The theme of this issue originated from a symposium in April 2014, organized by the Society for Mind-Matter Research, entitled “Naturalizing the Mind – Royal Road or Blind Alley?” The naturalization project for mind has been very active since the 1960s. The driving idea behind it has been to apply the astonishing successes of the natural sciences to explaining consciousness and other mental phenomena. But the naturalization project has also attracted resistance, and the papers included here are dedicated to critical scrutiny of some of its key elements and some of its alternatives.

Despite the difficulty of carrying out naturalization in practice and the many objections that have been raised against it, naturalizing the mind has been and remains very attractive for many scientists and philosophers. One reason is that the naturalization project fits well with a reductive picture of reality that many scientists and philosophers hold. The idea that mental life might be explained or subsumed under scientific principles such as natural laws and efficient causation offers the hope for a unified view of physical and mental reality.

Another reason for the appeal of naturalizing the mind has to do with an image of human beings that many have found compelling. Understanding ourselves as beings who act in accordance with scientific principles presents an image of us as being at home in the universe. Despite the serious objections of existentialists, phenomenologists, critical theorists and other social theorists to this “at home” image and its implicit assumption that human beings are scientific objects, the power of the naturalization project remains persuasive.

The April 2014 symposium was organized to revisit and assess the project of naturalizing the mind. The four main papers carry out this assessment largely on the “scientific” side of the ledger rather than on the “human” side. Yet, they all raise questions that go to the heart of our understanding of the sciences and their relationship to human life. This is the particular target of the solicited article by Michael Hampe, which frames this issue of the journal. He discusses some of the topics raised by the scientific naturalization project and embeds it into a broader framework of a more comprehensive understanding of naturalism than just physicalism.

Patterning itself so closely after the sciences, scientific naturalization abstracts consciousness and mind from our lived experience. This is why
there have been so many objections to the “at home” image that physicalism attempts to present – it suggests that our lived humanity appears to be inconsistent with our status as scientific objects. A careful appraisal of the sciences reveals that the line between appropriate scientific inquiry, which is one of the most momentous achievements of the human spirit, and scientism – the belief that scientific knowledge is the only justifiable knowledge there is – is delicate and sometimes easily crossed. Hampe argues that taking human experience, and human limitations, more seriously is important to properly appraising naturalization, along with its prospects and perhaps unacceptable consequences for the human image.

One cornerstone of the naturalization project is physicalism, the belief that everything ultimately is physical. William Seager examines physicalism’s successes and what he takes to be its singular failure: explaining conscious experience (the “hard problem” of consciousness). He starts out by distinguishing two forms of physicalism. Ontological physicalism maintains that the fundamental nature of everything is physical. Epistemological physicalism maintains that everything can be explained or understood in physical terms. Seager argues that epistemological physicalism has been tremendously successful everywhere except for consciousness. This explanatory failure blocks the inference to ontological physicalism based on explanatory success, and Seager offers a Bayesian argument that ontological physicalism isn’t well supported for explaining consciousness. This leads him to explore panpsychism as a viable alternative.

Steven Horst addresses reduction as another cornerstone of naturalization. Reductionism maintains that everything ultimately reduces to the most basic elements of physical reality. One of the most influential versions of reductionism is intertheoretic – the reduction of one theory to another, for example of thermodynamics to statistical mechanics. As Horst notes, valid cases of such reductions are much rarer than the philosophy-of-mind literature indicates. He diagnoses reductionism’s attraction and problems through cognitive pluralism, the view that, due to cognitive limitations, humans are only able to model features of the world by abstractions and idealizations.

Different pragmatic choices driven by a variety of explanatory goals lead to different models which, Horst maintains, lead to a severe disunity of scientific explanations. In his view, there isn’t only an explanatory gap between consciousness and physicalism (which Seager emphasizes). Such gaps exist all the way down, calling reductionism – both ontological and epistemological – into question. Horst compares cognitive pluralism to pluralism in ontology and theories, and discusses the implications cognitive pluralism has for ontological pluralism, consciousness, philosophy of mind, and the unity of the sciences.

