

## **Research on synchronicity: status and prospects**

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[Published in J. Cambray and L. Sawin (eds.) *Research in Analytical Psychology: Applications from Scientific, Historical, and Cross-Cultural Research*, London and New York: Routledge, 2018, pp. 135-156.]

### **Introduction**

In a letter to Philip Wylie (undated but probably 1949) Carl Gustav Jung referred to synchronicity as one of the best ideas he had ever had (cited in Bair 2004: 551). Elsewhere he indicated its relevance not only for psychotherapy (Main 2007c) but also for the critique of modern science, religion, and society (Main 2004: 117-43). Yet Jung only wrote extensively about synchronicity late in life (Jung 1950, 1951, 1952) and he never clearly or fully integrated the concept into his psychological theory. In the years since Jung's death, there have been many varied attempts to elucidate, apply, and evaluate synchronicity, both within and beyond analytical psychology, and these have recently burgeoned to the point where the need for orientation on the topic is pressing. The present chapter therefore provides an overview of existing research on the concept of synchronicity,<sup>1</sup> from which some promising directions for future research are then highlighted under various headings: conceptual, empirical, historical, theoretical, clinical, and cultural. As an example of sustained academic engagement with this topic and to provide additional detail on methodological issues, I include an outline of my own research on synchronicity over the last twenty-five years.

### **Jung's definitions and theoretical framing of synchronicity**

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<sup>1</sup> For previous surveys of work on synchronicity, each inflected to its immediate purposes, see Main (2004, 2007a, 2007c, 2011). Parts of the present chapter are an updating of material from those earlier works.

Before moving to the review of subsequent work on synchronicity, it may be helpful to set out how Jung himself defined and illustrated the concept. Jung defined synchronicity in a variety of ways. Concisely, he defined it as ‘meaningful coincidence’ (1952: par. 827), as ‘acausal parallelism’ (1963: 407), as ‘an acausal connecting principle’ (1952), and once, more poetically, as ‘the “rupture of time”’ (McGuire & Hull 1978: 230). More fully, he defined it as ‘the simultaneous occurrence of a certain psychic state with one or more external events which appear as meaningful parallels to the momentary subjective state’ (1952: par. 850). An example of Jung’s, which he presented as paradigmatic (1951: par. 983), will convey what he meant by these definitions as well as, concisely, how he saw the concept of synchronicity fitting into his overall psychological model. The example concerned a young woman patient whose excessive intellectuality made her ‘psychologically inaccessible’, closed off from a ‘more human understanding’ (ibid.: par. 982). Unable to make headway in analysing her, Jung reported that he had to confine himself to ‘the hope that something unexpected would turn up, something that would burst the intellectual retort into which she had sealed herself’ (ibid.). He continued:

Well, I was sitting opposite her one day, with my back to the window, listening to her flow of rhetoric. She had had an impressive dream the night before, in which someone had given her a golden scarab – a costly piece of jewellery. While she was still telling me this dream, I heard something behind me gently tapping on the window. I turned round and saw that it was a fairly large flying insect that was knocking against the window-pane in the obvious effort to get into the dark room. This seemed to me very strange. I opened the window immediately and caught the insect in the air as it flew in. It was a scarabaeid beetle, or common rose-chafer (*Cetonia aurata*), whose gold-green colour most nearly resembles that of a golden scarab. I handed the beetle to my patient with the words, ‘Here is your scarab.’ This experience punctured the desired hole in

her rationalism and broke the ice of her intellectual resistance. The treatment could now be continued with satisfactory results. (Jung 1951: par. 982)

In this example, the *psychic state* was indicated by the patient's decision to tell Jung her dream of being given a scarab. The *parallel external event* was the appearance and behaviour of the real scarab. The telling of the dream and the appearance of the real scarab were *simultaneous*. Neither of these events discernibly or plausibly caused the other by any normal means, so their relationship was *acausal*. Nevertheless, the events paralleled each other in such unlikely detail that one cannot escape the impression that they were indeed *connected*, albeit acausally. Moreover, this acausal connection of events both was symbolically informative (se we shall see) and had a deeply emotive and transforming impact on the patient and in these senses was *meaningful*.

Jung attempted to account for synchronistic events primarily in terms of his concept of *archetypes*. For this purpose, he highlighted the nature of archetypes as 'formal factors responsible for the organisation of unconscious psychic processes: they are "patterns of behaviour."' At the same time they have a "specific charge" and develop numinous effects which express themselves as *affects*' (1952: par. 841). They 'constitute the structure' not of the personal but 'of the *collective unconscious* [...] psyche that is identical in all individuals' (ibid.: par. 840; emphasis added). Jung further characterised archetypes as *psychoid* on account of their being irrepresentable (ibid.) and able to manifest in outer physical processes as well as inner psychic ones (ibid.: par. 964). Also relevant for Jung was that archetypes typically expressed themselves in the form of *symbolic images* (ibid.: par. 845). He considered that synchronistic events tended to occur in situations in which an archetype was active or 'constellated' (ibid.: par. 847). Such constellation of archetypes in the life of a person was governed for Jung by the process of *individuation* – the inherent drive of the psyche towards increased wholeness and self-realisation. Individuation in turn proceeded

through the dynamic of *compensation*, whereby any one-sidedness in a person's conscious attitude was balanced by contents emerging from the unconscious, which, if successfully integrated, contributed to a state of greater psychic wholeness.

