironic kinds of understanding by recapitulating the cultural inventions of literacy, theoretic thinking, and extreme linguistic reflectiveness.” (1997, p. 277)

These five kinds of understanding developed in our history with evolutionary advantage; so that humankind dominated over other species and ruled the world; so that orality and myths developed in all ancient societies; so that the human childhood is unique with linguistic capacities. Egan Explained:



“There were clear advantages to early societies if their younger members learned language very quickly and used it to build workable images of the society and the cosmos—images to which they also developed strong emotional commitments. Their reproductive success of such groups led to the uniqueness of human childhood in the animal world. An advantage also was to be gained in preserving throughout life, even if in diminishing degree as individuals aged, a relatively undifferentiated learning capacity. Such a capacity would allow a degree of adaptability and flexibility in learning the particular skills and lore required within the complex cultural societies that language created.” (1997, p. 277)

It is likely that evolution pushed the human species along with the development of orality and unique linguistic capacities. However, evolution has given us a “hardware” but it is no panacea for all human problems, especially for issues in advanced literate societies. Evolution favors small non-literate social groups in the same ideology but modern culture are built on sophisticated ideas, concepts, artifacts, and values beyond what biological evolution can handle. The implication is that we need an appropriate software of educational programs:

“Evolution has not equipped us ideally for the educational tasks required by advanced literate societies. We are equipped intellectually for the condition of small nonliterate social groups sharing unquestioned ideologies and images of the cosmos. . . . We have to adapt our undifferentiated learning capacity to deal with much more complex and flexible learning than it has been evolutionarily shaped to handle. We cannot tinker with the “hardware” supplied to us by evolution, so we have to adapt the “software” of educational programs in order to subvert the natural constraints on our intellectual flexibility.” (1997, p. 278)

Egan further argued that early learning sets the template which underlies future learning of children. “This early learning is rapid and typically so successful that it remains fixed throughout life, providing a template of presuppositions on which future learning is fitted” (1997, p. 277). This “dynamic language-learning and society-oriented drives” peaks at age four or five and gradually declines while “general learning capacity” begins to pick up. This is where our future education shall begin.

### (E) Egan’s Five Understandings: Features, Tools, Significance

Egan’s theory of understanding is lengthy and complex because it covers the whole human history with development of stages of understanding. I summarize these five kinds below with features, tools, and significance, in which I add my interpretation.

**Table 3: Features, Tool, and Significance of Five Kinds of Understanding**

Kinds (age)	Main Features / Significance	Tools
Somatic (0–2)	<ul style="list-style-type: none"> <li>Body movement / action</li> <li>Pre-linguistic thinking</li> <li>Pleasure-pain principle</li> <li>Seeking-avoidance principle</li> </ul>	Body <ul style="list-style-type: none"> <li>Miming</li> <li>Feeling</li> <li>Finger pointing</li> <li>Body moving</li> <li>Sign language</li> </ul>
	<ul style="list-style-type: none"> <li>Autonomous body movement</li> <li>Help memory / learning</li> <li><b>Intentionality</b></li> </ul>	
Mythic (2–7)	<ul style="list-style-type: none"> <li>Oral culture, storytelling – <b>group identity</b></li> <li>Pre-literate</li> <li><b>Follow leadership</b></li> <li>Stories aid memory</li> <li>It is mythic in the sense that there are gods (supernatural power) to intervene in human affairs. Causal relations and progress of events are less clear.</li> </ul>	Speech <ul style="list-style-type: none"> <li>Rhyme in oral stories</li> <li>Metaphor</li> <li>Binary opposites</li> <li>Images</li> <li>Narratives</li> </ul>
	<ul style="list-style-type: none"> <li>Understanding in story <b>script</b> simplifies understanding, bringing to higher level (such as ideology), leading to culture</li> <li>Level up = <b>structural template</b></li> <li>Story has a structure (problems – conflict – climax – resolution).</li> <li>Conflict has motive and morality (evil → fight → win → good)</li> </ul>	

