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AUS3: The Ionian Revolution - Western Emergence where thinking and doing danced - the first Western Bush Mechanics - 7th & 6th Centuries BC

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A note on the (onto)logics of separating, interfacing and integrating and ultimately blending Doing and Thinking – dancing with yourself: NB:

Thinking and Doing, Thinking or Doing, Thinking with Doing all repeat ALL still separate thinking from Doing. This piece uses the metaphor of two partners in a dance and thus begs the question of who leads? Plus thinking and doing are still discrete. A more appropriate metaphor would be the androgynous single person part dressed up as yin and part as yang male and who dances with themselves. Here we speak of thinking and doing being integrated at all levels in Our Lived Life (OLL). [Please see AUS1 for more detail on OLL]. Thinking and doing here is more like the I-Ching symbol of ONE symbol with each flowing into the other and each including a little of the other. NNBB: Thinking and Doing are but one, albeit a crucial one, duality in a broader Platonic-Descartesian Dualistic Epistem. This duality however is utterly crucial to this piece the broader eBook and our Western ontology nonetheless.

We can this piece suggest see the I-Ching perspective, to this touchstone duality, in current day indigenous (Palaeolithic and Neolithic peoples) right down to the Ionians then fracture. This civilisation predated the Ancient Greeks yet laid the foundation therefore. They were merchants and artisans and worked out utterly amazing feats of engineering and celestial mechanics as well as justice and early forms of democracy. They have been all but forgotten by history – they taught Socrates yet he and Plato and Aristotle dominate the Western Ontological landscape – I argue in this eBook - much to the loss and gain of our children.

So unlike western systems of say Action Learning which braid thinking and doing yet retain them as separate moments in a mentative/epistemic process, this eBook argues for their conflation as in the self-dancer the Yin|Yang I-Ching symbol. For the purposes of simplicity and understandability though their separation is used in order to illustrate the need to move to the next step that is of their integration. My point is that as you change the relationship between thinking and doing even as you separate them in the first place the ontology associated therewith changes.

The Ionian Revolution

Where did the West first emerge ~ reprise the Artificer as prototypical scientist?

Ionian thinkers of the sixth and late fifth centuries brought about one of the most significant revolutions we know of, one that set the civilized world on a path that -- with minor and not so minor deviations -- it has followed ever since. What they did, to put it boldly and over simply, was to invent critical practionality (practical rationality – which integrates experience + logic + evidence i.e. sense perceptions + logic + disproveable evidence viz.

<http://rationalist.eu/?p=140>) or scientific philosophy; for the theories they advanced, whether on the nature and origins of the cosmos or on ethics and politics, were not offered as gospels to be accepted on or human authority or, like divine Hesiod's cosmology, on the authority of the Muses but as rational products to be accepted or rejected on the basis of evidence and argument. Every university and college, every intellectual discipline and scientific advance,

every step towards freedom and away from ignorance, superstition, divine whim, and enslavement to repressive dogma is eloquent testimony to the power of their invention. If they had not existed, our world would not exist. [drawn from <http://faculty.washington.edu/smcohen/320/ReeveIonians.htm>]

Today in the West we almost unilaterally see our emergence as from Greek civilisation from Socrates or thereabouts. However prior to the Athenian Greek civilisation there was another – the Ionian Greek civilisation. Here well over a century before the supposed founders of Western civilisation by luminaries such as Socrates, Plato and Aristotle we find the prima mobile of western civilisation and what a cause celebre it is. This short piece is a celebration of a foundation now forgotten – forgotten in the dualities of modernity which in turn are buried in the Platonic middens of bygone millennia.

Here thinking and doing danced here the west emerged. This is the real tradition of the West.

Clearly Iona inherited her intentions and ideas from other sources such as the **Sumerians, the Egyptians, Persians, Babylonians, Indians** and so forth. Of the Abrahamic faiths (Judaism, Christianity and Islam) only Judaism existed and the other two would not be seen for centuries.

