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## Lavoisier, *ballooney*, *facmos*, Momus & Darwin's Universal Acid

### Lavoisier

For centuries, top experts recognized only four terrestrial elements: fire, air, earth and water. Any substance, discovered or not, surely was some unique mixture of these four. Two opposites, from two dichotomies, were enough to describe each element: *hot/cold*, *wet/dry*. Fire was hot-dry; air, hot-wet; earth, cold-dry; water, cold-wet. What kind of Chemistry could emerge out of these presumptions? Alchemy, pre-Lavoisierian or pre-scientific Chemistry. Little or nothing, in fact.

Out of all of Lavoisier's impressive accomplishments, his leading role in the visionary proposal for the first scientific, methodical and expandable, nomenclature for Chemistry is no minor feat. Its motto: a unique name for each element, indicative of a typical feature; the same for compounds, with names revealing—as much as possible—the exact composition. Easier said than done, but a brilliant move.

A reliable nomenclature first catapulted Mathematics, and later Physics. Before Lavoisier, Linnaeus' binomial nomenclature was already becoming a success in Biology. Why not follow suit in Chemistry? Artistry and humor aside, if we aspire to a universal mutual understanding, why not always follow suit? Clarity matters.

Compared with other disciplines, Mathematics' nomenclature has always been an easier job. Its platonic kingdom is not of this world, where everything seems much messier and hazier. Nature prefers mixture and *sfumato* over neat borderlines. Not without reason, it was in Mathematics where laws against capricious gods' meddling were first discovered and proved, where unshakeable certainties were first cemented with a robust consensus *inter doctos*.

Queen amongst disciplines, Mathematics not only is the freest—Cantor *dixit!*—but also the easiest of them all. We think just the opposite because our regular failures in the search for certainties in other, fuzzier fields have too often made us throw in the towel and move on with vague and unproven claims. Dubious claims do not amount to science. Not without reason is "*Nullius in verba*" gloriously written in the coat of arms of the Royal Society: *Take nobody's word for it*. From Euclid onwards, Mathematics ceased to be indolent and vague. In contrast, Economics, Psychology, Sociology and "political science" are still scholastic disciplines riddled with dubious claims: disputes in the truth-loving search of expert consensus are always welcome, but not if they *purposefully* block that consensus.

Sure, Lavoisier, like Euclid, was both a nomenclator and a magnificent prover, but let's take here Lavoisier as the epitome of nomenclators, and Euclid as the epitome of provers. It is no laughing matter that our "social

sciences" keep waiting for their (prover) Euclid. That they keep waiting for their (nomenclator) Lavoisier, unforgivable.

Any science is far more than a robust nomenclature reliably mirroring the inventory of entities worthy of discrete recognition. But, without such a nomenclature, no discipline can be called a science, yet. There are many "social sciences" still waiting for a Lavoisierian, methodical and expandable nomenclature. No wonder their success rate. No wonder our success rate, postmodernism included. Let's see some examples.

We hear that someone is an "*Islamophobe*". What does that mean, exactly? The suffix '*-phobe*' indicates a phobia, *i.e.*, a strong fear of, or aversion to something: *claustrophobia* (phobia of being in enclosed places), *acrophobia* (phobia of heights). So far, so good. But the Merriam-Webster Dictionary (MWD) defines *homophobia* as "*irrational fear of, aversion to, or discrimination against homosexuality or homosexuals*"; and *Islamophobia* as "*irrational fear of, aversion to, or discrimination against Islam or people who practice Islam*". Can't you see something is off in the last two cases?

You sure can. There are weird things aplenty. To begin with, the recipient of the phobia or aversion has *dangerously* multiplied by two: people and people's practices. Besides, note that the disjunctions linking these rather heterogeneous entities, flesh-and-blood people, on the one hand, and practices or isms, on the other, seem inclusive, not exclusive. Consequently, an aversion to only one of the two things, *e.g.*, either Islam or the people practicing Islam, would be enough to be depicted as an Islamophobe. For the sake of intellectual clarity and safety, wouldn't it be wiser to clear up these highly flammable ambiguities?

Consider this case. I find rap music unpleasant. But I am not against rappers. Am I a *rappophobe*? I don't know for sure if I feel an aversion to rap, but if it is possible to feel a total or partial aversion to rap (a practice) but not to rappers (people), I think it must be possible to feel a total or partial aversion to homosexuality (a practice) and not to homosexuals (people). This seems to be just the standpoint of many civilized heterosexuals. Accordingly, it must be possible to feel a total or partial aversion to Islam, but not to Muslims. We must make the right distinctions *à la Lavoisier*.

Another, more pertinent and clarifying case. Take a look at the most civilized parliaments in the world. There may be MPs from one political faction with an "aversion" towards the program of another group. Does this imply that they *necessarily* or *probably* feel an aversion towards those rival MPs? Of course not. I do not mean that "politics makes strange bedfellows". As Marx—Groucho, not Karl—clearly put it: "Politics doesn't make strange bedfellows: marriage does". We've already seen civil and ecclesiastical marriages with partners from viscerally opposed political flags. However important we deem our ideas, ideas and people subscribing them are totally different things.

