Module 5: Heuristics - Availability

This second heuristic that we will examine is the availability heuristic. There are situations in which people assess the frequency of a class or the probability of an event by the ease with which instances or occurrences can be brought to mind. For example, one may assess the risk of heart attack among middle-aged people by recalling such occurrences among one's acquaintances. Similarly, one may evaluate the probability that a given business venture will fail by imagining various difficulties it could encounter. This judgmental heuristic is called availability.

The logic behind the availability heuristic, such as it is, is this. "How frequent is X?" is a hard question to answer. If I can quickly recall some there must be a lot of them. If I can't come up with things very easily, there probably aren't so many. Availability is a useful clue for assessing frequency or probability, because instances oflarge classes are usually recalled better and faster than instances of less frequent classes. However, availability is affected by factors other than frequency and probability. Consequently, the reliance on availability leads to predictable errors on many accounts such as retrievability of information or effectiveness of a search set.

Retrievability of information may be impacted by familiarity, salience and recency of information. In an elementary demonstration of the role of familiarity, Tversky and Kahneman presented subjects with a list of well-known personalities of both sexes and subsequently asked them to judge whether the list contained more names of men than of women. Different lists were presented to different groups of subjects. In some of the lists the men were relatively more famous than the women, and in others the women
were relatively more famous than the men. In each of the lists, the subjects erroneously judged that the class (sex) that had the more famous personalities was the more numerous. That is, When the size of a class is judged by the availability of its instances, a class whose instances are easily retrieved will appear more numerous than a class of equal frequency whose instances are less retrievable.

Salience too impacts retrievability of instances. This is why people are more afraid to ride on a plane than in a car, even though they're much more likely to be injured or killed in a car crash than in a plane crash because when people ask "How frequently do planes crash?" they can think of examples of plane crashes really easily because they're memorable right? We see big news stories about them and so people think about plane crashes and they bring several to mind but when it comes to car crashes, there's thousands and thousands of car crashes every year that we simply don't hear about. So we can't bring those examples to mind and as a result we assume that car crashes are less frequent than they actually are and that plane crashes are more frequent than they actually are. Now we also see this when parents think about their children's behavior. We have parents that won't let their children walk to school because of fear of child abductions. Child abductions are incredibly rare; they almost never happen, right? But when they do happen, we hear about them. The big news stories, this means we can bring them to mind easily and that means we think that they're more frequent than they actually are. And other behaviors that are actually real risks to children that are common, we don't think of as being much of a problem. So I mean parents will drive their kids to school even though the risk of being injured in a car crash is much greater than the risk of being abducted by a predator. It's because the way we bring things to mind and how we estimate frequency, we are likely to overestimate the risk of certain things and underestimate the risks of others.

Recent occurrences are also likely to be relatively more available than earlier occurrences. It is a common experience that the subjective probability of traffic accidents rises temporarily when one sees a car overturned by the side of the road.

Reliance on the availability heuristic leads to judgment errors also on account of effectiveness of a search set. For instance, the heuristic might give us the right answer for which country has started more wars of aggression, Germany or Switzerland? But, do you think English has more words that start with the letter K or more words that have K as the third letter? You can think about this yourself. Which do you think is more frequent? If you're like most of the participants you probably think that there's more words that start with the letter K than have K as the third letter. You say this because it's easier to come up with words with K in the first position because one of ways we store words in memory is by their first letter. We don't store our words by their third letters. So you can think about words that start with the letter K and you can come up with a list pretty easily; kitchen, kite, kick, kangaroo, but when you try to think about words with K as their third letter, it's hard to do. We're not used to thinking about words this way and so it's not a question that you normally ask and even if you see words with K as the third letter you might not acknowledge it. So it's harder to bring words of that kind to mind. However, this is wrong because there's actually nearly three times as many words that have K as the third letter than words that start with the letter K. So, why was this so hard to get correct? Well it turns out that our minds really aren't equipped to answer this question but rather than admitting defeat what they do is they substitute a different question. This is a question that's a little bit easier for our mind to answer. So what's the question that we substitute? The question that we ask instead and we don't realize that we've switched them is "how easily does X come to mind?" There's a question that can be answered, although erroneously.

Notice that the availability heuristic makes us overestimate our contributions to joint projects. The stuff I did is more available to memory than the stuff you did. This can be a source of conflict in many kinds of relationships, including marriage. In one study married couples were asked how much they contributed to various projects, how much, for example, they contributed to breakfast. A woman said, I contribute 100%. I buy the food, I cook the food, I set the table, I clear the table, I clean the dishes. And the husband said, I do 25% because I feed the cat. A similar pattern is observed amongst athletic teams, working professionals and many other groups. Caruso, Epley, & Bazerman (2005) asked a group of Harvard MBA to estimate how much of the work done in their study groups was done by them. What do you think the average of the sum of contributions of members within a group was? 139%. This reduces once students were asked to first think about the contribution of each member. The estimate dropped to 121%.

Another interesting consequence of the availability heuristic is what Kahneman calls the focusing illusion. This is neatly summed up in what he proudly calls his "fortune cookie maxim": Nothing in life is as important as you think it is while you are thinking about it.' Why? 'Because you're thinking about it! In one much cited illustration of the focusing illusion, college students were asked two questions, one about their overall life satisfaction and another about satisfaction in a specific component of life — dating. Interestingly, when the students were asked about overall life satisfaction first, and then about their dating life, the answers shared an insignificant correlation of -0.012. However, when the order of questions was reversed, that when students were asked about their dating life first and then about overall life satisfaction, the answers shared a strong and significant correlation of 0.66. Which means that by focusing on their dating life, students elevated its importance and thus correlated their overall happiness with it. Other studies found that similar things happen when we ask questions about marriage, health, and pretty much any aspect of life.

As in the other cases, the availability heuristic has important implications for individual and organizational decision-making. For instance, strategic decisions tend to be affected more by information made available more recently, managers are less able to recognize and respond to discontinuous change that they are unfamiliar with, stakeholders give too much credit to CEOs when things are going well and punish them too harshly when they aren't, the use of social media is associated with depression and suicide, and many others.
To avoid falling prey to the availability heuristic, you should try to be aware of all the diverse factors that influence a decision. You should check in if your decision is influenced by any salient pieces of information and, if so, whether these pieces of
information are truly representative or simply reflect recent or otherwise particularly memorable experiences. Knowing whether information is truly relevant, rather than simply easily available, is the key to avoiding pitfalls of this important heuristic.