The artificer - redux

The artificer or bush mechanic blends thinking and doing in a strongly advocated (though sometimes unspoken) form of scientific philosophy. In our modern age there are few examples of this braiding - a form of practicality in short an axis for praxis a focus on the exemplar as lighthouse innovation so to speak. Here ends and means swap and deontology suggests action is the substantiative dimension of the artificers redux while reflection is the instrumental dimension to allow better action. This is a direct contradistinction to a Platonic view of the two which would have the merchant/artisan/practitioner/actioner as of lesser standing than the reflective philosopher king/god. Here means are ends and ends are means so right action becomes acting right.

The Artificer/Bush Mechanic/Merchant ~ never an expert

In line with the cognitive passion for the division of labour or specialisation occupations/groups/folks such as Merchants and Artificers (cp. Artisans – who are highly specialised) are by their nature and operations generalists and this can never be specialists or experts in the conventional context. As expertise is deeply valued in the West and to be considered of any social value one must have ‘expertise’ then by definition bush mechanics, merchants, artificers have no value as the status quo culture has no ‘value boxes’ to put them in i.e. not categories that valorise or credulise their life – so in our culture no matter how many of them there may be or how gracious or useful they are – they/we have no voice – all there is silence and a few smiling bemused and condescending asides.

Situating Iona

Clearly thinking and doing as an ontology is of much longer heritage than Iona – Wildman (2008). In other works I have identified this tendency as ‘sauvage’ energy and we can see it in Newgrange, Stonehenge and extant tribal communities. Wildman (2008).

Exploring the Ionian Revolution

This revolution happened between 600 and 400 BC a full century before Aristotle et al. It happened in the Greek Isles who were beyond the reach of imperiums such as **Egypt, Babylon, Persia, India, Incas** and so forth. These imperiums were conservative and enforced set answers to key questions – Iona did not. It was on the periphery, even beyond the periphery, of Imperiums of the time. It hosted an extremely rich and diverse mix of ideas and religions and more than all this it was open to question to experiment to inquiry. Carl Sagan (1934–96) in his series ‘Cosmos’ (1980: part 7 of 13) argues that possibly for the first time ever dogma did not displace enigma rather genuine questioning and experimenting resulted from deep questions.

The Ionians came up with the idea of evolution, spread of disease, earth as a planet. This was practical science by the artisans and merchants. They believed the Universe was knowable without the god hypothesis. For the first time ever in the history of humanity the preeminent position god hypothesis was displaced. In Ionia political power was in the hands of the artisans, merchants and their children the practical people not in the hands of the priests or military.

The central tenet was that the world is not made by Gods but is the result of the interface of material forces and principles. Ionian scientists such as Thales invented the sciences of astronomy and geometry. Democritus (460–370 BC) also ‘discovered’ ‘atoms’, and ‘air’ and saw the human as a microcosm of the heavens i.e. of the macrocosm he also saw the earth as a planet (a concept he also invented) and located the earth in, what we now call (our galaxy), the Milky Way. He is reported to have said ‘I would rather understand one cause than be king of Persia’. Poverty under democracy was preferable to wealth under tyranny and that religion was evil. At this time the Master-engineer Theodorus invented the key, ruler, lathe, level, carpenters square and Bronze casting.

The practical and theoretical were one. In this hybrid (as we would see it today) view of the world abstract thought and everyday experience were braided together in a free and open even democratic exchange of ideas, projects and endeavours a sort of Pracademos. Pracademos gave us science, a full century before Socrates (469?–399 BC), Plato (427–347 BC) who believed that ideas were far more real than the natural world – don’t experiment just reflect on the five Platonic/Pythagorean solids. His followers extinguished the Ionian focus on the world revealed to our senses.

An overview of the impact of Platonic Philosophy ~ retrospectively on Ionian Philosophy and prospectively on Western thought to today

Plato derailed science for a millennia and Sagan argues that of thinking and doing et al in this separation (see below) justified slavery and the exploitation of the mass of cruelty and oppression, and ultimately to Christianity whereby Plato was embraced by Saint Augustine.

