

Forthcoming in: Savransky, M. Wilkie, A. and Rosengarten, M. (eds), *Speculative Research: The Lure of Possible Futures*, London and New York: Routledge

Afterword

Thinking with outrageous propositions

Monica Greco

‘It is always better to produce an interesting disease than a mediocre painting’ (1988: 540): with this proposition, as with so many others from the lectures he delivered to patients at his Marienhöhe clinic in Baden-Baden between 1916 and 1919, Georg Groddeck rejoiced in provocation. In 1918 he had no qualms in naming the sanatorium’s new house magazine *Satanarium*, in explicit homage to Hell as the only place where, it seemed to him, a man could scream his agony ‘unimpeded, without shame or reserve’ (1992: 15). Nor should we imagine that in invoking Hell he had in mind the metaphorical ‘hell’ of WWI – which some of his patients would have experienced first-hand – rather than a more literal Hell with the full complement of damning moral connotations. The hellish agonies that the *Satanarium* was to vent were first and foremost those of ordinary patients, whom Groddeck encouraged to experiment with regarding their illness as expiation for their criminal desires. They, the patients, might disagree with this or other similar pronouncements. But they must make an effort not to disagree. As he put it,

You must make an effort to believe, you must silence all doubts in yourselves. It makes no sense to refute what I say through reasonable arguments. It is easy to find this or that false, but that is not the point of the exercise. You have come here to be helped. What I deliver is a remedy, a medication. (1987: 95)

In his medical version of a re-evaluation of all values, Groddeck thus staged a joyous obliviousness to the modern settlement, the one whereby disease and illness have become equally divorced from questions of aesthetic appreciation as from the metaphysics of evil and sin. His provocations playfully unhinged and reshuffled the customary relations between these conceptual frames, and in so doing they worked their healing magic. By all accounts, he was much loved and highly sought-after as a doctor, known for his ‘astonishing success with patients suffering from chronic symptoms long since abandoned as non-curable by others’ (M.C., 1951: 6).

The essays in this volume have addressed, in different ways, the question of how we might cultivate a speculative sensibility in our engagements with the empirical, and thereby also foster ‘deep empiricism’ (Stenner, 2008) in cultural and social research. Following Stengers, this sensibility has been described as defined by a concern with ‘resisting a future that presents itself as probable or plausible’, through practices designed to actively explore the ‘unrealised potential of the present’ and to summon latent (im)possibilities in the becoming of the world (Savransky, Wilkie and Rosengarten, this volume). In this concluding contribution I propose to think both with and through the ‘maverick’ Georg Groddeck in order to address a double challenge involved in this speculative task. This is, on the one hand, the challenge of taking the (im)possible seriously. Often, this will entail developing a mode of paying attention that might allow us to feel the latent (im)possibilities in propositions, in

modes or life and practice, that have ‘fared badly, thrown into the dustheap, neglected’ (Whitehead, 1978: 259). To the extent that such propositions have already been dismissed, surpassed, or denounced – whether retrospectively or preemptively – the speculative venture will thus demand that we associate with entities that may be epistemically weak and, for that reason, marginal. There is therefore an element of thinking ‘against the grain’ involved in a speculative ethos of research: not in the sense of thinking polemically or oppositionally, but in the sense of thinking against the inertia of thought, resisting the mental habits that unconsciously structure our judgment and channel our interest, which may include habits of reasonableness and criticism. In this process of thinking against the grain we strive to ignore the multiple sedimented strata of all that might tempt us, in turn, to be dismissive in the interest of caution – whether to preserve a sense of our own plausibility, safeguard a reputation, or build a career. We might then find ourselves in the penumbrae of liminal disciplinary locations, or drawn to the quagmires of ‘liminal hotspots’ (Greco and Stenner, 2016) – the wicked problems that can accrue from the solutions to mainstream ones, chronic symptoms of a way of life that have long-since been abandoned as incurable (or inevitable) by others. In reaching towards the improbable to activate new possibilities, the propositions we entertain may thus involve a degree of inconvenience and may well appear objectionable, if taken at face value, on a variety of immediately reasonable grounds. If we do take this risk, it is in order to allow ourselves to stay with the improbable and the inconvenient, to prolong it into far-reaching implications that could only obtain in conjunction with the imagination of a different world, so as to summon the possibility of such a world.

