Professional Resource:

Thinking, Fast and Slow (2011)

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Thinking, Fast and Slow. Kahneman, Daniel. (2011). New York: Farrar, Straus and Giroux.

Cognitive psychologists Daniel Kahneman and Amos Tversky eventually (and unexpectedly) made their mark on the economics world by challenging *rational choice theory*, a theory of classical economics that posits rationality as a bedrock value of market behavior. The associated experiments were simple—indeed, many seem like modified versions of brain-teasers or parlor games—but they nonetheless changed economists' assumptions of the rationality of actors in markets, eventually earning Kahneman and Tversky a 2002 Nobel Prize in Economics. Their key insight was that actual humans, compared to rational actors, are risk averse, and threats of risk (in the form of losing money, say) are twice as painful as the equivalent gain would be pleasurable (Kahneman and Tversky 1984). Hypothetical rational actors of economic theory are, therefore, an inaccurate representation of how markets will actually react to any number of phenomena that involve risk.

Media literacy education is generally concerned not with rational decision-making in markets, but with the development of *critical thinking*. Critical thinking is, reductively, the ability to challenge our assumptions and ask questions about the interplay of content and context. In the words of a group of prominent English educators, in critical thinking, "word-reality relationships must be challenged in every instance" (Alsup, Emig, Pradl, Remmel, and Yagelski 2006, 289). However, like rational actors, it is possible that critical thinkers function more as a hypothetical category of individuals with little relation to the messy, inconsistent humans who are said to be thinking critically. In *Thinking, Fast and Slow*, an artful synthesis of over three decades of cognitive experiments, Kahneman (2011) reveals some

of the limits of conscious mindfulness and deliberative thought on changing ingrained thinking, beliefs, and behaviors.

Ultimately, Kahneman suggests, we are far better at figuring out mistakes in others than in being critical about our own beliefs and choices. It is through no particular fault of ideology or ignorance; it is simply a constant and unavoidable feature of how we think. It would be wrong, though, to say that teaching critical thinking is a wholly futile endeavor, or that humans are solely driven by belief, intuition, and impulse. More accurately, what we call "critical thinking" is really only half of the story of how we operate cognitively on a day-to-day basis.

Critical thinking requires effortful cognitive work (the kind that makes your pupils dilate and your glucose levels drop), and thus falls under the second of two figurative systems—plainly named "System 1" and "System 2"—that comprise human decision-making and psychology (21). System 1, our intuitive and automatic thought processes, makes up the majority of our thoughts and actions. Far from being merely "uncritical," System 1 is actually essential, and usually good enough for interacting in the world: "its models of familiar situations are accurate, its short-term predictions are usually accurate as well, and its initial reactions to challenges are swift and generally appropriate" (25). We depend on intuitive, automatic processes when we move, when we drive a car, or when we filter information in our aural or visual environment to focus. By contrast, System 2 only enters the picture when we are in any situation that requires effortful cognitive work, like solving a math equation, writing an essay, or analyzing a media text.

Problems for critical thinking—including media literacy key concepts like understanding diverse perspectives, identifying omissions, or determining

values and points of view—arise when System 1 and System 2 begin to interact. A thorough catalog of these problems are presented in the first half of *Thinking, Fast and Slow*, in which Kahneman carefully and methodically sets out a general framework for understanding how the mind can succeed and fail when critical thinking is most important. The key insight in this half of the book is that people tend naturally toward *cognitive ease*—using the least amount of energy needed to perform a cognitive task. This has nothing to do with intelligence, education, or innate savvy. It is, according to Kahneman, simply part of how the human mind works.

Because we tend toward cognitive ease, we rely on necessary shortcuts to lighten the burden of effortful thought. We rely on associative memory, so that we are not reinventing our way of thinking with every new problem. We tend to rely on accepted norms (what others are doing or have done) and are susceptible to many forms of subconscious priming. We are naturally inclined to identify agents and causes of phenomena, even when no such cause is responsible. We tend to eliminate our sense of conscious doubt whenever possible. And we do a lot of post hoc justification through which our supposedly critical System 2 becomes "an endorser rather than an enforcer" (103), using the language of rationality to justify what was more accurately an intuitive response.

Our minds are very good, in fact, at justifying our instinctive System 1 responses with plausible System 2 rationalizations. Again, this has nothing necessarily to do with how smart or clever we are, or even how much information about a subject we have at hand. Kahneman claims that we substitute questions we can answer more easily with the questions it may be necessary for us to answer (for instance, one might respond to a question about political policy by answering the more basic question, "Do I like this politician?"). Often, our visceral likes and dislikes determine beliefs that we present in rational language, via a common device called the *affect heuristic*, "in which people make judgments and decisions by consulting their emotions" (139).

Kahneman uses a series of studies on the affect heuristic to single out how media representations in news play on fears, noting that negative framing of an event can change our perception of reality: "The world in our heads is not a precise replica of our reality; our expectations about the frequency of events are distorted by the prevalence and emotional intensity of the messages to which we are exposed" (139).

He also shares results from an experiment in which messages "extolling the benefits of a technology also changed [subjects'] beliefs about its risks" (140). When people liked a particular technology or read a positive evaluation of it, they downplayed or ignored its risks; when they thought it was risky, they saw little benefit of the technology. The outcome applied to both laypeople and experts (in this study, representatives of the British Toxicology Society).

