

Ideas, ideals and idealisations:  
decision-making  
under radical uncertainty

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## **Abstract**

Back in the 1920's, a Chicago economist, Frank Knight, introduced a distinction between uncertainty and risk. According to Knight, risk is quantifiable while uncertainty is not, i.e. under the conditions of uncertainty subjective probabilities cannot be assigned to outcomes with any reasonable degree of precision. Decision-making under uncertainty should be different from decision-making under risk as one can no longer rely on either probabilities or axiomatic reason. The most important decisions in business and life, like choosing a spouse, a career or a strategy for organisational transformation are made under the conditions of uncertainty, not risk.

A century later, the role and impact of individuals making decisions under the conditions of uncertainty remains largely overlooked. Much of the literature focuses on institutional decision-making and assumes that leaders are unboundedly rational, and perceive situations objectively. David Tuckett's Conviction Narrative Theory is one of the few theories to recognise this problem. It contends that under uncertainty, people tend to make decisions based on emotionally-laden narratives. However, little is known about the kinds of narratives that promote positively-evaluated decisions as opposed to negatively-evaluated ones.

The core question of this thesis is thus; What might individual narratives reveal about important business decisions made under conditions of uncertainty? The investigation was conducted using standardised critical incident interviews with 14 senior managers (defined as someone managing 100+ people) and investors about difficult strategic decisions that they made throughout their careers. Results indicate that the largest decision pitfall as reported by the interviewees was idealisation, falling under a spell and focusing excessively on either positive or negative sides of the situation. By contrast, the most positively evaluated decisions were made through the hard process of internal deliberation, where the final vote was cast by an ethical argument. These narratives had strong moral points exemplifying various virtues. I propose that faced with overwhelming uncertainty, people tend to forfeit for a time their limited ability to forecast the future and instead find psychological refuge in their ethical preferences.

**Keywords:** decision-making, radical uncertainty, critical incident technique, conviction narrative theory, ambivalence, phantastic object, idealisation, moral intuition

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## Introduction

On 11 July 2020, D.Muthukrishnan, an amateur investor with over 200 thousand followers on Twitter posted a tweet quoting Amazon’s CEO Jeff Bezos: “All of my best decisions in business and in life have been made with heart, intuition, guts... not analysis”. The tweet got 317 retweets and caught the attention of Philipp E. Tetlock, a renowned professor at Wharton School of Business, who replied “But is this also true of his worst decisions”? He further suggested setting up a contingency matrix to investigate the question:

	Best decisions	Worst decisions
Made intuitively		
Made analytically		

The true answer to Tetlock’s question is, of course, “We don’t know”. What’s worse, is that not only can we not answer this for Bezos personally, we cannot answer this question for an average manager of an average multinational corporation. After all, Bezos might just happen to be lucky with his intuitive approach to decision-making. The mere fact that it works for Bezos, doesn’t necessarily mean that it will work for everyone or even for the majority of people.

We know a lot about various outcomes of intuitive v. analytical decision-making from lab experiments. For example, a meta-analytic review by Phillips et al (2015) demonstrates that rational decision-making is associated with positive results and intuitive with negative, but the dispute is far from settled. For one thing, the difference, though statistically significant, is in fact very small, around 1 or 2 percent, and modelling life’s most important decisions in a lab is also exceedingly difficult. Furthermore, conclusions drawn from simplistic lab tasks like predicting results of football matches or estimating a person’s height from their photograph are not applicable to major decisions like choosing a career in banking over a career in the performing arts. Thus, in the recent years there were increasing calls for alternative sources of evidence, which include qualitative approaches (Yarkoni, 2020).

The key difference between lab experiments and life’s most important decisions lies in the notion of uncertainty as opposed to risk. According to economist Frank Knight (1921), risk denotes the calculable probability of an event occurring, i.e. controllable part of the unknown. Uncertainty is the unknown and uncontrollable part. Decision-making under

uncertainty cannot be the same as decision-making under risk as one can no longer rely on assigning probabilities.

British psychoanalytical researcher, David Tuckett, proposed that under uncertain conditions people make decisions based on narratives, rather than by assigning probabilities. Narratives provide conviction sufficient to act in the face of uncertainty, hence the name of Tuckett's theory, Conviction Narrative Theory (CNT). This hypothesis was verified by both interviews and big data analysis (Johnson et al, 2020). Tuckett's theory, however, is a purely descriptive one. It offers little advice as far as decision-making is concerned. One small clue is the prediction for the appearance of *phantastic objects*, idealisations that produce convictions yet ultimately lead decision-makers astray.

In this thesis I would like to further investigate the role of idealisations and ambivalence in the process of decision-making by conducting critical incident method interviews with senior managers of IT companies. Critical Incident Technique (CIT) is a brainchild of an American psychologist John C. Flanagan, who proposed the method in his seminal paper (Flanagan, 1954). The researcher utilising CIT encourages participants to create narrative accounts of a critical incident, in my case, an important decision. The accounts are later mined for common themes. This qualitative method offers both the rigour and flexibility required to investigate a complex phenomenon like human decision-making. The method does not require researchers to formulate any hypothesis in advance and as such, this is an attempt to build a theory from cases.

## Why am I interested in this topic?

The fundamental cause of the trouble is that in the modern world  
the stupid are cocksure while the intelligent are full of doubt.

— Bertrand Russell

Over the past 13 years I have been self-employed as a presentation coach and trainer. Conviction, synonymous with confidence, is one of the key characteristics in any presentation. Many of my clients work in highly intellectualised fields like IT and banking. Their material is complex and they can be quite ambivalent about the issues they are talking about. The audience, however, clearly favours speakers who speak with single-minded conviction. Is that conviction always reachable? Where does that conviction come from?

Steve Jobs, who was arguably the best presenter ever to set foot upon a stage, spoke with enormous conviction in highly uncertain situations. His most successful presentations were presentations of ‘magical’, idealised objects like the original iPhone or the iPad, objects, which might be characterised as *phantastic*.

Could it be the case that phantastic objects both hurt and help and if yes, what are the moderating factors? What are the characteristics of narratives that speakers have to tell themselves in order to speak and act with conviction? These were the questions that puzzled me as I ventured into the research.

## Literature review

### The Dual Process Model

Perhaps the most widely known and accepted contemporary psychological model describing relations between rationality and intuition is the aptly-named Dual Process Model, which was popularised by the Nobel laureate Daniel Kahneman. The model postulates that most judgements and decisions in life are intuitive, they are performed by something Kahneman and his long-term collaborator Amos Tversky dubbed System 1 thinking: they are fast, automatic, largely effortless, emotional and can be done in parallel. Those decisions, however, can be modified or overridden by System 2 thinking, which is slow, controlled, effortful, rule-governed and emotionally neutral (Kahneman, 2003).

According to the dual-processing model, System 2 is by no means obligated to correct mistakes made by System 1. It may also concoct *post hoc* justifications for unconscious judgements which could be both accurate and erroneous. Both System 1 and System 2 thinking might be faulty and thus lead to decisions that are later regretted. More recent variations of the dual-process model, such as the one by Bago and De Neys (Bago et al, 2020), suggest that corrective deliberation happens mostly when there are multiple competing intuitions with similar levels of activation, i.e. System 2 mostly acts as an arbiter between the competing System 1 factions.

Right there, we can consider the dispute settled: according to this variation of the dual-processing model, Jeff Bezos hardly makes *any* decisions with analysis, both his best and worst decisions are made by intuition. Bezos himself, however, might disagree. People have a persistent feeling, however illusory it might be, that at least some of their decisions they make consciously, deliberately and rationally. Also, while some people believe they tend to decide intuitively in life, others think they are more on the rational, analytical side. Are those beliefs completely unfounded and without merit?

### Decision-making, rationality and intuition

In decision science, the discourse about rationality and intuition is framed as a discourse about the so-called decision styles. They are defined as adaptive habits of thinking (Scott & Bruce, 1995). Early studies by Epstein et al. (1996) analysed two styles: intuitive-experiential and analytical-rational. The latter was characterised by deliberate, logical information



processing and the former by emotional processing. Intuitive thinking style was also associated with the use of heuristics.

Later studies by Scott and Bruce (1995) added three more decision styles: dependent, avoidant and spontaneous. The dependent style relies on advice and guidance of other people, the avoidant style evades making decisions, while the spontaneous style tends to make snap decisions. An important difference between intuitive and spontaneous decision styles is that intuition can be rather slow and may need a prolonged period of incubation. In a typical lab experiment three groups are presented with a task, then the analytical group is given 10 minutes to think, the spontaneous group is asked to produce the decision right away and the intuitive group is distracted for the same period of 10 minutes by listening to the music of their choosing.

Which style produces better results on average? A recent meta-analytic review by Phillips et al (2015) has concluded that rational style is associated with positive results while intuitive with negative, although the effects are rather small,  $r=.11$  and  $r=-.09$  respectively. This means that the results explain only around 1% of outcomes in decision-making. Overall, the authors conclude that associations between thinking styles and decision outcomes are largely context dependent. There's still a chance that intuition works best for life's most important decisions—but not for simplistic decisions typically modelled in research studies.

It is also important to understand that intuition and rationality are not part of the same psychometric continuum. According to another meta-analysis by Wang et al (2015) intuition and analysis are entirely uncorrelated, they are independent psychometric constructs, rather than opposite ends of a bipolar spectrum. This means that for any particular decision any given person may use intuition, analysis, both or neither (for instance, by delegating a decision to a toss a coin). Experiments by Keck and Tang (2020) conducted on large groups suggest the best results are achieved by aggregation of both intuitive and analytical judgments and the same might be true for individual decision-makers.

In a recent research study, Yang et al (2020) surveyed 262 CEOs of U.S., U.K., and Canadian manufacturing firms, all graduates of Harvard Business School, in order to find out how they make strategic decisions. They conclude that CEOs use a great variety of different processes: some rely heavily on instinct and intuition, others follow ad hoc decision processes, yet others use highly structured, evidence-based, deliberate processes. More structured processes were associated with larger company size, which in hindsight makes a great deal of sense. Larger companies have more stakeholders with diverse interests and

structured processes are one way to manage those interests. More structured processes were also correlated with faster headcount growth, but the causal relationship was not established.

