Emergent properties in reactive systems

Aiguier et al., 2008

Reactive systems consist of interconnected sub-components part of structural links that define communication methods. These systems can exhibit emergent properties that are unpredictable even when complete knowledge of the systems are available. This implies complexity in the systems, such that they cannot be simplified to rules based on inferences from their properties, but knowledge of the rules of interaction between components is also necessary.

Emergent properties are often difficult to predict.

An overview of novel soft actuators for soft robotics

Boyraz et al., 2018