Faculties of the universe

Marcus Robbins

faculty, n. 1. Aptitude for any special kind of action; power inherent in the body.
2. branch of art or science, department of University teaching. **universe**, n. All existing things; the whole creation (& the Creator); all mankind.

(from The Concise Oxford English Dictionary, 5th Edition)

If the universe and all that is in it started with a big bang, perhaps we can see images of that momentous happening in ourselves. I think we can. We each are a microcosm of the macrocosm. As humans, we can be modelled according to faculties (abilities or powers) we all possess, of which ten can be identified from ancient and modern studies. And if you look at the big bang theory and the immediate evolution of the universe, a corresponding set of ten faculties (branches or divisions) can also be identified. These faculties, both at universe level and in your "you-niverse", can be thought of as complementary pairs that form a unity of opposites. So what are they and what can we learn from them to help find balance in our ride of life?

Sparks vs. laws: creating vs. judging

Let's consider the first pair. For the big bang to have occurred, it can be argued that there had to be a "spark", prime mover, or faculty of creation to get it all going. Nobody really knows how that spark was struck, but the religious among us would put it down to a Creator. In effect, sparks continue through the processes of evolution. And now, from a human perspective, we mirror that faculty by starting life as a little bang, so to speak – an act of procreation initiated by our parents, and throughout life we continue to exercise that spark of creativity through art, music, drama, writing, innovation, inventiveness, more procreation, and the use of our intuition. The creative faculty at both cosmic and human level is characterised by freedom, un-limitedness, a lack of boundaries, cooperation with the evolutionary processes, and an unknowing where anything will lead.

In contrast to that faculty of creativity, we have – as humans – a faculty of judging, of making laws and setting limits. In other words, we can make decisions, or have them made for us – as part of our physiology,

environment, or social framework. That also includes our built-in preprogrammed instincts. When it comes to the universe, from the instant of creation everything has been determined by laws, codes and principles, albeit with chaotic effect in the beginning – as described in Genesis. Who or what determined the values of those laws? Although seemingly constant now, did they evolve, too? And what hand might a Creator have had, and still have, in making all those decisions? These are difficult but important questions.

So this is our first pair of faculties at cosmic and human levels – pure unbounded creativity, balanced by laws and limits. In the universe, it may seem like clockwork, but in our lives and behaviour, we have to keep on working to find that balance, now more than ever – rights vs. responsibilities, your freedom vs. my freedom, and whose rules, exactly?

Matter vs. motion – observing vs. applying

Let's consider the next pair of faculties, taking again the lead from creation. A spark is struck – what happens next? Well, the universe's faculty of matter springs into existence - undifferentiated chaotic matter, substance, just stuff, whatever you want to call it. Initially it is less than a pinhead in size, so say the physicists, but in a miniscule fraction of time it expands – billions and billions of degrees in temperature but already cooling. After aeons it forms stars, the earth and then us. We are stardust in a Goldilocks land, where everything is just right for our existence. And now we have the faculty to observe this matter in all its glory using sight, sound, touch, taste and smell and perhaps a few more senses than we thought we had. We may ask who "observed" the stuff of the universe as it was created and evolved? Genesis says that God "saw" it, and observed it was good. We can now peer back into the past almost to the beginning of that time using our telescopes and indeed it seems wonderful, but in times present, things of the world don't always appear that great.

What is the complementary faculty to matter and its observation? It is surely motion and its application. The act that created matter also created motion or energy. Without movement there would be no matter, and at billions of degrees there was plenty of it to begin with, and still is. Initiation by the prime mover was explosive expanding

chaos, followed by coalescing, orbiting, evolving, birthing and eventually squirming humans. An amazing dance, if you like. That faculty of motion is now built into us as we grow, develop, and do physical things, applying our abilities, using our hands, feet and bodies to move data, things or ourselves. We have got so good at locomotion and harnessing energy that we or our creations can now move away from Planet Earth and explore the stardust from whence we came, and work out where everything is going. It's a moving experience indeed.

That, then, is our second pair of faculties. Matter and its observation through our senses, and motion and its application using our bodies or machines. Watching vs. doing. Again a balance is needed in our daily lives. Just as there is no matter without motion, we cannot just be observers – we must be doers as well. No idle sitting on the sidelines...

Parts vs. purpose – monitoring vs. directing

We've come from creative freedom vs. limiting rules to observable matter vs. applied movement. Where now? Out of that undifferentiated chaos order appears, we are told. Genesis talks of light and darkness, water, the deep and heavenly bodies. Scientists talk of particles, atoms, elements, compounds, galaxies, stars, planets, and living beings, including humans – all evolving. A myriad of different parts, types, levels and hierarchies – microscopic and galactic – all the units and components that make up the earth, our environment, you and me. And with that has come our faculty to distinguish all these differences created out of matter, both by nature and by ourselves. We have become expert at discerning, measuring, classifying and monitoring differences, using our senses and intellect, until now we have a mind boggling store of data, information and knowledge – all the basis for natural science.