## **Decisions and radical uncertainty**

Successful decision-making depends on sound judgement which in turn depends on having accurate beliefs about the past, present and future events. Lack of relevant information either leads to errors in decision-making or produces the state of anxiety which can ultimately lead to utter inability to decide. Over the last few decades, economics, organisational psychology and other disciplines that study decision-making relied mostly on the probabilistic models of belief (Romeijn, 2014). As the name suggests, probabilistic models express the decision-maker's confidence; the strength of their belief in the veracity of certain information in terms of probability, which is typically represented as a figure between 0 and 1. In the subjective expected utility (SEU) model, the actor needs to assess the subjective probability of a given outcome and then take into consideration the outcome's relative desirability (Fishburn, 1981).

The core weakness of probabilistic models is that they have difficulties expressing the state of radical uncertainty, the state where subjective probabilities cannot be assigned to outcomes. The notion of radical uncertainty was introduced by Frank Knight (1921), who in his work *Risk, Uncertainty, and Profit* distinguished risk from uncertainty: "It will appear that a measurable uncertainty, or 'risk' proper, as we shall use the term, is so far different from an unmeasurable one that it is not in effect an uncertainty at all." Radical uncertainty is also sometimes referred to in literature as 'knightian uncertainty', 'deep uncertainty' or sometimes simply, 'uncertainty'.

Radical uncertainty is a state where the best experts are having trouble modelling the future. According to Walker et al. (2003), this state is characterised by either a multitude of alternative system models with a wide range of outcomes and a wide range of corresponding weights, or by entirely unknown system models, unknown outcomes and weights. Many of life's most important decisions are made under conditions of radical uncertainty. This is especially true for decisions that have a significant affective component and are socially embedded. Both the human emotional system and social reactions are notoriously complex and hard to predict. It is extremely difficult (if not impossible) to successfully model how one's love life with a future spouse will unfold by assigning subjective probabilities to various outcomes. Similarly, it is next to impossible to model one's career decisions or hiring decisions as well as most large-scale strategic business decisions.

The literature review revealed a number of approaches to managing radical uncertainty, probabilistic and non-probabilistic, descriptive as well as prescriptive. Examples include Robust Decision Making, Dynamic Adaptive Planning, Info-Gap Decision Theory and others (Marchau et al, 2019). One of the approaches is David Tuckett’s Conviction Narrative Theory (CNT), a descriptive theory of decision-making under radical uncertainty rooted in psychoanalysis (Johnson et al, 2020). It contends that faced with radical uncertainty, decision-makers tend to rely on narratives; structured hypotheses that make sense of the world, generate predictions about the future and guide their actions.

### Conviction Narrative Theory

According to Tuckett (2008), a conviction narrative is an internal representation of the past, present and future state of events, the primary function of which is to produce enough confidence to make decision-making under uncertainty possible. Conviction narrative combines both rational and emotional elements in a coherent temporally organised story.

To summarise, CNT makes five important claims (Johnson et al, 2020):

- 1) Important real-world decisions often occur under radical uncertainty.
- 2) People use narratives to structure evidence and generate explanations related to the past events.
- 3) In a similar fashion, people use narratives to imagine the future.
- 4) Imagined futures are felt through emotions that regulate decisions.
- 5) Narratives arise through the interaction of individual and socially embedded cognition.

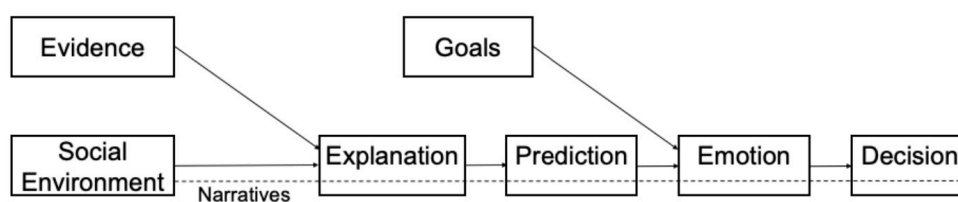


Figure 1. Summary of Conviction Narrative Theory

A brief summary of CNT is presented at Figure 1. Ready-made narratives are supplied by the decision-maker’s social environment. They are used to explain relevant evidence. In the mind’s eye they can be projected further into the future thus attempting to predict the future. The prediction is then emotionally appraised using decision-maker’s objectives as either attractive or unattractive.

## Phantastic objects

The CNT also points to a common pitfall in decision-making: a tendency for conviction narratives to become phantastic object narratives. *Phantasy* (deliberately spelled with *ph* to distinguish from *fantasy*) is one of the core concepts of psychoanalytic theory. As Sigmund Freud (1908) put it,

*As people grow up, then, they cease to play, and they seem to give up the yield of pleasure which they gained from playing. But whoever understands the human mind knows that hardly anything is harder for a man than to give up a pleasure which he has once experienced. Actually, we can never give anything up; we only exchange one thing for another. In the same way, the growing child, when he stops playing, gives up nothing but the link with real objects; instead of playing, he now phantasies. He builds castles in the air and creates what are called daydreams.*

According to Anna Freud (1937), when a person is unable to integrate difficult feelings, defence mechanisms are being mobilised. One of those mechanisms is an admiring form of transference, in which a person attributes exaggerated positive qualities to its target, which could be another person as well as an object, thus creating a phantastic object. It should be noted that in this context, ‘object’ would mean a symbol, an idea—not the physical thing.

Influential British psychoanalyst Melanie Klein, the author of object relations theory, proposed that transference happens through a mechanism of splitting (Klein, 1932). Splitting is an act of mental separation of objects’ parts into “good” and “bad” – the “bad”, anxiety-provoking part is then repressed. Splitting protects the ego from negative emotions. It is frequently associated with trauma, where the “bad” part holds truly unbearable feelings, while the “good” part is associated with extremely positive emotions.

In Tuckett and Tuffler (2008) “a ‘phantastic object’ is a mental representation of something or someone which in an imagined scene fulfils the protagonist’s deepest desires to have exactly what she wants exactly when she wants it. We might say that phantastic objects allow individuals to feel omnipotent like Aladdin, who owned a lamp which could call a genie.” They further hypothesise that phantastic objects will produce a gradual elimination of doubt/anxiety, which is essential in forming the conviction to act decisively. However, it will eventually lead to a massive reintroduction of doubt, as the whole phantastic object narrative collapses in a clash with reality.

Tuckett further introduces the terms *divided state* and *integrated state*. In a divided state, the decision-maker falls under the spell of the phantastic object to such an extent that they are

unable to integrate conflicting evidence. They do not acknowledge any possibility of error and lose their ability to discover evidence for conflicting narratives. In the integrated state the reverse is true: new information can trigger curiosity and evidence integration (Tuckett, 2011). Ironically, what Tuckett calls integrated state is actually a state of slight ambivalence towards the prevailing narrative.

### **The research gap**

CNT suggests that using narratives for decision-making can be either adaptive or maladaptive, depending on how decision-makers regulate their emotional stance towards new information (Johnson et al, 2020). However, further details about emotional regulation are yet to be discovered. The authors of CNT admit that there is no general consensus on whether ambivalence leads to better or worse decisions. It can lead to both maladaptive responses, such as behavioural paralysis, or adaptive responses, like broader attention and willingness to consider multiple perspectives. The authors ‘look forward to future research that helps to pinpoint individual differences in strategy selection and explores potential links with emotion regulation in the context of narratives’.

## Methods

The main method utilised in this thesis is the Critical Incident Technique. The CIT is a systematic, inductive, open-ended procedure for eliciting verbal or written information from participants (Norman et al., 1992). It is commonly used by qualitative researchers as a method of capturing and analysing retrospective stories of actual events in lives of the participants.

The CIT was devised by John C. Flanagan in a series of studies conducted as a part of the Aviation Psychology Program of the United States Army Air Forces during World War II. Flanagan (1954) summarises the CIT as follows: “The critical incident technique consists of a set of procedures for collecting direct observations of human behaviour in such a way as to facilitate their potential usefulness in solving practical problems and developing broad psychological principles”. Flanagan (1954) describes five stages to a CIT study:

- (1) determine the general aim of the activity;
- (2) develop plans and specifications for collecting factual incidents regarding the activity;
- (3) collect data, either through interview or written up by the observer;
- (4) analysing the information and
- (5) interpreting and reporting of data.

Incident, according to Flanagan (1954) is

*[A]ny observable human activity that is sufficiently complete in itself to permit inferences and predictions to be made about the person performing the act. To be critical, an incident must occur in a situation where the purpose or intent of the act seems fairly clear to the observer and where its consequences are sufficiently definite to leave little doubt concerning its effects.*

As the means of collecting data, Flanagan clearly favours direct observation, however, he acknowledges various challenges that come with this requirement (Flanagan, 1954). Apart from observation, Flanagan also identifies four other ways of collecting the data: interviews, group interviews, questionnaires, and record forms.

Decision-making is the process which is challenging to observe directly. The main problem associated with questionnaires and record forms is that the researcher is unable to collect in-depth information by asking questions of clarification. By contrast, interviews do permit asking clarifying questions and thus the accuracy of data interpretation could be

greatly improved. The researcher also has the option of probing for more details. To summarise, live interviews give us “a richness and depth of data that could not be achieved in a controlled experiment or by pencil and paper recording” (Callan, 1998, p. 96).

As an interviewing technique, CIT encourages research subjects to tell their stories about meaningful and memorable events in their lives. The participants are encouraged to provide factual details such as the time and place the event occurred, other people involved, as well as their appraisal of the event (satisfied/dissatisfied) and any learnings they might have acquired from it. The resulting account could be a rich and vivid description of events as well as various thoughts, emotions and associations that are far removed from actions, observable by an independent and impartial researcher (Urquhart et al., 2003). Because of this, the CIT found its use as a qualitative method within a hermeneutic-interpretive paradigm even though it was originally designed as a quantitative method within a positivist paradigm (Norman et al., 1992; Sharoff, 2008). The CIT does not define the number of questions or the structure of questions to be asked.