Harald Atmanspacher surveys several 20th-century dual-aspect approaches, where mental and physical features of reality are aspects of
an underlying domain that has no mental-physical distinction. These approaches arose as alternatives to physicalism. Atmanspacher begins by presenting different forms of naturalism and physicalism which form the contrast classes to dual-aspect theories. Then he gives a detailed account of the dual-aspect approaches to mind-matter relations advocated by Bertrand Russell, Wolfgang Pauli and Carl Gustav Jung, David Bohm, and David Chalmers. Atmanspacher argues that although these are not physicalist accounts, they are still naturalistic in the broader sense that they invoke no “supernatural” beings or qualities. He concludes his paper with an analysis of how the different versions of dual-aspect thinking compare and contrast with one another.

Michael Silberstein argues that neutral monism is the most promising candidate among the alternatives to physicalism and connects this alternative with contextual emergence, a recently developed alternative to epistemic and radical/strong forms of emergence often discussed in the literature. Silberstein argues that the hard problem of consciousness is dissolved once contextual emergence and neutral monism are adopted in a suitable combination, yet to be worked out in detail. This framework, he suggests, holds new possibilities for a unified approach to the sciences that respects methodological and ontological pluralism. Perhaps the image of science as a disunified patchwork, promoted by some philosophers of science during the 20th century, can be proven wrong after all.

The major fault lines amongst the four authors seem to be as follows: (1) the current status of physicalism, intertheoretic reduction and the relationship between the two; (2) the question of scientific realism; (3) how best to taxonomize panpsychism, neutral monism and dual-aspect monism; (4) which of the preceding anti-physicalist accounts of mind is most promising; and (5) how best to conceive of emergence as an alternative to reduction.

Seager and Horst agree that the best reason to believe in physicalism is the supposed success of reductive explanations in the sciences. However, Seager seems confident that there are numerous successful reductive scientific explanations, whereas Horst follows recent work in philosophy of science calling this success into question. Horst is concerned about scientific realism, while the other authors are more optimistic to varying degrees. Atmanspacher and Seager are sympathetic to panpsychism, whereas Horst and Silberstein are less excited about it. Seager and Horst have reservations about emergence, Atmanspacher and Silberstein are supportive of it. Though, while Seager and Host favor radical emergence, Atmanspacher and Silberstein adopt contextual emergence instead.

Altogether, this journal issue gives both an overview of the contemporary state of play with the project of naturalizing the mind and consciousness and its different alternatives. Some of these alternatives – substance dualism and eliminativism – pale in comparison with neutral monism,
panpsychism and dual-aspect approaches. For each of the four main papers, the three other contributors offer their commentaries followed by the author’s reply. This dialogue brings out some additional strengths and weaknesses of the various approaches under discussion and lays the groundwork for continued exploration and discussion of the issues raised.

All papers, commentaries and replies in this issue of *Mind and Matter* display the quest for human understanding. Even though they are academic pieces of work, their passions and commitments, hopes and concerns shine through, as is always the case when we engage the human and our place in the material world. As many scholars have noted, there often is a disconnect between the kind of impersonal knowing that the scientific image presents and the desire for understanding that so dominates our manifest image of ourselves.

This desire is deep within us and ancient, and lies at the very heart of all forms of scientific and rational inquiry. And appropriate modes of feeling are critical to genuinely appreciating our world and ourselves, to interact with and learn from one another. As Hampe reminds us, the scientific naturalization project tends to leave out these quintessential aspects of the human quest for understanding to its detriment. This quest seems to have no place within the very framework of naturalization – including those pursuing it.

It is with sadness and appreciation that this issue of *Mind and Matter* marks the passing of Hans Primas (1928–2014) in October 2014. It is a tremendous loss in many ways to so many of us engaged in mind-matter research. He made original contributions to this field as he did to so many other areas of scientific and philosophical pursuit. With an obituary for him, this issue is gratefully dedicated to his memory as well as his inspiration. He provided a model for us all of what it means to be a profound scholar and a human being.