Relating these psychological structures and dynamics to his example, we can note Jung's suggestion that it had 'an archetypal foundation' (1952: par. 845) and, more specifically, that it was the archetype of rebirth that was constellated. Jung wrote that 'Any essential change of attitude signifies a psychic renewal which is usually accompanied by symbols of rebirth in the patient's dreams and fantasies. The scarab is a classic example of a rebirth symbol' (ibid.). The emotional charge or numinosity of the archetypal event was evident from its having 'broke[n] the ice of [the patient's] intellectual resistance'. The compensatory nature of the experience was also clear: the patient's one-sided rationalism and psychological stasis were balanced by an event that both in its symbolism and in its action expressed the power of the irrational and the possibility of renewal. Finally, that all of this promoted the patient's individuation was implied by Jung's statement that 'The treatment could now be continued with satisfactory results'.

The features of synchronistic events that Jung's definitions and discussions most emphasised were the simultaneity of their component events, their acausality, their improbability, and their meaning. He frankly acknowledged that the first of these features, simultaneity, was not straightforward. For there were other events that he wanted to designate as synchronistic where the element of simultaneity was not so apparent, events that either could not at the time be known to be simultaneous (as, for example, with apparently clairvoyant visions) or seemingly were not simultaneous at all (as, for example, with apparently precognitive dreams). In order to account for these further kinds of coincidences, Jung presented, in his 1951 Eranos lecture 'On Synchronicity', the following three-pronged definition:

All the phenomena I have mentioned can be grouped under three categories:

1. The coincidence of a psychic state in the observer with a simultaneous, objective, external event that corresponds to the psychic state or content (e.g., the scarab), where there is no evidence of a causal connection between the psychic state and the external event, and where, considering the psychic relativity of space and time, such a connection is not even conceivable.
2. The coincidence of a psychic state with a corresponding (more or less simultaneous) external event taking place outside the observer's field of perception, i.e., at a distance, and only verifiable afterward [...].
3. The coincidence of a psychic state with a corresponding, not yet existent future event that is distant in time and can likewise only be verified afterward.

In groups 2 and 3 the coinciding events are not yet present in the observer's field of perception, but have been anticipated in time in so far as they can only be verified afterward. For this reason I call such events *synchronistic*, which is not to be confused with *synchronous*.

(1951: pars. 984-85)

### **Overview of some of the main approaches to researching synchronicity**

In his principal essay on the topic, 'Synchronicity: an acausal connecting principle' (1952), Jung adopts a broad, multidisciplinary approach to making sense of synchronistic experiences. The disciplines and perspectives on which he draws include: mainstream sciences such as physics and biology; newer or aspiring sciences such as psychical research and parapsychology; philosophy and intellectual history; analytical psychology and psychotherapy; and the study of religion and spirituality, including divination and esoteric traditions (Main 2004: 65-90). Subsequent works on synchronicity have also tended to engage

with several disciplines and perspectives, even while focusing on one or on selected relationships among them.

Jung published his principal essay on synchronicity in a co-authored volume alongside an essay by the Nobel prize-winning physicist Wolfgang Pauli (Jung & Pauli 1952), and this alliance is reflected in the predominantly scientific framing of Jung's essay (Main 2004: 104-5). Not surprisingly, much subsequent work has also reflected on the status of synchronicity in relation to science. Among the most substantive contributions with a predominantly scientific focus are publications by Marie-Louise von Franz (1974, 1992), David Peat (1987), Victor Mansfield (1995, 2002), Suzanne Gieser (2005), Lance Storm (2008), Joseph Cambray (2009), John Haule (2011), and Harald Atmanspacher (2012). The scientific discipline most discussed is physics, though von Franz and Peat in their different ways survey a range of historical and contemporary developments in science, Cambray explores complexity theory, and Haule takes account of evolutionary biology before moving on to field theories in physics. All of these works, however, also connect synchronicity to conspicuously non-scientific frameworks, whether psychotherapy, divination, esotericism, ancient or modern philosophy, mythology, Buddhism, politics, or shamanism. None treats synchronicity as of exclusively scientific interest.

Jung's work on synchronicity was also inspired by psychical research and especially by the work of Joseph Banks Rhine in the new discipline of parapsychology. These newer or aspiring sciences have provided significant foci within the work of Mansfield (1995, 2002), the present author (1997b, 2012), Storm (2008), and Haule (2011). But again the focus never remains exclusive for long, with religious, psychological, anthropological, and other perspectives also being invoked.

Jung's own grasp of philosophy and intellectual history, both generally and as they bear on synchronicity, was impressive in scope but sometimes unreliable, as his primary aim was usually to amplify his own thought rather than to understand the thought of others on its

own terms. Later attempts to situate Jung's concept of synchronicity philosophically or in relation to intellectual history have included wider-ranging books by Ira Progoff (1973) and the present author (2004), as well as several more focused studies. Paul Bishop (2000) considers Jung's preoccupation with the mind-body problem and the notion of intellectual intuition in German Idealist philosophy. Several authors, including David Lindorff (2004), Gieser (2005), Arthur Miller (2009), and Atmanspacher and Christopher Fuchs and their contributors (2014), closely examine Pauli's influence on and collaboration with Jung. Cambray (2009, 2014a, 2014b, 2014c) has also traced the influence on Jung of the aesthetic and holistic perspectives of German Romantic scientists.

