Candidate Interest #2

Learning the Controls

Given a wide range of interfaces from guitars to keyboards AI systems, regardless of their inner workings, what is the cognitive capability of being able to recognize an interface and begin to differentiate that each control does something different? Agent57 can play many different atari games, but has to retrain for each one. Exploring this void of AI where simultaneous action as a human can do is likely a much higher unification of the many cognitive capabilities a human has, but there should be some model where it can be done at a basic level. Nevertheless exploring the cognitive functions behind versatility is interesting even if the criticality point of a versatile AI is far in the future.

Another idea here is the ability for an AI to switch between tasks, and this might harken back to Hofstader's GEB theory that the cognitive functions of tracking tasks are recursive in nature. The big picture is that an AI is able to reprioritize without using a set of heuristics, and this could be simply modeled in some microworld then hopefully extended into more traditional and real games that humans play.