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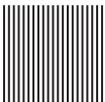
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Astrology, Alchemy and Retro-Organization Theory: An Astro-Genealogical Critique of the Myers-Briggs Type Indicator®

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Abstract. *The influence of astrology and alchemy on organizational conduct has not hitherto attracted much serious social scientific attention. Retro-organizational theory licenses paying closer attention to topics that are systematically occluded by modern knowledge regimes and is invoked in this article to examine the manner in which premodern cosmologies underpin certain contemporary organizational practices. The Myers-Briggs Type Indicator® (MBTI) is presented as a particularly conspicuous example of how the modern may be suffused by the pre-modern. An astro-genealogical account of the development of the MBTI® is offered, tracing its Jungian origins and exposing structural debts to Renaissance thinking and earlier forms of symbolism. The article concludes with a consideration of Latour's claim that 'we have never been modern' and suggests ways in which his hybridization critique of modernity connects with astrological and alchemical cosmology. **Key words.** Foucault; genealogical analysis; geomancy; humours; Jung; Latour; management development; MBTI; organizational development; psychometrics*



To the best of our knowledge, there have been no reputable investigations of the influence of astrology and alchemy on practices within the contemporary worlds of organization and management. This seems somewhat surprising given evidence of the manifest impact astrology is having on organizational conduct in both empirical and theoretical terms. Despite modern science's best efforts to exorcise the demon through rational



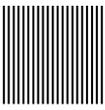
means, astrology continues to have a pull on the popular imagination, as testified to, for example, by the prevalence of sun sign columns in the mass media. Organizational life, too, reflects this broader social interest as more and more corporations turn to astrologers for help in making decisions. The attention of marketing executives is being drawn by the possibility that astrological knowledge might enable companies better to target their products and services (Mitchell, 1995; Mitchell and Haggett, 1997; Mitchell and Tate, 1998; Phillipson, 2000). There has been similar interest recently expressed amongst the financial fraternity (Anon., 1996; Brooker, 1998a, 1998b; Galarza, 1999), and there are also a small number of books with a business focus published by professional astrologers (Bates and Chrzanowska-Bowles, 1994; McEvers, 1989).

In empirical research terms alone, then, it seems legitimate to ask why astrology appeals to the executive world, where and how it is being deployed and with what organizational consequences.¹ Although wishing to encourage and promote such enquiry, this article adopts a more theoretical orientation. Starting from a broad interest in the sociological and organizational dimensions of astrological phenomena, we want to make contributions on two interrelated fronts: (1) to offer a *theoretical* justification for researching astrological interests and practices using the intellectual framework afforded by Burrell's 'retro-organization theory' (Burrell, 1998); and (2) to apply retro-organization theory to an analysis of one of the most widely used psychometric instruments in the contemporary organizational world, namely, the Myers-Briggs Type Indicator® (MBTI). In short, we seek to construct a 'history of the present' for the MBTI®—an 'astro-genealogy', if you will—informed by a reading of Burrell's work.

Adopting this line of enquiry is a risky business. As the paucity of credible research suggests, astrology and alchemy are generally considered taboo for academics whose interest in such subjects is anything other than strictly historical. There is a distinct danger, openly acknowledged by Eysenck and Nias (1982),² of attracting ridicule or even contempt from one's peers for daring to express a professional interest in such topics. We should emphasize, therefore, that our purpose is not to promote or proselytize on behalf of astrology nor to stand in judgement on the validity or morality of the practices we discuss. We seek, instead, to open to scrutiny some of the otherwise unacknowledged ways in which premodern cosmology informs actual patterns of conduct and thus to contribute to an improved understanding of the range of motives and effects at work within the organizational world.

The Insurrection of Subjugated Knowledge

In justifying his own 'astrological experiment', Jung (CW,³ vol. 18: 497) observes: 'In no previous age, however, "superstitious," was astrology so widespread and so highly esteemed as it is today.' Although penned in



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the early 1950s, the remark certainly still holds true. If anything, at the beginning of the new millennium, interest in astrology along with other forms of alternative knowledge and cosmology, such as Buddhism, Taoism, Sufism, *feng shui*, complementary medicine and the occult in general, has enjoyed something of a renaissance. We think it not insignificant, moreover, that many of these cosmologies (astrology included) trace their origins to non-European and premodern roots. The renewed and revitalized interest in these cosmologies marks a disillusionment with modernity and its sciences and a search for meaning within systems of understanding that approach the world in a less objective and instrumental fashion. To place this trend in the context of organizational studies, at the very time that, according to Ritzer (1993, 1998), relations across the globe are becoming McDonaldized, and that rationalization and intensified accountability are being lauded in many institutions, there appears to be a countervailing desire amongst certain population segments actively to *re-enchant* their disenchanted world (Ritzer, 1999). We witness the emergence of a rather strange trading relationship whereby the West appears to be exporting the ideologies and technologies of global capitalism while simultaneously importing those of Middle Eastern and Oriental occultism. It is as though Westerners en masse are seeking to redress an imbalance that has been caused by what, in Foucauldian terms, might be characterized as the subjugation of particular forms of spiritual and occult understanding by knowledge regimes and disciplines associated with modernity (Foucault, 1980: 81–5).

The renewed interest in these alternative cosmologies may also be a nostalgic throwback to what are perceived in the popular imagination to be less complicated and more wholesome times. Spurious and misplaced though such nostalgia may be, the particular re-emergence of astrology—as one among many alternative cosmologies in circulation (Short, 2000)—could be viewed as part of a broader pattern of a new medievalism emerging in the West. In short, bodies of knowledge and ways of understanding that were historically occluded by modern science are creeping back into vogue, much to the vocal chagrin of proponents of scientific method who view the trend with disdain and often take it as an affront to their professional integrity.⁴ Given the changed circumstances of the contemporary world, of course, these cosmologies are deployed in newly innovative and synthetic forms that simultaneously differ yet draw from their premodern applications. As we shall argue with respect to astrology and alchemy, there are both continuities and discontinuities in the marks they have made on the organizational world.