One field by which Jung was clearly influenced but within which he explored the significance of synchronicity surprisingly little was psychotherapy. A few subsequent books contain substantial discussions of synchronicity in relation to therapy, notably those by Jean Shinoda Bolen (1979), Robert Aziz (1990, 2007), and Robert Hopcke (1997). Mostly, however, the existing in-depth discussions of synchronicity in the therapeutic context have appeared in journal articles. The present author (2007c) reviews both Jung's limited clinical discussions of synchronicity and the more extensive clinical discussions by later analysts published in a variety of articles between 1957 and 2005. Since 2005, substantial articles on the clinical significance of synchronicity have continued to appear (Reiner 2006, Hogenson 2009, Colman 2011, Carvalho 2014, de Moura 2014, Connelly 2015, Atmanspacher & Fach 2016).

At the other end of the spectrum from the consideration of synchronicity in relation to science is its consideration in relation to religion and spirituality. Jung himself seems to play down the religious sources and significance of synchronicity in his principal essay (1952; Main 2004: 105-7), though these are easy enough to detect or extrapolate. Among subsequent commentators, Aziz (1990, 2007), Mansfield (1995, 2002), and the present author (2004, 2007a) specifically address the religious implications of synchronicity. Some of the works of

these authors focus almost exclusively on religion and spirituality (Main 2007a), sometimes with a psychotherapeutic inflection (Aziz 1990, 2007). Others explicitly address the dual religious and scientific influences on and significance of the concept of synchronicity (Mansfield 1995, 2002; Main 2004).

### **Prospects for future research**

Despite all of this work, the concept of synchronicity, while fairly widely diffused within popular culture, especially within holistic science (Combs & Holland 1994) and holistic spirituality (Main 2004: 144-74), has so far achieved very little integration within mainstream academic and intellectual fields. It is not that the concept has been decisively disproven or discredited – it tends to be too poorly understood and too cursorily evaluated for this – but rather that it has been disregarded. Part of the reason for this mainstream neglect may be the multidisciplinary complexity, incompleteness, and at times confusion of Jung's expositions of synchronicity (*ibid.*: 36-62). Also off-putting is the frequent superficiality of the more popular uses and presentations of the concept. But a further factor likely inhibiting its wider serious consideration is that, with its propositions that there may be uncaused events, that matter may have a psychic aspect, that the psyche may be able to relativise time and space, and that there may be a dimension of objective meaning accessible to but not created by humans (*ibid.*: 2), synchronicity challenges the positivist, realist, and humanist epistemological assumptions that predominate in the sciences and social sciences. Because it presents this challenge, the concept resists being proven, or perhaps even rendered plausible, in terms of these dominant epistemologies.

There do, however, seem to be some prospects for improving the understanding and possibly the credibility of synchronicity. In the following sections I note some of the promising directions that have been opened up by existing research. For convenience I have identified different strands within this research as primarily conceptual, empirical, historical,



theoretical, clinical, or cultural. Many studies, of course, could be included under several of these headings. For, as we have seen, in their attempt to get to grips with the topic, subsequent researchers, like Jung, have drawn on a plurality of disciplines from both the sciences and the humanities and have deployed a corresponding plurality of methods.

### *Conceptual*

Despite his efforts to be precise, Jung's definitions, characterisations, and illustrations of synchronicity leave many issues unclear. A number of subsequent, overarching studies have attempted to identify and resolve these issues in ways that remain consistent with Jung's own theoretical framework (von Franz 1974, 1980, 1992; Aziz 1990; Mansfield 1995; Main 2004; Cambray 2009; Haule 2011; Atmanspacher 2012). Within as well as beyond these studies, each of the main concepts informing Jung's definitions of synchronicity – time, acausality, probability, and meaning – has been scrutinised, and some directions for future research have emerged.

In particular, the role of time in synchronicity has been repeatedly questioned in view of Jung's qualifications regarding simultaneity in his more elaborate definitions (Pauli in Meier 2001: 38-39; Koestler 1972: 95; Aziz 1990: 71, 149). Other difficulties relate to Jung's characterisation of synchronicity sometimes in terms of qualitative time, whereby 'whatever is born or done at this particular moment of time has the quality of this moment of time' (1930: par. 82), and other times in terms of 'a psychically conditioned relativity of space and time', whereby 'space and time are, so to speak "elastic" and can apparently be reduced almost to vanishing point' (1952: par. 840; Aziz 1990: 71-72; Main 2004: 51-53, 110-11; Yassemidis 2014). To some extent these difficulties can be resolved by taking account of the different frameworks, predominantly religious or predominantly scientific, within which Jung at different times considered synchronicity (Main 2004: 110-11). But the difficulties also point to the need for deeper metaphysical reflection on the relationship of synchronicity to

time. A stimulating attempt at such reflection has compared Jung's thinking about time in synchronicity with Henri Bergson's notion of duration, including how Bergson's notion has been later adapted in the philosophy of Gilles Deleuze (McMillan 2015).

