

fluences what I can observe, and my ethnographic account cannot be reflected independently from my person. In this sense, ethnographic methodology must be understood as a situated practice that considers all agencies that contribute to the research setting and, ultimately, knowledge production.

My research practice and data are the result of an intra-active exchange between myself and the biological *other*. While the scientific result is a positivist account, the field, as I render it, is socially constructed because I attend to the social, historical, local, and pragmatic factors that influence scientific knowledge production.<sup>43</sup> However, although scientific knowledge production goes beyond social constructivism, it is also the result of material engagement with actors and agencies, which I aim to reveal.

## 4.5. Conclusions

In this chapter, I have described the practices of preparation necessary for any process of data collection in the field. Although I began by outlining the living conditions of the biologists and myself during fieldwork and our daily preparations, my focus was to assess the role of situated enskillment. I aimed to draw attention to the role of peer learning in conducting evolutionary biological data collection in the field, as opposed to formalised training in universities. My goal was to emphasise that, while university education gives biologists access to the fieldwork in the first place by providing them with basic knowledge, this training is not sufficient, and enskillment in situ is always necessary. From this perspective, fieldwork is ‘down to

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Cf. Knorr-Cetina, *Epistemic Cultures*; Latour and Woolgar, *Laboratory Life*.

earth<sup>44</sup> and ‘situated’<sup>45</sup> because it is bound to the specific field. Thus, it is not a view from above but a view from below, or rather from within.

This is the case because fieldwork differs from study to study. Regardless of what might be suggested in scientific papers, fieldwork is highly specific, given the research conditions, research objects, hypotheses, and social dynamics of a team, all of which shape biologists’ practices. Consequently, to successfully collect data, the biologists had to undergo enskillment in the field. On the one hand, this enskillment occurs through practical training on the handling of tools, such as maps, equipment, binoculars, and notebooks. On the other hand, it is an embodied enskillment of the senses, and thus, also embodied enculturation.

Ultimately, biological data collection is shaped by the research conditions in the field. These conditions cannot always be controlled and are part of the research environment. Addressing them requires experience and sensory and practical knowledge, for instance, navigating the field and catching birds. The research would not be possible without this enskillment. These skills are part of a sensory knowledge seldom reflected on in the natural sciences and usually invisible over the course of knowledge production. Therefore, the research conditions and the bodily entanglement between the biologists and the research objects also disappear throughout the process. By attending to the practices of preparation, I have made the first step of biological fieldwork visible, adding one piece to the puzzle that will eventually produce the scientific results. The following chapter builds on this one, presenting another component of the research process, that of collecting.

44

Latour, *Down to Earth: Politics in the New Climatic Regime*.

45

Haraway, ‘Situated Knowledges’.