Retro-Organization Theory and Genealogical Analysis

We have thus far spoken of the ‘re-emergence’ of astrology in West. In one important sense, of course, it never went away as far as the masses are concerned, and it is only relatively small knowledge élites under the



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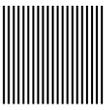
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sway of Enlightenment thinking that sought its exclusion from protocols of accepted scientific practice. Concerning the widespread mass appeal of astrology, Curry (1989: 96) arrives at an interesting conclusion based on historical scholarship:

Historical evidence is rarely complete, however . . . [i]n this case, there is enough for us to say that popular astrology persisted, almost unchanged in its content, from about the late Middle Ages until at least the mid-nineteenth-century, probably throughout the British Isles. As such, in the eighteenth century it remained an important part of the cultural life of the relatively poor and powerless. It is also possible (indeed, necessary) to go further, and get a sense of how astrology informed their perceptions and offered guidance in matters of vital concern—agriculture, husbandry, physic, and love-life—thus comprising a kind of plebeian science of life.

That Curry deems astrology to have been a more or less consistent aspect of cultural life for the ‘relatively poor and powerless’ and to have constituted ‘a kind of plebeian science of life’ resonates interestingly with some of the tenets of Burrell’s ‘retro-organization theory’ and, in particular, with his concern to resurrect the non-rational pragmatic knowledge and oral traditions of largely illiterate populations (Burrell, 1998). As Burrell puts it, ‘We should ask about the peasantry today, yesterday and tomorrow for this category has been hidden from organizational behaviour for far too long. . . Life in organizations is much more of an everyday story of country-folk than we imagine. . . To understand today we must engage in retro-organization theorizing’ (1998: 98). An important aspect of Burrell’s agenda is thus the celebration of knowledges and practices that have been marginalized under modern industrial capitalism and that find their roots in a pre-Enlightenment age—witchcraft, herbalism, astrology, alchemy, and so forth. Reasserting an interest in such worldviews holds out the possibility of breaking from the delusional obsessions of modernity, which, on balance, Burrell takes to have wrought far more harm than good for the great majority of the world’s population. He urges us to abandon historicist notions of inevitable progress and the rule of rationality; to give up attachment to linear order and closure; and, in their place, to embrace willingly a Nietzschean world of the discontinuous, the non-rational, the Dionysian.

It is Burrell’s rendering of Foucauldian genealogical analysis—arguably a central feature of the agenda just outlined—that is particularly relevant to the tasks we are pursuing in this article. Although this is not the place for a detailed exposition of Foucault’s genealogical method, it is perhaps useful to note some of its key principles in order to provide further theoretical context for the analysis that we engage in below.⁵ Foucauldian genealogies are concerned with the ‘insurrection of subjugated knowledges’ (Foucault, 1980: 81), by which is meant knowledges that exist as discounted or marginalized counterparts of privileged institutional discourses—medical, legal, psychiatric, scientific, governmental and so forth—and that are correspondingly afforded less social value within a



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given network of power/knowledge relations. Thus the perspective of psychiatric patients or ill people is actively discounted and often harshly opposed by medical knowledge, as are the local knowledges of delinquents, homosexuals or, indeed, any 'minority grouping' produced or reproduced by the webs of practice associated with a particular knowledge regime. Foucault famously asserts that, 'power produces knowledge . . . power and knowledge directly imply one another; that there is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations' (Foucault, 1977/1991: 27). Through genealogical analysis, Foucault demonstrates how it is possible to expose institutional power imbalances, injustices and inequities that have become naturalized and taken for granted within a given social order. The task of genealogical criticism is to reassert the 'low-ranking', 'unqualified' or 'directly disqualified' positions of the underprivileged or marginalized and thereby challenge the orthodoxy of hierarchical, functionalized, systematized social orders. It is by thus exposing taken-for-granted and naturalized networks of power/knowledge relations that, as Foucault puts it, 'criticism performs its work' (1980: 82). 'Genealogies', he proclaims, 'are precisely anti-sciences' (1980: 83).

Retro-organization theory and genealogical analysis are directly germane to our project insofar as astrological knowledge and practice have become marginalized through the privileging of natural and social scientific discourses that have broadly succeeded in discounting the value of intuitive understanding, holism and geomancy in favour of rational explanatory models based on material causation and a principle of verificationism rooted in experimental method. We contend that astrology, as a subjugated knowledge par excellence, is a strong candidate for the kind of genealogical and retro-organizational critique advocated by both Foucault and Burrell. Having set out what we trust is a credible theoretical licence for our undertaking, what follows is an analysis of a particular application of genealogical method in the field of management psychology. The particular example we wish to consider is that of the MBTI[®], a psychometric instrument in widespread use that finds legitimacy, in part, through its affiliation to 'scientific psychology'. Our argument is that astrology and alchemy are integral to the history of the MBTI[®]'s development and hence are implicated and replicated at every stage of its application—in its theoretical assumptions, formal measurements, results and modes of interpretation. Yet, despite their prevalence, the occult aspects have been conveniently marginalized in a bid to secure scientific credibility for the approach. To the users of MBTI[®], its astrological and alchemical heritage remains completely opaque, having become obscured by the multiple accretions and signs of scientific legitimacy. The astro-genealogy that we offer is intended to contribute to a more well-rounded account of the instrument by providing an overview which, in terms of Dreyfus and Rabinow's account of genealogical analysis,



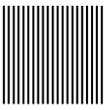
'allows the depth to be laid out . . . in a more and more profound visibility', such that the astrological and alchemical legacy becomes 'an absolutely superficial secret' (1982: 106–7).