The prefix '*anti-*' also falls victim to this pre-Lavoisierian confusion. '*Anti-Muslim*' or '*anti-Islamic*' are used as synonyms of '*islamophobe*'. Without considering now that Arabs and Syrians, among others, are also Semite peoples, the MWD defines '*anti-Semitic*' as "*feeling or showing hostility toward or discrimination against Jews as a cultural, racial, or ethnic group*". Again, the same cocktail of heterogeneous—but apparently mixable—things: *Jewish culture* and *Jewish ethnicity* or *race*. I insist, can't you be—partly or fully—hostile to "Jewish culture" without being hostile to Jewish people? I think so. In that case, how could we distinguish those hostile to Jewish people from those—partly or fully—hostile to Jewish culture? Distinct denominations would be a great help.

In addition, some of the emotions interpreted as phobias are all but synonyms. *In a narrow sense*, the MWD defines *phobia* as "*an exaggerated usually inexplicable and illogical fear of a particular object, class of objects, or situation*", and *aversion* as "*a feeling of repugnance toward something with a desire to avoid or turn from it*". *Fear* and *repugnance* are not the same. I fear tigers, but I don't feel a repugnance for tigers (quite the contrary). However, almost inevitably, *phobia* and *aversion* are frequently used interchangeably. This is no surprise. Remember, the MWD definitions of '*Islamophobia*' and '*homophobia*' are "*irrational fear of, aversion to, or discrimination against...*". Ergo, *in a much broader sense*, for the MWD, *phobia* can be irrational fear, or aversion, *i.e.*, repugnance, or plain discrimination. Confusion is on the menu.

Water had long been considered as an indecomposable substance, but thanks to Lavoisier (and others), today we know that it's made up of oxygen and hydrogen. Similarly, we should neither confuse distinct emotions, nor consider them inseparable. *Phobia* should mean either *fear*, or *aversion*, or *discrimination*, but not the three indistinctly. Let's treat different things differently.

Just like our all-too-short dichotomies of yesteryear *hot/cold*, *wet/dry*, the affixes '*-phobe*' and '*anti-*' don't cut it here. Following Lavoisier, we should never use the same denomination for objectively different realities. Fear is one thing, repugnance is another, and discrimination yet another. And, a zillion times much more importantly, people are one thing, and people's practices, convictions and volitions are quite another thing. We should, at least, make the proper distinctions here. But, how? The language of comics comes to the rescue.

### **Ballooney**

In comics, characters' thoughts and utterances are usually encapsulated into discrete and conveniently differentiated balloons. Pointers conveniently identify who thinks or says what. Cloud-shaped balloons with a column of bubbles as a pointer indicate unvoiced thinking (thought balloons); dashed-line balloons indicate musings; solid-line balloons with a spiky pointer are speech balloons. The language of comics graphically distinguishes characters from characters' thoughts, musings and utterances.

For brevity, let's call '*ballooney*' (pronounced as /bə'luni/) the set of balloons, with their content, in a comic book. Correspondingly, a comic book character's ballooney is whatever is *sincerely* thought, believed, uttered or wished by that character.

You are surely acquainted with those images, videos, phrases, etc. spread via the Internet, often altered in creative or humorous ways, and commonly known as *memes*. And memes they are, as they are a particular kind of Dawkinsian memes: it was Richard Dawkins who first coined this valuable term in his 1976 mind-changing book, *The Selfish Gene*. Well, ballooney captions are typically made up of Dawkinsian *memes* too, *i.e.*, of arguably discrete units of culturally transmitted information, which is the technical definition of *memes*. Once published and read, ballooney is memetic stuff.

We can quite effortlessly extend our concept of ballooney and assume that a flesh-and-blood person's ballooney is whatever that person *sincerely* thinks, believes, utters or wishes. On this assumption, each real person can be seen as the holder of a personal and extremely dynamic ballooney, which could become graphically visible memes if we managed to accurately caption into comic-like balloons whatever that person really thinks, believes, utters or wishes at any moment. What's more, even doctrines, like Shinto or veganism,

could be seen as disembodied carriers holding their peculiar ballooney, *i.e.*, the typical array of statements, beliefs and recommendations most usually endorsed by them.

The area of a typical comic panel is divided into balloons, characters and the remaining *background* areas (neither balloons, nor characters). Now let's imagine a typical comic book, where the areas of balloons and characters never overlap, where balloons, *e.g.*, are placed overhead. If we placed one page of that comic book on a dartboard, it would be easy for us to record which darts land on characters or Actors (A darts), which land on Balloons (B darts) and which land on the baCkground (C darts). Aiming at a character is not tantamount to aiming at that character's ballooney (whether or not the shot is successful). If our page covers the dartboard fully (and no dart lands outside), darts will either hit Actors (A darts), Balloons (B darts), or baCkground (C darts).

Our everyday speech, our *social sciences*, and more so our legal systems, must easily distinguish *assaults* on the balloons (the overhead ballooney) of flesh-and-blood people (*i.e.*, on their sincere thoughts, beliefs, utterances and wishes) from *assaults* on people themselves, *i.e.*, on their bodies (heads included), their physical integrity or wellbeing, health and life. Verbal assaults or "verbal darts" against what someone thinks, believes, declares or wishes can be launched with no intention of doing harm to that person's physical integrity or wellbeing, health or life. This is what usually happens in the most civilized debates in the world, and we call it "argumentative confrontation of ideas". In a civilized debate, many B darts cross the air, but no A darts do.