In Plato’s time there existed a great debate about the relationship between the eye and the nature of the soul (I argue that it should have been the hand and the nature of the soul PW 14-

04-2008). Indeed and nevertheless Plato had written that the five senses (inc. sight and touch) could *never* bring about an understanding of the workings of the infinite universe, thus negating even the saying mankind can understand 'gods handiwork'. Again Plato et al contributed to the demise of the hand and the emergence of the brain through text as viewed by the eye i.e. sight was now the primary sense and cognition the prima mobile of human understanding. If pushed I argue that humanity can understand 'gods handiwork' by doing our own – exemplar projects that is. Just as in the Renaissance a renaissance man had to undertake a large exemplar project to understand himself we earlier see this in the proto-concept of the journeyman's piece

It was not, Sagan argues, Theoria (abstract thought) giving us Scientia as with Aristotle (384–322 BC). This Ionian world started to 'melt away' with Pythagoras (582–500 BC) and ultimately his key disciple Plato who removed such Pracademos deliberations from the demos from the artisans and merchants and made them into arcane religion or philosophy respectfully. The classic for me is Plato's ultimate achievement for a philosopher to sit on 'heavens rim' and listen to the Gods discourse – not to participate but to listen and of course thus leaving the mundane or physical or physiospheric world far behind. This is more fully discussed in my eBook on Bush Mechanics/artificer.

Linking the Sauvage to the Ionian Revolution

Further it is my contention that the origin of Western civilisation as such in Greece around 600BC in the Ionian Civilisation and its associated revolution in consciousness inc. the embracing of thinking and doing of mathematics and experimentation represents the long ignored foundation of our present day world. Wildman (2008). So in this analysis 'sauvage' may be seen as a form of 'dynamis' cp. 'diabolis' the energy that emerges when thinking and doing are separated. In this context then the Ionian civilisation circa 600BC represented the emergent Western civilisation wherein dynamis viz. the sauvage was implicit whereas today in the West the two are diabolised and separated in line with the Platonic world view. Wildman (2008).

Where did the Presocratic philosophers get (some) of their ideas?

Where did the Presocratics such as Anaxagoras get their ideas to develop their knowledge. It seems that the atomic doctrine of Kan is the earliest example I have come across so far. According to the atomic doctrine of Kan viz. there are nine classes of substances: ether, space, and time that are continuous; four elementary substances (or particles) called earth, air, water, and fire that are atomic; and two kinds of mind, one omnipresent and another which is the individual. Although he posited that the conscious subject is separate from the material reality, he is, nevertheless, able to direct its atomistic evolution. That Vedic atomisim posited sub atomic particles, which they related to Brahma, Vishnu, and Shiva tends to make their atomism much more interesting than that of Democritus.

They also appear to have been further advances than Aristotle's 'Investigators of Nature' concerning the concept of infinity. A binary number system, including a zero, was used by Pingala around 450 BC. So did the Melitans gain at least some of their scientific knowledge

from this source? Certainly, the early Greeks came into contact with older civilizations and learned their mathematics and cosmologies. Zero was however probably developed in **South Central Mexico** in 4thCBC, in the Mesoamerican Long Count calendar. For example, Thales, listed as the first philosopher, went to **Egypt** where he learned geometry which he introduced to Greece.

An somewhat extended note on Anaxagoras

Anaxagoras 500 - 428 BC was the link between Iona and Athens. He was a [pre-Socratic Greek philosopher](#). He was a member of what is now often called the [Ionian School](#) of philosophy. He developed some of his ideas, science based in Athens - Anaxagoras brought philosophy and the spirit of scientific inquiry from Ionia to Athens. His observations of the celestial bodies and the fall of meteorites led him to form new theories of the universal order.

Anaxagoras, c.500-428 B.C., Greek philosopher of Clazomenae is one of the key Ionian philosopher scientists. He is credited with having transferred the seat of philosophy from Iona to Athens. He was closely associated with many famous Athenians and is thought to have been the teacher of Socrates. His belief that the sun was a white-hot stone and that the moon was made of earth that reflected the sun's rays resulted in a charge of atheism and blasphemy, forcing him to flee to Lampsacus, where he died.