Advantages of CIT over other approaches, including the traditional semi-structured interviews, are (Bott, 2016):

- CIT has inherent inductive properties.
- It does not force the respondent into a particular framework.
- It does not require a hypothesis.
- It’s relatively culturally neutral.

## **Sample size**

Importantly, when using the CIT, sample size is based on the number of incidents, not the number of participants (Sharoff, 2008, p. 306). The number of incidents needed cannot be predefined (Norman et al., 1992). It should be noted, however, that with qualitative research there has been little emphasis on obtaining a large sample size. As Sharoff (2008) observes: “as with most qualitative studies, sample size is usually small”. Rather than having a predefined number of interviews or incidents that need to be reached, interviewing continues until saturation is achieved. Saturation occurs when additional interviews or coding no longer provide new information.

## **Limitations**

As a research method CIT has a number of limitations:

1) It is greatly dependent on memories of participants. The human memory system is commonly known to be faulty. This is especially true for decision-making, which mostly occurs unobserved and over long periods of time. Decisions are complex processes and verbal narration gives only a limited glimpse into the inner workings of the human decision-making mechanisms. Also, participants might choose to give fictitious accounts of events because of difficult emotions such as shame or guilt. Perhaps less importantly, as the researcher encourages participants to ‘tell a story’, certain embellishments, common to storytelling, might occur (Sharoff, 2008).

However, these apparent flaws from the positivist standpoint are consistent with contemporary interpretative perspectives on storytelling. They bring our attention to ‘the symbolically charged meaning of narratives and their potential to create forms of hyper reality which blends fact and fantasy to produce its own compelling account of events’ (Bott, 2016). The task of the researcher is not to become preoccupied with the factual accuracy of the event but rather seek to uncover deep meaning that participants attribute to their stories.

2) Empirical material collected using the CIT is coded into themes based on shared commonality. Flanagan (1954) does not offer any criteria or set rules that can be applied here. This, perhaps, is the most controversial part of the CIT (Sharoff, 2008) due to its apparent subjectivity. Bradley, however, argues that “such an open-ended approach is essential for the critical incident technique because data has to be categorized inductively, without reference to pre-existing theories” (Bradley, 1992, p. 98).

Additional limitations of this research study include:

1) Outcome bias. Humans have a known tendency to under-appreciate the factor of luck and judge the decision on the outcome rather than on the effort (Brownback, 2019). This is true for decision-makers as well as for neutral observers. Perhaps in some of the cases it did not matter whether the decision was made with intuition or with rationality, what mattered was luck. In a lab experiment with a roulette wheel, we can account for luck with precision, but under radical uncertainty we can only admit that luck plays a certain role. We have no ability to understand the exact numerical impact of luck.

2) Bias for action. One of the decision styles named by Scott and Bruce (1995) was the avoidant style. When asked to recall a decision, participants will be highly unlikely to recall decisions they avoided making as one of their best decisions. However, at least in theory, it is possible that one of their best decisions in life was a decision they had successfully avoided making.



3) Selection bias. All of the interviewees were personal acquaintances, all worked in Russia and spoke Russian as their first language. The results are likely to reflect peculiarities of my social surrounding and Russian cultural context. Their generalisability to more broad social contexts might be, therefore, somewhat limited. Also, most of the interviewees were managers, only two of them were angel investors; entrepreneurs. Perhaps interviews with entrepreneurs will paint a different picture.

### **Reflexive bracketing**

When I was 25 to 35, I was a big fan of the power of the unconscious. Malcolm Gladwell's *Blink* was among my favourite books, I read about Ap Dijksterhuis' *Unconscious Thought Theory* (Abadie, 2019) and adopted its recommendation for complex decision-making. Gradually, however, I became disillusioned and spent the next 10 years mostly on the rational side of the intuition-rationality debate. Malcolm Gladwell was replaced in my library by the great rationalists like Carl Sagan, Sam Harris and Stephen Pinker. Among the courses that I teach now is a course on critical thinking. On Facebook and among my friends I have a reputation of being perhaps exceedingly sceptical, debunking claims that I believe are dubious, unfounded or too far-fetched. Gradually, however, I became a little wary of rationality as well. I still believe scepticism is important, but I find life on a purely rational side to be a bit dull. Yes, scepticism is important but so is enthusiasm. I am still more on the rational side but the information that attracts my attention mostly has to do with intuition, emotions and the unconscious.

### **Research setting**

The interviews were conducted with twelve senior managers (defined as having more than 100 subordinates) and two angel investors. All of them represented highly intellectualised and highly uncertain sectors: IT, biotech and fintech. All of the participants were personal acquaintances. The interviews were conducted over Zoom and in person, in 11 of the interviews a recording was made (3 interviewees expressed their desire not to be recorded). The participants were asked to obfuscate any potentially sensitive information. All interviews were conducted in Russian.

Below is the interview list in chronological order:

Gender	Profession	Age group	Number of cases provided	Zoom/In person
Male	IT manager	40+	2	In person
Female	Biotech manager	30+	3	Zoom
Male	IT investor	40+	3	In person
Male	IT manager	40+	3	In person
Male	Fintech manager	40+	3	In person
Male	Independent executive director	40+	2	Zoom
Female	IT manager	40+	3	Zoom
Male	IT manager	30+	2	Zoom
Male	Biotech investor	40+	4	In person
Male	IT manager	40+	4	Zoom
Male	IT manager	40+	4	Zoom
Female	IT manager	40+	4	Zoom
Male	Fintech manager	40+	3	Zoom
Male	IT manager	40+	3	Zoom

Prior to the interview participants were asked to come up with 3-4 of their most important business decisions, best or worst. Although the CIT method does not require that, a number of authors suggested that the researcher should ask the participants to think about critical incidents prior to the interview. For instance, Schluter et al. (2007) reports that when this step was missed, a substantial share of participants had trouble recalling any incidents worth discussing during the interview and valuable interview time was wasted on recall. This was also my experience during the preliminary interviews. Despite this forewarning, most interviewees obviously took little effort to think about the relevant cases in advance and were improvising. Considering this, it is difficult to ascertain whether the cases provided were indeed one of the most important decisions in the interviewees' lives.

### **Interview questions**

The following questions were shown to work best during the trial interviews:

— Please tell me about a highly important and difficult decision that you made throughout your career, one of your best or worst decisions.

- Can you please describe the decision process?
- How did you imagine the best and worst possible outcome of your decision?
- How confident were you and how did your confidence change?
- Where did you find the conviction to act?
- Was this decision more analytical or more intuitive, emotional? It could be both.
- Did you attempt to quantify risks or probabilities?
- What’s your takeaway from the event?

In addition, to better understand the emotional dynamics of the situation, participants were invited to draw an approximate emotional curve of their story, where the X axis represented time and the Y axis represented emotional valency, from +3 (enthusiasm and ecstasy) to -3 (depression and anxiety). The black dot represented the key decision. This idea was borrowed from Reagan et al (2016), who, in turn, credits an unpublished master’s thesis of an American science fiction writer Kurt Vonnegut.

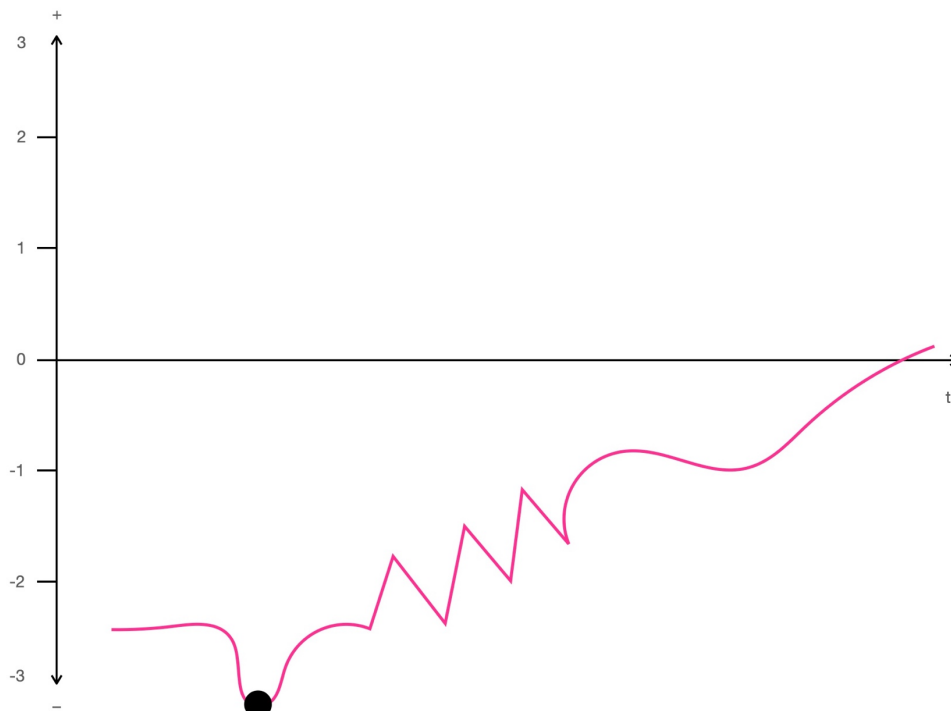


Figure 2. Sample emotional curve

The curves provide some additional information about the emotional dynamics and confidence levels of the participants before and after the decision. For instance, in the

example above we can see that after a deep crisis, the protagonist made an important decision to quit her dead-end job and then entered a period of turbulence where she was going back and forth thinking whether she made the right call. In the end, she considers this to be a good decision.

## **Research aims**

The research aims and objectives of this thesis are to explore the following questions:

- What are the stories of important business and life decisions made by individuals under the condition of radical uncertainty?
- What key themes are evident within these stories?
- How are the relative roles of rationality and intuition in the process of decision-making reported in these stories?
- What are the various sources of confidence and conviction for decision-makers?
- What is the role of idealisations in decision-making as reported by the interviewees?
- How do these stories and themes inform and extend the on-going intuition v. rationality debate?