The Myers-Briggs Type Indicator®

For those unfamiliar with the MBTI®, a few words of introduction may be in order. Proponents of this approach claim it to be the most widely used psychometric test in the world, and an estimated 3.5 million MBTI® tests are administered each year in the USA alone; it has been translated into two dozen languages and is routinely used in Canada, the UK, Australia, New Zealand, Japan, Germany, Italy, Singapore, Korea and many other countries (Myers, 2000). Its popularity owes much to the fact that business communities across the globe have found it of practical value—not least because of empirical evidence correlating 'psychological type' (as defined by the MBTI®) with occupational role (Kroeger and Thuesen, 1992). The MBTI® is commonly deployed to assist decision-making in a variety of management training and personnel areas, including: recruitment and selection; career counselling; team building; organizational change; individual and leadership development. It is also frequently used in post-experience and post-graduate management educational contexts, with students on business administration master's courses often being exposed to the test at some point in their studies. Whatever one might wish to challenge or criticize about this instrumental form of character analysis, there is no question that the MBTI® has a strong appeal, based on both pragmatic and intuitive factors.

The MBTI® developed out of the interests of Katherine Cook Briggs (1875–1968) and her daughter Isabel Briggs Myers (1897–1979) in human personality difference. They both read Jung's *Psychological Types* shortly after its initial publication in English in 1923 and were prompted, at the outset of the Second World War, to try to 'operationalize' the typology that he set out. They thought that the construction of a psychometric indicator might, amongst other things, prove useful in addressing certain pressing military personnel decisions faced at that time in the USA. Early forms of the MBTI® testing procedure were thus developed in the period 1942–4, but it was after the war and in the years leading up to 1956 that more systematic research involving medical students, nursing students and other sample occupations was conducted using the MBTI®. Neither Briggs nor Myers had any formal training in psychology or statistics, so Myers' encounter with a young psychology research student named David Saunders in the early 1950s was significant in terms of the statistical enhancement and subsequent development of the instrument.

Although isolated researchers and clinicians showed some interest in the MBTI® as it continued to evolve during the 1960s, it was not until Consulting Psychologists Press included the Indicator in its publication



list in 1975 that the approach became widely available and major commercial success ensued. Work on the development of the MBTI® continues to this day, with scales within the test being constantly re-evaluated and refined. There are several psychologists associated with the approach: Naomi Quenk, Otto Kroeger and Linda Kirby are three notable figures, but the most significant contemporary advocate is Mary McCaulley, who, since meeting Isabel Myers and striking up a close working relationship with her in the late 1960s, has been a vocal proponent of the MBTI®. A membership organization, the Association for Psychological Type, was formed in 1979 and a research publication—*The Journal of Psychological Types*—established for those working primarily (although not exclusively) with the MBTI®.

From the standpoint of genealogical analysis, it is important to note that, although the MBTI® is often presented as a form of ‘scientific psychology’ par excellence (see, for example, Gardner and Martinko, 1996; Hammer, 1996; Thorne and Gough, 1991), its origins in Jungian personality typology (Jung, CW, vol. 6) result in the MBTI® unconsciously inheriting and reproducing theoretical and epistemological structures founded on astrological and alchemical cosmology. Because Jung’s analysis of personality derives conscious inspiration from his active interest in alchemy and astrology (Jung, CW, vols 12, 13, 14), contemporary practitioners of this brand of psychometrics inadvertently find themselves conducting a form of astrological character analysis. In what follows, we endeavour to show how the development of Jung’s categorization of psychological types not only reflects his fascination with quaternity in general (what he considered to be the archetypal significance of the number ‘four’) but explicitly connects to the four elements of astrology. Jung’s typology, in turn, forms the conceptual basis of a range of MBTI® products, services and related academic research. Were the alchemical and astrological legacy lying at the conceptual heart of MBTI® exposed and acknowledged, we suggest, it would be anathema to the discipline of scientific psychology with which this system is closely aligned.⁶ We begin our critical exposition with a brief consideration of the four elements and their place in the Renaissance astrological system. This overview is a precursor to examining Jung’s own interest in Renaissance alchemy and the symbolism of its binary oppositions and quaternities.

The Four Elements of Astrology

In a critical review of alternative cosmologies, John Rennie Short (2000: 16) observes that ‘here is an astro-archeology that underlies the contemporary rationalist world’. Perhaps this is unsurprising given the seminal part played by astrology in the development of what we now take for granted as being the methods of rational scientific enquiry (Webster,



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1980). Astrology was central to the Renaissance worldview and continued to influence intellectual pursuits well into the Age of Enlightenment (Shumaker, 1972). Not only that, but this pagan system, whose legacy we will glimpse in what follows, possesses roots that stretch well back into antiquity, with the consequence that much of our everyday language and modes of organizing is tell-tale, though subliminal, testimony to this cosmology. To take one simple illustrative example, the division of the week into 7 days is based on a segmentation of the regular 28-day lunar cycle into units corresponding to each of the 7 major bodies in the solar system visible from Earth: Sun, Moon, Mercury, Venus, Mars, Jupiter and Saturn. The days of the week are named after these planets—the following collage of English and French day-names makes this apparent:

Monday = Moon day; Mardi = Mars day; Mercredi = Mercury day; Jeudi = Jove's day (Jupiter); Vendredi = Venus day; Saturday = Saturn day; Sunday = Sun day

The ancient Greek philosopher Empedocles is generally acknowledged to have been the first person to interpret natural phenomena using four elements—air, water, fire and earth—as an organizing vehicle. On the island of Kos around the 5th century BCE, Hippocrates, popularly known as the 'father of medicine', equated the astrological elements with corresponding bodily substances—blood, phlegm, yellow bile, black bile—and with four respective qualities: dry, warm, moist, cold. This innovation, in turn, set up the supporting intellectual conditions for another ancient Greek physician, Claudius Galen (2nd century BCE), to divide humans into four classes according to differing admixtures of Hippocrates' four substances, thus giving rise to the premodern notion of bodily 'humour' or 'temperament'. A preponderance of blood (air) in an individual was considered to produce a sanguine temperament; phlegm (water) was characteristic of the phlegmatic; yellow bile (fire) yielded the choleric; and black bile (earth) the melancholic. That Galen's typology held sway for some 1700 years thereafter, finding its way into Arabic alchemy of the 9th and 10th centuries AD and being 'rediscovered' in the translated texts of Christian alchemists during a period ranging from the 10th century to the 16th century (Hayes, 1983; Singer, 1959; Webster, 1980), is plain testimony to the pragmatic value it had for the premoderns.

