Every epoch not only dreams the next, but dreaming impels it towards wakefulness. It bears its end within itself, and reveals it ... by ruse. (Benjamin 1997, 176)

If we lived in a liquid world, the concept of a 'machine' would make no sense. Liquid life explores an alternative organisational infrastructure and experimental technological platform than the machine, through which the living realm can be imagined, observed and engaged. It sets the scene for an ecological approach to design and engineering our living spaces, whereby the platforms for thinking and making increase the liveliness of the living realm. Resisting the persuasive logic of Descartes' *Treatise of Man*, where conceptual models of humans are made up of separate elements, the body and (rational) soul that exist independently of one another, it seeks an alternative integrative synthesis between them.

Cartesian dualism breaks man up into two complete substances, joined to another no one knows how: on the one hand, the body which is only geometric extension; on the other, the soul which is only thought — an angel inhabiting a machine and directing it by means of the pineal gland (Maritain 1944, 179)

By removing any element of mentality, Descartes prepared the way for mechanistically-functioning, 'brute' geometrical bodies', to be better described by the *new physics*, while the character of the soul was outlined only its barest details. A mysterious substance where 'the animal spirits' flowed from the pineal gland through a network of vessels (neurons) like fine air, it was

* In a letter to Richard Bentley, Isaac Newton uses the term 'brute' to refer to an (inert) body (Newton 2017).
thought to be responsible for higher qualities of existence, like rational thought, which are distributed across the whole body’s system of organs. While Descartes did not suggest a formal relationship between the body and soul, Gert-Jan Lokhorst describes Descartes as ‘an interactionist who thought that there are causal interactions between events in the body and events in the soul … ’ (Lokhorst 2005). This brilliantly simple act of dualism created the foundations of modernity where matter is without innate agency and therefore requires animation through external agencies such as energy, or computer programs.

People — who themselves are in fact a process — are afraid of whatever is impermanent and always changing, which is why they have invented something that doesn’t exist — invariability, and recognised that whatever is eternal and unchanging is perfect. (Tokarczuk 2010, 110)

Simultaneously a metaphor and technological apparatus of fluid forces, in this book the term ‘liquid’ is used both literally and metaphorically to denote a testable philosophy capable of producing new kinds of encounters and artefacts (Stengers 2000). Its ‘new’ materialist discourse embraces those aspects of the living realm that are relevant to an ecological era, which cannot be accounted for by the bête machine, and include the ‘soul substance’. Although this conception of soul is not a literal derivation from Descartes’ model, where the soul was gaseous*, it is compatible with the Aristotelian-Thomistic conception — as the substantial form of the human body which penetrates all living matter — and shares allegiances with Rosi Braidotti’s notion of the posthuman†, since it is not an exclusively human agency.

* Descartes’ theories are actually inconsistent with contemporary anatomical theories of the brain, which established that the brain cavities, or ventricles, ‘are filled with liquid rather than [an] air-like substance’ (Lokhorst 2005).
† Braidotti considers life as a monistic expression of a universe of matter, not as the property of individuals and points to a zoe-centric worldview that decentres bios as the measure of all things (Braidotti 2013, 61).
This book is a monster: an uncategorisable treatise and transdisciplinary synthesis of text, quotations, provocations, images, conceptual slippages, voices, ideas, writing styles, events, poetry and narratives. As its arguments unfold, its loose body plan responds to its context — where sections support, contradict and hybridise with each other. An orchestrated cacophony, it is an ecological project — a *Babel in the making* — that, despite all its inherent conflicts and paradoxes, seeks to maintain its diplomatic coherence.

The compositional strategy of this book possesses a liquid character. Intermingling quotes within the body of discourse and observations, it emphasises conventions of thought and their contradictions, pertaining instead to an active investigation of the nature of lively matter by embracing its; scientific understanding; incorporation within creatures; associated technical developments; experimentation with nascent apparatuses; as well as the regenerative processes of decomposition. Through these juxtapositions, interminglings and fusions, new kinds of agencies begin to appear, where — for example — portraits of creatures with liquid and monstrous character, generate a counterpoint to the modern view of the *bête machine*, rendering it strange and unsuitable for a third-millennium notion of the living realm. Angels (see section 01.5) also act as vectors of liquid life, establishing a language with the potential for ‘angelfication’ (Lokhorst 2005; Maritain 1944, 179) that resists the reduction of its constituent concepts into a series of finite explanations.

In keeping with an alternative philosophy of the living realm, the parts of this book embody an alternative *life cycle* of events:

**CONTEMPLATION** This section constitutes an elemental pause, where the terms, key concepts and conditions used in this study are established that re-problematise the character of living matter.

**DETERMINISM UNBOUND** Enlightenment concepts; the world of machines, the hard question of matter and complexity, are outlined and juxtaposed against a third mil-
lennial understanding of the material realm including the concepts of quantum physics, non-linear phenomena and astronomical observations. These juxtapositions infer the existence of strange substances such as dark matter/energy, which cannot be readily described by the laws of classical physics and raise further questions about what kinds of discourses are ‘missing’ from our understanding of the living world.

HYPERCOMPLEXITY Through a study of states of existence that go beyond determinism, a portrait of life that is difficult to completely reduce, or solve, within a mechanistic discourse is presented, and juxtaposed with the notion of life as flâneur and the possibility of liquid creatures.

MAKING The possibilities for working with liquids as materials and technologies are explored.

BEING This chapter establishes the conditions for alternative ideas, languages and grammar that engage with the concepts of and encounters with liquid life. The Bütschli system is introduced as a liquid apparatus through which these proposals can be tested and directly engaged. Juxtaposed with quotations that speak to a range of known and imaginary phenomena, this section explores the transdimensionality and peculiarity of the living realm.

TRANSITIONING In this section, transdisciplinary practices engage with the concepts and experiences of liquid life. Rolf Hughes constructs an ‘angelology’ of language through the transformative invocations of prose poetry, while Simone Ferracina explores how graphical notations can help shape our concepts of metabolism, upcycling and designing with fluids.

REGENERATION Through a technique of composting, new encounters with liquid life are generated, where content
is (re)worked and reconstituted from the present exploration.

Setting out to provoke change in thinking and dreaming by opening up hidden landscapes (real and imaginary) that may be accessed in uncertain times, this book creates an expanded portfolio for navigating unfathomable terrains and conjuring forth alternative futures than are possible through the Anthropocene’s omnipresent paradigms. No formal conclusion to the experiments and explorations is proposed, which, by implication, would be a conversational dead end. Nor is there an attempt to fully resolve the strangeness of our existence with a distilled set of principles through which we may create life on our own terms. Rather, this ‘monster’ provides an alternative framework for observing the living realm than the bête machine, which through its (re)examination, sorting, ordering and valuing, aims to provoke new conversations about the nature of living matter and how we may imagine, construct and inhabit our living spaces at a time of ecocide.