

It Must be Beautiful

Gary Cundill recalls early days of engineering studies, where mathematicians taught him that equations needed to be beautiful in order to be valid. He remembers teaching his children that one aspect of creation's goodness is its beauty, which reminded him that all business activities take place in the context of God's creation. And that got him thinking about how, just as God's attributes may be evident in our world, elements of that same world's beauty may then be evident in business. If this world is beautiful, and business takes place in this world, in what ways does (or could) business reflect the beauty of the context in which it is taking place?

It was a long time ago, but I still remember what fun it was to read: 'It must be beautiful: great equations of modern science'¹. An edited collection of essays, it was about as far from the quintessentially dry mathematics textbook as the proverbial east from the west. The mathematics was certainly there, but also why it mattered, and how the development and use of these equations had changed the world. There were marvellous stories, but what stood out for me was the idea of 'beauty'.

I had studied mathematics at school and for several years at university

in the course of my undergraduate engineering degree. I'd found it interesting, even deeply satisfying at times such as when I was finally able to complete a complicated geometry proof. Our theoretical mechanics lecturer, in a temperature of at least eighty in the shade and still riding his scooter erratically around campus, had worked at the Peenemunde rocket works during the Second World War. His lectures certainly passed the 'coolness' test, as we learned the equations that described the landing point of ballistic missiles, and how to make sure a rocket reached the moon.

But beautiful? I don't recall ever thinking of mathematics in quite that way while engaged in those engineering studies.

'God made the world and he made it good' went the first line of the first children's bible story book I ever read to our (then little) girls. One aspect of creation's goodness is its beauty. I now live in a part of the world aptly named the Garden Route. As I write this I look out on forested slopes, and if I get up from my chair and stand on the balcony I can see the sun shining on the peaks of the Outeniqua mountain range. It's forecast to be a clear night tonight,

Outeniqua mountain range

Photo: MartinaS@MuKWilderness





Beautiful Architecture

Falling Water House (1935)

Bear Run, Pennsylvania

Architect: Frank Lloyd Wright

His career revived after designing this house

Photo: lachrimae72 - <https://pixabay.com/photos/house-in-nature-house-falling-water-2110133/>

which will provide an opportunity to enjoy the splendour of the stars, planets and galaxies.

Beauty in creation shouldn't surprise us. The Bible speaks of God's beauty both directly and metaphorically, and of the beauty of his immediate surroundings². When we look at an artist's works we may expect to see something of the artist's character in them. In one of his better known psalms David confirms that the creation tells us about God and his glory³. Quoting amongst others Jonathan Edwards, Alister McGrath has pointed out that God's beauty is reflected in his creation: 'The works of God are but a kind of voice or language of God to instruct intelligent beings in things pertaining to Himself'⁴.

Beauty in mathematics shouldn't be a surprise either. The natural sciences are based on 'a belief in the regularity of the natural world, and the ability of the human mind to uncover and represent this regularity in a mathematical manner'⁵. Galileo went so far as to describe the universe as a great book, written in the language of mathematics, and that could not be understood except in that language⁶. If the creation is beautiful, and if the way to understand creation is, at least in part, through the language of mathematics, why then

would this same mathematical language not also have attributes of beauty?

But this article is appearing in Faith in Business Quarterly, and not Faith in Science & Mathematics. What relevance does the above have to our primary area of interest, business? Just this: that thinking about beauty reminded me of mathematics, which led me to think of God's creation, which reminded me that all business activities take place in the context of God's creation. And that got me thinking about how, just as God's attributes may be evident in our world, elements of that same world's beauty may then be evident in business. If this world is beautiful, and business takes place in this world, in what ways does (or could) business reflect the beauty of the context in which it is taking place?

Some businesses lend themselves more naturally than others to displaying beauty. An architect who sets up offices and a studio in an ugly building may find herself short of custom. An interior designer who invites clients to meet him in poorly decorated surroundings is unlikely to inspire confidence. Customers of businesses such as these are usually expecting a beautiful result, whether in the form of a building or a living space. The creative types called upon to deliver such results are therefore

likely to signal their capabilities to prospective clientele by operating in overtly beautiful surroundings. There may be direct links to the beauty of creation in their offerings, too, as their designs may take into account and be complemented by expansive views, shady trees and rugged rocks.