To illustrate the kinds of relationships between the humours and elements devised by Renaissance thinkers, it may be helpful to consider the scheme developed by Marsilio Ficino (1433–1499), a student of medicine and astrology. In Book I of his *Vita libro tres* (*Three Books on Life*), Ficino (1989) makes the equations shown in Table 1 between bodily substance, element, quality, temperament and associated planet. We observe that little has changed in Ficino's fourfold arrangement of substance, element, quality and associated temperament since Galen's formulation. Indeed, in medical and psychological astrology the Galen



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Table 1. Ficino's Analysis of the Humours

Substance	Element	Quality	Temperament	Planet
Blood	Air	Warm and moist	Sanguine	Jupiter (always) Venus (sometimes)
Choler (red or yellow bile)	Fire	Warm and dry	Choleric	Mars
Black bile (black choler)	Earth	Cold and dry	Melancholy	Saturn
Phlegm	Water	Cold and moist	Phlegmatic	Moon (always) Venus (sometimes)

Source Adapted from Short (2000: 28).

cosmology survives intact to this very day (Crane, 1997; Ridder-Patrick, 1990; Toby, 1997).

What, however, is the significance of the connections in this cosmology? What do these arrangements represent? To answer these questions we need at least a rudimentary understanding of alchemy and its purposes. The origins of alchemy are less than certain. Aveni (1996: 38–9) suggests alchemy was probably first practised by the Alexandrian Greeks in Egypt. He notes that the etymology of the word alchemy seems to derive from the Greek—either from ‘fusing’ or ‘smelting’ (*chyma*) or ‘the black [soil—of Egypt]’ (*keme*), or indeed, both. The subsequent addition of the prefix ‘*al*’ almost certainly reflects the fact that the study was passed to the West via Muslim scholars who inherited the alchemical tradition in Alexandria when their soldiers conquered Egypt in the 7th century CE. It was not until the latter part of the first millennium (c. AD 800–1000) that alchemy was embraced by Sufism and Hermeticism and began thoroughly to blossom in the Middle East.

It is interesting to note in passing that something of a renaissance of scientific exploration was occurring in Arabia during an era that European Renaissance thinkers were later (in patronizing and Euro-centric vein) to characterize as the ‘Dark Ages’. In actual fact, Renaissance scholars such as Ficino, Paracelsus, Heinrich Cornelius, Francesco Giorgi, Giordano Bruno, John Dee and Robert Fludd owed their knowledge of astrology and alchemy to the translation of texts inherited from their Greek, Judaic and Arabian predecessors. The practice of alchemy may be understood as a precursor to modern chemistry insofar as alchemists were concerned to explore—through frequent and repeated experimentation—the property of materials and their chemical transmutation (Jung, CW, vols 12, 13,14; Haskins, 1960; Marshall, 2001; Webster, 1980).

This systematic exploration was motivated by the search for a material ideal whereby base metals might be transformed into gold (then considered to be the purest expression of substance). To contemporary eyes



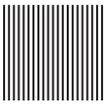
this endeavour may seem extremely naive. Before dismissing it out of hand, however, we should understand that the pursuit of this external ideal was often viewed *allegorically* by the alchemist. Outer material transformation mirrored inner personal transformation. The chemical experiments were an outward expression of a *spiritual ideal*; that of self-transcendence and realization. It was a search for understanding how the deepest meaning of life could be derived from quotidian experience.

Our point in drawing this quick sketch of alchemy and astrology (and we recognize it is no more than that) is to prepare the way for showing that Jung's attitude towards these subjects is broadly *sympathetic* and that his interest in premodern cosmologies informs his critique of modernity. Jung argues that 'modern man' (*sic*) has an inherent or instinctive need to pursue spiritually purposeful trajectories through life; a need that is fundamentally frustrated and denied by modern science, technology and the materialistic lifestyles to which they give rise. The search for the God-image is hardwired into the physiology of the brain and is part of an evolutionary inheritance (CW, vol. 6: 243) and, as such, it must find expression through constructive or, if denied, destructive means. Our point is that, in his writings on alchemy and astrology, he is in direct sympathy with the Renaissance proponents of these methods and considers the spiritual symbolism and meaning to have been lost in contemporary science, including, of course, *psychological science*. A fundamental tenet of analytical psychology (and one reason why Jung fell out so badly with Freud over his 'god-less' psychoanalysis) is that pursuit of the God-image is natural and healthy, and that its repression or denial is the source of much neurosis and psychosis in modern societies. Alchemy represented for Jung a science of spiritual and material integration: the search for the union of opposites and spiritual transcendence. Its symbolism attempts to invoke a state in which the inner human microcosm is undifferentiated from the outer macrocosm.

