Myth, synchronicity, and the physical world

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Abstract

In his extensive work on the theories of myth, Robert Segal makes a broad distinction between nineteenth-century theories, which saw myths as primitive attempts to explain the physical world and hence as now superseded by modern science, and twentieth-century theories of myth, which saw myths as serving other purposes than explanation of the physical world and hence as not necessarily incompatible with modern science. Segal suggests that the challenge for twenty-first century theories of myth is to find ways of seeing myths as explanatory of the physical world in a way that is also compatible with modern science. The present chapter focuses on one such approach that Segal discusses: Carl Gustav Jung's psychological theory of myth when it is allied with his concept of synchronicity. After clarifying the criteria that need to be satisfied for, in Segal's phrase, 'bringing myth back to the world', the chapter

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critically examines Segal's own assessment of the Jungian approach in light of this challenge.

Keywords

Carl Gustav Jung, myth, psychoid archetype, science, synchronicity

Throughout his extensive writings on myth, Robert Segal makes a broad categorization of theories of myth by century. For nineteenth-century theories, typified by those of Edward Tylor (1832-1917) and James Frazer (1854-1941), myth was an attempt to explain (or, in Frazer's case, describe) the external world and was deemed by the theorists to be incompatible with science (Segal 2003b: 598-601). Because of the incontestable explanatory success of science, myth was considered to have been superseded and to be no longer a viable option for people in the modern world. For twentieth-century theories, by contrast, typified by those of, for example, Bronislaw Malinowski (1884-1942), Sigmund Freud (1856-1939), Carl Gustav Jung (1875-1961), Rudolf Bultmann (1884-1976), Hans Jonas (1903-1993), and Mircea Eliade (1907-1986), myth was considered to serve other purposes than explanation of the physical world: for instance, social, psychological, or existential purposes (Segal 2003b: 601-607; 2015b). As non-explanatory and/or not about the physical world, myth was not considered to be in direct competition with science and therefore not to be incompatible with science. In relation to these theories, myth could be a viable way of thinking even for people in the modern world (Segal 2003b: 600).

Segal suggests that one of the main challenges for theorists in the twenty-first century is to find ways of understanding myth in which myth is both explanatory of the physical world, as for most theorists in the nineteenth century, and genuinely compatible with science, as for most theorists in the twentieth century. Meeting this challenge would constitute 'bringing myth back to the world' (2000: 18; 2008).

Segal considers a variety of possible theories that might achieve this, including ones based on Claude Lévi-Strauss's (1908-2009) structuralist anthropology (Segal 2000: 16-18; 2015b: 26-28, 100-106), James Lovelock's (1919-) Gaia hypothesis (2015a, 2015b), and Donald Winnicott's (1896-1971) notion of 'playing as reality' (2000: 18-24; 2004: 137-42). Another possibility Segal has considered is Jung's theory of myth when it takes on board the implications of his concept of synchronicity (1998: 20-21; 2008: 200-3). It is this last possibility that I shall mainly discuss in the present chapter.

From Segal's discussions of the candidate theories, in particular from the points on which he faults them, it emerges that, for him, a theory that fully brought myth back to the world would satisfy three criteria: first, it would involve causally effective divine personalities (1998: 20; 2015b: 125); second, it would explain the physical world (2008: 102-103; 2015b: 124); and third, it would remain compatible with modern science (2000:17; 2008: 100). It is worth considering how the different theories fare against these criteria. I shall briefly look at Segal's assessments of the theories of Lévi-Strauss, Lovelock, and Winnicott, before discussing in more detail Jung's theory of myth when combined with his concept of synchronicity.

First, however, it is important to clarify in relation to the second criterion that, although Segal refers at different times to bringing myth back to 'the world', to 'the external world', and to 'the physical world', he does mean in all cases specifically the physical world and not the social world or cultural world, let alone the psychological world. For example, in the 2004 edition of his book *Myth: A Very Short Introduction*, after discussing an example of the 'rags to riches myth' (2004: 139-140), he notes, as a limitation of his example, that in it the myth 'is still about the social world and not about the physical one'. He then goes on to discuss cases where the myths involve effects on the physical world (2004: 140). Tellingly, too, in the 2015 revision of his book the key statement from the 2004 edition that 'In the twenty-first century the question is whether myth can be brought back to the external world — without facilely dismissing the authority of science' (2004: 138) is repeated almost identically except that the phrase 'external world' has been replaced with 'physical world' (2015: 123).

