The Magic of Technology and the Christian Magus in Early Modernity
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The Triangle

Given the general tenor of what I want to argue about, it seems quite adequate to employ the image of a triangle. The triangle I wish to explore is formed by three concepts: technology, magic, and religion. Despite its imposing geometry, this figure can be neither clear-cut, nor universal. Whereas modern technology is spreading over the face of the earth, remaining basically the same for all kinds of "technologies", religion and magic consist of a multiplicity of traditions which scholars are at a loss to reduce to a definition or a common denominator. At the same time, I must point out that I am drawing my triangle in a specific setting, in a particular place and a particular time. I am thinking about these three concepts in Europe, after the long process of the Enlightenment, in a culture where technology thrives more than ever, religion fades into memory, and magic is altogether discarded. While many of my Western or Westernised contemporaries would exile religion and magic into the same category (and infantile and condemnable at that), I am well aware that the category susceptible of getting me into trouble is magic rather than religion. After all, with the surge of radical Islam, religion has made a hateful comeback *from the outside*; it is worth any academic enquiry on its own right, whereas magic lends itself to any discussion exclusively in the fields of history and anthropology. But there is more than that. In venturing into a discourse on magic, I must enter a realm at best ambiguous and at worst forbidden, running a considerable risk, the risk of provoking laughter, suspicion or anxiety. (See Lehrich, *The Occult Mind*, Introduction) With magic, one brews a weird potion which will not be to the taste of *quite* disparate groups like contemporary Christians and the enlightened antagonists of religion. An unlikely alliance indeed. The enlightened will relegate magic as mere delusion to some backward non-Western cultures and, of course, to the superstitious past of the West; contemporary Christians, on the other hand, will split into their two selves, their enlightened self and their archaic self. Their enlightened self will try to overbid the enlightened in ridiculing magic as a sheer phantasmagoria, an outright superstition; their archaic self will treat magic with suspicion and have deep reservations about it, not because it is unreal, but precisely because it poses a potential threat. Accordingly, this curious split within Christianity may raise some key questions about religion's complicated relationship to technology, too. Inasmuch as it is enlightened, will it ever resist the temptation to view technology as a neutral instrument, nothing other than a mere functionality – for good or bad? Insofar as listening to its archaic self, will the Christian religion ever overcome its anxieties about technology as amenable to magic and attain a better comprehension of them? And, apart from Christianity, does it make any sense to discuss technology in the context of magic?

The triangle I propose may sound familiar to those with an interest in anthropological research. J. G. Frazer, one of the great originators of modern anthropology, famously proposed that the history of humanity proceeds across the three subsequent stages of magic, religion, and science. In the wake of Frazer's influential if biased idea, religion and science have been major points of orientation for research on magic ever since. Although there are only sporadic references to technology in the literature, and mostly in conjunction with science, it becomes a significant source of comparison in the anthropology of magic as early as the French sociologist Marcel Mauss' work, especially his "General Theory of Magic" (first published in 1902 in collaboration with Henri Hubert, and then re-elaborated and republished in 1950). In Mauss' view, "with words and gestures magic does what techniques achieve by labour" and "the history of technology proves that there is a genealogical link between techniques and magic" (p.175.). And shifting focus from anthropology to intellectual history, it is striking to see how fascinated scholars, scientists and polymaths were with advanced mechanics in the Renaissance and the Middle Ages, finding a proper place for it within a religious and magical worldview. As a matter of fact, the later process of Western civilisation rendered our great anthropological triangle somewhat vague, loose, and complicated, yet the question still lingers on whether it is illuminating, and whether we can envision it again.

To explore the triangle of technology, magic, and religion, I cannot offer definitions. These concepts, especially religion and magic, are extremely challenging to define, and scholars have argued about them since the inception of modern academic research. Besides, my knowledge and experience about these entities is rather limited. Apart from some understanding I have of the

techno-culture of our time, I must confine myself to European cultural history. Consequently, what I can suggest is, first, a basic intuition, and, second, a simple distinction. My basic intuition follows from what I have discussed so far. While there is no question about any identity within our triangle, there must be a correspondence and an interplay among its three concepts, an interplay which is worth our contemplation. And it seems to me that a simple distinction must be made between religion, on the one hand, and magic and technology, on the other. For, in my view, this side of the triangle, that is, the correspondence between magic and technology, is somewhat closer than the other two sides (or two correspondences). It appears that, at least in monotheistic religions, religious believers tend to surrender themselves to divine initiation by divine agency, whereas, in the domains of magic and technology, users and practitioners take the initiative from their human empowerment and powerful human agency that seeks to transcend what is human.

The Synthesis and the Automaton

It is intriguing to realise that even the religious character of mediaeval culture was not pervasive enough to make us sure about putting mediaeval technology under the auspices of religion. To demonstrate how reasonable this doubt is, there are two relevant questions to ask. First, how conducive was Mediaeval Christianity to the mediaeval and the subsequent modern boom of technological development? And, second, was the way mediaeval thinkers saw technology a theological one? Did they have a theological vision of technology?

It should come as no surprise that the answer, to both questions, seems like a yes and no.