## Results

### Overview of the results

I have conducted 14 interviews and acquired 43 critical incidents: 29 of which were evaluated positively and 14 — negatively. The decisions were about:

- Career — 12
- Investments — 9
- Business strategy — 7
- Hiring, firing, promotion — 7
- Private matters — 5
- Organisational structure — 3

I have sorted the cases into the following categories according to the primary method used to make the decision:

Theme	Quote	Satisfied	Dissatisfied
Decisions made under the influence of idealisations	“I thought this was the only place in Russia where I can really study graphic design”	1	10
Decisions made under the influence of strong negative emotions	“Because my objections weren’t taken into account, I distanced myself from the M&A process which turned out to be a mistake.”	—	2
Principle- or values-based decisions	“I don’t deal with people who try to corner me.”	15	—
Deliberate, analytical decisions	“I sat down and created a huge map with lots of options. Gradually I eliminated most of them.”	4	1

Beginning with doubt	“We were so scared by the previous experience that we decided to move really slowly this time.”	6	—
Consultative decisions	“At some point my psychologist told me: ‘This is your responsibility, nobody else is going to accept the responsibility.’”	4	—

The largest category were decisions made on the basis of life principles or values. Most of these decisions were attributed to intuition and rationality simultaneously. Overall, people were very satisfied with principle-based decisions, and these were the stories which subjectively seemed most inspiring to me.

About a quarter of the decisions were attributed to idealisations. They were categorised as mostly emotional and were almost universally regretted. Another quarter of the decisions were attributed to analysis: these included deliberate decisions and decisions where the interviewees moved slowly, testing their courses of actions. Among these only one decision was regretted. This could mean that people make fewer mistakes with analysis, don't remember such mistakes as well and/or prefer not to disclose them. Almost all of the decisions except for one were made under the conditions of uncertainty, not risk.

## **Idealisations**

Idealisation was by far the most significant decision pitfall that emerged during the interviews. People idealise other people, job titles, countries and even abstract notions like “technologies” or “marketing”.

An archetypal idealisation story follows an S-shaped curve with initial enthusiasm rapidly replaced by disillusionment and devaluation of the phantastic object.

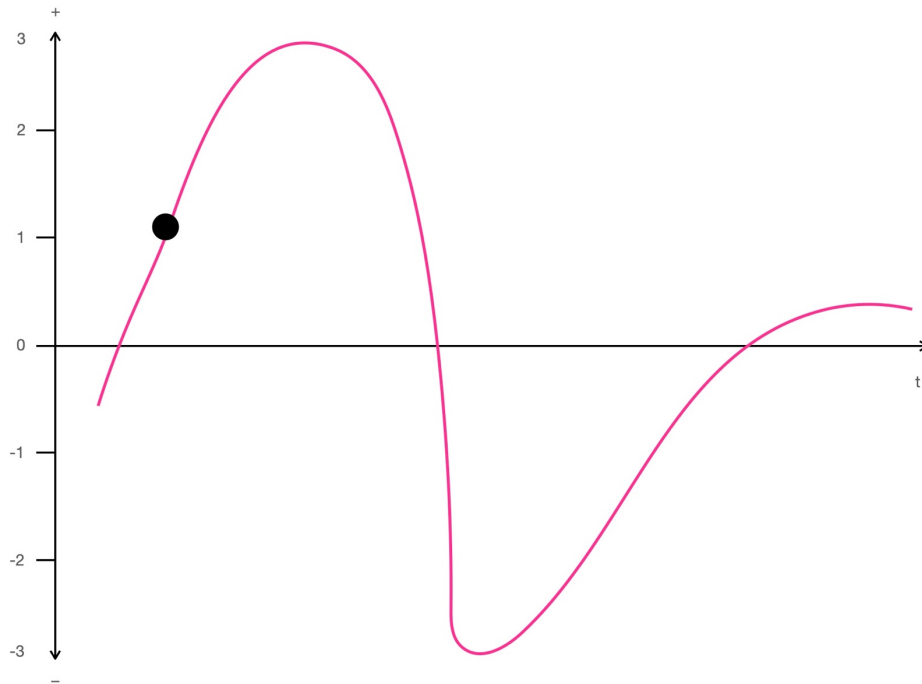


Figure 3: Phantastic object stories

In full accordance with Tuckett's phantastic object theory, conviction to act comes from an illusion that one's deepest phantasies are about to be realised. Unfortunately, this was almost never the case.

I have conducted an additional thematic analysis of idealisation cases and grouped them into four sub-categories:

- Idealising people — 5 cases
- Cultures, subcultures and communities — 3 cases
- Abstract notions — 2 cases
- Role of a businesswoman — 1 case

### **Idealising a person**

This story was told by a manager in charge of e-commerce at a major clothing retailer.

I had a subordinate operations manager, who was simply great at his job. He was my dream employee: punctual, pleasant, always meeting his goals, great communicator. After a few years he felt tired, burnt out and expressed a desire to leave. He was so great that he wasn't joining a competing company, in fact, he decided to start the process of job search only after leaving.

I asked him to find a replacement for himself, to which he agreed. My expectation was that he will be as great at finding a replacement for himself as he was great at his job. After a while, he indeed found a person who seemed like a suitable candidate. My trust in his abilities was so profound, that I didn't put enough effort into interviewing and vetting the candidate. I had a slight feeling that something was amiss but I must confess I ignored it. In hindsight, I simply wasn't accepting the fact that he was about to leave, I wanted him to continue for as long as possible.

The new head of operations turned out to be a disaster. He was a bad negotiator, he didn't know what he wanted, he didn't communicate well with the programmers. Under his "brilliant" leadership the whole operations department, which was previously working like a machine, almost came to a grinding halt. After a few months I was forced to fire him and then for another few months I wasn't able to find anybody to replace him.

Finally, I went back to my dream employee and convinced him to return! Fortunately for me, during those few months he wasn't able to find another job for himself. After we re-hired him, he continued to work like nothing had happened. Maybe he just needed rest...? I don't know. He received a 13% raise but given the months he spent unemployed without pay I don't think it was a cunning ploy on his part. We all just lost time.

One hypothesis is that the new manager was seen as an especially poor performer compared to the previous "dream" manager. It is likely that what we see here is an idealisation-devaluation cycle (Klein, 1975). A similar story was told by the owner of the Internet marketing agency. She once had hired an "ideal" CEO for her company and after he left to run his family's business she wasn't satisfied with any other CEO for the next few years.

There was also a case of reverse idealisation, i.e., demonisation. A manager at the IT consultancy was so afraid of his rival colleague whom he even nicknamed "John Silver" (after the chief villain from R.L. Stevenson's *Treasure Island*) that he agreed to a very uncomfortable and inefficient organisational arrangement in order to not be left alone with his enemy. The enemy, although indeed unpleasant, wasn't in fact anywhere near John Silver in terms of villainy.

- How confident were you in the decision?
- Absolutely, one hundred percent certain.
- What's your takeaway from the event?



— I was focusing too much on one thing. I shouldn't have.

The hallmark of idealisations is that interviewees frequently report absolute, unshakable confidence in their decisions with the phantastic object being a singular focus of their attention.

### **Idealising an abstraction**

I have also encountered two cases, where the phantastic object wasn't a person or even a thing, rather, it was an abstract notion. This story was told by an angel investor:

So, I had my core business of real estate and consulting in real estate and at some point, a desire formed to invest in technologies. At this point an acquaintance of mine told me about the project he was planning to invest in. I jumped on it and started doing research and it felt like I caught the bluebird of happiness by the tail. The project was about improving the efficiency of oil wells. They were planning to produce some equipment which when submerged into an oil well greatly improved the output. [Technical details skipped] What was especially great, the project had an investment guarantee issued by a European investment fund for 3 million, they only needed one more million.

So, I wired them the money. After a while it turned out the guarantee of the European investment fund needed to be re-confirmed. At this point there was a big scandal at the fund because too many projects had gone sour. So, they closed the fund down and we were three million short. This was our first problem. I should have looked at the dates of the documents. The second problem had to do with the equipment itself, we were not able to produce it like we planned initially. The alternative we found was twice as expensive. In about a year the whole fairy tale had collapsed. [...]

— You said “technologies” ... What did the word “technologies” mean to you at the time?

— Well, you know... [makes a grand hand gesture like casting a spell]

TECHNOLOGIES!

In hindsight people are often keenly aware of the illusory nature of their idealisations and don't hesitate to underline this with vivid, metaphorical language (“bluebird of happiness”) and non-verbal signals.

## **Idealising a culture**

Perhaps another idealisation in the above case had to do with the European Union and European institutions. A guarantee from the European fund was seen as proof for viability of the project beyond any reasonable doubt. In a similar case, an interviewee was investing in a real estate project in Latvia and one of the key justifications for it was that “Latvia is Europe”.

Latvia, of course, is a member of the European Union since 2004, however not all Latvian institutions and especially not all Latvian courts are exactly as efficient as German or French courts. My interviewee found this first-hand when the project got stuck in an arduous court battle with the residents of a nearby building who opposed the construction project.

On occasion, I caught myself cherishing the very same illusion with Russian institutions painted in my mind in overwhelmingly dark colours while their European and US counterparts were idealised. Arguably, it’s a classic case of splitting (Klein, 1932).

Other cases of culture idealisations included:

— a community of [removed to protect confidentiality]. A quote from a venture capitalist who was sponsoring a public award: “I thought they were great guys. And I still think they are great in their own way but I would have never expected this amount of irresponsibility and incompetence”.

— a graphic design subculture. A quote from an IT manager who decided to acquire a side education in design: “I thought they were having glamorous parties, you know, like *Great Gatsby*, and I practically saw myself there. But in a few weeks I was, like, what am I doing here?”.