One might ask what is the need for Segal's challenge and its stringent criteria. Have not twentieth-century theories of myth, in identifying other purposes for myth than explanation of the physical world, already satisfactorily resolved the question of the continuing value of myth in the contemporary world? The key, I think, lies in Segal's phrase 'without facilely dismissing the authority of science'. Twentieth-century myths, in Segal's account, achieved their compatibility with science by recharacterizing myth (2015b: 122). Myth bowed before 'the authority of science'; theories of myth 'circumvent the issue' of being in conflict with science (2008: 102). Alternative approaches of achieving reconciliation between myth and science through 'relativizing', 'sociologizing', 'feminizing', or 'mythicizing' science are scathingly

rejected by Segal as 'easy routes' (2015b: 122). The challenge Segal formulates for twenty-first century theories of myth is one in which myth, in fully-fledged form as involving causally effective divine personalities, is invited to show that it can hold its own in face of the authority of modern science. Is there a way in which reconciliation can be achieved between myth and science that is compatible with the strongest claims for both? Whatever the answer, in framing the question Segal prompts a deepening of reflection on the nature of myth and its possible role in contemporary worldviews.

Before examining in detail the case of Jung's theory, it is worth looking briefly at some other theories discussed by Segal as candidates for bringing myth back to the world. From these examples it will become clear how difficult it is to satisfy simultaneously all three of Segal's criteria.

In Lévi-Strauss's structuralist anthropological theory of myth, according to which myths are attempts to resolve or temper contradictions between natural and cultural phenomena (1955), myths can certainly involve divine personalities (1955: 433, 437, 439) and they do explain the physical world in a way that, in its own terms, is rational and arguably scientific (1955: 444). But myths for Lévi-Strauss are not compatible with modern science, since, as Segal summarises, they explain the world in terms of the (primitive) 'science of the concrete', which focuses on 'the observable, sensory, qualitative aspects of natural phenomena' rather than in terms of the (modern) science of the abstract, which focuses on 'the unobservable, nonsensory, quantitative' aspects of natural phenomena (Segal 2000: 16-17; see also 2008:

103n2). Lévi-Strauss's structural approach to myth thus satisfies the first and second of Segal's criteria but fails to satisfy the third.

In the case of Lovelock's Gaia hypothesis (later more boldly called the Gaia theory), the myth in question does involve a causally effective divine personality, namely, the Greek goddess Gaia. The hypothesis also purports to explain the physical world, that is, how the earth ('Gaia') maintains through self-regulation a 'highly improbable atmosphere' that can support life (Segal 2015b: 124). And, although the Gaia hypothesis is a highly controversial idea, a defensible case can be made for its compatibility with modern science (Lovelock, a Fellow of the Royal Society since 1974, has evidently been considered by his peers to be a highly credible scientist). At first blush, Lovelock's hypothesis or theory thus seems to satisfy all three of Segal's criteria. However, Segal notes that in his later work Lovelock has clarified that he is using Gaia as a metaphor and is 'not [...] thinking of the Earth as alive in a sentient way, or even alive like an animal or a bacterium' (quoted in Segal 2015b: 124-125). For Segal, this means that Lovelock is not in the end seeing the earth as a personality, since the earth, not being alive, has no 'intent'; and not being a personality, the earth is neither a god nor the subject of a myth (Segal 2015b: 125). The Gaia hypothesis thus ultimately fails to satisfy Segal's first criterion of involving causally effective divine personalities.

In the perspective that Segal (2000: 18-24; 2004: 138-142) develops from Winnicott's ideas about play, myth is seen as a form of 'make-believe', where adherents view the world mythologically even though they recognize that in reality it is not mythological (Segal 2004: 139). The example Segal ingeniously elaborates is of

fans treating Hollywood stars and other celebrities 'as if' they were gods and goddesses (2000: 21-24; 2004: 140-142). When viewed as make-believe, myths can involve causally effective 'divine' personalities (2000: 23), and those engaging in this kind of perception can also fully accept modern science when outside of the makebelieve. There is even a sense in which happenings in the physical world can be explained as having been caused by behaviour of the make-believe gods and goddesses: for example, when the celebrities campaign 'to end pollution, curb global warming, and save species' (Segal 2004: 140). It therefore again looks as though the approach based on Winnicott's ideas about play and 'make-believe' satisfies all three of Segal's criteria. However, although Segal doesn't draw attention to this, there is surely a significant limitation in the 'explaining' of the physical world that can be done within this perspective, inasmuch as being a cause of effects in the physical world through being the figurehead of a campaign is not the same as explaining the nature and processes of the physical world in the kind of way modern science does. Indeed, it seems more like an effect on the social world, inasmuch as the mentioned campaigns primarily address human beliefs and behaviours in an attempt to reverse or retard the effects of previous human beliefs and behaviours. Ultimately, therefore, this approach only satisfies the second criterion in a limited way, if at all.