If this, on the one hand, is the challenge involved in speculative research, taking the risk of such an adventure, on the other hand, cannot mean throwing all caution to the wind. A different set of risks concerns the probability that this adventure may itself fare badly in a variety of ways, such that, as we craft propositions to summon the (im)possible, we must also strive to *take care of the possible* (Stengers, 2010). There are many aspects to this challenge but here – and with reference to the practice of cultural and social research – I want to attend specifically to the aspect that relates to thinking with ‘outrageous’ propositions. Propositions that may have been tolerable by virtue of being neglected can acquire an outrageous character when we propose to take them seriously. And the challenge associated with this outrageous character concerns the extent to which it may hinder the proposition from becoming *interesting*, and thus detract from its capacity to lure, to bridge the way into novelty.

Indeed let me suggest that the speculative adventure may have about it something inherently *outrageous*: this word gifts us with an ambivalence that leads to the heart of the double challenge I have sought to describe so far. From the Latin *ultra*, in terms of its pure etymology it refers to ‘what goes beyond’, in any sense. Current meanings listed in the Oxford English Dictionary include ‘wildly improbable’ as well as ‘very bold and unusual’. But historical usage also links *outrageous* explicitly to acts of violent excess, injury and affront, meanings further consolidated in the English language by the folk etymology of *out* + *rage*. An outrageous proposition, in this sense, would be one that provokes the outpour of extreme anger, indignation and shock, with the probable effect of entrenching existing lines of difference and polemical contradiction, rather than opening them to new possibilities of relation. These meanings convey the sense in which, as we seek to articulate ‘what goes beyond’ the pivotal actualities of the present, as we seek to unhinge and reshuffle the

registers through which we make sense of experience, there is a genuine potential for this operation to become destructive, and we should be mindful of this potential. One aspect of this problem is linked to what authors working on the dynamics of transition in political anthropology have addressed through the concept of the ‘trickster’, a marginal figure able to exploit the uncertainty and indeterminacy of liminal situations to ‘institute a lasting reversal of roles and values’ with the sole aim, however, of placing themselves at the centre and maximising their own power (Szakolczai, 2009: 155; see also Horvath, 1998, 2007; Horvath and Thomassen, 2008). In a different context, and in relation to the efficacy of her own interpretations, Isabelle Stengers has addressed this negative potential through what she calls the ‘Leibnizian constraint’: the idea that the statement of what one believes to be true should ‘bear the responsibility not to hinder becoming: not to collide with established sentiments, so as to try to open them to what their established identity led them to refuse, combat, misunderstand’ (2000: 15). In both cases we are warned about the dangers of following outrageous propositions – propositions whose lure is to offer a springboard for the imagination of different possible futures – at the expense of a *commonsense*, in what might become an unwitting pursuit of ‘ignoble curiosities of the understanding’ (Whitehead, 1962: 154).

The relevance of Groddeck to this problematic, as a case to think with, is multi-layered. On one level, we may describe his own practice as an instance of speculative experimentation with (im)possibilities, mobilising an array of lures for feeling, like other practices of healing have done since time immemorial and indeed continue to do. What appears distinctive about his practice, at least among those operating in the horizon of the modern settlement, is that from an initial position of established authority – he trained and later collaborated with Ernst Schweninger, the private physician of Otto von Bismarck, and members of the Emperor’s family were among his own patients – Groddeck put outrageous propositions into play *as such*, that is, he took deliberate care to maintain their speculative character. Groddeck not only did not attempt to systematise and stabilise his lures into theoretical claims, but actively resisted doing so, in the same way as he actively refused to qualify himself as a scientist, at a time and in a context that would have been particularly conducive to him doing precisely that. Instead, he introduced himself as a ‘wild analyst’ before the Psychoanalytic Association at the Hague in 1920, prompting remarks that he had, in this and other ways, ‘endangered the carefully earned esteem of psychoanalysts with his carefree behaviour’ (Storfer, in Tytell, 1980: 93). In *The Ego and the Id*, where Freud credited Groddeck for inspiring him to use the term *Id* (the Latin equivalent of the German *Es*, which was Groddeck’s preferred form), Freud attributed Groddeck’s self-distancing from the ‘rigours of pure science’ to personal motives, and described it as a form of vanity (1984: 362). While there may be some truth in this characterisation, it fails to capture the sense in which Groddeck’s gesture of refusal expressed a form of coherence with the obligations inherent in his practice first and foremost as a healer. While Freud was busy developing concepts – such as countertransference – designed to safeguard the objectivity of his method, Groddeck happily conceded that ‘[a] certain harmony of feeling on the animal level between doctor and patient is the fundamental basis of medical treatment, which is, in essence a *reciprocal* activity’, adding that

