Intentionality, Intuition and Entrepreneurship

Before his untimely death **Michael Hodson** was working on a book called Designing Enterprise. With his wife Sheila's kind permission we are publishing a shortened version of chapter 2. Michael had a passionate interest in design thinking, and this piece reflects his concern that businesspeople (especially entrepreneurs) should shape their actions less by intuitions and more by intentions, carefully thought out under God.

There is a Strange Paradox

In our time and culture we live with a profound and strange paradox. We live in an instant culture that values speed and demands things quickly and sometimes instantly. We become annoyed if we have to wait twenty seconds for our laptop to start up. We expect service promptly when we pay at a checkout desk. We behave automatically; often we buy impulsively. And we object when we can't do so. The Nike slogan catches this well: "Just do it"¹. "Don't even think about it" might be another good slogan for our time.

Yet the credit cards, computer systems, technical machinery, business processes and service models that enable us to be quick require research and development; they take time and thought. Moreover they are based on previous knowledge that has been acquired through much thought over many centuries. They are based on intentional thought.

Many successful companies understand this. I was visiting an auto assembly plant in the UK. The UK government



had sponsored a Japanese 'master engineer' to inspect the plant and to mentor the managers there. It was just after the last shift ended on a Friday night and the assembly workers had gone home. The master engineer asked why the English managers were going home. In Japan Friday night was when Japanese managers tweaked the assembly line to see if it could run faster. They then compared their production statistics. This story happened some time ago and the principles of lean manufacturing are now well understood in Britain and around the world. But the lesson is the same for many aspects of manufacturing and services as well. Good design of products and processes requires careful, thoughtful, intentional analysis.

However we resist being intentional. We don't want to do things carefully, to have a method. This is particularly true of start-ups. At times resistance to planning and deliberation becomes hostility. We find good reasons to justify this reliance on 'gut feel' and what is already ingrained in us. We want to be spontaneous and quick, and this is seen as synonymous with creativity. We want to minimise the time to market for our new products. We want to rely on virtue to act ethically. We may doubt that it's even possible to achieve our desired aims through being intentional².

But Consider This

What if the evidence and our own common sense made us question our spontaneous approach? A supposed proof of spontaneity is jazz. Jazz players apparently create wonderful, complex never-to-be-repeated rhythms, melodies and harmonies without effort or forethought. But appearance belies the facts. Wonderful jazz is produced after the musician has mastered instrument and scales, and then much, much practice, both alone and with other players. Jazz is in fact proof of being intentional.³ The same is true of virtue. Virtue and character are rooted in story. The proper virtues are those that advance the purpose of the story in which the entrepreneur is a part. Therefore the entrepreneur needs to think not only about the story which he or she wishes to advance but also about their stage in the story, and therefore how their enterprise might contribute to the story's purpose.

The ancient Greeks had their stories and they promoted the virtues that supported those stories, chiefly prudence, justice, temperance and courage. The early church had a different story; and the Apostles added new virtues. Paul wrote about the virtues of faith, hope and love (1 Cor. 13:13) and the fruit of the Spirit: love, joy, peace, patience, kindness, goodness, faithfulness and selfcontrol (Galatians 5:22). The second letter of Peter lists a progression of virtues: faith, goodness, knowledge, self-control, perseverance, godliness, mutual affection and love (1:5-7).



Virtue certainly involves spontaneity. But it's habit that enables spontaneity to act virtuously.

Some might say that acquiring virtue is simply a matter of copying those who are virtuous. The Apostle Paul tells the Corinthian Church, 'be imitators of me' (1 Cor. 11:1), which requires an assurance that the relevant person is worthy of being copied.

Virtue is acquired through practice. During the practice period thought is required. While Paul's readers in Corinth might have received the gift of the Spirit this didn't mean that they necessarily acted virtuously. Paul likens the habit of acting virtuously to fruit growing slowly on the vine or a tree. The ripening process requires active response, not simply passive acceptance. As another New Testament writer puts it, disciples need to 'make every effort to supplement their faith with virtue' (2 Peter 1:5).

