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## Logical Thinking: A Surprising and Promising Insight for Creative and Critical Thinkers

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Abstract: Searchers in various disciplines have long tried to understand how a human being thinks. Most of them seem to agree that the brain works in two very different modes. For us, the first phase of thought imagines, diverges, and unlocks the field of possibilities. The second phase, judges converge and choose. But if we were to stop there, that would give the impression that thought is essentially an individual effort that seldom depends on context. This is, however, not the case. Whether we be a champion in creativity, so primarily in induction, or a master in logic where we are confronted with reality, the ideas we layout are indeed destined to be presented to third parties. They should therefore be exposed, defended, communicated, negotiated, or even sold. Regardless of the quality of the concepts we craft (creative thinking) and the interferences we build (logical thinking) we will take one day, or another, be confronted by people whose beliefs, opinions and ideas differ from ours (critical thinking). Logic and critique: The shared characteristics of logical and critical thoughts include a three-level structure of reasoning invented by the Greeks. For the first time in history, Aristotle tried to model thought deployable in three stages: the concept, the statement, and the reasoning. The three levels can be assessed according to different criteria. A concept is more or less useful, a statement is true or false, and reasoning is right or wrong. This three-level structure allows us to differentiate logic and critique, where the intention and words used are not the same. Logic only deals with the structure of reasoning and exhausts the problem. It regards premises as acquired and excludes the debate. Logic is in all certainty and pursues the truth. Critique is most probably searching for the plausible. Logic and creativity: Many known models present the brain as a two-stroke engine (divergence vs convergence, fast vs. slow, left-brain vs right-brain, Yin vs Yang, etc.). But that's not the only thing. "Why didn't we think of that before?" How often have we heard that sentence? A creative idea is the outcome of logic, but you can only understand it afterward! Through the use of exercises, we will witness how logic and creativity work together. A third theme is hidden behind the two main themes of the conference: logical thought, which the author can shed some light on.

Keywords: creativity, logic, critique, digital

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