[t]he term ‘animal’ is meant to indicate that this important factor in treatment has, to begin with, nothing to do with the knowledge and skill of the physician,

but arises from the contact of two human worlds and from their *mutual human sympathy and antipathy*. (Groddeck, 1949: 46, my emphases).

This, for Groddeck, was the basis for insisting on the importance of physical contact in healing, and of massage as a form of psychotherapy in the treatment of organic disease. Both ‘psychotherapy’ and ‘organic disease’ are here to be taken literally (he wrote of them as such) and yet, to some extent, they are misnomers, in so far as he also never tired of pointing out their character as abstractions from the *Es*, the ‘Universal Whole’ that merely expresses itself in everything we are and do, including our concepts (1951: 72 and ff.). The possibility of healing, then, did not depend for Groddeck on the application of an objectively ‘true’ theory, a theory whose truth would be predicated on an operation of separation and distinction of the subject of knowledge from its object. It depended exactly on the opposite, that is, on the recognition of a fundamental continuity (not separation) that obtains between human beings and indeed the whole world at the level of experience, such that they can come to ‘resonate’ in sympathy, and thus act as lures for each other.¹ We might regard this fundamental continuity in experience – between doctor and patient, in this case – as the foundation of a *commonsense*, a shared form of thought and discourse that would reflect the multiplicity and indeterminacy, and thus the hesitations and the speculative tendency, that arise from the ‘radically untidy’ character of actual experience itself (Whitehead, 1962: 157). We can see therefore that, while being biomedically trained, Groddeck had very good reasons for refusing to subject his propositions as a physician to the ‘rigours of pure science’ in so far as doing so would precisely have produced *rigidity*, compromising their capacity to communicate at the level of this *commonsense* in the most responsive and suggestive way possible.

In his practice, then, Groddeck put outrageous propositions into play, explicitly subordinating their truth-value to the value of their interest, of their capacity to effect a change of perspective in those whom he lured into resonating with them. He did this by making a home for such propositions at Marienhöhe, a medical clinic, where they formed, as he put it, part of his treatment. Alongside physical therapy mainly based on massage and diet, this treatment routinely included asking patients questions about the intention and purpose of their illness, regardless of the type of condition they suffered from, be it a broken limb, heart disease, or a tumour:

it is my custom to ask a patient who has slipped and broken his arm: ‘What was your idea in breaking your arm?’ whereas if anyone is reported to have had recourse to morphia to get to sleep the night before, I ask him, ‘How was it that the idea of morphine became so important yesterday that you had to make yourself sleepless in order to have an excuse for taking it?’ So far I have never failed to get a useful reply to such questions and there is nothing extraordinary about that, for if we take the trouble to make the search we can always find both an inward and an outward cause for any event in life. In medicine the external cause has received so much attention – it is in some ways, of course, much the simpler to deal with or at least to name – that there can be no great harm if a few doctors here and there seem to exaggerate the importance of the neglected inward cause, and maintain as I do that man creates his own illnesses for definite purposes ... (1951: 81)

We are prompted to wonder about the system of relations that made the efficacy of this question – about the purpose illness served, and what a patient might want to obtain through their illness – so very different in the context of Marienhöhe from virtually any other context since then. It is significant, for example, that the question was asked *as part of the treatment*, and not as a condition of admittance into treatment. A hundred years later, however, we are so far from being able to feel the proposition expressed in Groddeck's question, that it seems superfluous to dwell on the details of such relations. Instead, we hear it muffled by the historicisation of the figure of Groddeck, through which any lure or challenge it might pose becomes qualified and tamed by the fact that, *as we know*, he was a maverick. His propositions might be excused and indulged, in the same movement by which we might be excused for not taking them seriously.