## **Idealisations: conclusion**

Decisions made on the basis of idealisation, followed by subsequent disillusionment are exceedingly hard to justify. Perhaps this is the reason so many of them were described as the bad decisions. In the words of one of the money managers interviewed by David Tuckett for his *Minding the Markets* book (Tuckett, 2011):

Like I said, if I make a trade and it turns out wrong, but I did it for good reasons, I’m okay with it; but if you try to think back and you can’t think of a good reason other than just an emotional decision its bad... so every time we do a trade, we try to look back at the thesis and remind ourselves why we bought it in the first place; is that still the fact?

There was only one case in which the interviewee was mostly satisfied with the end result of his venture into the community of [removed to protect confidentiality]: through a serendipitous event he met an important business partner. However, what I believe was especially important, that after all the irresponsibility and incompetence he had encountered he still believed himself to be doing a morally good thing (more on that in the section “Principled decisions” below). It was still possible for him to maintain the “there were good reasons for my doing that” stance. All the other cases ended on a sad note.

### **Decisions influenced by strong negative emotions**

In a small group which include only two cases, decisions were influenced by strong negative emotions. This case was told by a pharmaceuticals executive:

One of the medications we were distributing lost its state registration and since we could no longer legally sell the product, we were forced to disband the whole sales department. There were 30 people working there and we had to fire them all. This was ugly, nobody enjoyed the process. After a couple of years, we managed to re-acquire the registration, which meant that we needed to re-hire 30 sales people. The situation was still a bit shaky and the prospect that we would need to let go of another 30 people was terrifying to us. We were so traumatised by the previous experience that we decided to outsource the whole sales process this time.

We never did this before but we decided to try. It wasn't something unheard of. We selected an outsourcing company, signed a contract and they started working. Or so we thought. You know, in our industry sales don't happens overnight. It is like a giant flywheel that you need to push for several months before you see sales figures grow. So, for a few months we didn't see anything happening. In about 6 months we started to suspect something and in 9 months it became obvious that the outsourcing company wasn't doing a good job. In fact, they were hardly doing any job. We were prepared from the beginning that they were not going to do 100% of the work they promised to do. We expected something like 60% to be done. We got 2% at most.  
[...]

Sales people need to be closely monitored and it is rather difficult to monitor them. Our key mistake was that the monitoring was also outsourced. What's worse, it was outsourced to the same company! We should have at least retained the controlling function, but we didn't. In the end, we sold our whole [type of pharmaceuticals] portfolio including this drug to another company.

— Was the decision to outsource more emotional or more rational?

— It was 60% emotional and 40% rational. Decisions like this should be made rationally. Don't get me wrong, a lot of decisions in business are done emotionally, especially people decisions. But this decision was different, it was made from completely the wrong place. I tell you, we were traumatised.

In both cases, the managers deeply regretted the emotionality which characterised their decisions. Hurt feelings are bad advisors, or at least so it seems. Hurt feelings were not unique to this group, they were also present in some of the cases in the principle-based group. However, there was an important difference between emotional decisions and principle-based decisions: no explicit decision principles were formulated in the emotional group. Given that (and, perhaps, due to other factors) people reported relatively little confidence when making these decisions. Apart from emotions, they had little else to base their decisions on and they understood all too well that emotions are a shaky foundation.

### **Consultative decisions**

Although I did not ask about that specifically, a few interviewees mentioned their strategies for preventing idealisation. Key among them was consulting with other people, which is ironic, given that other people were one of the main objects of idealisations themselves. One of the managers I interviewed, the CEO of a company with 600+ employees said that he tries to maintain a climate where he “can be stopped by other people”. He believes his job is “to be inspired” yet he understands that momentous inspirations can lead him and his business off course. He encourages his subordinates (the word he overtly hates and refuses to use, insisting instead on “people I work with”) to argue and contradict him.

He told me a paradoxical story of a bad decision he was greatly satisfied with. His employees came to him with an idea for a new digital product which he initially thought was very weak. There was only one good thing about it: it didn't cost much to try. Although he objected to the idea, his employees went on and implemented it anyway. Within one day it was clear that the product was enjoying great popularity among the company's customers. By now it is one of the substantial and growing revenue streams. He also revealed that during one of his most successful periods at helm he had two trusted confidants, the deputy director and the HRD and they all had to agree on an idea before it was put into practice.

Sometimes I come to them with a project and they both say “this is nuts, but tell us more”. Sometimes I manage to convince them and these were the best decisions.

This is echoed by the real estate magnate turned technology angel investor: “Of course I should have consulted knowledgeable people before investing”. Another case was told by a female executive working for a multi-national company:

After a meeting in the office one of the senior managers invited me to dinner. “Let’s talk this over a meal”, he said. He was a very powerful person, a lot in this company depended on him. I don’t often get dinner invites at work, not from senior people for sure. I had no idea what his intentions were. The invitation looked very much like the beginning of those stories they are telling with #meeto hashtag. I was terrified, I thought something bad was about to happen. Either I go and he makes an advance on me or else I risk my career.

So, I was sitting at my desk, writing and deleting the same text message to him, trying to find a plausible excuse not to go. If I managed to offend him, I would probably need to find myself another employment. I wasn’t able to make any decision. In the end I just called my father. He asked me a few questions and convinced me that my fears were largely unfounded, that nothing bad would have happened just because I accepted the dinner invitation.

The dinner went really well. The manager had a genuine interest in my business area, we had a very productive work-related conversation. He later became my most important ally among the top management of the company.

An outside view helped my interviewee to get a more objective look at the situation and at the person, whom she was already beginning to demonise. She was one of the four people in my sample who credited help from other actors as the key factor in their best decisions. These stories typically represent a variation of the S-curve, with the saviour appearing in the darkest hour.

Other interviewees were:

— The owner of the company who was working her way through a very difficult merger. She found great help from a psychologist and a business mediator

— A beginner investor who got confidence to invest in stocks by talking to other investors.

People in this group report varying levels of confidence and the main source of confidence are conversations with other people.

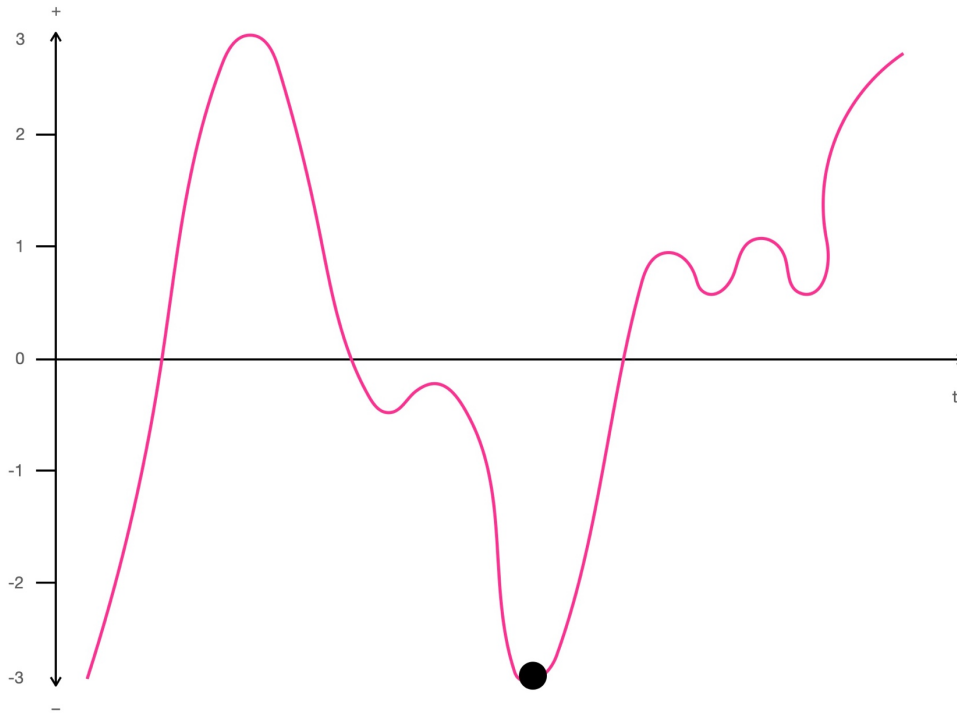


Figure 3: A story of a difficult merger

## Beginning with doubt

“If a man will begin with certainties, he shall end in doubts;  
but if he will be content to begin with doubts, he shall end in certainties.”

— Francis Bacon,

The Oxford Francis Bacon IV:

The Advancement of Learning

I have encountered eight incidents that begin with the state of massive doubt. In the beginning, the protagonist’s alarm bells were triggered by something which didn’t scare them away completely but made them proceed very cautiously. Often there was no single decisive turning point, like the telephone call to the father, described above. There were multiple small steps that gradually reduced doubt and in the end the story came to a satisfactory outcome.

This story was told by a division head at a major software development company:

We had three departments in our company which had great trouble coordinating their workflows. They were staffed by very experienced people, unique talent which we certainly didn’t want to lose, so for a while we did nothing because we were so afraid. The people were not only precious, they were also very conservative and very cautious as far as any reforms were concerned. At the time they

were still castigating the reforms we did 5 years prior, so we thought new reforms to be most unwelcome.

So, I started talking about this problem of coordination and in the beginning, I was looking for a solution which didn't involve meddling with the organisational structure. I was thinking about some instrumental environment, a process, a method, a software maybe... I even found something that I liked, but then at some point one of the heads of those departments expressed an idea to merge these departments under a unified leadership.

This removed an important mental block. I liked the idea, I thought it might work. Next, I discussed this idea with the two other department heads. They were mostly supportive but conveyed reservations over possible negative reactions from the employees. So, we started moving really slowly. One of the department heads worked out a new structure which took into consideration social ties to reduce the stress of transformation. [...]

In the end, it went really well. We received the desired benefits and overall, we are very happy with how things went.

— How confident were you and how did your confidence change?

— We felt like we did everything we could yet the perceived risk seemed pretty high. I don't know what the real risk was. I was closely monitoring the situation, trying to detect smoke before the fire erupts [...]

— Where did you find conviction to act?

— Again, we did everything we could reasonably do. We could not have done more. The department heads were pretty confident that their people would survive this. If we were to encounter resistance at an early stage we might have pedalled back. But we saw no resistance, so we just slowly moved on.