If the ultimate goal of media literacy education is to create the next generation of critical thinkers (NAMLE 2007), it would be wise to reflect on the ways that our fast-thinking System 1 and slow-thinking System 2, in concert, inevitably lead us to a wide variety of common and predictable errors, distortions, and rationalizations that can override critical thinking, skepticism, and tolerance for ambiguity. One general rule that Kahneman provides for those who would seek to improve their capacity to make sound decisions and judgments is, "little can be achieved without considerable effort" (417). Beliefs are stubborn, and easily become part of the fabric of System 1. This is, in part, the basis for the powerful "Solutions Too Easy" button on the Media Literacy Remote Control developed by Hobbs (2011)—a button that is, by Kahneman's logic, easier to apply to media and ideas we find distasteful or risky than to ourselves. Even with considerable effort in his life's work, Kahneman reflects bluntly, "I have made much more progress in recognizing the errors of others than my own" (417).

Kahneman seems ambivalent on the role of education to increase mindfulness and System 2-facilitated questioning in matters of knowledge that is connected to System 1. He describes a study conducted by Nisbett and Borgida that showed that students given explicit instruction in statistical human behavior were no better able to predict the likelihood of a person they saw in a video to exhibit that statistic than students without the instruction. However, a third group of students defied this trend when they saw the videos but were told afterward that the individuals on video exhibited a counter-intuitive trait. In the third case, students accurately gauged the correct statistic in the general population (which they had not yet been told), because surprise shook them out of their intuitive reaction.

The problem, Kahneman explains, is as follows:
People who are taught surprising statistical facts about human behavior may be impressed to the point of telling their friends about what they

have heard, but this does not mean that their understanding of the world has really changed. The test of learning psychology is whether your understanding of situations you encounter has changed, not whether you have learned a new fact… even compelling causal statistics will not change long-held beliefs or beliefs rooted in personal experience. (174)

Instead, he argues:

[S]urprising individual cases have a powerful impact and are a more effective tool for teaching psychology because the incongruity must be resolved and embedded in a causal story… You are more likely to learn something by finding surprises in your own behavior than by hearing surprising facts about people in general. (174)

If critical thinking is, in part, the constant practice of reflective thinking, understanding of diverse perspectives, and questioning assumptions and beliefs based on new experience and new information, then it seems that *experience*—specifically, the experiential impact of applying surprising or counter-intuitive information about the world to our own lives—is important for sustaining new beliefs. At the same time, sometimes information does not, in itself, enact lasting change. I have seen students who have been through media literacy programs complain about how their new knowledge of media construction has "ruined" television, movies, or video games. Have they had personal experiences that cannot be untaught? Or is that "ruination" secretly a sign of failure—of students whose new information does not sync up with their experiences of getting pleasure from media they use and experience?

In Kahneman's example of teaching psychology, knowing and feeling are not always the same—we can know many things that, in application, we will strategically not-know in order to appease our intuitive reaction. There seems to be a clear connection to media literacy education here, which, in teaching the processes of media constructedness, sometimes fails to reach learners and educators where it matters most—in their own lives, beliefs, and behaviors. Media literacy education does a disservice to students when educators believe that they are in a unique category of *critical thinker* or *media literate* without being able to challenge their own lines of thinking and belief. According to Kahneman, keeping intuition and cognitive effort in balance *is* not only a continuing struggle, but also *is* most difficult for us when we feel most certain about our own

correctness. This is a particularly vexing issue in the realm of information credibility, where most appeals to authority, reliability, and thoroughness taught as critical thinking may simply have the gloss of System 2 validity that appeals specifically to our intuitive beliefs. This gloss is part of the anxiety around Pariser's (2012) so-called filter bubble in which websites use algorithms to present information we already agree with. To my mind, Kahneman's studies take this line of thought a step further: our minds are also their own filter bubbles that are merely amplified by intuitive (System 1-friendly?) information technologies.

Thinking, Fast and Slow raises a great number of thorny questions about the relationship between information and persuasion. Persuasive techniques—those techniques that best apply to System 1, or to System 1 with the post hoc rationalization of System 2—are powerful motivators for behavioral change. By contrast, as Kahneman pithily claims, "correcting your intuitions may complicate your life" (192). Critical thinking, perhaps especially about those things which give us most pleasure, requires effort and the counterintuitive propensity to maintain doubt in exactly the situations our minds do the most they can to minimize doubt. It is an uphill battle for everyone.

That said, there are reasons why Kahneman's description of this uphill battle is useful, if challenging, for developing and supporting optimal media literacy education through the development of inquiry and critical thinking in teachers and in students. Kahneman's work refuses easy solutions, and as such is a much better resource for asking questions than it is for supplying answers. This makes *Thinking, Fast and Slow* a nice contrast to the more anecdotal *Blink* by Malcolm Gladwell (2005) and the more polemical *Everything Is Obvious (Once You Already Know the Answer)* by Duncan Watts (2011). All three texts are valuable reading for media literacy educators who seek a better understanding of the opportunities and limits of reflective thinking. They are humbling reminders that critical thinking only works when we view it as an imperfect, iterative process that fails precisely when we most strongly believe it has been mastered.

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