Cognitive systems are often concerned with entities that can make calculated decisions in order to solve a problem. Unfortunately, if the system were to factor in every aspect of a given situation, the decision will either take too long, or never be made at all. To remedy this influx of data, heuristics – systematic shortcuts used to make assumptions – come into play. Although heuristics tend to solve problems faster, with every shortcut there are bound to be side effects. Amos Tversky and Daniel Kahneman referred to this singularity as quick and dirty heuristics. Three examples of such heuristics are scarcity, familiarity and authority.

First is the scarcity heuristic. When an object is scarce or not readily available, the desire for that item tends to increase and so does its value in our minds. Scarcity is often used in marketing to influence purchases. The terms “limited edition” and “low stock” tend to create an image of must have product. Choice architects, coined in 2008, refers to the practice of influencing the choice of people by changing the extenuating circumstances in which options are presented to people. Scarcity is everywhere in society, and everyday it influences us.

The second example of a quick and dirty heuristic is the familiarity heuristic. Aristotle once said, “We are what we do. Excellence, then, is not an act, but a habit.” The familiarity heuristic ties in perfectly with this quote because everything comes down to habit. This shortcut is simply stating that familiar stimuli are preferred over less familiar stimuli.

Lastly, is the authority heuristic. This is when a system consists of a trusting bias towards an authoritative figure, or an agent of significant standing. Stanley Milgram carried out an experiment that studied the obedience of those towards an authoritative figure by directing subjects to “shock” another “participant” - who is, in actuality, part of the team conducting the experiment. The experiment was conducted to find out to what extent a person would be willing to follow instructions with regards to inflicting pain to another human being. Our judgments and choices are constantly influenced by those with authority and supposedly greater knowledge.

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