Other businesses may appear to involve the very antithesis of beauty. Peering through the starboard window of a Twin Otter flying south along the coast of East Kalimantan, you'll be confronted by a ghastly moonscape of gargantuan craters. Once lush jungle with all its variegated created life forms has been logged, burned, and then physically moved aside by opencast miners to allow access to the coal that lies beneath. Another business rather less obvious to the eye is the mineral tanning of animal hides. The product is supple and useful leather that can be put to a variety of uses, but the chrome-laden waste that results from the many small-scale tanneries in less developed economies is highly deleterious to human health.

Some businesses may seek to apply a veneer of beauty to their perhaps not-so-pretty operations. A company supplying diesel or machinery to those miners operating in Indonesia may hire the receptionists for their head office

lobbies on the basis of their looks. Flying, particularly when done at business-class levels or above, is a significant contributor to greenhouse gas emissions. This negative environmental impact is unlikely to come to mind when admiring the appearance of the 'Singapore girl', who forms a major part of the marketing thrust of a well-known Southeast Asian carrier. The hardnosed machinations of investment bankers are frequently kept out of the public eye, but their firms spend fortunes on artwork for board rooms and client-facing areas of their buildings.

Our world is beautiful, but fallen. The pure produce of Eden has been at least partially replaced by tangles of thorns and thistles⁷. We should not be taken aback, then, that otherwise beautiful businesses may have ugly facets. The modern pharmaceutical industry can certainly be seen in at least some respects as a beautiful business; the development and production of antibiotics has materially extended the life expectancy of the human population of the earth. More effective pain killers have eased the suffering of countless millions of hurt and sick people. Yet inappropriate marketing of opiates by some elements within that same industry has now led to the unnecessary death of tens of thousands of people each year. Ugliness, in amongst beauty. And that's even before we start to contemplate the overtly illegal drugs trade.

Some businesses appear at first blush to be irredeemably ugly—the military arms industry, for example. These are businesses whose very reason for being is the existence or at least the threat of war. Few things are uglier than war; and so presumably few businesses could ever be uglier than arms businesses. It's common for socially responsible investors to exclude arms companies from their portfolios, along with other 'vice' stocks such as tobacco purveyors. Yet if we were to try on the muddy boots of a weary Ukrainian infantryman sheltering in his freezing foxhole in the Donbas, might we not exclaim 'A thing of beauty!' were we to see a German Leopard 2 tank taking up a supporting position? If (as may be argued) the West is acting responsibly by supporting Ukraine's government and people against Russian aggression, and if (as is the case) much of this support is taking the form of arms and ammunition, is it possible that the arms industry is not, after all, irretrievably socially irresponsible?

Beauty, and ugliness. We see both in our world. Sparkling bright blue lakes in the high mountains of Peru; but bright blue because of copper contamination. Spectacularly coloured sunsets that distract us from monolithic buildings on the horizon, but with most of the palette a consequence of air pollution. Waving palm trees on a South Pacific

atoll appearing over the horizon, but as we sail closer we see the layers of plastic bottles on the beach and the coral bleached by ocean warming and acidification. Beauty, and ugliness. In the world, and in the businesses that operate in this world.

So what is a Christian to do? How are we to live in this beautiful yet marred creation that's now groaning and suffering⁸? How are we to serve in business, with its intertwined strands of beauty and ugliness?

One way is to respect in our work God's own work. A loving boy, presented on his birthday with a beautiful sweater by a doting grandmother, would not put it on and immediately go outside and dive into a muddy puddle. Likewise, we can hardly describe ourselves as lovers of God if our business activities are having the equivalently deleterious effect on God's beautiful creation. Those of us who are familiar with the ISO 14,001 environmental management system framework will know that you can't get very far until you've identified the (usually) negative impacts that business operations are having on the environment. As lovers of the Creator and his work, those of us in business can ensure that we are aware of any damage that the business may be causing, and act to at least mitigate if not eliminate these impacts.