In relation to acausality, one recurrent issue has been the need to specify what kind of causality it is that acausality negates, and specifically whether acausality is still an appropriate term if other kinds of causes than efficient causes (for example, final causes) are invoked in explaining synchronicity (Mansfield 1995: 72-83; Main 2004: 54). Jung's choice of the term acausality might also be examined in the light of Paul Forman's thesis about how in the interwar years this and related terms were taken up by German physicists for non-scientific reasons relating to cultural and intellectual climate (Gieser 2005: 57-60; Asprem 2014: 128-39, 142). Another issue is Jung's use of acausality to refer on the one hand to one-off synchronistic events at the level of ordinary human experience and on the other hand to statistically analysable forms of orderedness in microphysics. The questions here are whether and how these two forms of acausality can be reconciled (Gieser 2005: 272-98; McMillan 2015).

The role Jung ascribes to probability in synchronicity has been criticised in light of general statistical considerations relating to the law of very large numbers (Diaconis and Mosteller 1989; Main 2004: 27-29). The applicability of this law to synchronistic events has been challenged, including by pointing to limitations and problems within probability theory itself (McCusker & Sutherland 1991; Combs & Holland 1994: 155-59). Closer examination of synchronicity in relation to the theory of probability might therefore be valuable, especially in view of Jung's innovative if not idiosyncratic use of statistics (Main 2004: 58-61, 113). More recently, probability has been the focus of some suggestive speculations relating synchronicity to power-law distributions such as Zipf's law (Hogenson 2005, 2009, 2014), and this work has in turn prompted a proposal for scientifically testing synchronicity (Sacco 2016).

Finally, there have been many discussions of meaning in synchronicity. Among the issues discussed have been the relationship between meaning and order (von Franz 1992: 267-92), the complementarity between causality and meaning (Atmanspacher 2014b), whether the meaning in synchronicities is found or created (Bright 1997; Colman 2015), and what kinds or levels of meaning might be involved in synchronicities (Aziz 1990: 64-66, 75-84; Colman 2011, 2012; Giegerich 2012; Main 2004: 56-58, 112-13, 2014c; Atmanspacher 2014a: 192-93). Advancing these discussions is particularly important because it is the involvement of meaning that ties synchronicity to the rest of Jung's psychological model and constitutes the real challenge of synchronicity to prevailing philosophy of science.

In general, there remains in the case of each of the above concepts – time, acausality, probability, and meaning – a need for further clarification of what Jung's understanding of the concept was, whether a modified understanding might actually serve Jung's purposes better, and how either Jung's understanding or a modification of it can be related to mainstream discussions of the concept in philosophy and other relevant disciplines. In particular, such further clarification will need to take account of attempts to define and conceptualise the same broad range of phenomena from other theoretical perspectives: for example, those of psychoanalysis (Devereux 1953, Faber 1998, Williams 2010), psychical research (Johnson 1899, Koestler 1972, Henry 1993, Kelly et al. 2007, Kelly et al. 2015), psychology (Watt 1990-1), psychiatry (Beitman 2016), and statistics (Hardy et al. 1973, Diaconis & Mosteller 1989). Some of the work from these alternative perspectives has explicitly taken issue with central aspects of Jung's concept of synchronicity (Koestler 1972, Faber 1998, Williams 2010).

### *Empirical*

Notwithstanding the difficulties surrounding Jung's own attempt at an 'astrological experiment', reported in the second chapter of his principal essay on synchronicity (1952:

pars. 872-915; Main 2004: 58-61), it may be possible to conduct at least some levels of experimental testing of synchronicity (Sacco 2016). The possibilities may be greatest in those respects where synchronistic phenomena resemble parapsychological phenomena (Braud 1983, Thalbourne et al. 1992-3, Palmer 2004, Atmanspacher and Fach 2013; but note Mansfield, 2002: 161-79). Indeed, for anyone who construes synchronistic and parapsychological phenomena to be in important respects the same, there already exists in parapsychology a considerable body of relevant experimental research (Kelly et al. 2007). Data from this research could be re-examined from the perspective of the concept of synchronicity.

Again, rigorous social scientific methods of data gathering could be used to accumulate both larger, better-organised databases, on which more quantitative analyses could be performed, and richer synchronistic case studies, which would be more sensitive than existing accounts of synchronistic experiences to psychological, sociological, and other contexts. At least one project aimed at the systematic collection of synchronistic data within psychotherapy is indeed currently underway (Roesler 2014; see also present volume). Alongside such studies, it would also be valuable systematically to gather and analyse the more detailed accounts of synchronistic experiences that have already been published.