Each of the above three theories fails to satisfy one or other of Segal's three criteria: Lévi-Strauss's fails to satisfy the third, Lovelock's the first, and Winnicott's the second. Can Jung's theory of myth allied to his concept of synchronicity fare any better?

Although Jung made no attempt to present a systematic theory of myth, sometimes explicitly denying that he had any intention to do so (1911-12/1952: xxviii-xxix), his writings are replete with references to and discussions of myths and a coherent and largely consistent, though evolving, theory of myth can be extracted from them. This theory is, in brief, that myths are autonomously arising but culturally elaborated expressions of archetypes of the collective unconscious (Walker 1995, Segal 1998). Segal, more than any other commentator, has teased out the details of this implicit theory of myth and has set it in the wider comparative context of other late nineteenth- and early twentieth-century theories of myth (Segal 1998, 1999, 2003a, 2003b, 2008, 2010, 2011). From these comparisons Jung's theory emerges as one of the few to address each of the three main questions that, according to Segal, can be asked of myth: 'what is its subject matter, what is its origin, and what is its function?' (1998: 3). In Segal's account, the subject matter of myth for Jung is the human mind, specifically the collective unconscious; the origin of myth is the initial need for contact with this aspect of the mind; and the function of myth is the maintaining or renewing of such contact (1998: 3-21).

Because of the central role played in Jung's theory of myth by the concepts of the collective unconscious and archetypes, developments in his thinking about these concepts have implications for his thinking about myth. Both concepts are controversial (Hauke 2006, Roesler 2012). In Jung's basic understanding the collective unconscious designated 'a second psychic system [in addition to consciousness and its "appendix", the personal unconscious] of a collective, universal, and impersonal nature which is identical in all individuals'; and archetypes were the hypothetical, pre-existent factors, irrepresentable in themselves, that gave form to the

contents of the collective unconscious and expressed them in emotionally charged archetypal images or symbols (1936: par. 90; Stevens 2006). Perhaps Jung's most important development of these ideas, duly noted by Segal (1998: 20), was the shift from a purely psychic conception to a psychophysical, or as Jung called it a 'psychoid', conception of the collective unconscious and archetypes. This development was bound up with Jung's reflections on the phenomenon and principle of synchronicity – 'meaningful coincidence' (1952c: par. 827), 'an acausal connecting principle' (1952c: title) – which proposed that psychic and physical events could sometimes be experienced as corresponding acausally through the meaning that they jointly expressed. An implication of this proposal was that psyche and matter could be seen as different aspects of an underlying, psychophysically unitary reality, which was also the realm of the archetypes (Jung 1955-56: par. 662). In Jung's earlier model, in which the archetype was conceived as purely psychic, myths were exclusively viewed as projections of intrapsychic, albeit collective, contents onto the world. In Jung's later model, however, in which the archetype was psychoid (capable of structuring the physical as well as the psychic), myths could on occasion additionally express themselves in the arrangement of external events (Jung 1952a: par. 648; 1976: 541; Main 2007: 63-79; 2013).

Segal for the most part discusses Jung's theory of myth as a typical twentieth-century theory in that, with its psychological focus on revealing the unconscious mind, it makes myth compatible with science by being 'other than explanatory' of the physical world (2003b: 604). It thus satisfies Segal's third criterion for bringing myth back to the world but fails to satisfy his second criterion. As for Segal's first criterion, this also appears to be satisfied inasmuch as one of the common forms of imagery

through which Jung considered archetypes to express themselves was as 'active personalities' (1934/1954: par. 80), including as divine and heroic figures from mythology: modern individuals, he wrote, have been able 'to rediscover the gods as psychic factors, that is, as archetypes of the unconscious' (1934/1954: par. 50; see also 1936). It is true that these mythological figures are symbolic rather than literal, inasmuch as they express not actual divinities but archetypes. But Jung attributed divine qualities to the archetypes, above all the quality of being numinous: 'the archetypes' he wrote, 'have, when they appear, a distinctly numinous character which can only be described as "spiritual", if "magical" is too strong a word' (1947/1954: par. 405). In an open letter responding to what he saw as a mischaracterization of his work by Martin Buber, he put the point even more vividly:

