

## Chapter 8: Developing the Philosopher-king's Intellect – The Liberal Arts and Sciences

In the previous chapter, we examined a simple formula that reduced the substance of Plato's *Republic* into an equation that is the identical formula of the model that we use in Freemasonry... a formula that was adapted by classically-trained Freemasons well versed in Greek philosophy who were charged with framing English *Emulation Ritual* in the early years of the 19<sup>th</sup> century.

But before we progress much further, let us make certain that we are clear on what we've discussed so far...

From Plato's perspective, the training of a *thinking-leader* (a philosopher-king) involved two important steps... the training of his or her *intellect* and the training of his or her *character*.

Another thing that we need to be clear about is that Plato believed that the *accident of gender* had no relevance as to whether the philosopher-king was actually a man or a woman. His emphasis was on *competency*, not gender.

Plato's objective was to create an *ideal leader* – someone who was versatile and multi-dimensional – someone who was able to harmonise the various aspects of intellect (as well as emotion) to make judgments which were *sound* and that actually addressed the situation needing to be dealt with.

With this understanding, in this chapter, we will explore the *intellectual* dimension of Plato's curriculum. These are those that relate specifically to the *Liberal Arts and Sciences*. In the next chapter, we will examine the Cardinal Virtues and their application in our Ritual and equally importantly – our day-to-day lives.

The liberal arts and sciences (as we understand them today) comprise *seven* subjects. The number 7 has specific Masonic significance and something to which we will return later.

However – the *original* curriculum of subjects in Plato's Republic did not comprise seven, but *five* subjects. They were:

1. **Arithmetic**
2. **Geometry** Plato divided geometry into two separate streams. Plane geometry dealt with 2 dimensional models while solid geometry dealt with 3 dimensional models.
3. **Music**
4. **Astronomy**
5. **Dialectic.**

Dialectic was the art of constructing, expressing and defending arguments. It involved the skills of logic, grammar and rhetoric. The Roman statesman and philosopher Cicero

### Selections from Plutarch's *Life of Dion*

Dion believed that this situation resulted from the tyrant's lack of education, and so he tried to interest him in liberal studies...in the hope of forming his character. (9) With Plato in Syracuse, Dionysius would submit himself to his teaching, and so aided, his character might accept the discipline imposed by virtue...in obedience to which the universe moves from chaos to order...in short he would become a king instead of a tyrant. (10)

Plato would persuade the young man to disband his ten thousand bodyguards, dismiss his fleet of four thousand horsemen and countless hosts of infantry, and all this in order to pursue the ineffable good in the schools of the Academy, to make geometry his guide to happiness and to hand over the blessings of power... (14)

*Translations by: Rex Warner*

## The Influence of Plato's Republic on Freemasonry and Masonic Ritual.

(106 BCE - 43 BCE) is credited with breaking down the field of dialectic into the three streams of logic, grammar and rhetoric.

By the time the Middle Ages had come around, Plato's original curriculum of arts and sciences had developed into the structure that we recognize today and to which we refer every time we attend a lodge meeting. It is also interesting to note that Cicero wrote two famous works that have the same titles as Plato's two most famous writings – *Republic* and *The Laws*.

As a brief aside, if we look at any of their representations in *fine art*, we will note that each of the arts and sciences is portrayed as a *woman*. The reason behind this stems from the fact that in Latin (and in a number of other languages as well) nouns are classified by their *gender ending* – whether the ending of the noun is typically masculine, feminine or neuter. In their Latin form, *grammatica*, *logica*, *rhetorica*, *arithmetica*, *geometrica*, *musica* and *astronomica*, each have a *feminine* ending. In Latin, this is most commonly denoted by the letter "a".

We will now look at each of these arts and sciences separately to understand what they are intended to teach us as well as consider the possibilities that exist for us to express them *meaningfully* in our lives today.

### The Three Arts:

The three arts of grammar, logic and rhetoric relate to our ability to communicate to one another using *language*. Put simply – these are the arts that we need to learn and to master in order to communicate our ideas and visions, our desires, our wants and our needs effectively with others using the medium of *words*.