Rejecting Empedocles' four elements (earth, air, fire, and water), Anaxagoras posits an infinity of particles, or 'seeds,' or what we call today 'atoms', each unique in its qualities. All natural objects are composed of particles having all sorts of qualities; a preponderance of similar though not identical particles creates the difference between wood and stone. Anaxagoras' universe, before separation, was an infinite, undifferentiated mass. The formation of the world was due to a rotary motion produced in this mass by an all-pervading mind (*nous*). This led to the separating out of the 'seeds' and the formation of things. Although Anaxagoras was the first to give mind a place in the universe, he was criticized by both Plato and Aristotle for only conceiving of it as a mechanical cause rather than the originator of order.

With Anaxagoras's treatment by the State we also see the emergence of thought police – being punished for an idea - About 450 Anaxagoras was arrested by Pericles' political opponents on a charge of contravening the established religion (some say the charge was one of [Medism](#)). It took Pericles' power of persuasion to secure his release. Even so he was forced to retire from Athens to Lampsacus in Ionia (c. 434-433 BC). He died there in around the year [428 BC](#). Citizens of Lampsacus erected an altar to Mind and Truth in his memory, and observed the anniversary of his death for many years.

Anaxagoras marked a turning-point in the history of philosophy. With him speculation passes from the colonies of Greece to settle at Athens. By the theory of minute constituents of things, and his emphasis on mechanical processes in the formation of order, he paved the way for the atomic theory. However, his enunciation of the order that comes from an intelligent mind suggested the theory that nature is the work of design.

The main reason for us blindly accepting the destructive ethos we exist by today is owing to our incorrect definition of consciousness. **Consciousness** is 'self awareness', which means it's you and me and everything else that is energized. But nobody seems to know where this self awareness comes from. Anaxagoras told us, apart from its mechanical motion, this awareness is inherent in each and every atom (the Greek Nous), but who bothers to listen to him these days. For hundreds of years Western science has only given credence to the 'Yang' energy system, and that is the cause of the unbalanced physics we are lumbered with today. We can only do this by becoming conscious of the missing link in physics -- the ethical bit that Anaxagoras and a few other Ionian notables were on about. Only by having the 'Yin' ethics of creative "mind vision physics" indelibly imprinted in our minds, and only by living by those ethics do we 'the crazy apes' have any hope of further evolution on Earth.

What the Ionian scientists considered to be rational thought appears to us, today as being very irrational, as some of their cosmology theories clearly show. Rationalism, a philosophy, not a trait, gives rise to logic. However Logic paradoxical in that logic cannot be said to incorrect because to judge something as “wrong” needs a logic base of its own. Thales, as an example could not use logic to judge the same logic as wrong! We have assumed that there exists only one system of logic that works best. This is what could be called 'Yang ' logic, which scientifically is deterministic. However Anaximander and the other Ionian revolutionaries used their imaginations to theorise about nature and the universe. Is it possible to get a logical result from imaginings or (mystery dreaming) I prefer to call it? I believe so but only if it is 'Yin' logic.

To western thinking, rationalism means robbing us of the sense of beauty, romanticism, love, compassion; i.e. leaves us heartless and devoid of emotions. This is a big myth. **Rationalism stresses separating the head from the heart, not REPLACING heart with head. Certain things are intrinsically rooted in instinct, and thus beyond rationalism.** Western rationalism as it is experienced in everyday life in scientific and economic rationalism inc. for instance scientific positivism, objectivism and globalisation, does replace the heart with the head and ignores the hand – one needs to heed the trinity of head heart hand – western rationalism doesn't do this it is as indicated above scientifically deterministic.

Love, fear, altruism, conscience (sense of right and wrong), these are biologically rooted instincts. Mystery dreaming from Yin rationalism creates beautiful thoughts, rich, inspiring thoughts, indeed powerful thoughts that lift us bodily from our slumbers, energising us to apply ourselves in passionate endeavours. I believe this was the style of logic of the Ionians, not the cold hard calculations of crafting and trading.