I am aware that I am dealing with anthropomorphic ideas and not with actual gods and angels, although thanks to their specific energy [i.e., their being numinous], such (archetypal) images behave so autonomously that one could describe them metaphorically as "psychic daimonia" [...] dangerous antagonists which can, among other things, work frightful devastation in the economy of the personality. They are everything one could wish for or fear in a psychic "Thou". (1952b: par. 1504)

This certainly expresses the idea of causally effective divine personalities – though, as the repeated word 'psychic' makes clear, what are being described here in personalized terms are still intrapsychic factors and processes, rather than external, physical ones.

However, Segal also notes in his more extensive discussions of Jung's theory of myth that the concept of synchronicity in certain respects moves that theory closer to concern with the physical world (1998: 20; 2003b: 613; 2008: 100-103). Segal illustrates his reflections about myth and synchronicity using Jung's well-known case of a patient who was telling him her dream about being given a jewel in the form of a scarab beetle, when an actual scarabaeid beetle appeared at his consulting room window (1951: par. 982; 1952c pars. 843, 845). Of this case Jung later wrote to a correspondent: 'at the moment my patient was telling me her dream a real "scarab" tried to get into the room, as if it had understood that it must play its mythological role as a symbol of rebirth' (1976: 541). By way of substantiating the association of the scarab beetle with the motif of rebirth, Jung referred to ancient Egyptian culture, and in particular to the *Book of What is in the Netherworld*, where the symbol can readily be construed as carrying this meaning (1952c: par. 845).

What Segal finds positive about this experience is how the acausal matching of dream and outer event impressed on the patient her 'kinship' with the physical world: 'Rather than alien and indifferent to humans, the world proves to be akin to them – not because gods respond to human wishes or because human wishes directly affect the world but because human thoughts correspond to the nature of the world' (2008: 102). The patient's individual conscious attitude, which had fallen 'out of sync' with the world, was harmonized with the world again (2008: 101-102). The world thereby regained its meaningfulness for her, and that meaningfulness no longer depended on projection, for the meaningfulness that constitutes the connecting factor of a synchronicity is, by dint of the psychoid nature of the archetype, not just

intrapsychic but also 'inherent in the world' (2008: 102) – in the present case, in the timely behaviour of the scarabaeid beetle.

Despite this positive assessment, however, Segal raises a number of questions about the alliance of myth and synchronicity. He asks what exactly is the 'mythological role' of the beetle as a symbol of rebirth; whether there can be a myth of synchronicity, which for him would be a causal account of non-causality; whether the mythological associations of the beetle 'really deal with the world'; and whether the myth of the rebirth of the scarab explains the appearance of the scarab or is merely invoked on the appearance of the scarab (Segal 2008: 102-103). I shall discuss each of these questions in turn, before then assessing the extent to which Jung's theory of myth combined with his concept of synchronicity satisfies Segal's criteria for bringing myth back to the world, whether in Segal's view or in a different construal.

First, what is the mythological role of the scarab beetle as a symbol of rebirth? In one of my own previously published discussions of myth and synchronicity (Main 2007, revised as Main 2013), to which Segal's most extensive discussion of these issues (2008) is partly responding, I focused on the same synchronistic experience with the scarab beetle. The context of my discussion was a consideration of disenchantment and re-enchantment and of the extent to which first Jung's earlier theory of myth and then his later theory of myth, after he had developed his concept of synchronicity, could effect a restoration of 'the sacred sense of wholeness and reconciliation between self and world' (Scaff 2000: 105) that was assumed to have been lost as the world became progressively disenchanted (Main 2007: 19-22). For me, the mythological role of the scarab beetle as a symbol of rebirth was precisely to

express the archetypal idea of rebirth, in a manner that was, in its context, timely, numinous, gripping, and transformative. The transformation or rebirth that occurred was primarily the patient's, inasmuch as the experience broke her out of her personal state of disenchantment (Main 2007: 23-24); but I argued that Jung, consciously or unconsciously, might have been hoping that the principle of synchronicity that the experience was illustrating would also contribute to a rebirth or transformation of disenchanted Western culture in general (Main 2007: 25, 27-28, 33-34). In all of this the role of the scarab beetle as a symbol of rebirth was simply to express the archetypal meaning. In light of the concept of synchronicity, the archetypal meaning could express itself to some extent in the configuration of outer events as well as in the configuration of inner events. But the role of the symbol, to express the archetypal meaning, was the same.