### *Historical*

Detailed historical and comparative studies could be undertaken to test the extent to which the pre-modern, non-Western, and esoteric sources that influenced Jung's formulation of the concept of synchronicity really were, as Jung claims, based on similar principles. Deeper study of the esoteric influences on Jung could be especially valuable in light of the recent burgeoning of high-quality scholarship on Western esotericism (Hanegraaff 2012, Asprem 2014, Partridge 2015, Magee 2016). Similarly, the relationship of synchronicity to Chinese thought, especially to the *I Ching*, has been sympathetically, if briefly, addressed by a number

of distinguished Sinologists (Peterson 1982, 1988; Smith 2008: 211-17). This could help to provide a securer scholarly basis both for advancing existing understanding of Jung's relationship to the *I Ching*, including his friendship with Richard Wilhelm (Clarke 1994: 89-102; Karcher 1999; Main 1997a, 1999, 2007a: 141-87; Zabriskie 2005), and for fuller comparison of the concept of synchronicity with ancient Chinese theories of correlative cosmology and cosmic resonance (Main 2007a: 169-72; Smith 2008: 32-36, 248-49). Jung's interest in archaic thought, which is even further removed from modern Western culture, can also be fruitfully re-considered as an influence on his concept of synchronicity (Bishop 2008).

In addition to esoteric, Eastern, and pre-modern thought being examined as influences on the concept of synchronicity, insights derived from the study of synchronicity might in turn provide a useful tool for understanding the intellectual worlds of esoteric, Eastern, and pre-modern thought. Divination has already been the site for a number of scholarly explorations along these lines (Hanegraaff 2012: 362, citing the work of Kocku von Stuckrad; Redmond & Hon 2014: 205-14).

There also remains scope for further historical and contextual studies of Jung's engagement with contemporary Western influences on him, such as from physics and parapsychology, including his friendships with Pauli and Rhine (Gieser 2005; Atmanspacher & Fuchs 2014; Mansfield et al. 1998; Asprem 2014: 398-411). And finally an important piece of work remains to be done in systematically tracking, historically and sociologically, the various receptions and transformations of the concept of synchronicity in clinical practice, in academic work, and in both popular and élite culture.

### *Theoretical*

There have recently been several illuminating and suggestive attempts to relate the concept of synchronicity to theoretical frameworks that already have intellectual purchase beyond

analytical psychology. Chief among these frameworks are emergence, process philosophy, and dual-aspect monism.

The relation of synchronicity to emergence has been explored especially by Cambray (2004, 2009), George Hogenson (2005, 2009), Warren Colman (2011, 2015), and Robert Sacco (2016). Among the features that make this approach promising are that emergence is consistent with, even if challenging to, current mainstream science; applies at different scales and hence, like synchronicity, draws on and could potentially be relevant to a wide range of disparate disciplines; and provides scope for treating synchronicity both as an object of study (through exploring its phenomenological and theoretical connections to complexity theory) and as a method of study (through applying it in ways analogous to how complexity theory is applied). However, further work still needs to be done to clarify the exact relationship between synchronicity and emergence. If, for instance, emergence is ultimately understood as a causal phenomenon and if synchronicity is understood as a form of emergence, this would seem to undermine Jung's claims for the acausal character of synchronicity. It is also important to note that there are different positions on emergence, ranging from those that presuppose materialism to those that presuppose some form of panpsychism or even idealism (Kelly et al. 2015: 513-15).

There have also been several discussions of synchronicity in relation to Whiteheadian process philosophy, with varying judgements about how fruitful the connections might be. Steve Odin (1982: 171-87) finds synchronicity, along with other Jungian concepts, helpful for framing his comparison of Hua Yen Buddhism with Alfred North Whitehead's process metaphysics, especially the notion of the 'atemporal envisagement of all possibilities' common to Hua Yen visionary experience and Whitehead's conception of the primordial nature of God (ibid.: 5-6). Such atemporal envisagement he considers to be regulated by synchronicity and to have been 'empirically verified by the testimony from subjects with retrocognitive and premonitory dreams or inner visions' (ibid.: 6). In contrast, David Ray

Griffin (1989: 1-76), while generally very positive about the possibilities of connecting Jung's and Whitehead's work, singles out synchronicity as 'probably the weakest element in Jung's speculations [...] an element that will forever prevent Jungian psychology from being integrated with the rest of science' (ibid.: 27). He has reservations in particular about the notions of acausality and of a psychic relativity of time that could permit precognition (ibid.: 27-36). More recently, John Haule (2011: 152-55, 171-78) has drawn on Whiteheadian process philosophy to support his science-based account of synchronicity as the expression of psychoid processes operating at all levels of animate and inanimate nature. His account is elegant but makes no attempt to engage with the problems presented by apparently precognitive synchronicities, on which Odin and Griffin differ. Both the extensive connections and the unresolved issues suggest that further fruitful work could be done in examining synchronicity vis-à-vis process thought.

Another framework to which synchronicity has recently been related in ways that seem both theoretically and empirically promising is dual-aspect monism. Focusing on Jung's collaboration with Pauli, Atmanspacher (2012) has presented synchronicity in terms of a model whereby psyche and matter are seen as dual epistemic manifestations of an underlying psychophysically neutral ontic monism, the *unus mundus*. Some strengths of the model are that it has been elaborated out of explicit statements by Jung and Pauli; openly addresses the need to provide metaphysical grounding for Jung's thought, including his concept of synchronicity; is compatible with modern physics; elegantly solves problems in consciousness studies; and fits neatly with empirical data in areas as diverse as exceptional (i.e. paranormal) experiences and order effects in surveys and questionnaires (Atmanspacher 2014a). Interesting attempts have already been made to apply the model to illuminate the states of mind involved when synchronicity occurs in psychotherapy (Connolly 2015; Atmanspacher & Fach 2016). However, the model has also been criticised: for example, from an emergentist and phenomenological perspective for retaining epistemological dualism and relegating 'the

living reality of an *unus mundus* [...] to a far-off abstract hypothetical domain removed from the world of knowledge and experience altogether' (Colman 2015: 320-21). This criticism may be at least partly addressed by the concept of 'relative onticity' that Atmanspacher has introduced into his refinements of what he calls the 'Pauli-Jung conjecture' (2014a: 186-88).