And what complements this multitude of parts? I think it is the wisdom of the whole that they make up. Teleologically¹ speaking, it is the end, goal, purpose or meaning of all these parts. So, to what end was the big bang directed? Why did it happen? Most scientists would say that there is no purpose to this gradual evolution of plurality from one singularity – just blind following of rules that may go on for ever, or end back in a crunch – humanity just being a tale of sound and fury, signifying

_

¹ Teleology: The study of design or purpose in natural phenomena.

nothing. Religious people would disagree, but all might say that we now have a faculty to help us direct our lives towards goals by integrating all the parts into a purpose. And more importantly, we can help others to achieve their own goals. That may be as bland as just being happy, or it may be, as the Christian catechism states, "to know, love and serve God in this world, and to be happy with him in the next."

Our third pair of faculties is thus a tale of differentiation vs. integration, splitting and making whole, finding purpose in the parts, both at cosmic level and human. Depending on your viewpoint, it is either a tale that signifies nothing, or its parts do make up a purpose and the discerning leads to directing towards an eternal goal. It seems that nowadays, looking at all our breakups, breakdowns, riots, and terrorism, we need more integrating and less differentiating.

Patterns vs. phenomena – interpreting vs. expressing

Continuing on with the story of creation, what else is needed in addition to the sparks and laws, matter and energy, parts and purpose? It is the need for patterns to enable everything to come together in different ways to form those atoms, elements, molecules, stars, planets, galaxies, and individual animals and people which form part of the universe. Some philosophers would describe these patterns as pre-existent ideas, perhaps in the mind of God. Some enlightened researchers might accept that these patterns may exist as fields, so far unexplained. Traditional materialistic scientists would put it all down to progressive evolution of matter. Whatever the mechanism, the equivalent faculty at human level is our power of thought, of generating ideas, and solving problems — our ability to interpret things around us, using our brain, perhaps having a mind that extends beyond us into the universe. In short, we have the faculty of thinking and reasoning.

What contrasts with thought and interpretation? For us humans, it has to be the ability to express our thoughts to ourselves and others, using language via words, tone of voice, and body movement. It is when we speak, or play music, write books, or act out dramas. It is when we show emotions – messages from the bottom of our hearts. It is an amazing faculty, being able to communicate as we do. Our ability to express thoughts and feelings using language sets us apart from all other life. And how has the universe been expressing itself? We can

describe that by the word phenomena — the wonderful ways that galaxies, stars, planets, earth and nature have formed and manifest themselves in all the sensations that they produce. That has been happening ever since the big bang, with all creation being a silent witness to its amazing manifestations. Only now is part of it really aware and able to wonder and begin to understand it all. And that part is us.

Our fourth pair of faculties, then, is pattern and interpretation, vs. phenomena and expression. Thinking before talking. Again, the two faculties are inseparable. There must not be one without the other. Of course, we humans have the freedom to throw things out of balance. Polarising things and going to extremes seems to be natural to us (or maybe it's unnatural?) To talk without thinking, or bottle things up and not express our feelings – until an explosion occurs! It's something that happens all the time.

Conformation vs. transformation – reflecting vs. relating

We now come to our last pair of faculties. On a human level they can be described as reflecting vs. relating. On a cosmic level, they are conformation vs. transformation. Conformation is the link between pattern and phenomena. It is the process whereby organising fields (if that is what patterns or cosmic "ideas" are) give rise to their form and shape. It is when matter and its parts follow patterns and rules, fabricating themselves into cosmic phenomena. In ourselves, conformation is equivalent to a reflective faculty, whereby we internalise our thoughts and ideas, carry out an internal dialogue, chew things over deeply, and, if we are religious, we pray about them, conversing with our Creator, before we finally express our ideas truly in whatever form we choose. It's a process we often forget about, especially in this time of instant communication, comment and reaction.

On the other hand, transformation, the other cosmic faculty pair, is that process whereby matter changes into motion, mass into energy, and fields resonate and morph into new patterns. It is interaction between stuff according to rules. It is the whole process of evolution leading up to us. In fact, everything is transforming, reacting and renewing all the time. If change ceased, so would the universe. Only an

unmoveable, undifferentiated whole would remain. Then we're back to before the big bang, and what is that? It's a mystery. Our equivalent human faculty is one of relating. It is the way we relate to ourselves, our environment, and most importantly to other people. As we observe and communicate with others, we respond, get feedback, and change our responses as required to build up the relationship. In its ultimate form, it is falling and being in love, of peace and being at one with another and God. Alas, untended it is also the breaking down of relationships, which at its worst leads to havoc and hate and mayhem. We could argue at the human level that all transformation which builds up is an expression of divine love. And the reverse is its deliberate absence. And we are free to choose in which way we transform our relationships.