What might it mean, then, and moving now to a different plane of analysis, to take the (im)possibilities latent in Groddeck's propositions seriously, today? I have chosen this example because, as well as expressing so well the features of a speculative ethos and the risks it entails, it also resonates strongly and directly with a number of polemics that define the political context of contemporary healthcare, particularly in relation to the growing number of so-called contested illnesses and 'medically unexplained symptoms' (Greco, 2012). As a category of illness these are epistemically marginal and yet empirically prevalent; for the purpose of challenging our habits of thought they represent, I contend, an exemplary case of much broader relevance. It is in this context that Groddeck's propositions, if we take them seriously and at face value, sound distinctly *outrageous* in the negative sense of this term. They sound outrageous, that is, not in the sense that they might provoke curiosity and perhaps amusement, stimulating an effort of comprehension, a personal 'flight after the unattainable' (Whitehead, 1958: 65) that might effect a new perspective. They sound outrageous, rather, in the sense that they are likely to provoke outrage and polemical entrenchment – the familiar 'How *dare* you suggest that I have brought this on myself, that it is my fault! How *dare* you suggest that my illness is all in the mind, that it isn't real!'. Groddeck himself – in his lectures, delivered in the last two years of WWI – pointed to the conditions under which the type of questions he routinely asked of his patients would soon become outrageous in this way. He claimed that the medical profession had been irrevocably compromised by the Great War, in so far as doctors had been called upon to perform functions of policing (1988, 515). From then on, asking a patient 'What do you want to obtain with your illness?' would be associated with questioning the authenticity of the illness, and implicitly accusing the person of lying. For Groddeck, this had been a question to be asked of *every* patient and *every* type of illness. By contrast, within the modern settlement that strictly bifurcates 'external causes' from 'internal' ones (to use Groddeck's terminology), questions about the intentionality of illness, coupled with the attribution of a forensic function to any objective evidence of disease, are only asked as part of a process of *differentiating between* more or less authentic, more or less legitimate 'illnesses'. The potential *interest* of the question in relation to the possibility of effecting a change of perspective becomes unintelligible, pre-empted by the possibility of judgment, disqualification, and exclusion, while the question as such becomes something to be actively avoided and resisted at all cost.

Notwithstanding the specific local genealogies of this predicament, it is one that now obtains generally, and ever more so, in so far as medicine is moving increasingly in

the direction that Groddeck resisted. Rheumatologist Nortin Hadler (1996) captured the essence of this situation when he described it as a iatrogenic vortex whereby *if you have to prove you are ill, you can't get well*. Research by sociologists and anthropologists has amply illustrated how people with contested illnesses or 'unexplained symptoms', in their struggle to obtain legitimacy and to become a credible patient in the absence of a biomarker for their condition, become caught in a pragmatic paradox. On the one hand they will adopt rigidly biomedical idioms of explanation in their interactions with medical gatekeepers, 'resonating' with the constraints of those settings, as well as in wider public forums (although, importantly, they might use other, richer idioms elsewhere, as in conversations with family or friends). At the same time, these strategies will tend to make them conspicuous in a psycho-behavioural rather than biomedical sense, as deliberately 'performing' – and therefore faking – their illness.² Conversely, in the presence of a biomedically recognised disease, as in the 'lifestyle diseases' that are now leading causes of death worldwide, the biomarker acts *de facto* as a guarantor of 'external' causality – the necessary and sufficient condition for access to the system, at least ideally – such that it appears superfluous and inappropriate to ask questions about intentionality and purpose in any therapeutically competent sense. This does not mean, however, that such questions are not asked in relation to these diseases, on the contrary: they proliferate in non-medical, political and public discourse, in the context of angry polemics where they are typically mobilised to apportion blame to (categories of) individuals. In both cases, we can fully appreciate how the proposition that 'man creates his own illnesses for definite purposes' might be one that anyone who is wary of stigmatising the sick, or blaming the victim, would want to steer clear of – hence the tendency for social scientists to align with mobilised patients in denouncing the outrageousness of anything that might suggest it. In simply rejecting the proposition as outrageous, however, they collude in reinforcing the bifurcated logic that renders it so, and they allow it to proliferate in conditions of enunciation that are not conducive to exploring it or qualifying in any constructive sense.

