

Systems Thinking

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According to Peter M. Senge, “If you look deeply into any system and analyze the relationships between members, you will find infinite complexity ... The resolutions come from rethinking how we deal with complexity” (Senge). Senge is enlightening us about two key factors: (1) that *systems* are complex, and (2) that we need to rethink how we deal with *complexity*. In this paper, I intend to address some of the critical concepts discussed by Senge surrounding systems thinking and describe—albeit analogously—how they apply to our personal lives.

In Systems Thinking, we are instructed by Senge to approach complex thinking like how we would if we were developing the skills to drive a car, or to become a concert pianist. No matter the task, Senge contends, “At each level we start with a degree of complexity, just within the bounds of our conscious ability or our normal awareness to grasp.” In other words, without the basic knowledge or awareness of how to perform certain tasks, they then become highly complex tasks to accomplish. For example, Lebron James is one of the most athletically gifted athletes of our time playing basketball on a complex level; however, imagine Lebron at the tender age of 5 trying to shoot a basketball into an NBA sized hoop. This would be complex, correct? Now, imagine me trying to play in a game seven of the NBA Finals against Lebron and his teammates. The game itself, would still be complex, yet the level of complexity would diminish for Lebron because of his knowledge, experience, and skills of the game versus me who lacks all three. This is the point Senge is making, that “at each level we start with a degree of complexity.” Now, if you asked Lebron to pitch 9 straight innings in a World Series game, this same master in one realm would become a novice in another. All of these are examples of the complexities associated with systems thinking.

Systems thinking is complex, however, it requires developing the knowledge, experience, and skills along the way to help one become the LeBron James of their field. Does this mean you will not miss a shot? Absolutely not. LeBron takes a plethora of shots, and he misses more than he makes. The goal is to keep shooting. Senge addresses this point:

The key to educating people in systems thinking is to use a developmental process—to replicate what the pianist goes through. Eventually the concert pianist can simply look at a piece of music, which to our eyes is hopelessly complex, and absorb it with his self-conscious awareness. He may still have to practice it, but his ability to deal with complexity has expanded (1).

Thus, as our ability to deal with complexity expands, we are then better equipped to tackle the tasks confronting us. As humans, our lives are complex. This means being parents to our children, working for our employers, providing for our families, inter alia. As our ability to deal with these challenges expands, we become better at it. However, as soon as we think we have figured things out is when we are reminded that these matters are extremely complex. Regarding this latter point, Senge declares system dynamics to be “the study of complex systems, including such human systems as families, organizations, cities, and nations” (). In these systems, you will, “infinite complexity,” to quote Senge. This indicates the complex and continuous struggle to think systemically in all facets of our lives.

In *Systems Thinking*, Senge helps us gain a better understanding as to how we should approach complex matters. He advises us to “look at a problem more comprehensively” and begin “rethinking how we deal with complexity” (). In doing so, Senge wants us to rid ourselves of outdated methods that have failed to produce desirable outcomes. Instead, he provides us with the tools we need to help deal with these complex tasks.

## References

Senge, Peter M. “*Systems Thinking.*” This article derived from an interview published in ReVISION Journal’s Volume 7, Number 2, special issue on Work, Economics, and Human Values: New Philosophies of Productivity.