**Conclusion**

To conclude we briefly review some of the insights emerging from the genealogical approach to STS engagement with imaginaries offered in this chapter. We then return to the broader questions we began with: What is at stake in the investigations of imaginaries in STS? Why this turn in STS research?

The first two sections of this chapter (etymology and genealogy) have offered explorations of the rich hinterland of the concept of imaginaries. As such they should help both those using it and those observing its deployment in STS to have a better sense of the framing and parameters of these investigations. More specifically, our genealogical mapping highlights the plurality of trajectories and the diversity in the resourcing of this STS work. It also demonstrates that, with the exception of some feminist research, STS has been much more open to the traditions of socio-political theory than to psychoanalysis and science fiction as resources for the investigation of scientific imaginaries. Given this, our extended mapping is a reminder that there have been and there continues to be other ways into imaginaries. As such, our exploration constitutes something of an invitation to STS scholars to sample the breadth of this field.

Our identification and examination of key clusters of research both celebrates and ponders the recent flourishing in the pursuit of imaginaries within STS. The designation of clusters derived from the identification of common features, as well as diversifications, in key STS publications on imaginaries. While we struggled to find appropriate labels, we felt justified in proposing this cartography which foregrounds groupings characterized by their terrains of investigation (scientists, clinics, scientific communities/ national and institutional policies/ popular culture, technoscientific imagery), their research methods (ethnography; textual, comparative historical analysis; visual and cultural studies), and their registers (scientific communities, scientific practice; national, institutional and global identities; corporeality, visions of life, subjectivity and subject formation). By no means rigid and fixed, these could perhaps be thought of as fluid research assemblages.

One thread in the foregoing review was the foregrounding of methods employed in various STS imaginaries of technoscience. Jasanoff and Kim have emphasized the importance of comparative methods (latterly, particularly historically based comparisons) (Jasanoff and Kim 2009; Jasanoff 2015a) in STS research on imaginaries. However, Prasad (2014: 6) has warned that some comparative STS research reproduces, rather than challenges, ‘the West versus non-West technocultural divide’. As noted previously, he opts instead for a focus on ‘hierarchically entangled histories of technoscientific practices’ and advocates the use of deconstructive methods to avoid such binarisms.

More generally, new ways of exploring the performativity of imaginaries may be required. In this regard there are signs of methodological experimentation and adaptation including the use of focus-groups and memory work in Felt et al.’s (2015) study of the evolution of a distinctive socio-technical imaginary in Austria from the 1970s to the present. Moreover, given that imaginaries are far-reaching social phenomena, it may take something other than the conventional techniques of exposition and argument to conjure their features. Thus, it is not surprising that Haraway experiments with the form of her texts: dabbling with humour, shock, as well as playing with SF.

The review of these clusters and examination of exemplar research initiatives has shown that the pursuit of imaginaries is often presented as a vehicle for re-orientating STS. For example, Marcus (1995a, 3) regarded the notion of imaginaries as a tool for moving towards a ‘distinctly cultural study of science’—encouraging explorations of the tensions between scientific discourses and practices. Jasanoff and Kim (2009) called for STS to cast its investigative gaze beyond professional scientific actors and communities to analyze national cultures of technoscience, facilitated by their notion of *sociotechnical imaginaries*. More recently, Jasanoff (2015a, 5) has contended that such imaginaries are ‘not limited to nation states but can [also] be articulated by other organized groups, such as corporations, social movements, and professional societies’. The concept has also sometimes become the lynchpin for researchers’ ambitions for STS. Hence, Fujimura (2003) advocated the use of ‘imaginaries’ in forging ‘sociologies of the future’. Invoking imaginaries, Fortun and Fortun (2005) had aspirations for a new ‘civic science’ of toxicology and an STS ‘ethics and friendship with the sciences’.

Recent research on imaginaries has also been part of a more general shift within the field. STS’s earlier preoccupations with logic and epistemology have been supplemented, or, indeed, replaced with a much broader agenda which includes research on aesthetics, values, and emotions. So, for example, the sociology of expectations (Borup, Brown, Konrad, and van Lente 2006; van Lente 2003) and concern with hope, promise and hype (Michael 2000; Wyatt 2000; Brown 2003; Hedgecoe and Martin 2003; Hedgecoe and Martin 2008; Pollock and Williams 2010) have opened STS to the study of social and psychological investments and future visions linked to specific technoscientific developments.[[1]](#endnote-1) Moreover, whereas science and technology were formerly generally regarded as the domains of facts and artifacts, they are now as likely to be associated with [[2]](#footnote-1)storytelling, imaging, and imagining and, even, hyping.