In summary, the fifth and last pair of faculties is conformation and reflecting vs. transformation and reflecting. On the one hand it is a sort of inward process of giving true expression to patterns and thoughts, while on the other hand it is an outward process of continual change, feeding back, and being transformed.

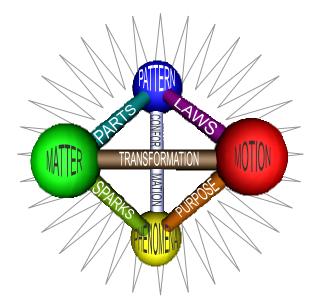
We have now come to the end of our ten components – five pairs of universal and personal faculties that help understand ourselves and the universe – the divine university, if you like. If we believe, as Christians do, that we are made in the image of a creator God, then we have gone some way to understanding that image. Let's summarise what we have learnt from this divine university:

- The university's faculty of *creation* is a mystery to us, but we do know that it started the universe itself, continuing through evolution, and we now use our *creative* faculty to cooperate in starting new life, ideas, images, innovations, using our freedom to choose. The university's faculty of *law* complements this, ensuring we live in a predictable world with boundaries, and our *judging* faculty enables us to understand those laws, make our own, and take decisions based on them.
- The university's faculty of *matter* produced all the stuff from which we are made, and our *observing* faculty allows us, using our senses, to understand what we are made from.

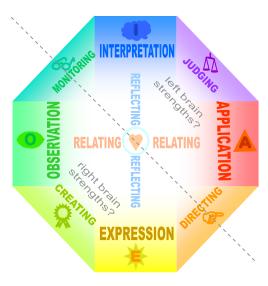
 Complementing this, the divine university's faculty of *motion* gives matter its essential movement energy, and our

- application faculty allows us to harness that energy, doing all sorts of weird and wonderful things in many moving ways.
- The faculty of parts is concerned with producing the components
 of which the universe is made, and we graduates have a
 monitoring faculty that allows us to discern and classify these
 parts, including those we help create ourselves. This is
 complemented by the university's faculty of purpose, which now
 enables us, via our directing faculty, to integrate all these parts
 together, finding a meaning and purpose that directs our lives.
- Then the faculty of *patterns* provides the ideas, blueprints or fields for assembling all the universe's parts, and our personal *interpreting* faculty allows us to think about them, rationalise and come up with our own ideas. This is complemented by the faculty of *phenomena* whereby the structures of the universe are manifest, and which has given rise to our *expressing* faculty, used to articulate these and our own ideas to ourselves and others.
- And finally the universe's faculty of *conforming* is concerned with the process of giving expression to patterns which in turn has given us a *reflecting* faculty to enable us to truly express our thoughts and ideas, making contact with the divine. And complementing this, there is the divine university's faculty of *transformation*, which links everything together via feedback, and has facilitated our own *relating* faculty for doing much the same thing as we let ourselves be transformed by divine love.

Given that a picture is worth a thousand words, below are two graphics summarising these points. Using these two models of ten faculties, we can go on exploring and transforming many more aspects of life,







Our ten personal faculties: the Octaikon model

including how we behave, how we work in teams, why we believe what we do, how we grow up and live our lives. We owe it to ourselves and others to do this if we are to make an impact on this troubled world.

I think that an apposite quote to conclude with is by St. Paul, writing to the Romans. "Do not conform any longer to the pattern of this world, but be transformed by the renewing of your mind. Then you will be able to test and approve what God's will is – his good, pleasing and perfect will." (New International Version)

AFTERTHOUGHT

It seems that these faculty pairs correspond to parts of speech in our languages. Adjectives vs. adverbs; pronouns vs. prepositions; nouns vs. verbs; conjunctions vs. interjections; tone of voice vs. body language. This is not surprising, if we were all spoken into existence by the Logos (word, speech, principle, thought, design) as Christians believe.

I obtained special inspiration in writing this article from the following books: Stratford Caldecott: *Beauty for Truth's Sake; on the reenchantment of education;* Rupert Sheldrake: *The Presence of the Past: morphic resonance and the habits of nature;* Ken Wilber: *A Theory of Everything - an integral vision for business, politics, science and spirituality,* and Rabbi Jonathan Sacks: *The Great Partnership: God, Science and the search for Meaning.*

AMJR 28.8.2011

PS. (Dec 2011) I have been reading parts of Fr. Pierre Tielhard de Chardin's *The Phenomenon of Man*. The first parts seem to resonate very harmoniously with what I have written.

PPS. (June 2012) And I have now just finished Iain McGilchrist's *The Master and his Emissary – the divided brain and the making of the western world*. His belief that 'the inner structure of our intellect reflects the structure of the universe' does indeed seem to be 'profoundly true'. The Octaikon diagram shows one way the faculties may correspond to the right and left hemispheres.

For further reflections on the faculties and use of the Octaikon model as a life long learning tool, see the project website www.octaikon.co.uk.