There seems to be a progression, a series of steps in the formation of a virtuous character (Romans 5:3-4; 2 Peter 1:5). Initial gifts of love for God, faith in Christ and his resurrection and hope in the coming Kingdom and our resurrection provide initial motivation to respond well to testing (James 1:2) and suffering (Romans 5:3). To be sure the will is involved, as is courage. But is there also a mental game involved here?

Virtue requires 'practical thinking' for its acquisition. As gifted as the Corinthian church might have been, they needed to be corrected and instructed how to act. That involved a mental, intellectual process that required effort. Paul urged his readers to 'have the same mind-set as Christ Jesus'; then he goes on to describe Jesus' virtues of humility and obedience, often associated with love (Phil. 2:5; John 14:15 and see also Lev. 19).

This mental reasoning plus the will to persevere are what amounts to intentionality.

The relation between virtue and intentionality can be likened to a tennis game. In tennis when you're two sets down, it's match point and you've lost the advantage, what you think is important. How should you return the service? You need to keep thinking as well as to be determined to win. You need to be intentional.

As in tennis so it is in life. Virtue in life requires making choices; then thinking about them and learning from our mistakes if necessary. Virtue includes having "habituated skills in assessing priorities among the actual and potential preferables in one's life and acting accordingly" (Wolterstorff 2011, 8). Yet the task of acting virtually in an enterprise is more complex still. For designing an enterprise requires conceptualising options that do not already exist. There may be few precedents. The designer entrepreneur needs also to formulate the designs as well as discriminate between alternative ones. This requires both reasoning and volition - intentionality.

Should we take the easy way out?

Daniel Kahneman the Nobel winning psychologist and author of the bestselling book Thinking, Fast and Slow distinguishes two ways of thinking. What he calls 'System 1' is what we might loosely term 'intuition' (but see the further discussion below).

Conversely 'System 2' involves rationality, thinking logically, and is therefore part of intentionality. Using 'System 2' thinking is slower and involves more work. We don't like to think this way. The brain is lazy and prefers to use 'System 1' (Kahneman

2011, 21, 31). Kahneman's research suggests that the reason entrepreneurs are reluctant, even hostile, to being intentional about the design of their enterprise is because they're lazy. So here are three questions. Would we want to imperil our enterprise by relying on

intuitive thinking alone because we were lazy? Would we want to forego the potential benefits of behaving intentionally out of laziness? How would we explain this to our Board and our investors; or to our Judge for that matter?

Why be Intentional?

There is reason therefore to cast doubt on many of the objections to being intentional about the design of enterprise. Moreover there's evidence from Kahneman's research to believe that it would be negligent not to investigate the potential benefits of being intentional. So first of all what are the errors we may avoid? Second, what are the benefits? Why not just follow our intuition and act on the spur of the moment?

Despite the relative ease appeal of relying on our intuition, there are good reasons to design in a structured way. Some of the reasons are theological. Others are pragmatic and based on what is known about the way the brain functions. These reasons are chiefly the following.

1. There isn't a good pattern automatically to follow in business

Entrepreneurs who wish to fulfil the purposes of God through the design of their enterprises have few examples to follow. Enterprises

> whose founders based their designs on Christian principles are relatively few and in most cases have lost the ethos of the founder⁴. Most companies dance to the beat of a secular drum. The methods taught in business schools follow secular objectives such as

the maximisation of shareholder value or private profit. The larger the company becomes, and therefore the more visible, the more likely it is to be managed by graduates of these schools. If the entrepreneur simply copies what they see elsewhere they will operate in a way that fulfils a

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secular objective. To copy a business that is seeking to fulfil God's purposes the entrepreneur must consciously choose the right model to follow. We must observe ourselves critically, knowing that we may be following a secular model⁵.

There is a further reason, set out by the design theorist and architect Christopher Alexander, as to why we cannot simply copy what we see other enterprises doing. The argument centres on the speed of change, a factor often thought to favour instinctive behaviour. "Problems" are increasing in "quantity, complexity and difficulty." The designer can no longer rely on "tradition"; and "any slow development of form becomes impossible." The result is that "the intuitive resolution of contemporary design problems simply lies beyond a single individual's integrative grasp" (Alexander 1964, 4-5). Particularly if a number of factors are interrelated, the consequences of making things based on intuition and tradition can be serious. Lack of conscious design leads to potentially disastrous unintended consequences (Alexander 1964, 77). Alexander blames the

construction of the large tower blocks of social housing in Britain on such an unthinking approach that didn't learn from its mistakes. Many of these blocks were subsequently demolished. What was true of architecture of the 1960s is arguably doubly true of business in the 21st century.