We need to *Lavoisierianly* distinguish at least these two types of *hostility*: *a) physical* hostility, intended or real, towards someone; and *b) intellectual* hostility towards that person's convictions and volitions (her ballooney). The fact that these two hostilities often show up like Siamese twins, like oxygen and hydrogen in water, does not mean that they are identical or inseparable. Under Macedonian siege, Tyrians cast all kinds of physical projectiles against the besiegers, most surely accompanied with scornful remarks—about Greek gods too—, but neither Tyrians nor Macedonians saw scornful remarks about gods as equal to stones and arrows. Casting stones to people is far from being identical to casting criticisms to people's ballooneys. Whoever denies this distinction is either ignorant, dishonest, or both.

There is no excuse for our lacking of agile linguistic means to unequivocally name the critics—perhaps prejudiced or uninformed, but still legitimate—of adult and consensual homosexuality who wish no harm whatsoever to homosexuals (discrimination, silencing, persecution, physical violence, pogrom, etc.). The same can be said for critics of any practice or doctrine. More can and must be done to easily differentiate between someone hostile to *Judaism*, *Christianism*, *Islamism*, *communism* or *fascism* (all of them ballooney doctrines) and someone hostile to Jews, Christians, Muslims, communists or fascists (all of them flesh-and-blood people). But first things first: some doctrines or isms deserve special attention. These are what I will call *facmos*.

### ***Facmos***

We people are our sincere beliefs and volitions in a similar way as we are our cells. Of course, this is only a simile, but a powerful and illuminating one. Our cells are constantly renovating themselves; like our beliefs and volitions. Apparently, there are long-lived cells which are born with us and die with us. In contrast, other cells

hardly live some months, weeks or days. Similarly, some beliefs and volitions are long-lived and some aren't. For example, my belief in my mother's identity is of the first type; my belief in what are the most fashionable clothes to wear is of the second type. For our most capricious and short-lived volitions we have even coined some names: *vagaries*, *whims*. When someone dramatically changes her cardinal beliefs and volitions previously held as sacrosanct, we arguably say that "*She is a completely different person*". No multi-organ transplant changes us as profoundly as a radical change in our beliefs. All the more reason to differentiate our cellular bodies from our beliefs and volitions. Beliefs and volitions are always ballooney stuff.

We pay hairdressers and manicurists for removing some of our cells and trashing them. We also pay cosmetic surgeons more generously for similar services. Certainly, we would not be so thankful to torturers anxious to cut our fingers, scalping us or slitting us open. Similarly, we exhibit very variable levels of tolerance towards *persuaders* intending to shake, remove or change our dear beliefs. Our tolerance ranges from 0% to 100%, according to the occasion, the belief and the persuader concerned. We thankfully pay dietitians for changing our beliefs on healthy eating habits (100% tolerance). However, religious zealots will kill anyone with gusto for mocking their faith or calling their god imaginary (0% tolerance). That's what zealots do: they assume that some beliefs and volitions of their particular ballooney must remain beyond the reach of all criticism.

No unilateral demand to impose a universal mutism on a topic must be granted. Universal mutisms on any topic put the ticktack of civilization's clock at risk. Zealots hate that ticktack and love quietism, in particular *intellectual* quietism. Stand still, if you wish; but banning someone else's free dancing is ethically indecent and must not be legally permitted.

Zealots are well known for being prone to blind literalism. Knowingly or not, zealots overstate the simile concerning our bodily cells and our beliefs in the most preposterous, literal way. Zealots *pretend* that assaults on their religious beliefs are assaults not only on their cells, but on their vital organs too, *i.e.*, as if any possible shaking of their sacrosanct beliefs entailed a physical threat to their earthly life. For Zealots, even the most well-intentioned B darts aimed at their religious ballooney over their heads are like A darts aimed at their heads. What's more, given their typical belief in an eternal life, Zealots take any criticism to their faith as an attack on their eternal salvation: after all, their god is watching their "pious" reactions! But this is mere pretense: ballooneys are never made of living cells, and eternal bliss after physical death is only imaginary, thus... genuine ballooney stuff! Where zealots rule, civilization's clock stands still.

There are complex doctrines, such as Stoicism, which subscribe thousands of factual claims, *i.e.*, assertions on *presumed* facts about the world ("*There is no randomness*") and scores of recommendations on how to behave in our daily and social lives, or morals ("*Live in accordance to nature*"; "*Sustine et abstine*", *i.e.*, "*Hold back and refrain*"). Usually, the names of these doctrines end in the useful suffix '*-ism*'. Platonism, Epicureanism, liberalism, anarchism, Nazism are isms of this sort. Since all these isms tend to produce both *factual claims* and *morals*, I call them "*facmo isms*" or simply "*facmos*", because they combine a *factology* (a system of factual claims) with a *morality* (a system of morals, recommendations). '*Facmoral*' could serve for the associated adjective with the meaning: *of, relating to, or concerned with facmo isms or facmos*.

*Factual claims* deal with real or simply presumed facts, and can be true or false, mutually coherent or incoherent, accurate or vague, and so on. For their part, *morals* deal with real or imagined voluntary human actions, and can be ethical or unethical, convenient or inconvenient, healthy or unhealthy, and, likewise,

mutually coherent or incoherent, accurate or vague, and so on. When hearing a factual (or factological) claim, do not take for granted that it is a true, coherent and accurate statement. When hearing a moral claim (or simply a moral), do not take for granted that it is an ethical, convenient, healthy, coherent or accurate claim. All our proverbs combined form a motley system of popular, oft-cited, factological claims (*"All roads lead to Rome"*) and/or moral claims (*"When in Rome do as the Romans do"*), but nobody expects that the system is coherent or complete in a logical sense.