Each of the above frameworks recognises the importance of taking seriously the philosophical underpinnings of Jung's thought. Several other attempts to illuminate synchronicity from philosophical perspectives, in some cases partially overlapping with the above, can also be noted, including work drawing on speculative realism (Haworth 2012) and the philosophy of Deleuze (McMillan 2015). A major challenge for future research would be to test and compare how satisfactorily each of the theoretical frameworks mentioned in this section accounts for the full range of data that can reasonably be subsumed under the concept of synchronicity.

### *Clinical*

As noted above, research exploring how synchronicity can be applied in psychotherapy has continued unabated. Much of this research consists of individual clinicians' reflections on single cases where synchronistic phenomena have appeared during therapy. Where implications have been drawn from more systematic programmes of research, this research has usually been carried out initially in other areas or on other topics than synchronicity. Cambray (2009: 68-87), for example, has applied insights from neuroscience, especially concerning mirror neurons, in his discussion of synchronicity in relation to empathy and the analytic field. Hogenson (2009) draws on the findings of the Boston Process of Change Study Group and links their notion of 'moments of meeting' to the way meaning can be experienced in the form of synchronicity during psychotherapy. And Colman (2015) invokes phenomenological biology to explain the meaning making that occurs in synchronicity in terms of embodied intentionality in the world. Even the project of the Berlin Research Group



reported by Hans Dieckmann (1976), which resulted in some important findings about synchronicity – including ‘an astonishing increase in the phenomena of synchronicity’ when the participating analysts ‘started to keep more accurate records of [their] subliminal perceptions’ (1976: 27) – was primarily investigating not synchronicity but transference and countertransference. In addition to such interdisciplinary inspirations and secondary findings, it can be hoped that with the collection of larger and richer sets of data specifically on synchronicity it may become possible for programmes of research to be pursued where synchronicity during therapy is the primary object of research rather than a phenomenon secondarily illuminated by research in other areas (Roesler 2014).

### *Cultural*

As well as taking synchronicity as an object of research, primary or secondary, it may be worth exploring ways in which synchronicity could be deployed as part of a method of research. Of course, in the field of psychotherapy this already occurs insofar as synchronistic experiences are used in analysis as one means of finding out about the unconscious states of analysands. A greater challenge is to find ways of applying synchronicity in social and cultural research. This might involve researchers, if only experimentally, stepping into the assumptive world of synchronicity and attempting to find ways of using that perspective to analyse social and cultural phenomena; that is to say, looking at the phenomena in terms of the acausal patterns of meaning they exhibit instead of, or in addition to, looking at them in terms of their causes and effects. The test of such an exercise would be whether it yielded insights that would not otherwise or so readily have been available. To date only a few attempts at this have been made (Main 2006c; Cambray 2009: 88-107), from which the difficulties of the venture are apparent. Some modern approaches to divination, which are explicitly grounded in a synchronistic understanding of reality, could possibly be added to this (Hyde 1992, Cornelius 1994, Tarnas 2006). There are also a few hints of how synchronicity

might be applied in the study of literature (Rowland 2005: 146-47, 175-77; Hammond 2007; Mederer 2016), as well as in business and leadership studies (Jaworski 2011, Laveman 2014). Efforts along all these lines are worth continuing, for it is difficult to see how synchronicity could ever be considered integrated into mainstream thought until it forms not just an object of inquiry but part of a method of inquiry.

### **A multidisciplinary and polymethodological approach**

Given the wide diversity of research on synchronicity, it is impossible within the space of a short chapter to give an adequate account of the range of methodologies that researchers have deployed. As a way of illustrating at least some of the approaches that can be taken, I shall note some of the principal methods involved in my own attempts to get to grips with this topic.

Synchronicity has been one of the principal topics of my own research for about twenty-five years. I have had two main foci. On the one hand, with particular attention to Jung's writings, I have tried to clarify how synchronistic experiences can best be described, classified, and theorised. With these aims I have looked at synchronicity in relation to the practice of psychotherapy (Hall et al. 1998, Main 2007c), paranormal or anomalous experiences (1997b, 2012), religious or spiritual experiences (2001, 2007a), and myth (2001, 2007b, 2013). I am interested in theoretical perspectives that can accommodate the full range of synchronistic phenomena, respecting all of their physical, psychological, and spiritual aspects. I share the view of Edward Kelly and colleagues (2015), expressed in relation to anomalous phenomena generally, that such theoretical perspectives might be illuminatingly viewed as underpinned by panentheistic metaphysics (Main 2015b).