Take, for example, Jung's interpretation of the *Rosarium Philosophorum*, a 16th-century alchemical woodcut, as reproduced in Figure 1. The old German text beneath the image translates as, 'We are the metals' first nature and only source/ The highest tincture of the Art is made through us. No fountain and no water has my like/ I make both rich and poor both whole and sick. For healthful can I be and poisonous.' Here is an extract from Jung's interpretation:

This picture goes straight to the heart of alchemical symbolism, for it is an attempt to depict the mysterious basis of the *opus*. It is a quadratic quaternity characterized by the four stars in the four corners. These are the four elements. Above, in the centre, there is a fifth star which represents the fifth entity, the 'One' derived from the four, the *quinta essentia*. The basin below is the *vas Hermeticum*, where the transformation takes place. It contains the *mare nostrum*, the *aqua permanens* or . . . the 'divine water'. (CW, vol. 16: 203)

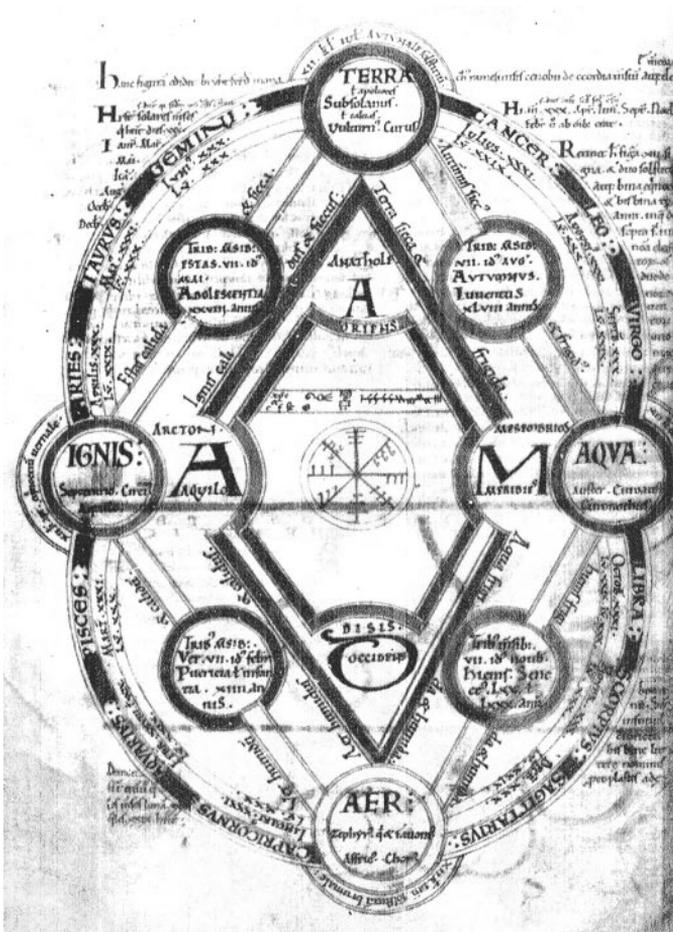
He continues:



the quaternity was archetypal; a mythological motif that was ‘always collective’ and ‘common to all times and all races’ (CW, vol. 6: 443), and it is with this understanding that we should approach the fourfold division of functions of consciousness that inform his psychological typology.⁸ As he explicitly states:

The quaternity is one of the most widespread archetypes and has also proved to be one of the most useful schemata for representing the arrangement of the functions by which the conscious mind takes its bearings. It is like the crossed threads in the telescope of our understanding. The cross formed by the points of the quaternity is no less universal and has in addition the highest possible moral and religious significance for Western

Figure 2. Byrhterth’s Diagram, 12th-Century *Annus-Mundus-Homo*



Source *De concordia mensium atque elementorum* [On the concord of the months and the elements], MS 17, fol. 7v, St John’s College library, Oxford.



man. Similarly the circle, as the symbol of completeness and perfect being, is a widespread expression for heaven, sun and God; it also expresses the primordial image of man and the soul. (CW, vol. 16: 207–8)

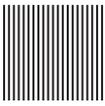
Jung's Four Psychological Functions and the Four Elements

It is in his detailed study of the works of a 16th-century Swiss alchemist, Paracelsus, that Jung (CW, vol. 13) makes the most direct comparison between the four astrological elements and his earlier work on the functions of consciousness and character typology (CW, vol. 6). We quote at length from the relevant passage since it provides pivotal evidence for the case we are making about the relationship between the psychological types inherited by the MBTI® and its alchemical/astrological origins. Jung refers to the last chapter of *De vita longa* (1562) in which:

Paracelsus makes almost untranslatable allusions to the four Scaiolae, and it is not at all clear what could be meant. Ruland, who had a wide knowledge of the contemporary Paracelsist literature, defines them as 'spiritual powers of the mind' (*spirituales mentis vires*), qualities and faculties which are fourfold, to correspond with the four elements. . . The Scaiolae, he says, originate in the mind of man, 'from whom they depart and to whom they are turned back' . . . Like the four seasons and the four quarters of heaven, the four elements are a quaternary system of orientation which always expresses a totality. In this case it is obviously the totality of the mind (*animus*), which here would be better translated as 'consciousness' (including its contents). The orienting system of consciousness has four aspects, which correspond to four empirical functions: thinking, feeling, sensation (sense-perception), intuition. This quaternary is an archetypal arrangement. (CW, vol. 13: 167)

We have traced one other moment in Jung's work where, in a discussion of Plato's *Timaeus*, he equates the 'empirical functions of consciousness' with the four astrological elements (CW, vol. 11). In one passage he analyses Plato's character, suggesting that, although he possessed a preponderance of fiery 'spirit' and 'airy thought', he was relatively lacking when it came to connection with sensational reality and concrete action ('earth'). As Jung puts it, '[Plato] had to content himself with the harmony of airy thought-structure that lacked weight, and with a paper surface that lacked depth' (CW, vol. 11: 122–3). Jung's equating of the earth element with 'concrete reality', of air with 'thought' and of fire with 'spirit' in this analysis enables us to infer the following relationships between the Jungian functions of consciousness and the astrological elements: thinking–air, intuition–fire, feeling–water, sensation–earth.