Other decisions in this category more or less follow the same pattern:

- A candidate manager arrives to an interview very awkwardly dressed thus raising suspicion of her incompetence and prompting a lot of checks which she passed with flying colours. Turned out to be a great hire.
- A potential new boss was known for his eccentricity. "Do I want to work for this guy?", my interviewee wonders. Careful analysis reveals that the job offer satisfies all the criteria while the boss' eccentricity is tolerable.

- Two consecutive CEOs brought in from the outside failed at turning around a loss-making company. “Let’s try it slowly this time, let’s appoint an interim CEO from the inside and gradually give him more and more power.” The company started making profits within a year.

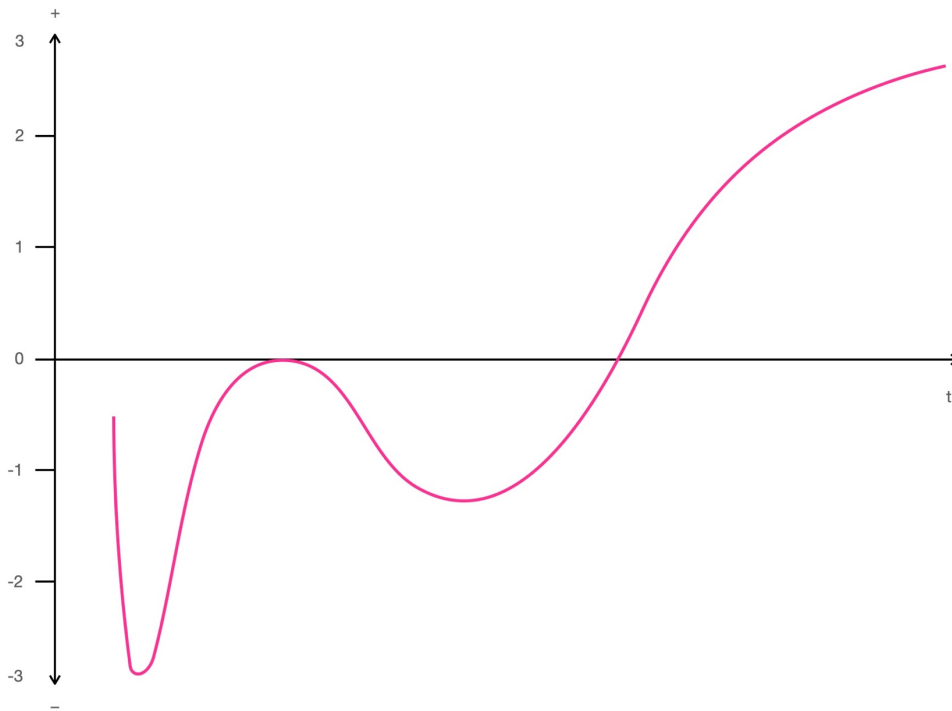


Figure 4: A story of an organisational transformation

The dramatic power of these stories comes from a sharp drop in the beginning which is followed by a gradual ascent. Perhaps people enjoy telling these stories because they paint themselves as heroes overcoming dire straits. Interviewees also looked visibly proud of not acting on their first impression and not succumbing to irrational fears.

### **Analytical decisions**

Five decisions were attributed primarily to analysis, of which one was regretted. This is another heterogeneous category which includes both satisfactory and unsatisfactory decisions. It is also the only category to include a case where risk was clearly quantifiable. A married couple whose first child had an autistic spectrum disorder were deciding whether to have the second child. Their literature search revealed that chances for the second child being on the autistic spectrum were around 15%, a risk they deemed acceptable under the circumstances. Should the risk be 50, 40 or even 30% they were to abstain. Their second child turned out to be fine and the father whom I interviewed considers this decision to be one of their life’s best.



The desire for the second child was clearly an emotional one, however, what places this case into the “analysis” category is the interviewee’s venture into the statistical realm and his stated resolve to abstain from having the second child if probabilities for the baby developing an autistic spectrum disorder were too high. The dramatic arc of the case is very similar to “Begin with doubt” cases, it has a sharp drop in the beginning and a slow rise closer to the end.

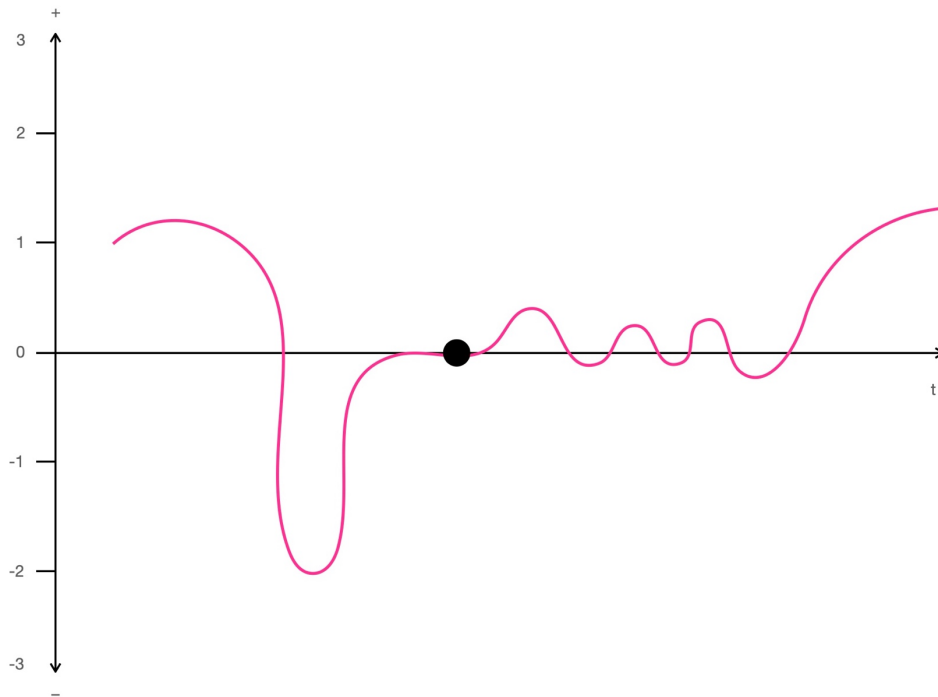


Figure 5: A story of the second child

In two of the cases the interviewees decided on a simple pragmatic rule. When choosing whether to become a professional athlete or a professional physicist, the interviewee (who ultimately became a professional IT manager) asked himself a simple question: what maximises my chances for success in life? His impressions were that in professional sports, wealth distribution is highly uneven with 1% of people earning 99% of money. Professional physics, he believed, is more egalitarian. He chose a safer bet. In a similar case, when choosing whether to invest in aesthetics of an app or its money-making functionality, a fintech manager chose the latter despite an outcry from his design team. It was an important three-year-long project which won him a lot of recognition within his company (and no design awards).

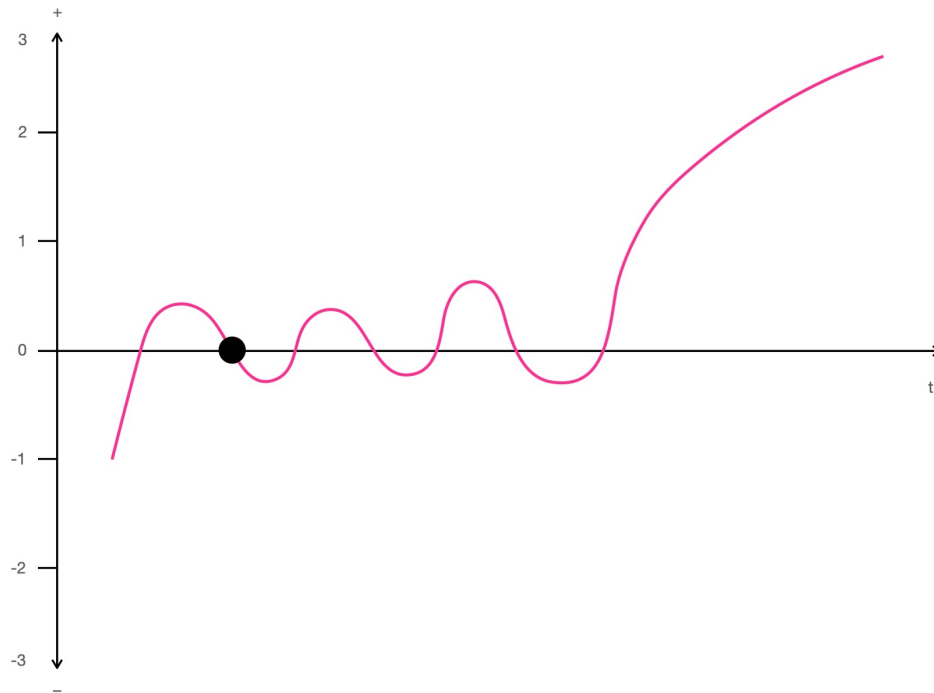


Figure 7: Should I heavily invest in the aesthetics of my app or should I choose a more objective metric?

There was also one unsatisfactory decision in this category. According to the interviewee, it was “100% rational and maybe 10-15% emotional” and involved promoting a valuable domain expert to a top management position. The person ended up being a poor manager, alienated his team and eventually was forced out of the company. As another interviewee quipped describing his promotional decision, “I make all my people decisions intuitively. With people, you never know anything anyway.”

## Principled decisions

Fais ce que dois, advienne que pourra.

— Baldwin IV of Jerusalem

Within this category people attribute decisions to both emotions and rationality in various proportions. When asked whether their decision was emotional, rational or both, they reply “both”, “largely emotional“, or even “seems rational but it was actually pretty emotional”.

This story was told by an investor in a genetic research company, whose investment recently paid out big time:

I had projects which just brought me money. Well, at first, I didn't have money, so having money for food and rent was really great. Then I had projects that brought a lot of money but no happiness. I was just moving stacks of paper around, signing contracts and making arrangements with officials. So, when my children ask me what do I do for work, what should I tell them? This was no good. Then I had a few projects which just brought me happiness and nice people, but no money. It was pure charity work. [The genetic research company] was the first project that brought both happiness and money.

