

Matthew's Book Club Summary #13

By: Matthew Klippenstein

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Title: Gut Feelings

The book club started as an informal, fun way to explore and consider business ideas relevant to our work with colleagues. The format consists of one person (usually Matthew) reading a book and writing a summary for discussion during team meetings. This allows the other team members to benefit from the book's insights, without carving time in their schedule to read the full volume.

The idea was to summarize *an interesting part* of each chapter in a paragraph or two, and where applicable, note how these could be relevant to the workplace. This provides the reviewer with practise condensing a mass of data into a few pieces of key information: an underappreciated skill. The reviews are meant to be accurate but light-hearted, on the assumption that people learn more when they're having fun.


Matthew's company gave permission for these to be distributed to non-employees as long as the employer-specific content was removed, for which he is sincerely appreciative.

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About the author:

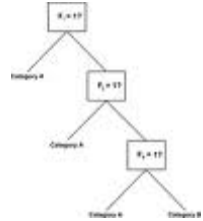
When this book was written, Gerd Gigerenzer was the director of the Centre for Adaptive Behaviour and Cognition at the Max Planck Institute for Human Development in Germany.

This was the first scientific book to investigate whether there might be a biological explanation for gut feelings, as subconscious *heuristics*, or rules-of-thumb for various situations; and whether gut feelings might therefore serve an evolutionary purpose.

Ch	Title	Summary
1	Gut Feelings	<p>The author suggests gut feelings are subconscious <i>heuristics</i> (rules of thumb) which help animals survive. <i>They take the most important piece of information and ignore the rest.</i> It's a bit like a Pareto rule – on steroids.</p> <p>No child playing baseball can do the calculus necessary to project the parabolic path of a fly ball – they move so that the ball stays in the centre of their field of vision. That one rule allows them to put themselves where the ball will land. (Micro-cameras have proven dogs use the same heuristic, to catch frisbees). Gut feelings purportedly work the same way – using simple rules of thumb to navigate complex situations.</p>
2	Less Is (Sometimes) More	<p>Sometimes, less is more. In the real world, when making decisions, people often do best when they have a medium amount of information – not too much, not too little. This is generally known as a “Laffer curve”. Carried further, this suggests that <i>the ability to forget (unimportant information) could provide an evolutionary advantage (!!)</i>.</p> <p>A common example is the <i>recognition heuristic</i>. Asked which is bigger, Detroit or Milwaukee, more German kids got it right than American ones. They likely thought, “I’ve never heard of Milwaukee, so it must be smaller”. American students probably out-thought themselves: “Milwaukee has a baseball team, and Detroit has lost a lot of people with the failing auto industry, so maybe Milwaukee is bigger”.</p>  <p>Women don’t tend to follow business as closely as men, but statistically, they’re better investors. They probably stick with names they’ve heard of (<i>recognition</i>) – so are unlikely to lose money on riskier firms, which don’t tend to survive long enough to become well known. (There could be other factors, e.g. conservative / aggressive tendencies, per other studies.)</p> <p><i>From a research context, this could have implications for how we interpret results from DOE’s and other experiments. Should we take the biggest factors and ignore the rest (because dubious minor relationships could “crowd out” the stronger ones, in our memory)? Besides, how many minor conclusions actually survive a second or third investigation? Some of the minor conclusions in my earlier work probably haven’t – nowadays, I’ve learned to avoid over-interpreting subtler results.</i></p>
3	How Intuition Works	<p>The author suggests that “intuition” is a rule-of-thumb process that helped our ancestors determine things that could affect their survival. Pretty much reiterates the first chapter.</p>