Whereas the elemental aspects of Jung's analysis of psychological typing are an *implicit* influence on the development of the MBTI®, there is one company that has self-consciously used the alchemical aspects of his system in their management consultancy practice. Insights Learning and Development Ltd is a firm of management consultants offering training and development courses to corporate clients. According to its



website publicity,⁹ ‘Many of the world’s finest companies are using Insights to develop a common language and to provide the skills necessary to excel in today’s marketplace.’ Indeed, Insight’s client list includes such familiar blue-chip companies as British Airways, HSBC, Lloyds Bank, McDonalds, Microsoft, NatWest and Royal Mail. Interestingly, it explicitly links Jung’s four functions to the humours as they appear in Hippocrates’ philosophy and practice. Amongst other things, the company offers a diagnostic psychometric system (see Figure 3) that types individuals according to four colours, corresponding (with some qualifications) to Jung’s four psychological functions, and the four elements: red (fire), yellow (air), green (earth), blue (water).¹⁰ The functions and elements of the system are further associated with 8 primary organizational types that represent a simplified version of a 56-element typology that, Insights claims, more accurately models individual differences. For the purposes of the argument being developed here, it is worth noting the striking structural resemblance between the 12th-century *Annus-Mundus-Homo* diagram (Figure 2) and the contemporary chart employed by Insights.¹¹ It is, we suggest, a further indication of how this particular aspect of premodern cosmology is being purveyed in a postmodern corporate marketplace.

Figure 3. The Eight Primary Types of Insights Learning & Development Ltd.



Source www.insightsworld.com (consulted April 2001).



An Astro-Genealogical Critique of the MBTI®

The publication that inspired Insight's system and, as we shall see shortly, the MBTI® is Jung's *Psychological Types* (CW, vol. 6). A work of not inconsiderable sophistication and scholarship, *Psychological Types* draws together ideas taken from such disparate sources as Schiller, Goethe, Schopenhauer and William James and marries them with clinical psychiatric experience in order to establish a system of character analysis based on the two 'attitude-types' and four 'function-types'. In presenting Jung's conclusions concerning this typology, we are not particularly concerned with the veracity or otherwise of the psychological framework he offers. Critics abound, as McLynn (1997) is careful to note, but our intention here is to trace the relationship of Jung's psychological typology to its astrological and alchemical origins and further to establish a link to the MBTI®. To this end it will be useful to set out Jung's own summation of the typology thus:

The attitude-types . . . are distinguished by their attitude to the object. The introvert's attitude is an abstracting one; at bottom, he is always intent on withdrawing libido from the object, as though he had to prevent the object from gaining power over him. The extravert, on the contrary, has a positive relation to the object. He affirms its importance to such an extent that his subjective attitude is constantly related to and oriented by the object. (CW, vol. 6: 330)

And, of the functions of consciousness and their corresponding types, he observes:

The conscious psyche is an apparatus for adaptation and orientation, and consists of a number of different psychic functions. Among these we can distinguish four basic ones: *sensation, thinking, feeling, intuition*. . . Thus there are many people who restrict themselves to the simple perception of concrete reality, without thinking about it or taking feeling values into account. They bother just as little about the possibilities hidden in a situation. I describe such people as *sensation types*. Others are exclusively oriented by what they think, and simply cannot adapt to a situation which they are unable to understand intellectually. I call such people *thinking types*. Others, again, are guided in everything entirely by feeling. They merely ask themselves whether a thing is pleasant or unpleasant, and orient themselves by their feeling impressions. These are the *feeling types*. Finally, the *intuitives* concern themselves neither with ideas nor with feeling reactions, nor yet with the reality of things, but surrender themselves wholly to the lure of possibilities, and abandon every situation in which no further possibilities can be scented. (CW, vol. 6: 518–19; emphases in original)

Each of these four function-types is mediated by an attitude-type of extraversion or introversion, thus giving, in Jung's scheme, a minimum of eight types (although he suggests that this is a relatively crude matrix and that each of the four functions may be subdivided into more refined categories; CW, vol. 6: 523).



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It is this typology that was taken up by Katherine Cook Briggs and her daughter Isabel Briggs Myers in the postwar period and developed into the MBTI® instrument (Myers, 2000). In their interpretation of Jung, however, they give greater prominence to the distinction he drew between the 'rational' functions of thinking and feeling—the way in which experience of the world is judged—and the 'irrational' functions of sensation and intuition; in other words, the purely perceptive or phenomenological apprehension of the world. These two auxiliary functions Briggs and Myers refer to as 'Judging' and 'Perceiving' respectively (Myers, 2000). In addition to the dominant orientation of consciousness to its environment—the 'superior function' in Jung's scheme—there is a secondary or 'inferior' function. This means that in the MBTI® system there are 16 *psychological types* resulting from possible combinations of (1) attitude-type: extraversion (E) or introversion (I), (2) the basic mental processes of sensing (S), thinking (T), feeling (F) or intuition (N), and (3) judging (J) or perceiving (P). Hence individuals responding to the MBTI® psychometric or following a process of guided self-assessment will arrive at a type for themselves that can be coded using combinations of four letters: ISTJ, ESTP, ENFP, INTJ, and so on. It is important to note that the alchemical quaternity is still very much intact in this formulation.

In the case of the MBTI®, there is a considerable amount of academic research pursued in the name of establishing construct validity of the instruments used to generate the character typologies in order that clients can be assured of the *scientific credibility* of the interpretations offered. Much of this applied research in areas of career management and counselling, team building, cross-cultural studies and the like is empiricist in epistemological and methodological orientation,¹² and as such conceals the astrological and alchemical origins that we have been at pains to demonstrate lie at the very heart of this typological scheme. This is where retro-organization theorizing enables us to challenge and expose the obfuscation and concealment at work. What results from the scientization of the MBTI® we contend, however, is the substitution of one form of mystification—based in a premodern cosmology—by another form of mystification based on positivist scientism. Consider, for instance, the following extract from a comprehensive review of MBTI® applications in management research. We have dipped into the text more or less at random with the intention of conveying the narrative tone of the work and the scientific language being employed:

Part of the problem in validating the EI scale stems from the difficulty of developing criterion measures. Still, Thorne and Gough (1991) found that the ACL-EL cluster could serve as an observational measure of extraversion/introversion. This cluster correlates moderately and significantly with the MBTI-EI scale ($r = .32$ for males, $r = .40$ for females). Although many of the ACL extraversion items measure sociability (e.g., talkative, outgoing), others reflect an external focus (e.g., energetic, active).