Since real facts are infinite in number, no factology can aspire to be exhaustive. Since voluntary human actions are potentially infinite too, no morality can aspire to be exhaustive either. All factologies and all moralities are, *by definition*, incomplete, fragmentary, deficient. The less knowledgeable the authors of a facmo are, the more incomplete and fragmentary, *i.e.*, the more deficient that facmo inevitably is. There is no better proof of insanity than the demand that a more knowledgeable society be ruled by the facmoral standards of a less knowledgeable society.

Once loaded in the information processing biomachine known as the human brain, assumed factologies and moralities become executable instructions or programs with latent or swiftly manifest consequences. All our beliefs, factological or moral, are levers for potential action, provided the relevant triggering circumstances. Seemingly, beliefs have that effect on any sufficiently sophisticated brain, human or not. A light shock of the electric fence immediately loads the dissuasive instruction of *"Painful grazing over here"* in a cow's brain.

In all facmos, morality is factology-dependent. Once it is wrongly assumed, *e.g.*, that women are inherently inferior to men, or less valuable than men, the door is open for a fairly foreseeable morality. If one takes for granted that people of certain skin tones are no more than half-witted "talking cattle" suitable for exploitation, the door is open for a fairly foreseeable morality too. If one assumes that nonhuman animals are incapable of suffering, the door is understandably open for complacent forms of animal cruelty. Beliefs matter. Beliefs make a world of difference, and human beliefs produce dramatically different worlds.

Thanks to, *e.g.*, Deuteronomy (13:6-11), there is no further need to ascertain the effects of convincingly loading in the populace's mind *a)* the *factological* claim that an omniscient god, an almighty vigilante exists, in combination with *b)* the *moral* claim that

*If thy brother, the son of thy mother, or thy son, or thy daughter, (...), or thy friend, (...), entice thee secretly, saying, "Let us go and serve other gods", which thou hast not known, thou, nor thy fathers (...), thou shalt not consent unto him, nor hearken unto him; neither shall thine eye pity him, neither shalt thou spare, neither shalt thou conceal him; but thou shalt surely kill him; thine hand shall be first upon him to put him to death, and afterwards the hand of all the people. And thou shalt stone him with stones, that he die; because he hath sought to thrust thee away from the Lord thy God.*

For the last three millenia, human subpopulations have never ceased to embark on this obnoxious experiment. Extremely primitive and barbaric facmos, some dating back to the Bronze Age, continue to be regarded as perfect codes for modern life. Insanity of the worst kind.

Values, the fabric of moralities, are inevitably rooted in assumed factologies: all values are factology-dependent. But factology not always precedes morality. All too often it is the other way around: our values entice us into concocting the most comfortable and presumably supportive factology for them. Imagine that, as

a tribal leader or self-appointed prophet, you find (the mere idea of) the consumption of vulture meat disgusting. *Firstly*, you can *morally* disapprove of vulture meat consumption (a moral claim); *subsequently*, state that the Almighty abhors and forbids that consumption (a factological claim). But this conscious or unconscious move, which true origins tradition can easily distort to the point of practical obliteration, and its adherents subsequently embellish and sanction, only ratifies that our morals are *constitutionally* factology-dependent. Interestingly, moralities overtly invoke factologies in their support, but factologies never invoke moralities. Moralities rely on factologies; factologies will never admit to relying on moralities.

Not all words ending in *'-ism'* refer to facmos: there is no way of taking *cubism*, *organism* or *neologism* for genuine facmos. Admittedly, almost any *status quo* (*feudalism*), policy (*McCarthyism*), activism (*Luddism*), mindset (*denialism*) or short list of commandments (Orwell's *Animalism*) can be seen as a facmo by itself, when readily interpreted as combining some factual and moral endorsements. All the more reason to have an unequivocal word for *epitomical* facmos.

Since any factology is ballooney stuff, and any morality is ballooney stuff too, all facmos are ballooney stuff suitable for printing, either in comic books or, more ordinarily, in intricately written revelations, manifestos and treatises. The comprehensive printing of all factual claims and morals of highly elaborated facmos could probably fill up several volumes. Schools of philosophy are, for the most part, thought-out facmos, but no facmo is *necessarily* a well thought-out edifice, not even philosophical facmos.

Judaism, Christianity and Islamism are epitomical facmos. Many devotees will promptly reply that their creeds are much more than merely *intellectual* facmos. Sure, but the intense feelings of membership, reassurance, even beatitude, experienced by the adherents of a facmo, either religious or not, by no means disprove the objectively facmoral character of their beloved ism. There is no reason to think that ecstatic mystics cease to believe in the factology and the morals of their particular creed. Quite the opposite.

The Torah, the Bible and the Koran are the most revered manifestos of Judaism, Christianity and Islamism. Each of these facmos holds a peculiar and idiosyncratic factology, with thousands of claims typically subscribed by their adherents. Jewish, Christian and Islamic factologies share many assertions. Typical Jews, Christians and Muslims would subscribe this one: *"There is only one God"*. But many of the assertions of each creed are blasphemous for the others. It is a claim of the Christian factology, for example, that *"Jesus died on the cross and resurrected"*. Typical Jews and Muslims vehemently dispute that claim. *"Muhammad is the Seal of the Prophets"* is a claim of Islamism that typical Jews and Christians fervently reject. *"Jews are God's chosen people"* belongs to the typical Jewish factology, but not so categorically to Christian or Islamic factologies.