### Grammar: *Its Use and Importance*

The rules of grammar determine how words are positioned in a sentence so that its logic is clear and unambiguous. Each language has its rules for sentence-construction (or *syntax*) and it is important to understand that the rules that govern how words appear in an English sentence bear little correspondence to the rules governing where they appear in the sentences of other languages.

When you or I construct phrases and sentences and place them in a correct order, so that we can make sense to others either in writing, private discussion or public presentation, we are demonstrating competency in the art of grammar.

A thinking leader needs to be able to communicate clearly and with the least amount of ambiguity. This ability to use grammar effectively is arguably the most essential aspect of being able to present who we are to others. In this respect, grammar forms the building blocks of our own unique *self-expression*. When we express ourselves clearly, we are expressing who we are and what we stand for. Importantly, we also express what it is that *we stand against*.

Because of the power of this art form, it is crucial then that we develop the ability to do so with precision and eloquence.

### Logic: *Its Use and Importance*

In its simplest form, logic deals with the ability to construct a sound argument, rather than a poor one.

One of the distinctive traits of a thinking leader is his or her ability to think clearly, encapsulate the essence of the argument and work toward the resolution of the problem at hand. To be able to do this and to argue convincingly with thinking that has clarity, is reasoned and sequential is itself a form of intellectual excellence and forms the basis of correct decisions and effective policies.

### Rhetoric: *Its Use and Importance*

Ask any number of people what their greatest fear is (and putting aside death and taxes) the universal response (irrespective of culture) appears to be *speaking in public*. Amazingly, most people would happily undergo the painful experience of a dental root-canal treatment in preference to standing up and articulately and persuasively addressing a group of people. However, this ability to communicate confidently and effectively in a *public forum* is one of the hallmarks that are often used to identify a leader.

A leader is expected to use the power of his or her *voice* to sway a public audience to *do something* – to *act* by appealing to their thinking and *engage them emotionally*. It incorporates a number of fine communication skills. Most importantly, it requires the use of voice (not only volume but tone and projection). It also requires an understanding of body language to express emotion (as well as read) emotional responses more effectively. Admittedly, this is far from an easy feat to achieve. It requires an ability to “feel” the differences in the way that an audience responds during the delivery of a presentation. It requires versatility to adapt *and adjust* to the audiences’ “mood” at any one time.

Collectively, these skills comprise the competency of *rhetoric*.

Plato had a star-making pupil who went by the name of Aristotle. Aristotle wrote a work called *On Rhetoric* that deals specifically with the *correct* use of rhetoric. In his opening paragraphs, he addressed those instances where rhetoric was incorrectly used. He described them as instances where “pity, anger and similar emotions” are aroused when they have “nothing to do with the facts”.

At its heart, rhetoric deals with being able to speak with what Ritual describes as *persuasive eloquence*. In modern-day terminology, persuasive eloquence would probably come closest to the more pedestrian expression of *sales-personship*. From a Freemasonic viewpoint it is interesting to bring to mind that during the Ceremony of the Installation of the Master-Elect, both the Worshipful Master and his Junior Warden are invested with words that direct both of these Officers to use persuasive eloquence in all their dealings with others.

The term *persuasive eloquence* seems to sum up (in a very economical use of words) what the *correct* use of rhetoric actually requires!

### The Four Sciences

While the Arts referred to skills of communication using words, the Sciences refer to the skill of being able to communicate with others using the media of *numbers* and *calculation*.

### Arithmetic: *Its Use and Importance*

The first of the sciences, it is specifically the science of calculation.

From a leader's perspective, it is important to know how to add, subtract, multiply and divide. A handmaiden to logic, it is a tool that you and I take for granted as a subject that we are taught from our earliest days at school. Plato understood that arithmetic had very practical applications (especially for a general deploying his troops or a merchant for commercial gain). He also observed that people who are good at arithmetic, have a natural tendency to demonstrate agility of mind in other subjects as well. From a purely practical stand, Plato even suggested that a person who lacks natural agility of mind could take up arithmetic as a means to train his mind to think with greater flexibility.