Second, can there be a myth of synchronicity, which for Segal would be a causal account of non-causality? In my discussion of the scarab synchronicity I elaborated on various other possible meanings of the symbol of the scarab, some based on other aspects of ancient Egyptian culture, others based on Jung's narratives about the symbol and his experiences of it in other contexts (Main 2007: 27-34).

These meanings – which included creation, heroic rescue, and re-enchantment itself, in addition to rebirth – all seemed to me expressive of how Jung understood synchronicity and its potential significance for Western culture, and I suggested that Jung, perhaps unwittingly, might have chosen his example not, as he wrote, 'simply to give some indication of how meaningful coincidences usually present themselves in practical life' (1952c: par. 845), but to add emotional power to the presentation of his concept (Main 2007: 34). In any case, there seems to be no reason why ancient

narratives about the scarab beetle should not be seen as myths of synchronicity. It is not that the motif of the scarab beetle, with its mythological associations, causes the non-causal events of the synchronistic experience; rather, the motif expresses mythologically and symbolically aspects of the feature of reality that is designated more rationally by the concept of synchronicity, namely, the capacity for events to occur that are connected acausally through meaning. Nor is it difficult to think of other possible 'myths of synchronicity': myths of the relationship between microcosm and macrocosm, of the Anthropos, of Mercurius, and of magicians and seers might be examples.

For the avoidance of doubt, the possibility of there being myths of synchronicity does not imply that synchronicity is itself myth, as Segal is careful to clarify (1998: 20; 2003b: 613; 2008: 102). Jung's theory of myth remains about the expression of archetypes of the collective unconscious, and Jung nowhere suggests that synchronicity is an archetype. It may be that aspects of the nature of synchronicity can be expressed through archetypal and hence mythological images – for example, images relating to rebirth, creation, and re-enchantment – but synchronicity itself is presented by Jung as something more fundamental than an archetype: it is a 'connecting principle' (1952c: title) and 'principle of explanation' (1952c: par. 819). Nor, by the same token, is it the case that 'synchronicity constitutes "myth beyond projection" (Segal 2008: 102). The phrase 'myth beyond projection', for which I am to blame (2007: 25-26; 2013: 135-136), refers not to synchronicity but to a possible not-purely-intrapsychic way of viewing myths that arises when Jung's theory of myth is allied with his concept of synchronicity.

Third, do the mythological associations of the scarab beetle in Jung's example really deal with the world? In the case of the scarab beetle, Segal suggests, even if there is a rebirth, moment of creation, or heroic rescue taking place in relation to Jung's patient or, more broadly, Western culture in general, the transformation involved occurs within the patient's or, more broadly, humanity's unconscious side, with the external events being merely ancillary to this intrapsychic individual or collective transformation: as Segal puts it, 'the outer world is a mere steppingstone to the inner one' (2008: 102). Such a view seems to be supported by Jung's account of the scarab incident: 'The dream alone', Jung related, 'was enough to disturb ever so slightly the rationalistic attitude of my patient. But when the "scarab" came flying in through the window in actual fact, her natural being could burst through the armour of her animus possession and the process of transformation could at last begin to move' (1952c: par. 845). Here the parallel physical event enhanced a meaning arguably already present in the dream symbol and magnified its effect; but the effect was still primarily a psychological one.

Again, however, Jung's theory of myth does not purport to deal directly with the outer world. It deals with archetypes. The connection to the outer world stems from Jung's revised view of archetypes as psychoid, that is, as factors that are neither psychic nor physical but are capable of ordering both psyche and matter and of expressing themselves in either or both domains (Main 2014: 225-226). Synchronistic experiences acausally connect inner psychic events with outer physical ones. The most accurate description might therefore be that it deals with the psychophysical world. Even in those synchronistic experiences where the focus appears to be primarily on the psychic world, as in the incident with the scarab beetle, the physical

world is also necessarily and substantively involved. Jung described his patient as having been 'steeped in Cartesian philosophy', to which she 'clung [...] rigidly' (1952c: par. 845). The rationalism and sharp separation between mind and matter implied by this description were, in Jung's account, undone by the synchronistic experience. Psychologically, this was beneficial for the patient's personal development. But it also seems to have been relevant physically, inasmuch as it brought about a shift in her view of the physical world, which she had witnessed as being not after all so sharply separated from her psychic world but, in some 'unexpected and irrational' (1952c: par. 845) way, connected to it.