Groddeck's questions to his patients were challenging and outrageous already in his own time, but primarily from the perspective of a *commonsense* already informed by a bifurcated understanding of nature, which has consolidated more widely since then. It is only in the context of this bifurcation that an illness that is real in a biophysical sense must, in essence, be considered devoid of any spiritual, existential, moral or aesthetic value, and that any illusion to the contrary pertains to a subjective judgment that has no place in orienting a medical practice that claims its authority on the basis of scientific facts. We can now appreciate how, in the context of Marienhöhe, Groddeck did not so much shock his patients as *surprise* them, by authorising them – in the space he protected from the 'rigours of pure science' – to follow his lead in exploring and trusting a more primordial, 'animal' *commonsense*. This *commonsense* might be described as the sense that would experience illness as a totality of relations involving every other aspect of life, a sense made not of clear demarcations but of hesitant intuitions and wonderings about all these relations. Groddeck's outrageousness was to propose that such *commonsense* should be at the core of a therapeutic venture, rather than being admitted at best as an afterthought or an accessory. In pursuing this aim, Groddeck maintained, it was specifically important to avoid fostering '[t]he absurd superstitions about medical matters which one finds in all social classes, [and which] have become in their half-knowledge a general danger' (1949: 49). He also made it clear that such 'superstitions' typically had their origin in

‘the mistakes of the expert’ – among which he counted medical diagnostic practices – adding that such mistakes ‘continue long after they have been recognised as such by experts; they are tough, inert masses and difficult to get rid off [sic]’ (1977: 242).

Moving now towards a conclusion, what can we learn from thinking with Groddeck about the value and risks, more generally, of engaging with outrageous propositions in speculative research? The possibility of taking Groddeck seriously depends, as Foucault taught us (1969), on removing the filters that would prevent us from relating to his propositions as equal to our own, that is, as deserving of the same serious consideration. In Groddeck’s case, this is the filter of historicisation that would have us regard and ‘forgive’ him as a maverick. Other filters are possible in relation to other propositions that similarly ‘go beyond’ what our habits of thought would allow us to take seriously. Once we remove such filters, the world appears full of outrageous propositions pointing to wondrous possibilities. One conclusion to be drawn here, therefore, concerns simply the importance of learning to recognise outrageous propositions that are good for the purpose of thinking with them, in relation to our problems.

Groddeck’s propositions draw our attention precisely because, taken at face value, they are simultaneously so similar and yet so different from propositions that are ubiquitous, and that tend to cause outrage, today. We have learned to distrust the contemporary propositions, for good reasons; but Groddeck offers the opportunity of reading similar statements in the context of an entirely different system of relations, where they point to a completely different set of conclusions and surprising consequences. Taking the (im)possibilities latent in his propositions seriously thus means appreciating this contrast, which produces a hesitation where previously there might have been a knee-jerk reaction of dismissal. My particular example has illustrated how social scientists can often be outraged *by proxy*, and dismiss outrageous propositions in the name of siding with the underdog, against power; but in such hasty dismissals, as we have seen, they can reinforce the system of relations that has rendered a proposition offensive and injurious in the first place. Learning to hesitate would then mean that we gain a deeper insight into the contextual, situated impulse behind the need for such a dismissal; that we become aware of some of its potential unintended consequences; and that we become capable of entertaining the thought that, in a different system of relations, a given proposition might become interesting rather than offensive.

What we also learn from this example is that, while it is useful to think with outrageous propositions in order to reactivate latent (im)possibilities, we must take very great care in how we re-propose them. In this respect Groddeck is interesting specifically because of the explicit care he took in relation to the efficacy of his thought. He situated his statements in such a way that they could ‘go beyond’ and thus provoke surprise, but not outrage. While it is impossible to turn his strategy into a general prescription, it points to the importance, once again, of evaluating what doing this might mean in the context of relations within which we hope to intervene.

Endnotes

¹ Groddeck's language in describing experience comes remarkably close that of Whitehead and William James. Indeed, when read alongside their work it ceases to seem so outlandish and becomes an exemplary instance of what Stenner (2011) calls their 'deep empiricism'. Consider for example this statement, from an essay entitled *The Part as Whole*: 'I assume ... that the assertion "I live" only expresses a small and superficial part of the total experience, "I am lived by the It". Every human happening depends on the It, yet no human thought or invention can ever lead us to the heart of its mystery, since none of us however learned, wise, lucky, or imaginative, can ever hope to jump out of his skin and view man's nature as a whole. At the same time, it is possible by close and careful observation of human behaviour – our own and other people's – to discover something about the It's modes of expression.' (1951: 73).