— Was that a more rational decision or an emotional one?

— It was both. I thought, ok, this is a growing market that will be forgiving to small mistakes. But more importantly, there is a lot of value in it. This is something that is useful to a lot of people. I can now tell my children that I invest in a company which helps people to stay in good health... hell, one day maybe it will even help us achieve immortality.

— How confident were you and how did your confidence change?

— I was 100% confident that something good will come out of it. It was only the question whether the success will be small or big. Just to add this project to my profile, to my resume, would have been a good thing. Having done even something, anything in the field of health and genetics would have been great. Of course, I didn't anticipate [big institutional investor] coming in.

On a surface this seems like a classic “rags to riches” story but with an important twist. Riches in this story gradually transform from material to spiritual. This “I would have done it anyway” theme is common to many stories in this category. Sometimes it was hard for me evaluate the outcome as favourable, yet the author still maintained that it was all good and fine. In one of the stories the protagonist's prize-winning amateur sports team came to a dissolution as a result of an internal conflict. The interviewee's reaction to that event was “Anyhow, I believe this was all for the best”. In one of the stories there was no clear outcome at all, just the decision point. The decision, which was deemed morally good was itself the outcome.

There was a guy whom I headhunted from [another bank] a long-long time ago, ages ago. We worked with him together for, like, 20 years. So, about a year and a half ago he decided to quit and joined a newly formed rival bank. There were several things happening at that time... On one hand I became much less involved in operational matters, I was sitting high on a mountain and looking on how things worked. [On the

other hand] the guy moved to Moscow because he found himself a girl and got married. But I never anticipated him quitting. I expected him to come to me, if he got stuck with his career or something wasn't working out for him. I would have helped him myself. I would have helped him to find another job if need be.

I don't know... He must have got tired of playing the second violin and decided to try himself as a solo act. The people who poached him weren't in fact buying him as a manager but our brand, they were paying money for a line in his resume. At this point if somebody wants to do something for [this market segment] it makes sense just to get somebody from our bank. To me this was all like thunder out of a clear sky. I had this feeling that we were like a big family and I can trust anyone without boundaries. So, this had me shaken. I was very tense and I had doubts whether I can work with people again, trusting them completely. I was looking at people thinking each time "What about you, aren't you, [expletive], gonna leave me too?". Which, as you might imagine, wasn't the most healthy and useful way of thinking. But then somehow... I was thinking and observing myself... and I made a decision to not behave like I was surrounded by traitors but to live like nothing had changed. [Long pause]

— Is that it?

— Yeah, that's it.

— Happily ever after...?

— There was a joke about Mao Zedong, when a journalist asked him what he thought of the February revolution and he said "Well, it's too early to tell". So yeah, too early to tell... But it would have been hard for me to enjoy myself otherwise.

What separates these stories from phantastic object narratives is that people don't report decisions as quick and automatic. They typically come to a decision through a hard process of evaluating different options. At the decision point their confidence was high, but during the decision-making process they often hesitated and weighted different scenarios.

These stories typically include a period of hardship in the middle, after a decisions point. Hardship could be rather mild as well as exorbitant (Figure 8), but ultimately these stories end very well.

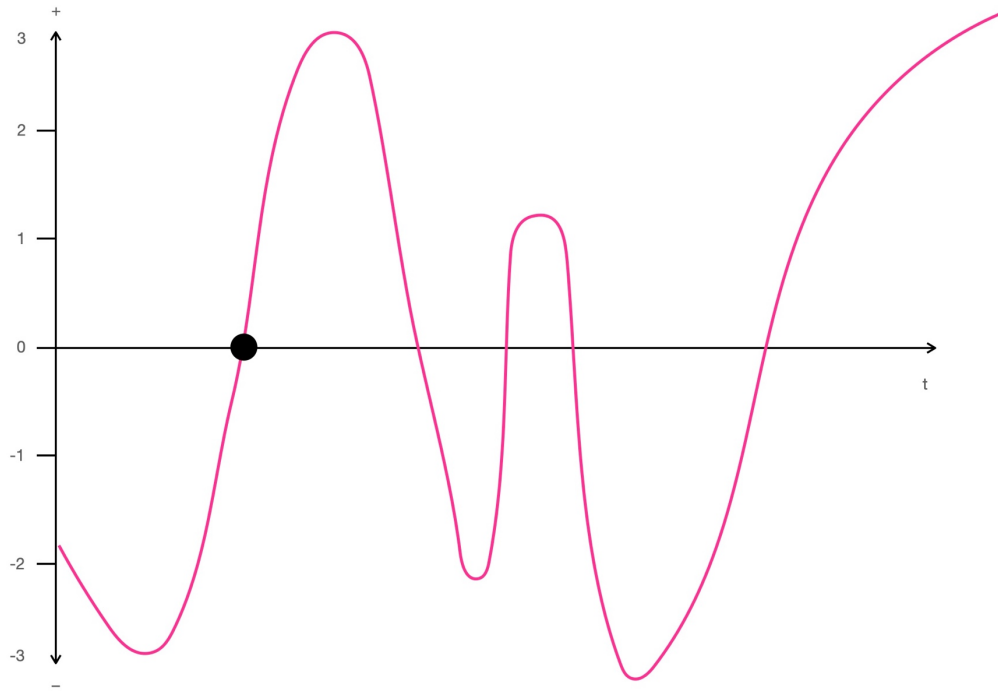


Figure 8: Should I join this company?

Due to large emotional variability of the narrative arc and strong moral points, most of these stories produced a profound dramatic effect on me while I was listening and re-listening to them. They were among the most interesting to hear and the most inspiring stories of all the stories that I've heard. The interviewees were passionate while telling stories, displaying a wide array of both verbal and non-verbal signals accentuating the lowest or the highest points. Perhaps similar to reflecting on one's values, telling stories about principle-based decisions has a self-affirming effect (Steele, 1988), helping people to maintain a global narrative of themselves as morally righteous.

These stories typically have clear moral points, the interviewee's have no trouble justifying their actions even if with only one word. This was told by a manager who made a decision to fire a number of veteran employees who got burn-out and were demotivating other people.

— Was it an emotional decision or a rational one?

— I did it out of my sense of beauty.

— Your sense of beauty?! Where does that come from?

— Oh, I don't know, you're asking me very hard questions. But I thought the situation... it wasn't like it should have been. We all have beliefs about what's right and wrong. We all want to work with people who share our beliefs.

— How confident were you?

— I was 100% confident that I needed to do it, I just wasn't sure how it will go.

This story's moral point, perhaps belongs more to the domain of aesthetics rather than ethics. The interviewee had a picture of a "beautiful organisation" free from ballast and pollution. However, this by no means was a phantastic object that he was chasing without any regard for negative consequences. The interviewee was in fact keenly aware of the downside of his decision to fire the old-timers, most important of which were loss of expertise and potential problems with his company's delivery schedule.

The moral point was also what distinguished this group from decisions guided by negative emotions. In principle-based decisions people report things like "I felt cornered so I thought 'Ok, if your tactic is to corner me, I am getting out of this deal. I don't get cornered'". The conditional rule formulated overtly is what makes the decision more conscious and easier to justify later. Even if the outcome is unfavourable, the rule still provides a much-required rationale. If the situation turns out badly, decision-makers lay blame on the circumstances and not on their decision process. In the above case, the interviewee said in conclusion, "Yes, the [prize-winning amateur sports] team fell apart, but the decision was good. As for the result, everything unfolded like it was meant to be. Anyhow, I believe this was all for the best".

In normative theories of decision-making there's a sharp distinction between inferences (beliefs about the state of affairs, current, past or present) and preferences, likings, affective appraisals of outcomes (Zajonc, 1980). I suggest that what we see here is people switching from making inferences to casting preferences. Unable to predict the future in the face of overwhelming uncertainty, they find refuge in their moral convictions. They abdicate their power to create a meaningful forecast and bet on preferences instead. "I don't know how things will turn out, but this is how I think they must turn out according to my moral convictions", they seem to say.

Moral principles were not created to predict the future even though they are frequently (mis)used for this purpose. As Philipp Tetlock's work on expert political judgement (Tetlock, 2017) clearly demonstrates, moralising partisan experts are the worst in terms of predicting the actual outcomes in politics. However, another important distinction must be made here: lone political prognosticators have very little influence on the political outcomes. They don't need much conviction to act. Managers and angel investors do have more influence on the events. They also need to rally the troops. As far as business strategy is

concerned, the hardest part in the decision process is not to choose plan A over plan B. It is to follow up on that plan. As Jack Welch once said, “In real life, strategy is actually very straightforward. You pick a general direction and implement it like a hell”. Where do you find the emotional energy “to implement like hell”? Strong moral convictions might provide you with this scarce resource.

Compared to the negative emotions group and idealisation groups in the principled decisions group, decision-makers felt more agency. In their mind’s eye they were the ones making the decision. In the idealisation group, decision-makers felt taken hostage by their emotions, they lacked agency. The difference is crucial and it was only possible because the principles were overtly formulated.

### **Are these principles truly moral?**

Were the principles that people formulated in the interviews truly moral, i.e., belonging to the domain of moral psychology and moral philosophy? I would argue that yes, they were. These principles aren’t concerned with what objectively works and what doesn’t. They aren’t concerned with mathematics or the fundamentals of business. They are concerned with who we are as human beings, with values and virtues, with matters of good and evil.

In all of the cases in this category I had little difficulty identifying a moral virtue that stood behind a moral principle that was applied by the protagonists. They were portraying themselves a virtuous human being, creating a positive narrative of their life.