Leopard 2 Tank

Photo: Bundeswehr/Wikimedia

Sometimes this may involve enhancing the beauty of God’s creation—or, more likely, restoring its original beauty. Last’s year Faith in Business theme of ‘Investment’ saw articles written and presentations made on ‘impact investing’, investment aimed at achieving a positive impact in the world. Similarly, while beautiful businesses seek to minimise negative impacts, they can also aim to have a positive impact on this world. For example, they can provide customers with quality products at a fair price; they can care for their employees; they can give to good causes⁹.

So, we can contribute to beautifying business by focusing on impact, reducing the negative and enhancing the positive. But a second way doesn’t require us to look outside of the business at all, but to focus on what’s happening inside the business itself. Can the internal workings of our business be described as ‘beautiful’? The Bible, while far from being anything like ‘The Dummy’s Guide to Beautiful Business’, provides us with useful guidance in this regard. Just a few examples: are we showing traits of beauty in the way that employees are treated? Do we ensure that workers enjoy sufficient time off to rest?¹⁰ Are those who are more vulnerable than others protected from exploitation?¹¹ And do we manage the business with a ruthless attention to the financial bottom line, or do we take

into account the social conditions in neighbouring communities, creating opportunities for the less fortunate?¹²

And allow me to suggest, perhaps a little controversially, that there is a third way in which we may pursue beauty in business. Not surprisingly, many of the references to beauty in the Bible are references to women. Sarai, Rachel, Abigail, Tamar, Abishag, Esther, and the beloved in the Song of Songs are all described as beautiful¹³. It is therefore perhaps not surprising that what may be the most comprehensive description of beautiful business that we find in the Bible is that of a businesswoman:

*She obtains wool and flax,
and she is pleased to work with her hands.*

*She is like the merchant ships;
she brings her food from afar.*

*She also gets up while it is still night,
and provides food for her household
and a portion to her female servants.*

*She considers a field and buys it;
from her own income she plants a vineyard.*

*She begins her work vigorously,
and she strengthens her arms.*

*She knows that her merchandise is good,
and her lamp does not go out in the night.*

*Her hands take hold of the distaff,
and her hands grasp the spindle.*

*She extends her hand to the poor,
and reaches out her hand to the needy.*

She is not afraid of the snow for her household,

for all of her household are clothed with scarlet.

*She makes for herself coverlets;
her clothing is fine linen and purple.*

*Her husband is well-known in the city gate
when he sits with the elders of the land.*

*She makes linen garments and sells them,
and supplies the merchants with sashes.*

*She is clothed with strength and honour
and she can laugh at the time to come.*

*She opens her mouth with wisdom,
and loving instruction is on her tongue.*

*She watches over the ways of her household,
and does not eat the bread of idleness.¹⁴*

Glass ceilings are not as shatter-proof as they once were, but women remain under-represented in many areas of business, particularly at senior levels. Perhaps as this situation continues to change we may rightfully expect to see more beautiful business being done?

God made a beautiful world, and we can still see beautiful signs of his handiwork as we look at his creation. The scientists who have sought to describe in the language of mathematics how God has ordered his creation have recognised and displayed this beauty in their work. Similarly, those of us who serve in business ought not to allow ourselves to miss this created beauty, but instead work to reflect and show it in our business life. 🌿

1. Graham Farmelo (Ed.) *It must be beautiful: great equations of modern science*, Granta Publications (2002).
2. Ps 27:4; Isa 28:5; Ps 50:1-2.
3. Ps 19:1-6.
4. Alister McGrath, *A Scientific Theology*, vol. 1, T&T Clark (2001), p 236.
5. *ibid.*, p 50.
6. *ibid.*, p 210.
7. Gen 3:18.
8. Rom 8:22.
9. cf. Peter Lupson, ‘Men of purpose’, *FIBQ* 21.2 (2021), pp 12-16
10. Exod 20:8-11; 23:12.
11. Deut 10:19; 24:14-15.
12. Deut 15:7-11; 24:19-22.
13. Gen 12:14; 29:17; 1 Sam 25:3; 2 Sam 13:1; 1 Kgs 1:3,4; Est 2:7; Song of Sol 1:15.
14. Prov 31:12-27 (NET Bible).



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