Beyond strategic, ethical and methodological reorientations of the field, imaginaries are identified with normative aspects of technoscience. While interest in normative aspects of science and technology is not new, feminist and postcolonial scholarship has intensified this concern. In demonstrating how modern Western science has been implicated in gendered and post-colonial power relations, these movements have opened the field to studies of imaginaries (see esp. Prasad 2014). Imaginaries research also seems to bring a new humanist inflection to STS – concerned as it is with human vision, values, aesthetics, and power. Indeed, Jasanoff characterizes imaginaries research as ‘a profoundly humanistic inquiry’ (Jasanoff 2015b, 3), as a reaction against ‘the flatness of networks’ (Jasanoff 2015a, 21). More generally, engagement with imaginaries may also constitute a critical response to some exclusively materialist dispositions within STS, opening the field to psycho-social perspectives on science and technology and/or to investigations of the interplay between the imaginary and the material.

The flourishing of the concept of imaginaries also registers a more specific theoretical shift. Until recently, discussions of values within technoscience were generally handled through notions of ‘interests’ and/or ‘ideologies’. These have proven to be limited theoretical tools for pursuing the normative dimensions of science. These terms operate primarily in a cognitive register – neglecting affective dimensions (which have been a prime concern of social research in recent years). Moreover, both concepts are linked to distortion, misrepresentation, and manipulation, whereas invoking the imaginary allows for consideration of the productive-- of expectations, hopes, and dreams, as well as fears. It is these dimensions of technoscience and medicine which are increasingly attracting attention.

From this perspective, the circulation of the concept of imaginaries marks the relative decline in the deployment of the notion of ideology in STS research.[[3]](#endnote-2) Taylor (2004, 183) has noted that, while the concept of social imaginary could designate elements traditionally associated with ‘distorted or false consciousness’– which he associates with ideology, it may also entail ‘what we imagine can be something new, constructive, opening new possibilities.’ Haraway (2000, 77-78) has also cautioned that there is a need for precision in the use of the term ‘ideology’: ‘And we must remember the mythological and the ideological are not the same thing. It is important to keep the fantastic, the mythological and the ideological as three different registers of an imaginary relationship.’ As Haraway’s comment suggests and, as much recent cultural studies research attests, analysts have been pushing beyond representations towards much more complex accounts of meaning making and affect generation.

However, what might seem *de rigeur* in cultural studies may be more problematic in STS. In this regard it may be appropriate to return to Verran’s (1998), Waldby’s (2000), and Squier’s (2004) contentions that the denial of imaginaries has been a crucial feature of Western science and to assumptions about there being clear demarcations between fact and fiction or fantasy that may still linger around STS. Likewise, subjectivity is another domain that many may find uncomfortable territory for STS, even if Steven Shapin (2011) has nominated it as *the* new challenge for the field. While there may be unease about bringing subjectivity and fantasy into STS research, the concept of imaginaries may provide an avenue onto that terrain. If this is to occur, there may need to be more awareness of and recourse to the diverse repertoires through which the concept has emerged.

Finally, we must return briefly to inter-disciplinarity and to the breadth and scope of STS as these figure in recent deployments of the concept of imaginaries. The range and diversity of STS scholarship which pivots on notions of imaginaries is impressive. Our investigation has generated a sense of the many flowers blooming in this rich field. Our concern has been to broaden awareness of this complex development and to encourage further experimentation in STS investigations of imaginaries.

1. There are obvious connections between the sociology of expectations and the conceptualization of imaginaries in STS. However, the disciplinary specificity, the focus on particular technoscientific developments, and on orientations towards the future distinguish the former from the explorations of imaginaries considered in this chapter. [↑](#endnote-ref-1)
2. [↑](#footnote-ref-1)
3. Nevertheless, some STS researchers (as noted above) do use the concept together with the notion of imaginaries.

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