It is true that Western Monasticism brought about a cultural climate which turned out to be a fertile ground for intense manual labour and a series of technological inventions (this is the major thesis of the great historian of medieval technology, Lynn White). The agricultural revolution, the extended use of water-powered mills and the development of metallurgy and all kinds of machine design are just a few examples among many. And, in contrast to the low social position of labour and craftsmanship in Antiquity, all the work and all the crafts were a form of divine worship in the medieval monasteries. As Lynn White put it, "in the Middle Ages, in Europe alone, invention became a total and coherent project" (Cultural Climates, p. 173.). However, Jacques Le Goff argued that Western Christianity's unequivocally positive evaluation of craft and labour was a response to the social and economic upheaval of the 12th and 13th centuries. In his opinion, Christian theologians adjusted their earlier dominant view of labour as penitential activity to the new conditions in the High Middle Ages which were basically urban and secular in origin.

Moreover, from the 12th century onwards, in medieval systematisations of knowledge including technology, a philosophical scheme proved to be more influential than the theological one. In the centuries following the publication of Domingo Gundisalvo's *De divisione philosophiae* (1150), it was an Aristotelian and Arabic classification of knowledge that became prevalent in the West. What was a handful of references to practical knowledge in Aristotle developed into a system first in Arabic philosophy and then in Western thought. This system implies a mutual interdependence between theoretical and practical knowledge, technology being both "applied science" and a source for scientific insights. In this scheme, "the function of crafts and mechanical arts is secular to supply goods (…) and appropriate instruments to the sciences" (Whitney, p. 134.)

Nevertheless, likewise from the 12th century onwards, there was also a very significant theological vision and synthesis of all knowledge. The Augustinian canon Hugh of St. Victor (c. 1096–1141), in his famous *Didascalicon*, set up a classification, in which the seven liberal arts (grammar, rhetoric, logic, geometry, arithmetics, music, astronomy) are paralleled by what he calls the seven "mechanical arts" (fabric-making, armament, navigation, agriculture, hunting, medicine, theatrics). Interestingly, the mechanical arts figure as a third branch of philosophy, preceded by "theoretical" and "practical" philosophy. But the role of philosophy in Hugh is profoundly different from the one that the Aristotelian tradition attributes to it. Hugh embraces a highly integrated theological view of all knowledge, in which all branches strive for a restoration of humanity's prelapsarian condition. In his vision, technology with its benefits is a remedy, like all other arts and sciences, against original sin which resulted in a state of ignorance, vice and weakness.

These contrary approaches in the Victorine school and Aristotelian thought, in Jacques Le Goff's and Lynn White's work, clearly show that religion's relationship to technology is permeated with ambivalence. Technology is both closely related and somewhat recalcitrant to religion. And

this difficult relationship emerges in another perspective by technology's long association with magic. When such association between magic and technology is at work, it causes immense marvel and endlessly fascinates people, not only the population at large, but also a cultural elite. As a matter of fact, what population and elite are so fascinated with is not just any kind of technology, but a specific one. I think it will be quite indicative of such kind of technology in our time if I point out what this magic technology in the Middle Ages and Renaissance was. And I assume that this "magic of technology" as a phenomenon will help us differentiate between the ethos of technology in general and the spirit of modern technology. For it seems plausible to claim that the spirit of modern technology was already present in the Mediaeval and Renaissance fascination with the self-moving mechanical device, that is, the automaton. Whether in the feats of engineering or in the fables of legends, talking heads, mechanic animals and artificial androids kept cropping up, surrounded with the aura of the illicit, the ambivalent, the miraculous. It was not just popular imagination that associated the miraculous machines with magic, especially diabolical magic. The few engineers themselves who were capable of such achievement knowingly established their reputation as magicians. Let me emphasise that the technology of these magicians was thoroughly different from the one featured in the Victorine synthesis of all knowledge, and the difference is much more than a simple contrast between "traditional" and "well-known" crafts, on the one hand, and "advanced" and "cutting-edge" technology, on the other. The point is that Hugh's seven mechanical arts perfectly lend themselves to the religious vision of serving God and humanity, the vision of a restored paradise, whereas the technology of the automaton embodies a dangerous and much less pious dream: the dream of creating artificial life – with all its beautiful fascination and all the potential of destruction to humanity. There is something in the essence of this kind of technology that cannot be integrated into religion, but still maintains a deep correspondence with it. Needless to say, this kind of technology became paradigmatic to modernity. And it is not surprising at all that various forms of automata conspicuously emerge in those originators of modernity who are known as the Renaissance Magi of the Hermetic tradition like Heinrich Cornelius Agrippa, John Dee or Giovanni Battista Della Porta.

The Christian Magus
If there is such a thing as the "spirit of modern technology", and we can attribute any coherence to it, it finds a striking expression in the Hermetic tradition of Early Modernity, an intellectual movement which was a unique combination of religion, magic and philosophy. The Hermetic tradition is named after its main source of inspiration, the so-called *Corpus Hermeticum*, a diverse body of Gnostic writings from Late Antiquity that was ascribed to the legendary Hermes Trismegistus, an Egyptian priest, prophet and philosopher, who, according to legend, lived in the same historical period as Moses. On account of the similarities in the *Corpus* to the Mosaic Genesis and Hermes's alleged prophecy of Christ, he was in fact regarded as the "Egyptian Moses" by the Hermetic philosophers and magi. These significant circumstances explain to some extent why the *Corpus* could inspire a fully fledged tradition in a Christian intellectual milieu, and why its adherents could almost invariably embrace the role of a Christian magus.