Kinds (age)	Main Features / Significance	Tools
Romantic (8 – 15)	<ul style="list-style-type: none"> <li>• <b>Hero</b></li> <li>• Limits of reality</li> <li>• Extremes of experience</li> <li>• Enrich simple binary understanding</li> <li>• Adding human dimension Conceptual revolution, new consciousness, freed from memory by invention of writing</li> </ul>	Writing or literacy <ul style="list-style-type: none"> <li>• Written language</li> <li>• Number / quantity</li> <li>• Representation</li> <li>• Inquiry becomes possible</li> </ul>
	<ul style="list-style-type: none"> <li>• Transition from mythic to philosophic understanding</li> <li>• Many of our present-day adult understanding are at this level</li> <li>• It may be good to explore the romantic / Greek structure (individuality, human fate) vs Eastern-structure (collectivity, harmony)</li> </ul>	
Philosophic (15 –)	Systematic / theoretic thinking <ul style="list-style-type: none"> <li>• Crave for <b>generality</b></li> <li>• Search for truth</li> <li>• Human action and control</li> <li>• Quest for certainty</li> <li>• Anomalies</li> <li>• <b>Rationality</b> without affection</li> </ul>	Human mind on: <ul style="list-style-type: none"> <li>• Language and concept</li> <li>• Cultural artifact</li> <li>• Thought</li> <li>• Measurement tools</li> <li>• Information</li> <li>• Technological devices</li> </ul>
Ironic (After 15)	<ul style="list-style-type: none"> <li>• Constant <b>reflection on</b> linguistic forms</li> <li>• Discovery of paradoxes</li> <li>• Uncertainty, limits of conceptual reasons</li> <li>• Self-reflection and self-criticism</li> <li>• Multiple perspectives</li> <li>• <b>Postmodernism</b></li> </ul>	<ul style="list-style-type: none"> <li>• Self-reflection or irony</li> <li>• Metanarratives</li> <li>• Deconstructionism</li> <li>• Meaning, value and affection</li> </ul>

## (F) Initial Review: Three Thought Experiments on Egan's Understanding

In order to help readers and myself to understand Egan's ideas deeper and try out its applicability, I have three thought experiments (imaginary trips): pre-linguistic action, teenager discussion, and mirror room.

### 1. Pre-linguistic Action (About 500,000 years ago)

A young child is following his tribe. They move slowly and quietly. A man examines the surrounding, looks up and points to a group of trees. The focus of all tribesmen is now on the group of trees. The man (leader) picks up a long stick. Others search and get sticks. The leader hits the leaves of a tree. Others do the same on the neighboring trees. A nest falls on the ground resulting in a falling sound. Another nest falls. The leader roars with excitement and picks the eggs and ducklings. Others mimic and do the same. The whole tribe and child eat and share the food, keeping some to bring home. The child witnesses a scene in Mimetic culture. It is pre-linguistic hunting (hunting without language).

The above story shows a sequence of getting food by:  
 Thinking → Vision → Mime → Action →  
 Pre-linguistic speech → Learning

examine	——	thinking
look	——	visual detection
point to	——	finger movement, sign
pick	——	action
get sticks	——	mime
hit	——	action with intentionality
roar	——	pre-linguistic speech
mimicry	——	pre-linguistic speech
witness	——	learning

The child in fact learns a hunting-gathering script which he will reproduce in his later stage of life. This is somatic understanding.