2. We can't rely on doing the right thing automatically

Entrepreneurs must also be intentional because we must all acknowledge our inclination to error. We not only live in a fallen world but we are fallen creatures. Our understanding of God's will is imperfect. There are hostile voices that still question "Did God say?" Today there are many who like the serpent deconstruct what God has said to suggest manipulation and selfish intentions (Genesis 3: 4-5). The stories of adam, Israel and Jesus in the wilderness among many others in the Bible amply show that no one is immune to temptation. In the silence of our hearts it's not a foregone conclusion that we will listen to God's still voice. Nor do we always want to follow his direction

when we hear it. Like our first ancestors we desire "the wisdom that might enable a person to make his or her own judgements autonomously." We "want to be gods, in the fullest sense, rather than representing and mediating God to creation" (Provan 2014, 114). We are conscious that we do not always resist these temptations. "If we claim to be without sin, we deceive ourselves and the truth is not in us" (1 John 1:8). To avoid self-delusion requires vigilance. It requires conscious attention. It requires being intentional.

Reliance on instinctive behaviour is simply impractical. Doing what is right is not only a matter of understanding God's will and being willing to implement it. It requires the right tools on hand as well as the skill and understanding to do the job. It requires careful design of not only products or services but also supply, logistics, manufacture, contracts, financial structures, promotion, distribution and pricing, to mention only the major areas of decision. It requires careful planning with many hundreds of decisions at each stage.

3. Relying on intuition leads to mistakes

Research in psychology and neuroscience continues to expand our understanding of our different ways of thinking. Results show that relying on intuitive thinking can lead to mistakes in the way we think and the conclusions we draw from our thinking. These mistakes affect the way we gather the data for our analysis, the way we "frame" our analysis and our ways of thinking⁶.

Psychological research helps us to understand why our mental picture is wrong. Our intuitive thinking limits and biases our perceptions and datagathering abilities. The conceptual picture of the context will usually be different from the actual (Alexander 1964). This can lead to wrong analysis and conclusions. Kahneman describes some of the ways in which this happens (Kahneman 2011, 79-88). We have first of all difficulties in perceiving what is happening. We tend to ignore information that we need in order to make a decision and to use only what we see available. He calls this "What You See Is All There Is".

Another type of filter tends to divert our attention away from what is stationary in preference to what is moving. This can extend to numbers as well as things. We notice changes in levels rather than question the levels themselves. Stock traders tend to trade following news that alters the price of a share, not on the fundamental value of the stock. We are interested in relative changes, not absolute changes. This makes us blind to small changes that are nevertheless significant. For example over time we didn't notice the slow incremental rise in the level of mortgage debt until the market collapsed.

While much of design is incremental some of the most significant designs are "disruptive", off-the-wall and very different. Think of the jet engine as opposed to the prop engine, the personal computer following the mainframe. New designs such as these usually come from adopting a new perspective. The concept of the enterprise as there to serve God and not make profits for its owners is a case in point. It's often thought that free-wheeling intuitive thinking may help generate a new perspective. However intuitive thinking also introduces biases that may stop the entrepreneur seeing things from a different point of view. The intuitive mind for example tends to see things from the perspective of a representative individual or a general type of product (Kahneman 2012, 105). This inhibits consideration of unrepresentative people, or different physical principles as in the case of the jet engine.

The intuitive way of thinking is also biased by the way in which information is presented. In particular we are biased against losses and toward gains. A \$10 loss is more significant than a \$10 win. In design terms we are therefore less likely to consider those design forms that might have harmful effects.