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Moreover, while it is hard to observe an 'inward flow of energy,' the introversion items suggest an inner focus (e.g., reflective, preoccupied). (Gardner and Martinko, 1996: 73)

Interestingly, in this 39-page review of MBTI® research very little space (two short paragraphs) is given over to the conceptual basis of the instrument. Neither is there any mention of 'people' in any integrated or rounded sense. Instead there is talk in free-floating generalities of coding of 'types' and measurement of fragmented social psychological disposition. This may seem reasonable given the espoused interests of the authors (to provide an overview of the 'empirical' research) until we consider their methodological conclusion, namely, 'managerial research into type is mixed, with the experimental studies employing the strongest designs' (1996: 55), and 'our critique of the management type studies identified many weaknesses, especially for those with descriptive designs' (1996: 79). One wonders, then, what Gardner and Martinko make of Jung's original contribution on typology, since that is *entirely descriptive* in design and devoid of formal 'empirical' evaluation and evidence of the sort they might recognize or value. *Psychological Types* contains not a single correlation coefficient or tabular matrix and in it can be found no presentation of numerals outside a consideration of their symbolic (as opposed to statistical) significance. Our genealogical critique thus leads us to question fundamentally the value of the empiricist edifice to which the MBTI® has given rise in light of the Jungian theoretical legacy that we have attempted to explicate. Based expressly on premodern cosmology and symbolism, Jung's propositions form an *interpretative* heuristic intended to assist in the apprehension and understanding of human character. We speculate that he would have been decidedly unimpressed by the scientific turn taken by many of the MBTI®'s protagonists.

Conclusion: Have We Always Been Non-Modern?

Now that we are no longer so far removed from the premoderns—since when we talk about the premoderns we have to include a large part of ourselves—we are going to have to sort them out as well. Let us keep what is best about them, above all: the premoderns' inability to differentiate durably between the networks and the pure poles of Nature and Society, their obsessive interest in thinking about the production of hybrids of Nature and Society, of things and signs, their certainty that transcendences abound, their capacity for conceiving of past and future in many ways other than progress and decadence, the multiplication of types of nonhumans different from those of the moderns. (Latour, 1993: 133)

'As above, so below' is a central dictum of the occult sciences,¹³ including astrology. It might equally be applied to the critique of modern ontology offered by Latour (1993) in his essay *We Have Never Been Modern*. Latour puts forward nothing less than a moral and political



programme for rediscovering what he considers to be the excluded middle of modernity. A false dichotomy has been created by the moderns between 'transcendent Nature' on the one hand, and 'immanent Society' on the other, he suggests. Since the Enlightenment, the moderns pursued a programme of ontological 'purification' that denied acts of human mediation between the two respective provinces of Society and Nature and attempted to ensure that the 'things' of nature remained uncontaminated by the social constructions of apperceiving minds. It is therefore imperative, Latour maintains, to expose the networked nature of both 'things' and 'social order' and hence dissolve the false duality that modernity has imposed. Indeed, as the title of his essay suggests, he contends that a consideration of historical evidence concerning the development of natural and social scientific knowledge reveals that 'we have never been modern' in the sense that ontology is always already a matter of networked processes; of mediation, delegation, distribution, mandate and utterance. And yet, in the acts of purification necessary for the stabilization of modern objects and modern conceptualizations of 'humanity', 'society' and so forth, the a priori fact of mediation has to be occluded or consigned to a kind of 'modern unconsciousness' (1993: 37).

As a student of the history and sociology of science, Latour is no doubt intellectually aware of the role played by astrology and alchemy in the formation of modern sciences. It can surely be no mere coincidence, therefore, that he has alighted upon a form of philosophical holism that itself resonates strongly with premodern cosmology. Indeed, as the quotation at the opening of this section reveals, he openly admires the premoderns' unwillingness to differentiate 'durably' between Nature and Society and values their persistent attempts to find and expose hybridized human/non-human connections within the universe. By synthesizing elements of premodern, modern and postmodern attitudes toward ontology and epistemology, Latour devises a nonmodern 'constitution' and programme of enquiry and politics that acknowledges the extent to which 'we have never been modern. . . Half of our politics is constructed in science and technology. The other half of Nature is constructed in societies. Let us patch the two back together, and the political task can begin again' (1993: 144).

We began this article by invoking retro-organization theory as a way of licensing serious enquiry into what might otherwise be considered to be the socially scientifically taboo subjects of astrology and alchemy. Based on an interpretation of Foucauldian genealogical analysis, retro-organization theory's challenges to the received wisdom of apolitical, ahistorical and 'phallogocentric' approaches to organizational studies open the door to new ways of thinking about present-day conduct in organizations. By following the tenets of retro-organization theory in combination with Latour's hybridization project, one is freed to forge new conceptual and analytical syntheses unfettered by the constraints of modernist ontology and epistemology. The pandemonium that results from eschewing the modern



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creates fissures through which knowledges previously proscribed well up and re-present themselves in potentially new and interesting combinations.

We have sought in the astro-genealogical analysis of the MBTI® presented above to lay open to scrutiny a set of intellectual interconnections and legacies that, through the 'scientific purification' engendered by an empiricist rendering of the MBTI®, have been systematically forgotten or otherwise obscured. Our explicit aim has been to reconnect premodern cosmology to the modern in this specific, yet important, area of organizational conduct and thus, less directly, to demonstrate the fecundity of the form of retro-organizational analysis adopted. Although we have focused largely on a theoretical dimension of the impact of astrology on organizational life, as we intimated in our introduction, there is scope for a programme of empirical research on the influence of occult sciences within organizations. We hope that this article may spark new research ideas and directions for colleagues who are interested in exploring these topics in an organizational studies context.