### Kieran Egan: His Books and academic career

Kieran Egan (1942– ) is a Canadian philosopher of education. He was educated in University of London, Stanford and Cornell. He teaches in Simon Fraser University, Canada and has published numerous books on education philosophy and cultural history. Some notable titles are:

- *Education and Psychology: Plat, Piaget, and Scientific Psychology* (1983)
- *Primary Understanding: Education in Early Childhood* (1988)
- *Imagination and Education* (1989)
- *Romantic Understanding: The Development of Rationality and Imagination* (1990)
- *Imagination in Teaching and Learning: The Middle School Years* (1992)
- *The Educated Mind: How Cognitive Tools Shape Our Understanding* (1997)
- *Getting it Wrong from the Beginning: Our Progressivist Inheritance from Herbert Spencer, John Dewey and Jean Piaget* (2002)
- *An Imaginative Approach to Teaching* (2005)
- *The Future of Education* (2008)
- *Learning in Depth* (2010)
- *Imagination and the Engaged Learner* (2015)

## 2. Teenager Discussion (21st Century)

The political conflict between Russia and Ukraine in recent years has escalated into military conflict in February 2022. A teacher in a classroom in Hong Kong played a news clip and asked some teenage students to hold a group discussion on the subject.

Student A: I wonder, in this war between Ukraine and Russia, who are the **good** guys and who are the **bad** guys?

Student B: Ukraine is **good** guy and Russia is **bad** guy.

Student A: So Russia is **wrong**?

Student C: Sure, Russia is **wrong** because it invades Ukraine. Ukraine is **right** because she is defending herself. But Ukraine is unable to stop Russia with its military might. Russia is **strong** and Ukraine is **weak**.

Student D: But USA can supply arms to Ukraine to fight the **evil / wicked** empire. Some European youths are volunteering to go to Ukraine and fight the Russian. How **heroic**; what a **strong** moral sense.

Student E: I **hate** Russian invasion; they kill many civilians. I'm **angry**.

Student F: It is hard to decide **true** and **false**. First, the USA accused that Russia would invade Ukraine on 16 February. Russia didn't do that and condemned it as fake news and **false**. On 24 February, Russia started the war. This time it is **true** news.

While the above is written with a bias of excessive binary opposites in mythic understanding, the way of thinking depicts some common understanding and narrative in our present-day media and among adults, although they add more "facts," here and there, with details and analysis. But many "facts" are fake: for example, Ukraine President Zelenskyy was seen wearing an army uniform on the 4 March 2022 news but in fact the picture was taken a year ago on 21 April 2021. A bombing in Kyiv in February 2022 was in fact a chemical explosion in 2015 in Tientsin, China. And many more<sup>1</sup>.

## 3. Mirror Room (Self-Reflection with Hi-Tech)

Stand in the middle of a room with mirrors in front of and behind you. You will see yourself in the front mirror and the reflection of your back from the back mirror reflected to the front. There are 4 mirrors on 4 sides. When you move around, what you see will be complicated and dizzying. Now, wear a camera that can capture images from all sides of the mirror and project it to your eyes. This powerful camera is 360°revolving, able to zoom in, close up, telescope and videotape. Moreover, you have a drone with video-taping function, that can fly and move in any location and send real time images to you.

You have two tasks:

- (a) Identify and measure the birth mark on your eyelids.
- (b) Measure the average length of your hair on the scalp.

If you open your eyes, you can't see the birthmark on your eyelids. If you close your eyes, you can see nothing at all. You can hardly see your scalp from the mirrors and you have to rely on the drone. Measuring hair length is another challenge. At the same time, you have invented many tools to help: mirror, camera, drone, video recorder, photo-imaging, statistics, etc. You can see from multiple perspectives but you aren't sure which is correct. The above may throw light on the demise and complexity of ironic and self-reflective understanding.

<sup>1</sup> See HILL.TV: War Videos Debunked! (7 March 2022)

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Professor Li received a Doctor of Education from Teachers College, Columbia University. He is a psychologist as well as a pioneering educator of the gifted in Hong Kong. Being the founder of the Gifted Education Council, G.T. College, and the Hong Kong Mathematical Olympiad School, he serves as a consultant and advisor to many local and overseas institutions. He was appointed Visiting Professor in the Institute of Psychology at the Chinese Academy of Sciences (1997) and Fudan University, Shanghai (2016). He is Chief Editor of *John Dewey's Selected Works*, (2017) and author of many scholarly works, the latest being *Rediscovering John Dewey: How his psychology transforms our education* (Palgrave Macmillan, 2020).

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