Judaism, Christianity and Islamism also hold peculiar and idiosyncratic moralities. And, again, although these three moralities share many morals, not all their morals are shared. *"You shall not eat pork"* is a recommendation subscribed by typical Jews and Muslims, but not by typical Christians. The typical Jew would readily subscribe *"You should circumcise your son"*, but a typical Christian would not, whereas Muslims are divided on the issue. *"You should pray five times a day towards Mecca"* is a Muslim, but neither a Jewish nor a Christian endorsement.

If the ballooneys of Judaism, Christianity and Islamism were perfectly coincidental, there would be no means of distinguishing one ism from the other. The ballooneys of Judaism, Christianity and Islamism are only partly

intersecting sets. Presumably, the authenticity of most of the undertakings and moral teachings biblically attributed to the common patriarch Abraham would be subscribed by the most devoted Jews, Christians and Muslims (although the latter think, e.g., that Abraham's sacrificial son was Ishmael, not Isaac). However, the sincere acceptance, by a Jew or a Muslim, that Jesus of Nazareth is the Son of God (or God Himself) would almost inevitably turn them into an ex-Jew or an ex-Muslim and a converted Christian. There is no coherent way of reconciling these *factos* without seriously curtailing and distorting them all.

A natural language used by millions of speakers does not reside entirely, *i.e.*, with its complete lexicon and infinite messages, in the head of any one of them. Each speaker makes an idiosyncratic and unique use of the zillion lexical and communicative possibilities of a language. The same is the case for long-lasting, complex *factos*. No long-lasting, complex *facto* resides, entirely, in the head of any one of its adherents. Each believer has a limited and particular knowledge of the huge amount of factological claims and morals of her religious creed, which she uses idiosyncratically. Not only are all *factos*, even the most elaborate, incomplete and fragmentary; the private knowledge of any elaborate *facto* is incomplete and fragmentary too.

In any case, the idiosyncratic versions of the *factos* subscribed by someone are part of her ballooney, not of her cellular, flesh-and-blood body. Certainly, all that information is mysteriously stored in brain neurons. But our neurons are never *factos*: our neurons only provide the physical substrate for our very personal versions of our cherished *factos*. No ballooney is made up of cellular tissue, only of memes, either *in act* (*i.e.*, already transmitted cultural information) or *in potentia* (not yet transmitted, but transmittable cultural information).

The formulation of the most reliable, *i.e.*, provenly or probabilistically true, coherent, accurate, exhaustive, unequivocal, intelligible, updated, parsimonious, explanatory, powerfully predictive and relevant factology is the prime goal of science. Any alternative factology, religious or not, in contradiction with science's factology, inevitably collides with science. If you think that there is a magisterium in a field of knowledge that science cannot visit for inspection and expert valuation, either you don't understand science, or that field has no real knowledge to offer (or both). Science is a limitless investigation with a well-earned right to have the last word in factological claims. Intellectually, science is not only the anti-quietism, but also the anti-zealotry. Endlessly inquisitive, science aspires to fact-check everything.

What's more: any morality based on factual claims in contradiction with science's factology inevitably collides with science too. Moral claims must not only be *logically* coherent, but also *factually* defensible, because morality is factology-dependent. No one needs lectures on moral logic to see that animal cruelty can hardly be supported if animal suffering is scientifically proven and needless suffering is undesirable. Logic and facts, *i.e.*, coherence and evidence, are the prime business of science. If science and scientists cannot deal with morals, who or what else can, and by what differential right or authority? Trust nobody claiming to have powers of knowledge and judgement beyond the scientific standards of scrutiny and validation. They are wrong or they are cheaters.

When morality is consciously elaborated in compliance with the rigorous scientific protocols of rational attestation, morality becomes Ethics, a fully scientific discipline most usually ascribed to Philosophy. Ethics is to morality what scientific medicine is to shamanic healing. If you think that Science and Ethics belong to two non-overlapping magisteria, you neither understand Science, nor Ethics. The farther you place Ethics outside the scientific realm, the more you devalue Ethics. Actually, '*Philosophy*' and '*Science*' are cognitively



synonymous: they are interchangeable in every possible instance, as happened, correspondingly, to '*philosophia*' and '*episteme*' (translated as '*scientia*' by Romans) among the ancient Greeks.

## Momus

According to Hesiod's *Theogony*, Momus (Greek *Μῶμος*) was a son of Nyx, the Night, and personifies irreverent criticism, disapproval, rebuke and blame; derision, mockery, sarcasm and satire. Even the most praiseworthy work and actions of principal deities were found at fault by the sharp-tongued Momus. Actually, the gods became so annoyed by faultfinding Momus that they expelled him from Mount Olympus. No god can bear criticism, and much less mockery.

Momus is usually depicted wearing a theatrical mask, not on his face, but on his hand: Momus the Unmasker! However unpopular Momus' criticism was, "of the whole crowd of gods celebrated by the poets, none was more useful", proclaimed the great Erasmus of Rotterdam. Interestingly, Momus was never suspect of violent acts, only of an irritatingly never-ending vocal criticism. Momus' cutting remarks never turned into cutting daggers. We must bear in mind the exclusively verbal character of Momus' assaults. This is key: Momus was a master at casting B-darts; Momus never cast A-darts.