In contrast to this incident, there are other synchronistic events where the focus appears to be primarily on the physical world. Yet in these too the real matter dealt with turns out to be psychophysical. One of Jung's favourite accounts of how an activated archetype could be accompanied by synchronistic 'effects' in the physical environment is the myth-like, though reportedly real-life, story of the rainmaker of Kiaochou. Summoned to a drought-stricken region, the rainmaker retired to a hut where he meditated until he had brought himself 'in Tao' (in Jungian terms, had connected with the archetype of the self), whereupon, narrated Jung, 'naturally the rain came' (1955-56: par. 640n211). It was perhaps with such an incident in mind that Jung, in his letter describing how the scarab beetle had had to 'play its mythological role as a symbol of rebirth', continued: 'Even inanimate objects behave occasionally in the same way – meteorological phenomena, for instance' (1976: 541). At any rate, while the dénouement of this anecdote is the physical event of the rainfall, no less necessary and substantive in it is the psychic state of the rainmaker's being in Tao.

What the event is really dealing with is the nature of psychophysical reality, that is, in this case, the acausal relationship between inner psychic and outer physical order.

The fourth question Segal raised about the alliance of myth and synchronicity is: does the myth of the rebirth of the scarab explain the appearance of the scarab, or is it merely being invoked on the appearance of the scarab? If the myth does not explain the appearance of the scarab, then for Segal 'the myth may lie more in the background than in the foreground' and accordingly 'Myth [...] may not yet be fully back in the world' (2008: 103). In response to this, it can be noted that the question assumes that explanations must be causal. Yet Jung introduced the concept of synchronicity precisely as a form of explanation that was non-causal. The possibility of non-causal explanations, while not a mainstream view among either scientists or philosophers, is not inherently absurd and has recently been attracting increasing interest among philosophers of science (Lange 2017; Reutlinger and Saatsi 2018). For his part, Jung argued that the occurrence, in subatomic physics as well as in psychological experience, of events that, it seemed, could not be explained in causal terms, necessitated the postulation of 'another principle of explanation' (1952c: par. 819). Synchronicity – acausal connection through meaning – was, for him, this other principle of explanation. It explained not by identifying the causes of events but by disclosing the pattern of meaning (for Jung, invariably archetypal meaning) expressed by a set of events. Jung would not dispute that the appearance of the physical scarab had its own chain of efficient causes, and the patient's dream of the scarab jewellery likewise. What he wished to explain was not either of those events individually but the psychophysical event of their meaningful coincidence, and for this he felt he needed to appeal to a non-causal principle of explanation.

The question of whether myth explains a synchronistic event is bound up with questions of intent, agency, and personalization, which for Segal are requirements of a mythic account of an event. He stresses that synchronicity achieves its benefits 'without [...] personality' (1998: 20), 'without personalization' (2008: 102). It is true that there is, by definition, no intentional agent, hence no personality divine or otherwise, causing a synchronicity; a synchronicity by definition is an acausal event. But for Jung the synchronistic dimension of a mythic event, such as the appearance of the scarab beetle, is independent of any causal effect it may have. An archetypal motif, such as rebirth, here symbolized by the scarab beetle, may emerge synchronistically in the physical and psychic environments, but any causal effect that the presence of that emerged archetype then has is independent of - as it were, complementary and orthogonal to – its synchronistic appearance. Having emerged synchronistically, the archetype can then have causal effects, including ones that could be expressed in personalized form, just as an archetypal figure that emerged purely psychologically in a dream could affect the dreamer. In short, synchronicity does not independently contribute personalization to an experience, but neither does it undo the personalization that might already exist by dint of an experience's being archetypal.

We are now in a position to assess the extent to which Jung's theory of myth when allied with his concept of synchronicity satisfies Segal's criteria for bringing myth back to the world. Segal himself offers a positive overall appraisal: 'With synchronicity', he states, 'Jungian psychology offers an extraordinary vehicle for carrying myth back to the world – and without leaving science behind' (2008: 102).

He argues that Jung's theory of myth, when allied with his concept of synchronicity, achieves a closer connection with the physical world through fostering a sense of, as he puts it, 'at-homeness' in the world, thereby providing 'an existential benefit comparable with that offered by myth' (1998: 20). Focusing on synchronicity as a phenomenon – 'an entirely empirical matter [...] the sheer parallel between us and the world' (2010: 374) – rather than as a principle of explanation, he seems to accept the compatibility of synchronicity with modern science.