Using our intuition can not only lead to misleading ways of gathering data

and looking at a problem but also poor ways of analysing a business or design problem. For example, our intuitive way of thinking sometimes substitutes easier questions for the question that we are actually trying to answer (Kahneman

2012, 97–104). Intuition may be a legitimate first step in finding an answer to a problem. As Polya explains, this "heuristic reasoning" cannot be "regarded as final and strict" but only "provisional and plausible only." It provides us with a "plausible guess" that acts as "scaffolding" while we build a correct proof (Polya 1945, 113). Intuition has a bias toward confirming what we think already. A related problem is that our intuition is too good at inventing a "coherent explanation for events" (Kahneman 2012, 105). This problem is compounded because our intuition is very often "blind" to our incorrect intuitive explanations (Kahneman 2012, 28). The implication is that we may design the form of the enterprise in a way that doesn't achieve the desired purposes.

4. Thinking intentionally can lead to better results

What advantages are there of being intentional? This can be answered with respect to our purpose. We want to design the enterprise to help fulfil God's purposes. We don't want to go off track. Secondly, we want a process that enables us to do the best we can with God's help. We need to recognise that our first efforts are not likely to be our best. Thirdly, we want the opportunity to go on making our enterprise better. Therefore we need a method that enables us to monitor progress and to evaluate it. However we don't operate in isolation. So fourthly we need some way of communicating

"intuitive thinking sometimes substitutes easier questions for the question that we are actually trying to answer." with workers, customers and others, some process that communicates what we are doing and why we are doing it. All these four purposes are better served by an intentional method of design.

As discussed above, the intuitive way of thinking leads to many types of bias. These

biases tend to lead us to think in terms of our norms and to re-enforce our beliefs, including our beliefs about how we should do business. Unless we are intentional we follow the expectations others have about how we should behave and act. If we are aware of our own defining values, objectives and desired behaviour we can remain true to these. We can resist the pull to conform to others and to remain true to our intentions. We can remain *en piste*, contributing to God's story.

Staying on course has a personal as well as a corporate aspect. If we are not conforming to commonly accepted business values, starting up an enterprise requires a tremendous amount of energy. We need to be aware of what sustains our energy, the source of our passion, how we are feeling, and knowing what we can do to revive our flagging energy. We must plan for reflection, prayer, inspiring conversations - whatever we know from studying ourselves will give us new life and enthusiasm. The entrepreneur needs to use this same awareness to motivate others in the enterprise. Self-awareness is the result of intentionality.

Consciously trying to avoid the weaknesses of our intuition is one approach. We must instead think how to use the strengths of our rational, intentional capacity to think. These strengths include 'deliberate memory search', nontrivial computation, logical analysis, making comparisons, criticism and planning (Kahneman 2011, 103). The entrepreneur designs a process that uses these capabilities of the human mind. We search our memory of biblical texts for the most appropriate and subject our interpretation of them to the criticism of others to develop a better understanding of God's purposes. We include an analytical and data-gathering stage to the design process, checking the logic of the design and its specification. We use our brains well to decouple complex problems and minimise interactions. We question our point of view to check if our understanding of cause and effect is too simplistic. We intentionally adopt a rational approach.

But intentional thinking processes also have natural weaknesses. The brain can only process a limited number of interrelated variables at one time. Solving a design problem may require simplifying the process. The entrepreneur designer might include times when they widen the design options and then narrow them. By thinking intentionally about their method the entrepreneur plans out mental tasks to avoid mental over-load.

The thinking process suggests many options as one activated neural pathway leads to another. Thinking about the design of an enterprise itself continuously prompts the generation of multiple alternatives. What aspect of the enterprise do we want to include, or to exclude? Deciding which paths to follow requires assessment and evaluation. Conscious thinking gives us the capability to be aware of our own intentions, thoughts and the effects of our designs.

We ourselves are the problem, for our conclusions are influenced by what we have experienced. Our experience is partial, our observations or recollections probably imperfect and our assessment possibly biased. The solution is to make our biases

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transparent to ourselves. We need to step back and see ourselves. One way to do this is to write down what we intended to do, how we did it and what were the results of our designs. Like the experimental scientist we can keep some form of 'lab notes'. This is the starting point for a detached evaluation and

analysis. It can stop us from hiding behind the 'style' or design 'rules' of others and can help us question the form of our design (Alexander 1964, 77). Conscious evaluation gives us a framework to go back and correct errors and redesign.

Writing down our thinking and design processes also exposes them to others. This helps increase our own commitment to what we're doing. More important still it enables others to evaluate what we are doing, separate from the desire we have to justify ourselves. This is the basis of design teams and concurrent design in automotive, aircraft and other areas of manufacture and services.