The vocative form of *Μῶμος* is *Μῶμε*, *Mome* (pronounced as /moum/). Not all the names of facmos always feature the '-ism' suffix (*Islam*, *voodoo*, *Christianity*, *Shinto*, *Scientology*), but they all could (*Islamism*, *voodooism*, *Christianism*, *Shintoism*, *Scientologism*), and most actually do. With Momus or Mome, we can take advantage of this, and use '-mome' as a new suffix with the meaning of *criticizing*, *disapproving*, *rebuking*, *vituperating*, *satirizing* or *scorning*, just like '-clast' means *breaker* or *destroyer* of in '*iconoclast*' (breaker or destroyer of icons or images). Similarly, the suffix '-mome' would evoke a *ballooney-breaker* or *meme-breaker*. The critic of fascism would then be a *fascismome*. The obsolete noun '*mome*'—apparently derived from Momus' name!—can be taken as a synonym for *memetic faultfinder*. *Criticize*, *disapprove*, *rebuke*, *vituperate*, *satirize* or *scorn* always mean verbal or graphical assaults, never physical assaults, and much less bloody assaults. The last syllable of '-ism' and the first syllable of '-mome' can also be conveniently melted together.

Homosexuality is not a facmo, but *homosexuality*, *i.e.*, the fragmentary factology and morality typically embraced by supporters of adult and consensual homosexuality, could be easily considered as such. In fact, '*homosexuality*' is an old-fashioned name for homosexuality. Thus, the faultfinder of homosexuality, now considered as a facmo, could be suitably called *homosexualitymome*; the faultfinder of Islamism, *Islamismome*; the faultfinder of Christianity, *Christianismome*; and the faultfinder of Judaism, *Judaismome*. The new nouns *Hinduismome*, *Buddhismome*, *Zoroastrianismome*, *Stoicismome*, *Platonismome*, *Liberalismome*, *Marxismome*, *Nazismome*, *Anarchismome*, *Confucianismome*, etc. require no further explanation. Since all these new terms have the syllable '-ism', there can be no mistake: the notional (*i.e.*, non-physical) attacks of a genuine *mome* (or faultfinder) *always* target facmos (and, more generally, ballooney stuff), never flesh-and-blood people.

We could save syllables and time if the new memes '*mome*' (noun) and '-*mome*' (suffix) promptly caught on, and were identified in the global psyche with someone casting B darts, but not A darts; that is, with someone who *criticizes*, *disapproves*, *rebukes*, *vituperates*, *satirizes* or *scorns* isms (or, more generally, ballooney stuff),

but not flesh-and-blood people. Dispelled the risk of ambiguity, the shorter the lexeme ahead of the suffix '-mome', the better. Some of the previous coinages are reasonably short ('*Buddhismome*', '*Nazismome*'), but others could be shortened further. For some of the neologisms already seen we would probably opt for the following curtailed, but no less unmistakable variants: *homosexmome* (*homomome* or *gaymome*); *Islamome*; *Christiamome*; *Judamome*; *Hindumome*; *Zoroasmome*; *Stoicmome*; *Platomome*; *Liberamome*; *Anarchomome*; *Confucimome*, etc.

How shall we call the criticism, disapproval or satire made by a *homosexualismome* (*homosexmome*, *homomome* or *gaymome*)? '*Homosexmomy*' ('*homomomy*' or '*gaymomy*'). In fact, the plural form of '*Momus*' is '*Momi*' (pronounced as /'moumaɪ/). '*Momy*' (pronounced as /'moumi/ could be used as a short synonym for *criticism*, *disapproval* or *satire*. Correspondingly, the new coinages will produce '*Islamismomy*' or '*Islamomy*'; '*Christianismomy*' or '*Christiamomy*'; '*Judaismomy*' or '*Judamomy*'; '*Hinduismomy*' or '*Hindumomy*'; '*Buddhismomy*'; '*Zoroastrianismomy*' or '*Zoroasmomy*'; '*Stoicismomy*' or '*Stoicmomy*'; '*Platonismomy*' or '*Platomomy*'; '*Liberalismomy*' or '*Liberamomy*'; '*Marxismomy*'; '*Nazismomy*'; '*Anarchomomy*'; etc. Admittedly, '*Zoroastrianismomy*' is too long to regurgitate; but "*criticism of Zoroastrianism*" is even longer, isn't it?

*Ismomy* would then mean the criticism of isms (mockery included), either *facmos* (e.g., *Aristotelianism*) or not (e.g., *Expressionism*), and ballooney stuff, in general. *Facmomy* would mean the particular variant of *ismomy* targeting *facmos*. The usefulness of these new coinages may exceed the purely linguistic field and salutarily protrude into our much befuddled sociopolitical and legal arenas. Let's see how.

