A Practice-Theory Analysis of Scientific Editing by Translators

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International exchange of scientific knowledge today frequently happens through English, the lingua franca of science. Many international science journals publish exclusively in English, and scientists throughout the world aim to submit their research, written in English, in pursuit of international dissemination and reach. Moreover, the quality of researchers’ work is often judged institutionally in terms of their ability to publish in leading international journals. Increasingly, scientific publishers provide translation and editing services to their potential non-Anglophone authors. Elsevier, for example, offers English-language editing services, as well as a translation service between English and other languages. Elsevier’s editing services are offered at three levels and price points. For each of these services, the publisher’s undertaking is that the author’s manuscript will be edited by an English native speaker with a relevant scientific background, holding or studying for a PhD. Editors are described as having “excellent communication skills,” and they undergo “extensive training” and “frequent performance reviews” (“Language Services” n. pag.). Similar services are offered by other academic publishers, as well as a myriad of international editing companies; Editage is one example, among many.

Against the backdrop of extensive international demand for English-language editing of scientific papers, this article sets out to examine the practice of scientific editing as performed within a scientific research organization in a non-Anglophone European country. The editing in focus here is performed by language specialists who spend much of their working life translating, predominantly into English. This editing seems likely to share some char-
acteristics with scientific translation, while also resembling the technical editing done by monolinguals. The practices of in-house translators and project managers have been studied in commercial and institutional workplaces (see Mossop; Buzelin, “Independent” and “Translations”; Koskinen; Risku; Désilets et al.; Karamanis, Luz, and Doherty; Risku et al.; LeBlanc, “Translators”; Ehrensberger-Dow and O’Brien; Ehrensberger-Dow and Heeb; Olohan and Davitti; and Olohan, “Knowing”). However, the work of translators as scientific editors has not been examined in workplace studies to date. Where editing figures in some previous workplace studies, it is in the form of post-editing of machine translation, as part of the practice of translating. In parallel, research in the field of technical communication studies tends to focus on technical editing in monolingual settings (see Thompson and Rothschild; Wager and Middleton; Rice-Bailey) or “convenience editing” by English teachers in non-Anglophone settings (see Willey and Tanimoto). This article seeks to identify key features of scientific editing as performed by translators in an institutional setting. In doing so, it aims to contribute to establishing how this practice resembles and differs from those other practices.

The article offers a novel approach to the study of scientific editing by drawing on practice theory to conceptualize editing and translating. This conceptual approach is supported analytically with data gathered during a period of workplace observations in the language services department of an international scientific research organization. Following an introduction to the research setting, the three element types which constitute practices, namely materials, competences, and meanings, are characterized in turn, thus producing a materially aware and dynamic account of the practices performed by the linguists in the context of international scientific communication and publishing.

**Studying Practices**

Practice theory allows us to focus analytical attention on practices and the elements that constitute them. Understood as a set of sensitizing concepts for the investigation of human activity (see Nicolini, “Zooming”), rather than as a single or uni-
fying theory, conceptualizations of practice have emerged from the work of several influential thinkers, including Marx, Wittgenstein, Foucault, Weber, Bourdieu, and Giddens. I engage here predominantly with the contributions of scholars who have built on those foundations, sometimes referred to as the second and third generations of practice scholars. These include Schatzki’s Wittgensteinian account of practice (see Schatzki, *Social Practices* and *The Site*), Reckwitz’s cultural theory perspective (“Toward”), and several theoretical extensions and empirical applications (see Warde; Bräuchler and Postill; Shove, Pantzar, and Watson; Nicolini, “Practice” and *Practice*; and Jonas and Littig).

According to one widely used definition, a practice is a “nexus of doings and sayings,” organized by common understandings, teleologies (i.e., ends and tasks), and rules (Schatzki, *Social Practices* 89). Delving deeper into the nature of those doings and sayings, practices have been characterized as arrays of embodied human activities that are materially mediated and organized around shared practical understandings (Schatzki, “Introduction” 3). Reckwitz uses a different shorthand to describe a practice as a “bodily-mental routine” (“Toward” 256). More specifically, a practice, as a “routinized type of behaviour,” consists of bodily activities but also mental activities (knowing, understanding, emotions, motivations) and things, i.e., material and cultural objects (Reckwitz, “Toward” 253).