If you have a natural gift for speaking, you will become a famous speaker, provided that you improve your gift by knowledge and practice, but if any of these conditions is unfulfilled, you will to that extent, fall short of your goal.

*Plato, Phaedrus, 269*  
*Trans: Hamilton*

## The Influence of Plato's Republic on Freemasonry and Masonic Ritual.

While a leader will acknowledge arithmetic's practical applications, s/he will also be trained to use arithmetic as a specific instrument of philosophy...as a way to understand *true reality* or put another way - *God*.

*We ought...to persuade people who are going to undertake our community's most important tasks to take up arithmetic. They shouldn't engage in it like dilettantes, but should keep at it until they reach the point where they can see in their mind's eye what numbers really are...in order to facilitate the mind's turning away from becoming toward truth and reality.*

### Geometry:

The second science, it is the science of spatial calculation, of angles, distances and areas. Plato divided this subject into two separate streams and identified them as *solid* and *plane geometry*.

Again, Plato acknowledged the practical aspects of this science, but its purpose in a curriculum for developing thinking leaders, was to align the leader's mind to the ultimate reality which he expressed as *God* alone. How does the science of geometry do this? It does it by a process of mental discipline in the same way that arithmetic is a mental discipline designed to strip away the useless, illogical aspects of working through or presenting a calculation. Plato's platform was along the lines of *training* the mind – *disciplining* the mind to see truth behind the illusion of everyday existence.

*What we have to consider is whether the more advanced aspects of geometry which constitute the bulk of the subject, have any relevance in the context of smoothing the way toward seeing the character of goodness. And what we're saying is that anything is relevant in the context if it forces the mind to turn towards the realm where the most blessed part of reality is to be found, which the mind should do its utmost to see...therefore...geometry can attract the mind towards truth. It can produce philosophical thought...*

Something that has deep significance for us as Freemasons is the language that we have adapted from Plato's writings specifically relating to *God*.

For instance, in *Timaeus*, Plato created the first Greek myth of the creation of the universe by *one God* (rather than a multiplicity of gods). In this myth, Plato describes *God* created the world using *geometrical* shapes. In this regard, he is the *Geometrician* of the Universe.

Plato was in fact the first to use this image of *God* as the *Geometrician* of the Universe. In the same way, Plato was the first to use the image of *God* as the architect of the universe. The actual Greek term from which architect is derived is *arche-techton* and it means – (*arche*) *great* and (*techton*) *craftsman*.

Plato proposed that the *Geometrician* of the Universe created the world from four basic elements –earth, fire, air and water. To earth, he assigned the cube; to air – the octahedron; to fire – the pyramid and to water – the icosahedron. All matter was formed by the cohesion of these elements in various proportions, one to another. Once the universe was created, it took on a shape that was the image itself – of perfection:

*Therefore he turned it into a rounded spherical shape, with the extremes equidistant in all directions from the centre, a figure that has the greatest degree of completeness and uniformity, as he judged uniformity to be incalculably superior to its opposite.*

### Astronomy:

**(Chap 8, Text Insert 3)** The third science – Astronomy - is the science of measurement of the heavenly bodies. It was also the science by which *time* was measured, not only the proportions of day and night, but also the way that the seasons were determined from observations of the arrival of the solstices and equinoxes.

*Now when the Father who had begotten the universe observed it set in motion and alive...he was well pleased...For before the heavens came to be there were no days or nights, no months or years.*

In Plato's day, the science of astronomy incorporated matters as diverse as the movement of the planets, astrology and (at a stretch) possibly even weather forecasting. By observing the colours of the sky at different points in the day, we arrived at the rule of thumb that runs "...red sky at night, a sailor's delight...red sky in the morning, a sailor's warning". More than anything, astronomy was for Plato, the method by which a philosopher-king would be able to deduce the existence of a Creator *behind* the universe. In its own way, it formed the basis of a primitive Argument from Intelligent Design. Plato argued that the intellectual wonder and awe that we feel when we look at the heavens, was the origin of philosophy:

*As it is, however, our ability to see the periods of day and night, of months and of years, of equinoxes and solstices, has led to the invention of number, and has given us the idea of time and opened the path to inquiry into the nature of the universe. These pursuits have given us philosophy...*

Delving into philosophy, it is little wonder that the astronomer will find aspects of the divine.