Isonomy and Iona

<http://ccat.sas.upenn.edu/bmcr/2002/2002-07-03.html>

The Greek city, the author states, ‘embodied a particular (civic) conception of justice: justice as an equilibrium (isonomy) of contending powers and forces.’ Cleisthenes (c515–c495 b.c.)

was the major innovator who ‘offered a no longer divine but mathematical and geometrical (rational) image of justice.’ **Isonomy was the first rational principle of balance that opposed the principle of domination.** This geometric equality was reflected in **Anaximander's** (611?–547? BC) presocratic cosmology, in Heraclitus's philosophy, in architecture, and in the new ‘public power’ that set the terms for contestatory engagements. Here the Greek considering these practical ideas in relation to architecture, city design, sculpture, the human body, philosophy and the cosmos, but always with the intent of illuminating its political meaning i.e. always to be of assistance to the polis the ultimate social cradle. Isonomy worked well in ancient Greece for around 200 years for around 500BC to 400BC + or – and included Anaximander and Pericles.

The Anaxagorean concept of self-similarity toward both smaller and larger dimensions presages holons and speaks of an isonomy both horizontal between different components and vertically between nested systems. Indeed ‘demiourgos’ is a very rare archaic Greek term that denotes a craftsman and not a ‘public’ servant more a civic servant who crafts for the good of the Polis - apropos of my work on the Demiurge. Anaxagoras named Nous (Νοῦς - Mind) as an expression of this Demiurge started differentiation of the primordial mixture of seeds. The Nous apparently played somewhat ambiguous (undifferentiated) role of (physical) principle and supernatural agency at the same time. Aristotle later dubbed as Anaxagoras’ seed or homoeomere (ὁμοιομερη),

The physical shape of the city and its public spaces are vital to this meaning. And the civic ideals of the Greek republican constitutionalism ‘clash’ trans-temporally with the hierarchical ideals of imperial and Christian patrimonies. Within this Greek context of isonomic harmony and balance, justice as conflict becomes justice as proportion and where health can be seen as an ‘isonomy’ of bodily and other forces. Here the Platonic western tendency towards commentary on texts (thinking) may be contrasted with the exemplar project of building the ideal city (doing).

Isonomia and kosmopoieis through phusis

Isonomia, then, is not equality before the law through contentatory argument but rather a balancing of norms. Each of the parts of the polis had its own *nomos* – *the spirit or intent of the law*. The *Isonomia* was the constitutional ordering of all the *nomoi*. ‘Those who confront each other in public are not the same. The *nomoi* of their family, household, class or function in society *sets them apart*. ‘Yet, underlying such contestation was an awareness of limits, moderation, measure and balance. Murphy here does not consider whether the idea of *nomos* existed in archaic Athens, whether this idea was the same as the *nomos* in the classical period, how exactly *nomoi* could conflict, what difference exists between a *nomos* and a particular claim, or whether the *nomos* here was not precisely the ‘underlying awareness of limits’ that was needed to resolve conflicts.

Ultimately, however, England was unable to follow this **kosmopoiesis** Ionian-Greek system of harmonic proportions which enacted the idea that ‘*politics is the creation or ordering of the world*, and it returned to the Augustan ideals of monarchy, empire and autocracy. *Kosmopoiesis* and architecture are each properly of *phusis* - *customs and attitudes* (translated

physics in an incomplete way) bottom up generation, unfoldment, emergence, and can be seen in Heidegger's aletheia, and not of *nomos – top down law*. Since architecture and politics are each properly a mimesis of the kosmos according to phusis (in lieu of a mimesis of the community by nomos).

This may be seen as the prototypical West **replacing reason**, which included imagination and focused at the juncture of thinking and doing, **with rationality** which separated thinking and doing, by abandoning limits in favour of boundless growth. This view of reason remains characterised not as it is today by a straight line of advancement and progress (modernity), but by a circular equilibrium of dynamic balance and harmony i.e. of isonomy.

Some impacts of undergrounding the Classical Traditions

When pushed underground the classical tradition becomes a haven for the intellect and the soul. For instance during the whole period of communism the classical past was felt by individual teachers and pupils throughout the Soviet zone as a secret world where the human spirit remained free'. In our own day this very same relegation of the classical world-view to secret societies, often conspiratorial, in the form of hermetic specialists, threatens to undercut the value found in study of classical antiquity.