The long series of Christian magi from the 15th to the early 17th century, starts with the Florentine philosopher Marsilio Ficino who around 1463 translated the *Corpus Hermeticum* from Greek to Latin. Apart from the dialogue called *Asclepius*, the whole of the Corpus was unknown in the medieval West. In the course of the Hermetic tradition, as early as Ficino's work and the writings of his quasi successors, Pico della Mirandola and Johannes Reuchlin, it came to be combined with other philosophical and spiritual inspirations like Neoplatonism, Jewish Cabbala, and Pythagoreanism. Nevertheless, it is the very core of the tradition, the Hermetic writings themselves that can be particularly revealing about why the tradition's understanding of the "Christian magus" is so loaded with ambivalence. Indeed, such ambivalence seems to pervade the fraught correspondence between religion and magic – and the one between religion and technology.

Let me highlight just two significant episodes from the *Corpus Hermeticum* – one from the so-called "Egyptian Genesis", the *Pimander*, that is, the first piece in the *Corpus*, and one from the *Asclepius*.

Although the parallels between the Hermetic and the Mosaic Genesis are numerous – just to mention a few of them, in both there is a Creator God who calls everything into existence through

his Word, He creates man in his own image, and man has dominion over the world –, there is a fundamental difference between them. The Hermetic Adam is a divine being with the divine creative power. As Francis A. Yates pointed out, in the Hermetic Genesis there is no question about any kind of transgression to the divine sphere like the one in the Mosaic Genesis with Adam's decision to eat of the Tree of Knowledge (Yates, *Giordano Bruno and the Hermetic Tradition*, p. 27)**.** The Hermetic Adam cannot transgress; he is divine and belongs to the seven demonic governors of the seven planets. Here we are faced with a central theme that runs through the Hermetic tradition as a basic tenor. The theme of the *deificatio* of the magus emerges in Pico della Mirandola who bequeaths it to Reuchlin and the later Hermeticists. (See Beierwaltes, "Reuchlin und PIco della Mirandola".)

The other episode I wish to highlight is a notorious one that, after stunning and horrifying the medieval readers of the *Asclepius*, turned out to be a canonic passage to the Renaissance magi. In this episode, Hermes Trismegistus talks to Asclepius about their Egyptian ancestors. "Our ancestors once erred gravely on the theory of divinity, they were unbelieving and inattentive to worship and reverence for god. But then they discovered the art of making gods. To their discovery they added a conformable power arising from the nature of matter. Because they could not make souls, they mixed this power in and called up the souls of demons or angels and implanted them in likenesses through holy and divine mysteries, whence the idols could have the power to do good and evil." (*Hermetica*, ed. Copenhaver, p. (81), 90.) In other words, a magus endowed with divine power is able to animate statues like self-moving idols of gods by summoning souls of angels or demons into them. In fact, the magus is capable of "making gods". And these animate divine statues have their perfect pendants in the list of miraculous automatons that keeps recurring in the Hermetic literature.

All in all, the ideal of the "Christian magus" as a "Christian technologist" was – and still is – a difficult and ambivalent enterprise. To be sure, Renaissance magic was rather pure and idealistic; it embraced a natural philosophy rather than crude rituals, a philosophy based on a Gnosis and a Neoplatonism which did not necessarily collide with Christian orthodoxy. Indeed, the Renaissance magi made serious attempts to harmonise their doctrine with Christianity – one may refer to examples like Agrippa's idea of spiritual rebirth inspired by both the *Corpus Hermeticum* and the New Testament, or Reuchlin's view of the name of Jesus as the supreme magical word which wields miraculous power. Furthermore, in Christianity, in some contrast to the other two monotheistic religions, there certainly is a tremendous dynamics between the human and the divine through the incarnation of Christ which may offer some space to the Hermetic idea of *deificatio*. However, Renaissance Magic motivated an unbridled human quest towards the divine without the checks and limits of what Christian orthodoxy makes sure as negative theology (see Borchardt, "The Magus as Renaissance Man"). Magic propelled an unconstrained quest empowered by sheer human initiation and primarily human agency. (It is quite significant that what the apparently Christian language in Reuchlin expresses is, at the same time, the deification of individuals and their acquisition of the "splendour of *all* science" (see Roling, "The Complete Nature of Christ, in *The Metamorphosis of Magic*, ed. Bremmer-Veenstra, p. 256)) Accordingly, the Renaissance Hermetic project of the "Christian magus" looks like a failed attempt. Notwithstanding, "failed" does not inevitably mean "doomed" or "uninspiring". For the question we face today is the following: is there any possible way in which the powerful human agency of the "Christian magus" or "Christian technologist" can be integrated into the divine-human dynamics of Christianity?