However, against the criteria that Segal used to test the theories of myth based on the perspectives of Lévi-Strauss, Lovelock, and Winnicott Jung's theory of myth allied with synchronicity does not seem to fare so well. The third criterion, compatibility with modern science, might be satisfied, but there are, as we have seen, serious question marks for Segal over the first and second criteria. In at least two of his discussions (1998: 20; 2008: 102) he emphasizes that the benefits brought to Jung's theory of myth by its alliance with synchronicity are at the expense of promoting a picture that is 'without personality' or 'without personalization'. He also questions whether in Jung's theory of myth when allied with synchronicity the mythic content causes anything (2008: 102). Taken together, these seem to be serious stumbling blocks to satisfying the first criterion of involving causally effective divine personalities. Again, he questions whether Jung's theory of myth allied with synchronicity actually provides an explanation of the physical component of a synchronicity, such as the appearance of the real scarab in Jung's example (2008: 102-103). This would amount to a conspicuous failure to satisfy the second criterion of explaining the physical world.

I have suggested that it might be possible to make a stronger case for Jung's approach. The key to doing so would be to focus on the decisive element of Jung's theory of myth, the role of archetypes, and the crucial revision that Jung made to this element in light of, or as a part of, his concept of synchronicity, namely, his characterization of archetypes as psychoid. Once Jung had conceived of the archetypes as psychoid, that is, as factors that can order physical as well as psychic reality, then claims he had made for the archetypes as psychic factors might also, in some form, also apply in the physical world. In relation to the first of Segal's criteria for bringing myth back to the world, this might mean that events in the physical world could, on occasion, behave in ways that seemed mythological, as if imbued with numinosity, intent, and personality: that is, expressing causally effective divine personality. The behaviour itself would be an expression of the archetypes; its appearance in physical as well as psychic contexts would be a manifestation of synchronicity.

In relation to the second of Segal's criteria – that myth should explain the physical world – there are two ways in which this might be satisfied. One way again involves the archetype conceived as psychoid. Insofar as such an archetype, by dint of its psychoid nature, resulted in effects in the physical world, the archetype would be part of (unlikely the whole of) the explanation of those events. This would be a causal explanation, albeit one in which the cause was of an unusual nature, neither straightforwardly physical nor straightforwardly psychic. The other way in which myth allied with synchronicity could explain events in the physical world is by disclosing the pattern of archetypal meaning that those events jointly expressed with

the psychic events with which they were acausally connected. This would be a noncausal or acausal form of explanation.

In relation to the third of Segal's criteria, there is no reason why Jung's theory of myth allied with synchronicity should not remain compatible with modern science. Jung certainly intended that it should. His concepts of the archetype and the collective unconscious, to say nothing of the psychoid archetype and synchronicity, are clearly all pushing at and beyond the boundaries of currently established science, and as such are scientifically highly questionable. But Jung wished only to broaden, not to reject, modern science, as Segal acknowledges (2003b: 597). One of the many questions that remains is whether that envisaged broadening could even in principle be accomplished within the physicalist metaphysics that dominated the sciences in Jung's day, and does so still today.

References

Hauke, Christopher (2006). The unconscious: Personal and collective. In R.Papadopoulos (ed.) *The Handbook of Jungian Psychology: Theory, Practice and Applications*, 54-73. London and New York: Routledge.

Jung, Carl Gustav (1911-12/1952). Collected Works, vol. 5, Symbols ofTransformation: An Analysis of the Prelude to a Case of Schizophrenia.London: Routledge and Kegan Paul, 1995.

Jung, Carl Gustav (1934/1954). Archetypes of the collective unconscious. In
 Collected Works, vol. 9i, The Archetypes and the Collective Unconscious, 2d
 ed., 3-41. London: Routledge & Kegan Paul, 1990.