There are good reasons for prosecuting the crime of outspoken incitement to unjustified discrimination, proactive violence—even disproportionate reactive violence—or hate against flesh-and-blood people. There are good reasons for prosecuting the crimes of defamation, libel and calumny against natural or legal persons too. But, in principle, there is no reason to prosecute *ismomy*, in any of its many forms, any *facmomy* included. Not even the most fallacious historical denialism or revisionism should be banned. Let all faultfinding *momes* compete everywhere, *on an equal footing*, and see what happens next! The full decriminalization of *ismomy* could serve as a reliable litmus test for truly rational, freedom-loving and democratic governments in the world. The *ethical* banning of *ismomy* is like a round square: an oxymoron. The proposed nomenclature brings benefits all around! Let's see it by way of a real example of our time. The chemical nomenclator Lavoisier never heard of it, but it has been most befittingly called "*Darwin's Universal Acid*".

### **Darwin's Universal Acid**

Just like every other natural or legal person, governments inevitably embrace and promote particular *facmos*, and despise and contend others. All governments have an *agenda*, and all agendas are based on *facmos*. To get to know the *facmos* supported by your government, pay attention to what your government says and, much more importantly, to what your government does. If there are hardly any women, or no women at all, in your self-declared pro-women government, one of the *facmos* supported by your government is crystal-clear: machismo is okay.

Admittedly, some of the *facmos* some governments promote (e.g., racism) may be deleterious. However, governments cannot completely abstain from promoting some *facmos* (over others) and ignoring, despising and/or contending the presumed rival ones. In particular, theism is only one of the many *facmos* all

governments must take a vocal stand upon. But, in today's world, the stand taken by a government on this issue is still of fundamental, even vital importance.

The Oxford University Press Dictionary defines *theism* as:

*"Belief in the existence of a god or gods, specifically of a creator who intervenes in the universe".*

The theist concept of god is that of a jealous and meddlesome god.

The meaning of *Darwinism* can only be extracted from the factological and moral claims actually proposed and/or endorsed by Charles Darwin throughout his life, par excellence at an intellectually mature age. In a narrow sense, Darwinism, the scientific theory, is a factology, a subset of the scientific factology, and not a facmo. Like everybody else, Darwin issued some moral recommendations too, chiefly in private, but Darwin's moral recommendations are mostly unknown to the public at large, and almost irrelevant for today's scientific community. Modern scientists are understandably much more interested in the updated version of the Darwinian factology, hugely reinforced by geneticists and other researchers since Darwin's original edition.

*Sensu stricto*, no morality derives *logically* from the Darwinian factology. The morality contained in the misnomer "*social Darwinism*" is by no means the morality *naturally* begotten by Darwinism. This nefarious *non sequitur* has haunted Darwinism since its inception, and still persists today, gleefully applauded and boosted by ignorant misinterpreters, fearful of Darwin's colossal contribution and its seismic implications. Darwinism advocates for "*social Darwinism*" as much as Newton's law of gravity advocates for throwing derelicts, the weak and unfit off a roof.

Although all moralities are factology-dependent, no factology *inevitably* leads to a morality. There is no decent way to distill "social Darwinism" out of *genuine* Darwinism without first crushing *genuine* Darwinism, *i.e.*, the factual claims and morals *provenly* endorsed by the bearded Charles Darwin. To derive social Darwinism from Darwin's ideas, you must first distort Darwin's statements and recommendations into a strawman fallacy. No other factology is more positively *conducive* to universal empathy and compassion—for all sentient beings, actually—than the Darwinian factology. Actually, in a famous passage from *The Descent of Man*, Darwin advocated for a moral of *sympathy* "beyond the confines of man", "extended to all sentient beings". But this issue is beyond the scope of this paper.

In his 1995 book, *Darwin's Dangerous Idea*, Dan Dennett insightfully compared Darwinism with a Universal Acid capable of irresistibly corroding a wide spectrum of our most intuitive, sacrosanct, cherished and long-lived beliefs, theism being only one of them. Darwinian laws govern the evolution of both genes and memes, or ideas. Darwinism is truly incompatible with *traditional* forms of theism. In fact, Darwinism is incompatible with any form of *supernaturalism*. You cannot be a theist without *automatically* becoming a supernaturalist. Being a subset of the scientific factology, Darwinism is antisupernaturalistic, *by definition*. Now, with our new nomenclature, let's call the criticism of Darwinism *Darwinismomy*, and the criticism of theism *theismomy*.

Unsurprisingly, governments eager to censor or ban certain forms of theismomy notably corrosive to their supported facmos (and vested interests) tend to censor or ban Darwinism, the most scientifically grounded and powerful form of theismomy, *by implication*. But governments have the same *ethical reasons* for censoring or banning theismomy than for censoring or banning Darwinism: none. Certainly, governments may

have Machiavellian *motives* for banning Darwinism, but Machiavellian motives and *ethical reasons* usually mix together like oil and water. Ismomy must always be legally permitted. Darwinismomy is indisputably permitted across the globe, and that is how it should remain. Theismomy should not be less permitted.

The banning of a peaceful facmo is not an extreme form of ismomy, but an infringement of ismomy. In fact, the banning of theismomy is no less indefensible, self-accusatory and, in the long run, self-defeating than the censoring or banning of Darwinism. In a truly open society, no facmo in collision with science's factology can survive for long. As Dan Dennett wisely declares: "*There is no future in a sacred myth. Why not? Because of our curiosity*". In the next 50 years or less, Darwin's Universal Acid will probably corrode all theist, still sacred myths. With science on the loose, no myth, sacred or not, has a future.