Separations Emerging post the demise of the Ionian Revolution

Simultaneously the following separations occurred at this time the:

1. Separation of thinking and doing
2. Removal of thinking from the everyday lived life of the demos
3. Withdrawal of thinking often embedded in mystery cults for the priesthood
4. Political shift from the workplace to academic and priest
5. Elitism separated science and mathematics
6. Alienation of the body from the mind
7. Thought from matter
8. Heavens (divine) from the earth (tainted)
9. Thus thought can be separated out for the elite philosopher king or priest, separated from everyday life, separated from action which can be then allocated to the slaves who deal with the tainted 'real' or 'physical' world
10. Distaste for experiment and embrace of mysticism
11. Everyday experience is not to be trusted as the basis for abstract argument
12. Enjoyment and understanding were separated (recall that Democritus said 'a life without festivity is like a long road without an 'inn'')
13. The esoteric was separated from the exoteric

In Summary

1. The Ionians kicked off Greek science.
2. Persians took them out in 4th Century BC when attacked Annatolia
3. Thales kicked off Greek philosophy of Science approx 624 - 546 BC

4. Ionian civilization was the cradle of Greek science.
5. Which then shifted to Athens 5thC BC

Backgrounding Ionian civilization (1050 - 300 B.C.)

Most of the Ionian cities were built around 1050 B.C. in Ionia, ancient region in [Anatolia](#), geographically between gulf of [Smyrna](#) (Izmir) and gulf of Mandalya ([Didim](#)). Initially they lived on [agriculture](#) and had no sophistication at all. Only at around 850 B.C. with the influences coming from Egypt, [Assyria](#), Phoenicia and [Hittites](#) they started to show the first signs of a civilised society.

The most important outcome of the civilized Ionian cities was the creation of scientific thinking and observation. This new methodical ideology suddenly became the biggest step, humankind ever took in the history of civilization. Especially, the city of [Miletos](#) became not only a city of trade, but also an intellectual centre of Ionia and of the ancient world. A new generation of the philosophers of nature (this is what they called themselves) or in other words first scientists started the notion of examining the nature free from the effects of religious beliefs and superstition.

The philosopher of nature, Thales (624-546 BC) - *Greek philosopher who is traditionally considered the first Western philosopher and a founder of geometry and abstract astronomy. He maintained that matter is composed of water & an ancient [philosopher](#) of [Greece](#), called by some the [first genuine Greek philosopher](#). He lived about 600 years before [Jesus](#) and about 150 years before [Socrates](#) –Thales was also a merchant, mathematician and engineer.*

The historians:

- . Anaximander (611?–547?) – *a presocratic Greek philosopher and student of Thales who believed the universal substance to be infinity rather than something resembling ordinary objects (611-547 BC)*
- . Anaximenes of [Miletus](#) (c. [585 BC](#)–c. [525 BC](#)) - *was a [Greek philosopher](#) from the latter half of the [6th century](#), probably a younger contemporary of [Anaximander](#), whose pupil or friend he is said to have been.*
- . The historian and geographer Hecataeus ([550–476 BC](#)))- *Hecataeus is the first known Greek [historian](#), and was one of the first classical writers to mention the [Celtic people](#) and*
- . Kadmos, all lived in [Miletos](#) at this time.

These scientists, by using the knowledge they accumulated during their visits to Egypt and Mesopotamia and synthesizing this knowledge with their new philosophy, created modern day mathematics, geometry, astronomy, philosophy and most of the other sciences. Thales demonstrated the power of modern science to humankind by calculating the [solar eclipse](#) for the first time in history before the event took place.

The bright civilization of Ionia was also very creative at [art](#) and literature. The temple of [Artemis](#) in the city of [Ephesus](#) was 55 meters wide, 110 meters long and built completely by marble. The [architectural](#) style of famous Ionian cities and buildings have been copied even until the 20th century, in Europe and America.

The cities of [Bergama](#), [Ephesus](#), [Priene](#), [Miletos](#), [Didyma](#), [Sardis](#) and [Aphrodisias](#) are the most elegant examples of the great Ionian [architecture](#) and city planning. Statues and a lot of other [art](#) pieces of the great Ionian tradition are on exhibition in a number of museums mainly in [Turkey](#). The Ionian civilization was collapsed after Persians invaded whole [Anatolia](#) in the 4th century B.C.

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