

What is meant by the term “Attractor”?

Unfortunately there is considerable confusion about what is meant by an ‘attractor’. The confusion arises from the meaning the term ‘attractor’ has for a complexity scientist and its colloquial meaning. For example, if you ask anyone without a background in complexity science, ‘what is an attractor?’ their likely response is: ‘anything that attracts.’ A complexity scientist, however, might say: “an attractor is the pattern which forms from the interaction of many connected entities.” The attractor for a complexity scientist is the result not the cause.

Cohen and Stewart (1995) provide a useful description that illustrates the complexity science view of attractors. Imagine a beach. At one end is a pier and the other is a rocky point. Two ice cream vendors arrive to sell their wares and decide to locate themselves so they are equidistant from the pier, the point and one another. By pure chance, vendor A gets the first group of customers. So as not to miss out on business, vendor B moves a bit closer to vendor A. Now vendor B has customers, so vendor A decides to move closer to vendor B. Over time they creep toward each other until they are both side by side. The resulting cluster is called the attractor. They are not attracted to a particular grain of sand in the middle of the beach. Rather, their interaction results in the attractor pattern forming.

From a management practice perspective both views of an attractor are useful and we should avoid being dogmatic about which is right or wrong. Perhaps a way to explain attractors to those people wishing to use this concept is to describe two types of attractor: those that attract a behaviour, such as people, events, rituals and communities (this is how Cynefin describes attractors); and those that emerge from the behaviours of people interacting.

The key point to remember is, regardless of how we define attractors they are simply a metaphor to help us better understand how organisations work.

Cohen, Jack, and Ian Stewart. 1995. *The Collapse of Chaos: Discovering Simplicity in a Complex World*: Penguin.