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		He also points out that the idea of a “female intuition” is a holdover from the bad old days when women were considered inferior to men. While men had the gift of intelligence, smart women were only credited with having “intuition”.
4	Evolved Brains	<p>This chapter centres on empathy, and our <u>innate</u> sense of equality. (see http://www.sciencedaily.com/releases/2010/02/100224132453.htm)</p> <p>As the recent crash shows, economic theory gets a lot of things wrong. The theory of maximum utility suggests that we choose spouses after evaluating multiple candidates on a list of pro’s and con’s. The “Nash Equilibrium” suggests that if we play a game where the outcomes are: I get money, offer you some, you accept, we both keep our share - OR - I get money, offer you some, you refuse, neither of us gets any</p> <p>...and if I get a million and offer you one, you’ll still accept the money. (‘cause you’d still be a dollar richer than you were before.)</p> <p>In real life, you’d feel insulted by the low-ball offer, and would forgo the dollar to prevent me from keeping the other \$999,999. Lesson: humans aren’t economists. (Or maybe economists aren’t human? ;))</p> <p><i>This is what happens when foreign companies mine resources from poor countries. The company doesn’t understand why the locals are so upset – they’re providing millions into the local economy. Of course, that’s only a few percent of the wealth being created, which is why locals feel cheated. This partially explains why unions emerged in Europe in the 1800’s, despite factory workers being better off than their farming predecessors.</i></p>
5	Adapted Minds	<p>The key argument here is that simplicity is an adaptation to uncertainty. Phrased differently, in an uncertain environment, good intuitions must ignore information. We know this intuitively: there’s always scatter in our results.</p> <p>Data is presented which suggests that for complex decisions, instead of trying to weight several factors, making a judgement solely on the most important one, is better.</p> <p><i>This implies that when hiring, we should decide on the one most crucial factor (work ethic? team-leadership expertise? could sell Macs to Bill Gates?) and ignore the rest...!</i></p>

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6	Why Good Intuitions Shouldn't Be Logical	<p>Logic works by finding conclusions based on the provided information. But if logic can lead you astray if you start with partial information. And in the real world, you <i>never</i> have all the information!</p> <p>We develop intuitions based on past experience (consisting of situations where some information is always lacking). It follows that intuitions about current experiences (where, again, some information is always lacking) can be better adapted than the rigid application of a logic template.</p>
7	Ever Heard Of...?	<p>This goes into more detail about the recognition heuristic. Thousands of years, this rule-of-thumb could have been "eat only foods you've eaten before, 'cause you know those aren't poisonous."</p> <p>Nowadays, especially for bigger purchases, we're more likely to trust names we've heard of: "if I've heard of it, it's more likely to be a quality company making a quality product."</p> <p>Seen this way, corporate "branding" actually leverages evolutionary survival tactics.</p> <p><i>As mentioned in <u>Crossing The Chasm</u>, though, you need to focus on the right people: for some firms, TV ads would be a waste of money, because they sell to OEM's, not the public. But getting repeat mentions in industry magazines, or attending every worldwide trade show for a particular widget, might be extremely useful.</i></p>
8	One Good Reason Is Enough	<p>This builds on a prior chapter in emphasizing that in a complex situation, repeated studies have shown that people who look only at the most-important variable, make better predictions than if they're given a snowstorm of parameters alongside the most-important variable.</p>
9	Less Is More in Health Care	<p>One of our more modern heuristics is, "trust the person in a white coat" – which is why actors dress up as doctors on TV ads.</p> <p>The University of Michigan tried to help physicians diagnose whether someone with chest pains, should be put in the ICU or a regular care unit. A <i>heart disease predictive instrument</i> was developed, using statistical regression, incorporating fifty (!) probability terms. Doctors hated it, but diagnosis improved. The tool was removed, to confirm the hypothesis... but diagnosis rates stayed just as accurate!</p>

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		<p>The researchers found that the doctors internalized a fast and frugal tree (a simple decision tree) to make their decisions. When that was formalized (instead of the complex formula) <i>diagnosis rates improved further</i>.</p> <p><i>The fact that a simple flow-chart beat the statistical formula, reminded me of how the massive quality improvements at Japanese companies from the 1960's to 1980's came <u>before</u> the era of statistics software: they used simple, "frugal" paper tools.</i></p> 
10	Moral Behaviour	<p>The core of this chapter is that seems to be an ingrained rule-of-thumb of "stick with the group". You can affect the outcome of a decision by choosing the default setting wisely. (Think: negative-option billing.)</p> <p>Organ donor rates are 12% in Germany and 99% in Austria, two very similar countries. In one, you have to sign up to be a donor; in the other you have to sign up to <u>not</u> be a donor. When Pennsylvania and New Jersey offered the same two car insurance options (with opposite default settings) the results for the unrestricted-coverage option were 79% and 30% respectively.</p> <p><i>From a work perspective, this might mean things like asking for people to put up their hands if they <u>can't</u> volunteer to clean the lab on a given Friday. Or if they can't volunteer to read a business book and summarize it on behalf of their peers... hmm... ;)</i></p>
11	Social Instincts	<p>Not that much here. One interesting argument was we have an innate tendency to organize ourselves into exclusive in-groups as contrasted with outsiders: whether it's competing tribes on the Serengeti... or the football fan who cheers his team on every Sunday, jeering the opponent.</p>