Having an intentional method and being consciously aware of it opens our work to evaluation by the Holy Spirit. If we make conscious provision we can include a place in our design process for God to have his say. We let God get a word in edgeways, for his assessment. We may find some forms of the Ignatian examination of conscience a helpful way to do this. Asking, "What moments am I most grateful for, or least grateful for?" can show God's leading in our lives daily. Praying and listening to identify where God has made us grateful can show us where God is providing our needs, and therefore where God is leading us7. This can include the plans we have for our enterprise and its development. The examination can be used daily or at stages in the design

> process⁸. God's Holy Spirit becomes part of our evaluation team.

Communication of an intentional process enables evaluation in a less biased way. We articulate a goal for our enterprise, its practices and products, to others so they can engage with us in the process of co-design. We can tell our story to suppliers,

investors, workers and customers.

This is important for the competitiveness and sustainability of the enterprise. For enterprises operating with a wider purpose than pure profit often face higher costs. Fair trade coffee companies for example pay their suppliers higher prices. However they can stay in business if customers are willing to



pay a higher price too. They may do this if they agree with the story the enterprise tells. Similarly workers may work more diligently, large suppliers may agree to smaller production runs and investors may accept lower returns if they agree with the enterprise's story. To communicate that story well requires structured, intentional thought.

The entrepreneur also needs to communicate the purpose and practices of the enterprise to the board of directors or those to whom the founder is accountable. If the founder has thought out and communicated the purpose of the enterprise then the board can help ensure that the purpose is carried out, and that the purpose of the enterprise is maintained after the founder leaves. As Peter Greer and Chris Horst say in the opening sentences of their book Mission Drift, "Without careful attention, faithbased organisations will inevitably drift from their founding mission. It's that simple. It will happen" (Greer 2014, 15). Maintaining the intention to fulfil God's purposes is one of the most difficult problems that face the successful faith-based enterprise. It cannot be solved without thinking about the problem and intentionally designing a structure and implementing practices that maintain

the orientation of the enterprise, including its communications.

5. Thinking can help get the best of both worlds

If we think about our approach to enterprise we can design a way of getting the best from both our intuitive thought processes and our intentional ones. We have looked already at the strengths of intentional thinking and the beneficial ways we can use it. We have also seen some of the biases and weaknesses of our intuitive ways of thinking. However intuition also has strengths as well as weaknesses. We can build on these strengths and use them to our advantage if we integrate our two ways of thinking while we design enterprise thoughtfully. Consider the following three ways of doing so.

First, we could use intentional thought to define patterns beforehand, and then use our intuition to help us to recognize them. Intuition is particularly good at recognising abnormal patterns. Intuition recognises the 'surprising from the normal' (Kahneman 2012, 105).

Second we could use our intuitive thinking to help us see problems and to analyse them from a different perspective. We could spot the 'outlier', the unrepresentative customer, the technology that is potentially disruptive, the place where things are going wrong and the data that are missing.

Third, integrating intuition and intentionality is potentially a productive may of formulating new designs. Intuition can 'see' plausible, coherent patterns of cause and effect (Kahneman 2011, 105, 200–222).

At the designing, analysis and datagathering stages we could integrate our two ways of thinking to create a better product or process. The results could be much better than using our intuitive or intentional ways of thinking on their own. However to get the best of both worlds we would need to devise a method to do so. This too requires intentionality.

Thinking Ahead

As Kahneman's research shows, laziness is a forceful reason to rely on intuitive thinking. That's why we rely on it and there's such resistance to thinking intentionally. Arguably this is especially true of entrepreneurs. Yet it's a dangerous mistake to do so. If we rely on our intuition by and large we follow the way of the world. We don't follow a different path. Moreover intuitive thinking leads us to make mistakes in data-gathering, if we do any, as well as problem framing, making deductions and attributing cause and effect.

Conversely intentional thinking has great advantages. It can help avoid the mistakes of intuitive thinking. It can help us to use our brains more fully, to draw on a larger database, to make use of analytical thinking, to build on the thinking of others in order to understand new design problems. It enables us to represent and compare what is desired and what is achieved so that we can design a better solution to our problems. Intentional thinking also enables us to recognise the strengths of intuitive thinking. Conscious of these strengths we can formulate a design process that enables the best use of both intuitive and intentional thinking.