² See e.g. Dumit 2003 and 2006; Werner and Malterud, 2003; Bech-Risør, 2009; Barker, 2011. See Greco and Stenner (2016) for a discussion of this iatrogenic vortex as an illustration in the broader context of a theorisation of the dynamics of 'liminal hotspots'.

References

- Barker, K. 2011. Listening to Lyrica: contested illnesses and pharmaceutical determinism. *Social Science and Medicine*. 73, 833-842.
- Bech-Risør, M. 2009. Illness explanations among patients with medically unexplained symptoms: different idioms for different contexts. *Health*. 13 (5), 505-521.
- Dumit, J. 2000. When explanations rest: 'good enough' brain science and the new sociomedical disorders. In Lock, M., Young, A. and Cambrosio, A. (eds), *Living and Working with the New Medical Technologies*. Cambridge: Cambridge University Press, 209-232.
- Dumit, J. 2006. Illnesses you have to fight to get: facts as forces in uncertain, emergent illnesses. *Social Science and Medicine*, 62, 577-590.
- Foucault, M. 1969. *The Archaeology of Knowledge*. London & New York: Routledge.
- Freud, S. 1984. *On Metapsychology: The Theory of Psychoanalysis*. London: Penguin Books.
- Greco, M. 2012. The classification and nomenclature of 'medically unexplained symptoms': Conflict, performativity and critique. *Social Science and Medicine*. 75, 2362-2369.
- Greco, M. & Stenner, P. 2016. Liminality and affectivity: Introducing liminal hotspots. Forthcoming in *Theory & Psychology*
- Groddeck, G. 1949. *Exploring the Unconscious*. London: Vision Press.
- Groddeck, G. 1951. *The World of Man*. London: Vision Press.
- Groddeck, G. 1977. *The Meaning of Illness – Selected Psycho-Analytic Writings*. London: The Hogarth Press.
- Groddeck, G. 1987. *Vorträge I*. Basel & Frankfurt-am-Main: Stroemfeld/Roter Stern.
- Groddeck, G. 1988. *Vorträge II*. Basel & Frankfurt-am-Main: Stroemfeld/Roter Stern.
- Groddeck, G. 1992. *Satanarium*. Basel & Frankfurt-am-Main: Stroemfeld/Roter Stern.
- Horvath, A. 1998. Tricking into the position of the outcast: A case study in the emergence and effects of communist power. *Political Psychology*. 19 (3), 331-47.
- Horvath, A. 2007. The trickster motive in Renaissance political thought. *Philosophia* 52 (1-2): 95-111.
- Horvath, A. and Thomassen, B. 2008. Mimetic errors in liminal schismogenesis: On the political anthropology of the trickster. *International Political Anthropology*. 1 (1), 3-24.

- M.C. 1951. Georg Walther Groddeck, 1866-1934. Biographical introduction to Groddeck, G. *The World of Man*. London: Vision Press.
- Savransky, M., Wilkie, A. and Rosengarten, M. (this volume). The lure of possible futures: On speculative research.
- Stengers, I. 2000. *The Invention of Modern Science*. Minneapolis & London: University of Minnesota Press.
- Stengers, I. 2010. The care of the possible. *SCAPEGOAT: Architecture | Landscape | Political Economy*. Issue 01, 12-17, 27.
- Stenner, P. 2008. A. N. Whitehead and subjectivity. *Subjectivity*. 22, 90-109.
- Stenner, P. 2011. James and Whitehead: Assemblage and systematization of a deeply empiricist mosaic philosophy. *European Journal of Pragmatism and American Philosophy*. 3(1), 101–130.
- Szakolczai, A. 2009. Liminality and experience: Structuring transitory situations and transformative events. *International Political Anthropology*. 2 (1), 141-172.
- Tytell, P. 1980. Un précurseur des fictions théoriques. *L'Arc*. 78, 92-103.
- Werner, A. & Malterud, K. 2003. It is hard work behaving as a credible patient: encounters between women with chronic pain and their doctors. *Social Science and Medicine*. 57, 1409-1419.
- Whitehead, A. N. 1958. *The Function of Reason*. Boston: Beacon Press.
- Whitehead, A. N. 1962. *The Aims of Education*. London: Ernest Benn Limited.
- Whitehead, A. N. 1978. *Process and Reality*. New York: The Free Press.