After decades of pundits and philosophers arguing that AI is impossible, suddenly that argument has been replaced with the assertion that not only is it possible, but that it is inevitable, perhaps imminent, and apocalyptically dangerous. In only about a decade, the conversation has shifted from you can't do it … to we shouldn't do it ! My purpose in this talk will not be to go into these arguments, but rather to draw your attention to an interesting historical parallel between AI and another, older, technology which was also controversial, thought to be impossible, and then deemed to be a great danger to the human race: artificial flight. From the very beginning, and until modern times, attempts at flight sought to imitate the behavior and specific implementation details of birds. But the Wright brothers were not trying to mimic bird flight, or build an ornithopter. They asked quite different questions, not about flapping or feathers, but about lift, stability and the dynamics of turning in air. The "imitation game" of the Turing Test has misdirected the ambitions of AI, just as a concern with feathers and flapping misdirected early efforts at flight. Now that we understand them, it is clear that the laws of aerodynamics apply to any wing, natural or artificial; and in the same way the laws of thought apply to reasoning done by any cognitive agent, humans, machine or — we think most interesting of all — a combination of both, working together. Boole believed, as did Leibniz and Lull before him, that human thought is mastered by laws, which could account for how people think. Perhaps computation itself is the air that provides lift for the wings of thought. At the end of this talk I will review some research underway at IHMC with a particular emphasis on the results and "lessons learned" arising from the DARPA Robotics Challenge.