Significantly an intentional method of designing the enterprise might also allow a place for reflection and prayer in the design process. We could ask, "How does intentional thought relate to prayer and listening to the Holy Spirit?" What is the relation of mind to Spirit? In some respects this is similar to asking about the relation of the mind and virtue discussed above. Some of the same answers apply. The complexity of business problems requires us to think; and we must think to communicate. This includes prayer.

However the writings of the Apostle Paul suggest that the relation between the Spirit and action is more subtle than this. The Holy Spirit has mind (Romans 8:27). Paul also writes about the Holy Spirit controlling the mind to bring life (Romans 8:6). So God doesn't intend the Spirit to displace the use of the mind. Prayer in the Spirit and the mind are complementary. Using one's nous is intelligible and brings understanding to others (1 Cor. 14:14-17). Yet the Holy Spirit also brings recognition and understanding of the "things of God" (1Cor. 2:10-15). The Spirit of God and the mind of humankind are meant to work together.

The question then arises, "What form might this process take within the design context?" This is similar to asking how we might design a process to keep us on track theologically, avoid the pitfalls of relying on intuition and making best use of both intentional and intuitive ways of thinking. We need to think intentionally to solve these and other problems. Fortunately how to design well is a question that many people have studied. Researchers in the field of design thinking have also considered the effects of the sort that Kahneman and others have done on the way the brain works. They

have developed ways of using this understanding to develop better approaches to design that are more creative. They've shown that everyone can design better. And they have shown how some designers design better than others. This is work that we cannot afford to ignore. How we can integrate their findings with the revelation of God in scripture and the Holy Spirit to fulfil the purposes of God is the subject of another article. We need to learn to do so intentionally.

Works Cited

Alexander, Christopher. *Notes on the Synthesis of Form.* Cambridge, Mass.: Harvard Fellows, 1964.

Greer, Peter and Horst, Chris. *Mission Drift.* Bloomington, Minnesota: Bethany House Publishers, 2014.

Kahneman, Daniel. *Thinking, Fast and Slow.* London: Penguin Books, 2011.

Kay, John. *Obliquity: Why Our Goals are Best Achieved Indirectly.* London: Profile Books, 2011.

Pattison, John & Smith C. Christopher. *Slow Church: Cultivating Community in the Patient Way of Jesus.* Leicester: Inter-Varsity Press, 2014.

Wolterstorff, Nicholas. *Justice in Love.* Grand Rapids, Michigan: Wm. B. Eerdmans Publishing Co., 2011.

1 "JUST DO IT" is a trademark of Nike and was the basis of the company's highly successful 1988 campaign.

- 2 This is the position taken by John Kay (Kay 2011). See below.
- 3 I'm indebted to Paul Williams for this example that he used in a talk that he gave to the London Institute of Contemporary Christianity in 2015.
- 4 See *Mission Drift* (Greer 2014)
- 5 See for example the story of Bernie Willock who was aware of the secular nature of the furniture retail model and set out to change it (Marketplace Institute, Regent-College, Vancouver 2014)
- 6 The discussion of "intuitive" thinking is largely taken from (Kahneman 2012)
- 7 The point is made by Smith and Pattison in their book *Slow Church* that prayer and thanksgiving are the means of discerning "the center" (sic) of God's will and that gratitude is the means of seeing God's blessing and through His eyes. (Pattison 2014, 178, 183)
- 8 On the designing enterprise course at Regent College we have used a book designed for use by families. Nevertheless students have often found this to be one of the most helpful parts of the design course. See (Linn, Linn and Linn 1995). D M Lloyd-Jones, *Life in The Spirit in Marriage Home and Work*, Banner of Truth Trust, 1974, p.305.



Michael Hodson was an economist who hailed from Canada but lived much of his life in Guildford, where he was a Reader at Christ Church. He worked in business, consultancy and government. In recent years he was a visiting lecturer in social enterprise at Regent College Vancouver. He was married to Sheila. We wish her and their two grown-up children our sincere condolences.