*A genuine astronomer...he'll certainly think that the artist of the heavens has constructed them and all that they contain to be as beautiful as such works can be...*

Returning briefly to our own ritual, we find that the *Lecture on the First Tracing Board* reflects an identical sentiment:

*The Universe is the Temple of the Deity...and Beauty shines through the whole of the Creation in symmetry and order.*

The symmetry and order just referred to was similarly highlighted by Plato in drawing parallels between the sciences of astronomy and music and the human senses of sight and hearing:

*The eyes are made for astronomy...and by the same token the ears are presumably made for the type of movement that constitutes music. If so, these branches of knowledge are allied to one another. This is what the Pythagoreans claim.*

#### **Music/Harmonics:**

The fourth science is the measurement of sound intervals and frequencies. How often do we use in everyday language the image of being "in harmony" – an image which conjures up the notion of operating on the same frequency/bandwidth as someone or something else? The phrase speaks to us at a subconscious level of the harmony that exists when what we think, what we feel and how we behave are perfectly aligned.

*...And harmony, whose movements are akin to the orbits within our souls, is a gift of the Muses...to serve as an ally in the fight to bring order to any orbit in our souls that has become unharmonized and make it concordant with itself.*

...the Seven Liberal Arts...They are the abstracts of truth and, as Plato claimed, the steps of the universal whole.

Laurence Gardiner, *The Shadow of Solomon*, Chap 2, pg 24.

The Liberal Arts were not so much taught as a means of preparing students to gain a livelihood, but to increase their awareness in the philosophical sciences.

Laurence Gardiner, *The Shadow of Solomon*, Chap 2, pg 22

## The Influence of Plato's Republic on Freemasonry and Masonic Ritual.

From Plato's perspective, music was a method that helped us (in the same way as astronomy) to intuitively discern the presence of a Creator.

What Plato was advocating in designing a course of study in the liberal arts and sciences, were tools of *philosophical trade*. This reflects the caution that we are given in each of the *Addresses on the Working Tools*. In each degree, our attention is drawn to these working tools not as tools of trade but as *speculative* (meaning philosophical) *tools of living*. These intellectual tools were designed to help a person to *think* – not only in the everyday practical applications of these fields of knowledge, but more importantly – as a means of attaining a better, more fulfilling understanding of the relationship between God and humankind.

And *this* is precisely the interpretation that we find appears in our *Third Degree Exhortation*:

*...you were led in the Second Degree to contemplate the intellectual faculty and to trace its development by the paths of heavenly science, even to the throne of God himself.*

Below is a table of some other correlations between the Sciences in Plato's *Republic* and *Emulation Ritual*.

Arithmetic, Geometry, Music, Astronomy	
Craft Ritual Ceremony/Page Number South Australian Constitution 13 <sup>th</sup> Edition, 2004	Platonic Writing Dialogue/Stephanus' Pagination/Translation
Seven had a further allusion to the seven Liberal Arts and Sciences, namely Grammar, Rhetoric, Logic, Arithmetic, Geometry, Music and Astronomy. <b>Second Degree/pg 149</b>	<p>Now calculation and arithmetic are entirely concerned with number...and they clearly guide one towards truth...Then arithmetic is one of the subjects we're after apparently. <b>Republic/525b/Waterfield</b></p> <p>Therefore Glaucon, geometry can attract the mind towards truth. It can produce philosophical thoughts... <b>Republic/527b/Waterfield</b></p> <p>And don't you think the third should be astronomy?... Don't you think that a genuine astronomer...feels ...that the artist of the heavens has constructed them ...to be as beautiful as such works could ever possibly be? <b>Republic/527d and 530a/Waterfield</b></p> <p>The eyes are made for astronomy ...and by the same token, the ears are presumably made for the type of movement we call music. If so these branches of knowledge are allied to each other. This is what the Pythagoreans' claim. <b>Republic/530d/Waterfield.</b></p>