- Jung, Carl Gustav (1936). Wotan. In *Collected Works*, vol. 10, *Civilization in Transition*, 2d ed., 179-193. London: Routledge & Kegan Paul, 1981.
- Jung, Carl Gustav (1947/1954). On the nature of the psyche. In *Collected Works*,vol. 8, *The Structure and Dynamics of the Psyche*, 2d ed., 159-234. London:Routledge & Kegan Paul, 1991.
- Jung, Carl Gustav (1951). On synchronicity. In *Collected Works*, vol. 8, *The Structure* and *Dynamics of the Psyche*, 2d ed., 520-531. London: Routledge & Kegan Paul, 1991.
- Jung, Carl Gustav (1952a). Answer to Job. In *Collected Works*, vol. 11, *Psychology* and *Religion: West and East*, 2d ed., 355-470. London: Routledge & Kegan Paul, 1986.
- Jung, Carl Gustav (1952b). Religion and psychology: A reply to Martin Buber. In *Collected Works*, vol. 18, *The Symbolic Life*, 663-670. London: Routledge, 1993.
- Jung, Carl Gustav (1952c). Synchronicity: An acausal connecting principle. InCollected Works, vol. 8, The Structure and Dynamics of the Psyche, 2d ed.,417-519. London: Routledge & Kegan Paul, 1991.
- Jung, Carl Gustav (1955-56). Mysterium Coniunctionis: An Inquiry into the Separation and Synthesis of Psychic Opposites in Alchemy, 2d ed. London: Routledge & Kegan Paul, 1970.
- Jung, Carl Gustav (1976). C. G. Jung Letters 2: 1951-1961, ed. G. Adler and A. Jaffé, trans. R. F. C. Hull. London: Routledge & Kegan Paul.
- Lange, Marc (2017). Because Without Cause: Non-Causal Explanations in Science and Mathematics. Oxford: Oxford University Press.

- Lévi-Strauss, Claude (1955). The structural study of myth. *Journal of American Folklore* 68(270): 428-444.
- Main, Roderick (2007). Ruptured time and the re-enchantment of modernity. In A. Casement (ed.) *Who Owns Jung*?, 19-38. London: Karnac.
- Main, Roderick (2013). Myth, synchronicity, and re-enchantment. In L. Burnett, S. Bahun, and R. Main (eds.) *Myth, Literature, and the Unconscious*. London: Karnac.
- Main, Roderick (2014). Synchronicity and the problem of meaning in science. In H. Atmanspacher and C. Fuchs (eds.) *The Pauli-Jung Conjecture and its Impact Today*, 217-239. Exeter, UK: Imprint Academic.
- Reutlinger, Alexander, and Saatsi, Juha (eds.) (2018). *Explanation Beyond Causation:*Philosophical Perspectives on Non-Causal Explanations. Oxford: Oxford

 University Press.
- Roesler, Christian (2012). Are archetypes transmitted more by culture than biology?

 Questions arising from conceptualizations of the archetype. *Journal of Analytical Psychology* 57(2): 223-246.
- Scaff, Lawrence (2000). Weber on the cultural situation of the modern age. In S.

 Turner (ed.) *The Cambridge Companion to Weber*, 99-116. Cambridge:

 Cambridge University Press.
- Segal, Robert (1998) (ed.). Jung on Mythology. London: Routledge.
- Segal, Robert (1999). *Theorizing About Myth*. Amherst, MA: University of Massachusetts Press.
- Segal, Robert (2000). Myth as make-believe: An inaugural lecture delivered at the University of Lancaster on 22 March 2000.

- Segal, Robert (2003a). Jung on UFOs. In C. Partridge (ed.) *UFO Religions*, 314-328. London and New York: Routledge.
- Segal, Robert (2003b). Jung's very twentieth-century view of myth. *Journal of Analytical Psychology* 48(5): 593-617.
- Segal, Robert (2004). *Myth: A Very Short Introduction*. Oxford: Oxford University Press.
- Segal, Robert (2008). Bringing myth back to the world. In L. Huskinson (ed.)

 Dreaming the Myth Onwards: New Directions in Jungian Therapy and
 Thought, 91-105. London and New York: Routledge.
- Segal, Robert (2010). Jung as psychologist of religion and Jung as philosopher of religion. *Journal of Analytical Psychology* 55(3): 361-384.
- Segal, Robert (2011). Jung on myth. In K. Bulkeley and C. Weldon (eds.) *Teaching Jung*, 75-92. Oxford: Oxford University Press.
- Segal, Robert (2015a). The modern study of myth and its relation to science. *Zygon* 50(3): 757-771. DOI 10.1111/zygo.12198.
- Segal, Robert (2015b). *Myth: A Very Short Introduction*. Second edition. Oxford: Oxford University Press.
- Stevens, Anthony (2006). The archetypes. In R. Papadopoulos (ed.) *The Handbook of Jungian Psychology: Theory, Practice and Applications*, 74-93. London and New York: Routledge.
- Walker, Steven (1995). *Jung and the Jungians on Myth: An Introduction*. New York and London: Garland Publishing.