Problem or dilemma	Moral point(s)	Virtues conveyed
Should I quit my job?	The time I’m spending with this organisation — does it make be a better person?	Personal development
Should I tell the truth that people don’t want to hear?	Honesty is an asset.	Honesty
Should I persevere or give up?	No matter what happens, my son will always be with me.	Love for close kin
Should I sponsor that band and if yes, what should I expect to come out of it?	Sometimes you just have to pay for the music, enjoy the music and be happy.	Being charitable

Should I fire my toxic but valuable subordinate?	We won't become the organisation we want to become with this person on board.	Justice
Should I stay in a startup or return to a more stable employer?	Everybody abandoned the founder so I must support him.	Being charitable
Should I let them transform the company into a money-making machine without any respect for customers?	Client relations are of utmost importance.	Altruism
Should I join this company?	These guys are nuts so I want to work for them. I am a nobody so I should make bold moves to succeed.	Boldness
Should I quit my job or stay?	I know what emotional abuse is, I won't tolerate emotional abuse.	Intolerance to vice
Should I join a startup, an established local company or a huge multi-national organisation?	I don't want to be a cog in a huge machine. I don't want to be the best among the weak. I am ok with being the second if I play against a strong opponent.	Being a good sport
Should I take the offer?	I don't deal with people who try to corner me.	Boldness
What kind of service do we want to create?	We will maximise transparency for the customers.	Altruism

It is, perhaps, easy to dismiss these results as mere virtue signalling (Levy, 2020). However, I would side here with Levy, who suggested that there is in fact little wrong with virtue signalling as long as what is being signalled is really virtuous. When people proclaim their moral principles, they make themselves vulnerable to criticism should they deviate from those principles. It is much easier just to stay silent.



## Discussion

### Do we under-appreciate the role of moral intuition?

For me, the most striking and unexpected finding of my interviews was not that people use affective judgements for high-stake decision-making under uncertainty. What strikes me as odd is a completely unexpected meaning of the word “intuition” that was revealed. Indeed, when we say “intuition”, which intuition do we mean exactly? In retrospect, the Bezos’ quote that kick-started my thesis quest does mention both heart and gut, two distinct kinds of intuition, which probably should not be lumped together under one vague umbrella term.

A literature search made after the analysis revealed an additional layer of relevant literature. Dane and Pratt (2009) in their article “Conceptualizing and Measuring Intuition: A Review of Recent Trends”, identified three different kinds of intuition:

1) Problem-solving — pattern recognition based on highly specific and largely unconscious domain knowledge. I would suggest that when people say “gut instinct” they mostly mean that they sense a recognisable pattern.

2) Moral — affective reactions to issues that are viewed as having moral, ethical content. My hypothesis is that “heart” most closely describes this kind of intuition.

3) Creative — an ability to combine knowledge in novel ways. My hypothesis is that this kind of intuition most likely has to do with vision rather than with bodily feelings like “heart” or “gut”. Leaders blessed with this kind of intuition are described as “visionary”.

When faced with a question about important decisions in life and business, people by and large described moral, “heart”-based decisions as their best (this holds true for IT managers and bankers, interviews with entrepreneurs or creative industry professionals may paint a different picture). Perhaps alarmingly, they did that even when the decision yielded a somewhat questionable outcome or even no outcome at all. Of course, it is possible that people simply prefer not to tell stories where they made moral choices but were dissatisfied with the end result.

Principles are not without their own drawbacks. They could themselves become an object of blind worship. They could put their author in conflict with other individuals, with groups holding different moral intuitions or even with society at large. An American moral philosopher Eric Hoffer said, that “Men never do evil so completely and cheerfully as when they do it from religious conviction” and the same is probably true for any moral conviction. At this stage it is hard to tell whether the benefits associated with exercising moral principles

clearly out-weight the costs. Further research might be warranted. However, stories, associated with moral decisions might be even more important than the decisions themselves.

Contemporary philosophers exploring matters of virtue ethics, such as Alasdair MacIntyre (1984), argue that narrative plays a prominent role in our moral lives. Firstly, narratives have important educational properties due to their capacity to emotionally engage human imagination. But secondly, they might also hold a key to explaining the morality of human character itself. MacIntyre believes that a narrative model is best able to convey the moral qualities of a person. Humans judge their lives as worthwhile by the stories they tell about themselves. We become ourselves by living (and telling) coherent stories about human vices and virtues over time. The reverse is also true: we may fail in life by failing to establish a coherent story of ourselves or by failing to pursue a meaningful assembly of moral ideals. Thus, formulating life's principles and then living those principles "out loud" is, MacIntyre argues, what ultimately makes life meaningful and worth living.

### **Can we move from idealisations to living moral ideals?**

"But what great thing has there ever  
been that was not phantasy first?"

— C. G. Jung, *Psychological Types*, 1920

As the results of the interviews demonstrate, idealisations mostly (if not overwhelmingly) produce negatively evaluated decisions just as decisions grounded in moral ideals mostly produce positively evaluated decisions. Are these two somehow related? Can we transform pathological idealisations into healthy moral ideals? These questions bring us back to Melanie Klein (1932).

In Kleinian view, our capacity for love and hate unambiguously determines our ethics, what we believe is right and wrong in the world. Positive as well as negative affects, what we love and hate might be equally pleasurable and fill us with the sense of righteousness. Love and hate are both thrilling. We love to hate, to criticise, devaluate and demonise and we do it with the same passion as we love and admire something or somebody. In the early stages of moral development, the two polarities never met in our psyche. In this state (*the paranoid schizoid position*, in Kleinian terms) primitive division between good and bad acts as a motivational driver. Decision-making would have been impossible if not for existential tension between the two. To quote from Meltzer (1975):

[S]plitting processes are necessary for the kind of decisions that make action in the outside world possible. Every decision involves the setting in motion of a single plan

from amongst its alternatives; it is experimental, involves risk, a certain ruthlessness towards self and others.

It is obvious from the interview results, however, as well as from Tuckett's earlier observations, that the quality of decisions made from the paranoid schizoid position, from a divided state, is lacking. Splitting enhances our thinking and feeling only to some extent, it makes matters clear, it gives us confidence to act — but it also simultaneously impoverishes it, robbing us of nuance and shades of meaning.

To move to the next phase of moral development we need to be capable of creatively integrating the good and the bad, to see different shades of grey in the world rather than only black and white. We cannot do this with the rational mind alone. Contrary to understandings of rationalists, Klein believes that as far as ethics is concerned, thoughts and feelings work together to produce complex moral understandings.

Complexity and uncertainty are frightening. Thus, our capacity to deal with moral complexity is only as good as our ability to deal with anxieties that invariably accompany complexity. We can deal with it using primitive defence mechanisms like splitting or we can develop more nuanced understandings, the choice is ours.

An obvious avenue for pursuing this goal is psychotherapy in general and psychodynamic therapy in particular. Another option, which recently enjoyed a surge of popularity, is mindfulness training. Mounting evidence (Liu et al, 2018) suggests that both long-term and short-term practice can improve many aspects of decision-making, including its ethical dimension.

## **Reappraising the role of ambivalence**

Throughout the 20th century, ambivalence got a lot of bad press. Influential philosopher Harry Frankfurt called it "a disease of the will" (Frankfurt, 1999, p. 99-100). In his view the healthy will is solidified and unidirectional. A healthy person doesn't meander around. This view was shared by a lot of social psychologists (van Harreveld et al., 2015 provides a review of relevant research), who mostly focused in their research on the negative consequences of ambivalence, which, it must be admitted, are numerous. These include negative affect, procrastination, resistance to change, paralysis, decision avoidance and other decision maladies. Leaders expressing ambivalence and emotional complexity were reportedly perceived as less powerful.

Freud, on the other hand, maintained that ambivalence is something inescapably human. In *Totem and Taboo* (1913), he proposed that unconscious ambivalence is at the core

of human relationships, a theme which was further developed in the writings of Melanie Klein about love and hate. In Freud's later writings (Freud, 1933), ambivalence became a part of the fundamental dualism: *libido* (life instinct) versus *mortido* (death instinct). For as long as we are alive, we can't escape ambivalence, this was his conclusion.

Recently, however, the tide in experimental social psychology started to turn. Researchers began showcasing a more positive side of ambivalence, ironically, becoming more ambivalent about the subject matter. Rothman et al. (2017) demonstrated that emotional complexity as a characteristic of leadership could be beneficial by producing more adaptive decisions. According to Pillaud (2018), being ambivalent on complex, controversial issues can be recognised as competence. Perhaps ambivalence needs to be recognised as an important stage in decision-making in uncertain situations.

### **Practical implications**

Although this research study is not without its limitations, some preliminary advice to decision-makers who deal with radical uncertainty can still be offered:

- Resist the temptation to eliminate uncertainty with one sweeping 'ideal solution'. As interviews demonstrate, idealisations are seductive; they provide easy answers to complex questions. The drawback, however, is that those answers are seldom if ever true. After the idealisation narrative has collapsed, decisions become almost entirely unjustifiable and produce a massive state of grief and regret.
- When a solution appears that satisfies all the decision-makers' deepest desires (or evokes one's deepest fears) seek advice from a competent third party. Try to form a more balanced pros and cons view. Seek to understand risks and limitations of the solution, which seems "ideal".
- When alarm bells are triggered, proceed gradually, testing the hypothesis slowly. Place small bets and see if any of them pay out. As one moves forward the fog of uncertainty will gradually recede. Again, it is not advisable try to silence the alarm bell with one decisive movement.
- Seek to reduce uncertainty to risk by trying to assign meaningful subjective probabilities to different outcome scenarios. In some of the situations which look uncertain at first glance, subjective probabilities can in fact be assigned.
- As a last resort, use your moral compass to cast a decision but be aware that this is not a way to predict the future. However, decisions that use ethical judgement as the foundation are seldom regretted regardless of the outcome.

## **Further research**

Apart from replicating these results on a larger and more culturally diverse sample, further questions for research might include:

- What are the ways in which people arrive at principled decisions?
- Are there conditions under which decisions based on moral intuition leave the decision-maker dissatisfied? What are the drawbacks and limitations of the ethical approach to dealing with uncertainty?
- How does moral decision-making work in group settings, especially in morally diverse groups?
- Is it always advisable to moralise in the face of uncertainty and ambivalence or are there possibly other, more productive ways to resolve the ambiguity?

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