On the other hand, I have attempted to explore the possible cultural significance of synchronicity. I have discussed synchronicity in relation to late nineteenth- and early twentieth-century tensions between science and religion (2000, 2004, 2014c), with particular

attention to the problem of disenchantment (2007b, 2011, 2013) and meaning (2004, 2012, 2014c). Related to these issues, I have also examined the role of synchronicity in contemporary holistic spirituality (2002, 2004, 2006a) as well as in both traditional and contemporary uses of the *I Ching* (1997a, 1999, 2007a). Recently my interests have focused on looking in greater depth at synchronicity vis-à-vis Western esotericism (2010a, 2014b, 2015a). All of the preceding work is part of a broader exploration of the social and cultural significance of synchronicity (Main 2006b, 2006c, 2014a), especially of its potential as a tool for the critique of modern Western culture (Main 2004, 2011). In relation to this exploration, I think Jung and Pauli's co-publication (Jung & Pauli 1952) and correspondence (Meier 2001) especially warrant further study (Main 2014a, 2014c).

Linking physical, psychological, and arguably spiritual aspects of reality, synchronicity seems to require to be studied by a multidisciplinary approach. Jung himself, as we have seen, drew on both scientific disciplines such as physics, biology, psychology, and parapsychology, and humanities disciplines such as philosophy, theology, and history of religions. My own approach has also been multidisciplinary and, as a consequence, polymethodological. Drawing on my background in Classics (especially literature and philosophy), Religious Studies (especially psychology of religion), and Psychoanalytic Studies (especially history and sociology), I have mainly approached synchronicity from the perspectives of the humanities and social sciences.

The principal methods I have used have been historical (2000, 2004), textual (*ibid.*, 2014c), and comparative (1997a, 2002, 2007a, 2011), especially for the task of elucidating and culturally locating Jung's writings on synchronicity. For assessing the coherence and philosophical implications of Jung's and others' thoughts on the topic I have additionally undertaken conceptual and theoretical research (2004, 2007a, 2014c), both scrutinising the various concepts implied in synchronicity (time, acausality, meaning, and probability) and considering how effectively different theoretical frameworks (statistical, psychological,

parapsychological, scientific, and theological) can account for the phenomena (2004, 2007a).

I have also undertaken a number of hermeneutic studies (2001, 2007a, 2012) in order to explore more deeply the senses in which synchronistic experiences can be interpreted as meaningful, as proposed by Jung.

The data I have studied have consisted of accounts both of synchronistic experiences themselves and of how such experiences have been responded to, including how they have been theorised and applied. In relation to synchronistic experiences themselves, I have extracted numerous narratives of one-off or short series of experiences from published works, variously clinical and non-clinical, Jungian and non-Jungian in orientation (2007a, 2007b, 2007c, 2013). In addition, I have examined a couple of longer series of synchronicities centring on a single individual (Main 2001; 2007a: 63-79, 81-140). One of these series had already been published (Thornton 1967: 124-33). The other series was made available to me in journal form by the experiencer and had not been published at the time of my initial work on it, though he published some of it subsequently (Plaskett 2000). The responses to, and theorisations and applications of, synchronicity that I have studied have been drawn from the whole range of literature on the topic to which I have had access (Main 2004, 2007a).

I should also note one unsuccessful attempt to gather data on synchronicity. In 1998 some colleagues and I sent a questionnaire inviting accounts of synchronicities to every Jungian analyst and trainee in the United Kingdom and then to every member of the worldwide International Association for Analytical Psychology (Hall et al. 1998). However, only a handful of responses was received, with no returns at all in the United Kingdom, despite analysts there having received the questionnaire twice.

The principal methods I have used to analyse the data obtained by these various means are taxonomical: classifying different kinds of experiences, influences, and explanations (2004, 2007a); phenomenological: providing a richer picture of how synchronicities are actually experienced (1997b, 2004, 2007a, 2007b, 2013); hermeneutic: eliciting what specific

synchronistic events might mean, predominantly but not exclusively within the theoretical framework of Jungian psychology (2001, 2007a, 2007b, 2012, 2013); abductive: seeking the best-fitting theory to account for the full range of data of synchronicity (1997b, 2004, 2007a, 2011, 2012, 2014c; cf. Kelly et al. 2015); and, tentatively, acausal: using synchronicity as the basis for a method of research (Main 2006c).

Despite being stretched in all these different methodological directions, I am acutely aware that there are many approaches to the study of synchronicity that, for want of the necessary training, time, or aptitude, I have not pursued but that could be, and in some cases already have been, fruitfully pursued by others. These approaches might include, for example, experimental research, archival research, textual analyses in the original German, the methodical tracking of the cultural diffusion and transformations of the notion of synchronicity following Jung's publications, and heuristic or auto-ethnographic research.

## **Conclusion**

Jung described his essay 'Synchronicity: an acausal connecting principle' as 'an attempt to broach the problem [of synchronicity] in such a way as to reveal some of its manifold aspects and connections, and to open up a very obscure field which is philosophically of the greatest importance' (1952: par. 816). The problematic, manifold, and obscure nature of synchronicity is amply attested by the quantity and diversity of research to which Jung's essay has subsequently given rise, as well as by the lack of decisive outcomes from this research. Synchronicity is, unsurprisingly, well established as a concept within analytical psychology, and also has fairly wide currency within popular culture. However, it is still rarely if ever deployed as part of a method of research by academics that are not already self-consciously Jungian in orientation.