## Coda

Typical facmos combine a large number of factual claims and morals. Can someone be *Confucianismome* (or *Confucimome*) without rejecting all the teachings of Confucian factology and morality? Sure. This is a matter of degree and relevance: cherry-picking is always allowed in the memetic world. I consider my disagreements with the original and, understandably, still defective Darwinism of relatively minor importance, but my disagreements with Confucianism are not so negligible. So strongly do I disagree with some of the most fundamental claims and/or morals of Confucianism that I consider myself a Confucimome. I find unbearably irrational the Confucian insistence on the *unconditional* respect to be paid to rites, forebears, emperors, fathers and elder brothers. However, I enthusiastically applaud Confucius' definition of benevolence as expressed in the formula "*Do not do to others what you do not want done to yourself*" (*Analects*, Book XII, 2), an ethical golden rule which I gladly subscribe. But still, I see myself as a *Confucimome* rather than a *Confucian*. While Darwinism is, for the most part, my ballooney, Confucianism is, for the most part, not. I have already cast some B darts against Confucianism. However, I have no intention of casting A darts against peaceful Confucians.

In Lavoisier's time mercury had ten different names. In Chemistry, inaccuracy was then a constant risk. In our time, inaccuracy is still a constant risk for our "social sciences" and legal systems. Lavoisier courteously apologized for the nomenclatorial revolution that, for the sake of clarity, he felt obliged to promote. Today, '*oxygen*' and '*hydrogen*' are everyday words, but it was Lavoisier who first coined and proposed them. Thanks to Lavoisier '*sulphuric acid*' displaced '*vitriol*', and there is no doubt which one is more frequently used today. Many may have trouble pronouncing—not to mention differentiating—*ribonucleic* and *deoxyribonucleic* acids, but knowledgeable parties no longer have problems with the distinction. And *that* is what really matters.

What are we going to do with our old and ambiguous concepts like '*homophobe*', '*homophobia*', '*Islamophobe*', '*Islamophobia*', '*anti-Semite*', '*anti-Semitism*', etc.? Everybody can use them at their own risk. As happened to '*vitriol*', still in circulation, time will tell. If we want to express a sort of aversion to flesh-and-blood homosexuals or Muslims, I find that '*antihomosexual*' ('*antigay*') and '*anti-Muslim*' are much more accurate terms. Likewise, for anybody feeling an aversion for flesh-and-blood Jews, I think that '*anti-Jew*' is a much more accurate term than '*anti-Semite*'. The terms '*gayphobe*', '*Jewphobe*', '*Christianophobe*' or '*Muslimophobe*' should be used to specifically name those, if any, having a phobia, *i.e.*, "*irrational fear*", of flesh-and-blood gays, Jews, Christians or Muslims.

Hatred should not be mistaken for phobia. We already have a prefix meaning *hatred*: 'mis(o)-'. Think of the terms 'misogyny' (hatred, dislike or mistrust of women), 'misandry' (hatred of males), and 'misanthropy' (hatred, dislike, or distrust of humankind). If we want to label someone who hates gays, Jews, Christians or Muslims, we can use 'misogay', 'miso-Jew', 'miso-Christian' and 'miso-Muslim'? 'Miso-Judaism', 'miso-Christianism' and 'miso-Islamism' could describe the mindset of hatred towards these religions. Some of these coinages can already be found on the Internet.

Now compare these three notional couples: the Chosen people, the Aryan race; the expected Messiah, the *Führer*; the Promised Land, the *Lebensraum* (English: *living space*). Despite these undisputable framework commonalities of Judaism and Nazism, Hitler would have not admitted to a common source of rudely primitive and tribal inspiration. Hitler was for sure not only an outspoken Judaismmome (or Judamome), but also a blood-thirsty miso-Jew with a visceral miso-Judaist mindset.

Are you still a Jew if you happen to have Jewish parents (or ancestors), but you no longer believe in Judaism's capital tenets, *i.e.*, in the facmo known as Judaism? I don't think so. "*Secular Jew*" is a misnomer for such a person. This is not a matter of genes in our cells—and much less of blood in our veins—but of endorsed memes in our heads and, *in this case*, of facmoral ballooneys *freely* and *conscientiously* subscribed by *well-informed, capable* minds. Nevertheless, Hitler, in his lunacy, would have answered in the affirmative. For Hitler, someone like the old Einstein, provenly incapable of believing in the capricious Jewish god, nor in the Jewish mythology, was still worthy of being gassed simply on account of his ethnicity. Hitler was a hideously *genocidal* miso-Jew. In Hitler's lunatic ballooney there was no distinction between hating Jews (by birth or free and mature affiliation) and hating Jewish ballooney, nor between A darts and B darts regarding this particular subject.

Neither bigotry nor muddled thinking should dictate our sociopolitical language, not to mention our jurisprudential discourse and practice, or our political agenda. Inevitably, today's efforts to procure us with clear and distinct notions will eventually fall short. But every effort must be made for the sake of a decent terminology. Inevitably, Lavoisier's nomenclature was not free of errors. But, in retrospect, we can arguably say that Lavoisier's errors were mostly *in the right direction*. The truly important thing for us is to get things right. As I have stated in my book, *If Darwin and Socrates, Global Sciocracy* (to be published in English), mutual understanding is extremely important for what truly matters: to achieve a global democracy, in the form of a global Sciocracy, with socially compatible Maxi-Freedom, Maxi-Knowledge and Maxi-Wellbeing, ideally for all. Yes, the prefix '*maxi-*' stands here for the more, the better.