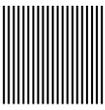
Notes

We thank Simon Lilley, Frances Laneyrie and the editors and reviewers of *Organization* for their thoughtful comments on earlier drafts of this article. Andrew Hall of Consulting Psychologists Press kindly provided background readings on the MBTI® and Catherine Chassay helped trace additional reference material. The work in embryonic form was presented at the 18th Standing Conference on Organizational Symbolism, 'Organization and Culture: Premodern Legacies for a Postmodern Millennium', 5–9 July 2000, Athens, Greece.

- 1 Engaging in primary research of such issues can be a highly sensitive matter, not least because many executives are embarrassed to admit to having resorted to astrological consultation and also because professional astrologers working with business clients are bound by strict codes of confidence. Despite these not insubstantial difficulties, one of us has managed to gain corporate access and to report on some preliminary interview findings (Phillipson, 2000).
- 2 Eysenck and Nias (1982) report on a systematic study of astrology from the perspective of scientific psychology. Their epistemology and research questions—which generally hinged around whether or not astrological claims could be statistically validated—differ from those pursued in this article. Interestingly from our point of view, however, Eysenck and Nias (1982: 220) do note the considerable resistance they encountered from their own research community: '[M]any of the people in the scientific establishment would have fitted well into the panel which condemned Galileo! We have become aware of this climate of censorship and intolerance . . . from remarks warning us that even criticizing astrology in detail, and showing familiarity with its pronouncements, would undermine our scientific standing and reputation. So much for the religion of the open mind.'



- 3 We make extensive reference to the Routledge & Kegan Paul edition of *The Collected Works of Carl Gustav Jung* (21 volumes, 1953–83) and abbreviate it as ‘CW’ throughout.
- 4 Phillipson (2000) documents objections to astrology voiced by an organized group of natural scientists. See also Dawkins (1995), Maddox (1994) and Adorno (1994) for critical assaults on the tenets of astrology. Maddox (1994: 185) reflects the sentiments of many natural scientists and sceptics when he observes: ‘It is a plain fact that astrology is a pack of lies in the literal sense; those who peddle horoscopes do so on an explicit set of statements about the real world that cannot be correct. There is no evidence that the positions of the planets can affect human behaviour, nor any plausible mechanism by which they could do so. It would not matter if the lies were told in some other context, say an alleged link between stock-exchange prices and the popularity of rock-and-roll music. That they are told, and believed by countless innocents, in flat contradiction of the more objective view of the world accumulated over several centuries, means that each and every horoscope is, by denying the objective view of the planets, an attack on the probity of science. . . Would other professionals, lawyers or accountants say, be as tolerant of public belief that undermined the integrity of their work – and, potentially, their livelihood?’
- 5 For a useful general introduction to the Foucauldian concept of genealogy, see Dreyfus and Rabinow (1982: 104–25). Burrell (1996, 1998) discusses genealogical analysis and its relation to organizational studies, as do Calas and Smircich (1999: 655–8), who also offer a comprehensive overview of extant organizational research conducted using this approach.
- 6 For indicative responses to astrology on the part of the scientific psychology community, see Eysenck and Nias (1982).
- 7 This diagram was constructed in the year 1110 by Byrhtferth, a monk of the abbey of Ramsey, and appears in a text he composed entitled, *De concordia mensium atque elementorum* (‘On the concord of the months and the elements’), held in the library of St. John’s College, Oxford (MS 17, fol. 7v). See Baker and Lapidge (1995) for a full translation of the text and Edson (1996) for comments on the structure of the diagram. We thank the President and Scholars of St. John’s College for their kind permission to reproduce Byrhtferth’s diagram in this article.
- 8 Were Jung to have explored the burgeoning contemporary literature on organizational theory, he would doubtless have gained great satisfaction from the vast number of confirming instances for his thesis. As students of organization and management will be aware, 20th-century and early 21st-century organizational theory is replete with two-by-two matrices. Whether the substantive topic is ‘leadership’, ‘motivation’, ‘strategy’, ‘marketing’ or ‘operations’, one inevitably encounters fourfold frameworks. From the JOHARI window, to SWOT analysis, PEST analysis or the ‘Four Paradigms’ proposed by Burrell and Morgan (1979), there would appear to be a powerful intuitive pull to this representational form for both the producers and consumers of organizational knowledge. A fuller exploration of this fascinating preoccupation would warrant a paper in its own right.
- 9 See www.insightsworld.com (consulted April 2001).
- 10 This diagram is used frequently in Insights’ literature, for instance in presenting the ‘Insights System’ on their website. We thank Andrew M.



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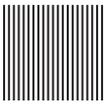
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Lothian, chairman of Insights, for permission to reproduce the diagram in this article.

- 11 The earliest form of the *Annus-Mundus-Homo* diagram, so far as we know, is a 10th-century medieval cotton manuscript produced in Exeter and currently held in a British Library volume, *Tracts on Astronomy* (MS Vitellius A.XII, fol. 52). Our thanks to John Rennie Short for directing us to this document.
- 12 See, for example, contributions to Hammer (1996).
- 13 This popular phrase is abridged from literal translations such as ‘that which is above is like that which is below, and that which is below is like that which is above’ (Holmyard, 1968: 68). It comes from the Emerald Tablet (*Tabula Smaragdina*) of Hermes Trismegistus—long believed to be a divinely inspired prophet or god, now identified as a composite figure to whom various authors, probably spanning several centuries, attributed compositions. The Hermetic corpus seems to have been collated for the first time, by Michael Psellus of Constantinople, in 1050.

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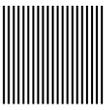
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