Greater interest in synchronicity within wider academic and scientific communities is most likely to arise where the problems being addressed by other academics and scientists are

similar to those that the concept of synchronicity has aimed to address. One set of problems that immediately stands out in this respect concerns the mechanistic and physicalist biases in contemporary science and the efforts that have been made to correct these imbalances by drawing attention to more holistic perspectives. There are strong parallels, for instance, between the kind of thinking in terms of whole patterns of meaning that is characteristic of synchronicity and the type of holistic attention to the world that characterises right hemispheric brain activity according to some contemporary neuroscientists (McGilchrist 2009). Again, as Cambray has noted, current theorists of complexity and emergence have taken renewed interest in the kind of holistic German Romantic science that was also a major influence on Jung and his concept of synchronicity (2014a, 2014b), and it is possible that specific viewpoints inspired by that earlier holistic tradition, such as the relationship between environmental and genetic factors in epigenetics, could be illuminatingly compared to synchronicity in at least some contexts (2014a: 23-25).

A related set of problems that played its part in spurring Jung's conceptualisation of synchronicity is encapsulated in the term 'disenchantment' (*Entzauberung*): problems relating to the excessive rationalisation of modern Western culture and its loss of a sense of sacredness and meaning. Recent research into disenchantment from a 'problem history' (*Problemggeschichte*) perspective has shown how the associated epistemological problems of the scope of empirical and rational knowledge, the possibility of metaphysics, the relations between facts and values, and the separation of science from religion were variously responded to within physics, chemistry, biology, and psychology, as well as within less mainstream disciplines and knowledge cultures such as psychical research, parapsychology, and occultism (Asprem 2014). These responses, occurring in the very decades during which Jung was developing the thoughts that would eventually be formulated as synchronicity (1900 to 1939), both could be illuminated by the analogous case of synchronicity and in turn could provide a wealth of opportunities for further contextualising and comparing Jung's concept.

Despite Jung's ambivalence about philosophy (Main 2010b), there are aspects of his work on synchronicity that could interest professional philosophers. As an alternative to materialism, idealism, and dualism, the philosophical position of dual-aspect monism, to which both Jung and Pauli seem to have been led by their reflections on synchronicity (Atmanspacher 2012), is in the same camp as the neutral monism that Thomas Nagel considers the best-supported framework for understanding how mind relates to matter (Nagel 2012: 4-5, 56-58, 61-65). Jung and Pauli's dual-aspect monism has some distinctive and empirically promising features, such as the way the mental and material aspects are specified in terms of complementarity (Atmanspacher 2012), that might especially repay further philosophical attention. Within a different philosophical tradition, exploration of the conceptual and contextual connections between Jung's psychology, including the concept of synchronicity, and Deleuze's philosophy (McMillan 2015), not least their shared interest in esoteric currents of thought (Kerslake 2007; Ramey 2012), is likely to be as fruitful for scholars of Deleuze as for scholars of Jung.

Another way of eliciting wider scholarly interest in synchronicity might be to draw attention to ways in which it has been and arguably still is implicitly present right at the heart of numerous cultures. Most obviously, since almost all cultures before the modern period, Western and Eastern, have relied on one or another form of divination, synchronicity, as one of the most sophisticated attempts to understand divination, could have enormous significance as a tool for understanding the thought processes informing decision making within those earlier cultures. More surprisingly, perhaps, it has also been argued that one of the staples of contemporary academic scholarship, the comparative method, is 'a very close cousin of synchronicity', since 'What comparison is *always* about [...] is identifying meaningful connections between apparently separate events or things, that is, between seeming coincidences' (Kripal 2010: 74). Here in particular, if this relationship is indeed as close as

suggested, there may be opportunities for elucidating how synchronicity might become part of a method of research through enriching existing comparative practices.

The above possibilities for eliciting wider academic and scientific interest in synchronicity are some of the ones that currently appear most promising to me, and the list largely reflects my own preoccupations and limitations. I shall end at a more general level by suggesting that there are at least five questions that might help to guide further work on synchronicity:

First, what is the full range of phenomena that the concept of synchronicity is designed to capture?

Second, how adequate is Jung's psychological framework for explaining the full range of synchronistic phenomena, firstly in its own terms and then compared with other possible explanatory frameworks?

Third, how adequate is Jung's hermeneutic strategy for interpreting synchronistic experiences, that is, for eliciting their specific meaning, again firstly in its own terms and then compared with other possible hermeneutic strategies?

Fourth, what is the broader cultural significance of synchronicity?

And fifth, how can the concept of synchronicity be applied, not just in psychotherapy and personal development but also in academic research and in social and cultural analysis?

For me, the sign that synchronicity will have been properly established as a concept within Western, or indeed global, culture will be that it starts being invoked and operationalized by researchers, academics, and non-therapeutic professionals who are not initially working within the ambit of Jungian thought. That synchronicity has not, after more than sixty years, achieved this status to any notable extent does not mean that it has been refuted as a concept. The dissonances between synchronicity and the assumptions of mainstream scientific and academic cultures are not insignificant, and it may be that there need to be major shifts to those assumptions themselves before whatever potential the concept



of synchronicity may have can be realised. My suspicion is that as well as being the beneficiary of such shifts the challenging concept of synchronicity may also be one of the agents of them.

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