A key difference in conceptualization becomes evident from these definitions. Schatzki construes practices as being organized around material arrangements; the materials are not part of the practice but they structure it in various ways. The combination of a practice and related arrangements forms a practice-arrangement bundle. By contrast, other practice theorists, including Reckwitz, consider that objects, artefacts, materials, and bodily and mental activities are integral and constitutive parts of the practice.

The integration of materials as elements of the practice is a perspective also seen in the streamlined, three-element model offered by Shove, Pantzar, and Watson, where practices comprise three elements: materials (i.e., things, objects, infrastructures), competences (i.e., know-how, embodied skills), and meanings (i.e., symbolic meaning, socially shared meanings, cultural con-
ventions, expectations). Taking the practice of eating breakfast as an example (Maller 57), materials encompass the food and drink products, crockery, cutlery, and utensils involved in the practice. Competences include the embodied knowledge and skills employed in preparing, consuming, and cleaning up after breakfast, while its meaning is enacted through social understandings of when and how to eat breakfast. These interrelated elements make up the practice, as an entity that is recognizable and relatively stable. This practice-as-entity evolves from individual and varied performances of the practice in specific times and places (practice-as-performance) but is distinct from specific performances. By focusing on the practice entity, it is possible to study the constitutive elements of practices, follow their trajectories, and theorize about how practices endure or change. Although acknowledged as reductive by its authors, the three-element model has proven useful analytically for tracing the evolution of practices by enabling researchers to focus on the trajectories of these different elements, and their interrelations (Shove, Pantzar, and Watson 15). Following similar reasoning, the present analysis of practices also adopts an approach that considers materials, competences, and meanings as constitutive of practices.

As with other practice-theory concepts, scholars have proposed slightly different ways of accounting for relations between practices, although all emphasize the existence of interconnections. It is generally accepted that practices are bundled together in specific ways, their connections reflecting the ways in which life in one practice “hangs together” with life in another practice (Schatzki, Social Practices 202). Continuing to draw on the three-element model, Shove, Pantzar, and Watson consider connections between practices as being relatively loose or tight. Those combinations with loose connections are known as practice bundles. Practices may be connected in bundles by co-location and co-existence but also by other spatial-material or temporal aspects. The practices of eating breakfast and eating dinner, for example, may share material elements and may also take place in the same location. More integrated and “stickier” combinations of practices are referred to as practice complexes (Shove, Pantzar, and Watson 81). Practice complexes imply a co-dependence, e.g., necessary
co-existence or sequencing, synchronization or proximity, and the practices often become so integrated that the characteristics of the complex cannot be reduced to the individual practices that composed it. Shove, Pantzar, and Watson note how the practices of starting a car engine, signaling prior to a maneuver, and overtaking were once performed as individual practices but are now tightly integrated, through co-dependence and temporal sequencing, into the single practice of driving and are seldom treated as discrete practices, except briefly when someone is learning to drive.

Shove, Watson, and Spurling have been particularly interested in questions of how practices endure and change over time, with a focus on everyday practices and consumption. They argue, for example, that modern-day dependence on cars can be best explained by understanding both the trajectories of the elements (materials, competences, meanings) that make up driving as a practice, traced historically, and the interconnections between the practice of driving today and other practices such as commuting, shopping, raising children, and socializing (278).

Translation scholars increasingly draw on sociological theories to study translation as a socially situated act (see Wolf and Fukari; Wolf; Buzelin and Baraldi). A set of Bourdieuian concepts have been found to be particularly productive; these include notions of habitus, capital, doxa, and illusio (see Simeoni; Gouanvic; Inghilleri; Hanna). A smaller number of scholars have drawn on Luhmann’s social theory (see Hermans; Tyulenev), Gidden’s structuration theory (see van Rooyen) and Latour’s actor-network theory (see Buzelin, “Unexpected”). Practice theory, in the versions elaborated here, differs from other social theories in that it takes the practice as its unit of analysis, rather than mental structures, people, discourses, institutions, or social interactions. It decenters both the individual choices of human agents and the systems of norms to which individuals may conform or from which they may deviate (see Reckwitz, ‘Toward’). In other words, it assumes a middle position between methodological individualism and methodological holism (Postill 6).

Although some similarities can be drawn between current thinking on practice and the perspectives of earlier practice scholars, this generation of practice theorists also identify key diver-
gences. For example, Schatzki among others argue that nothing is prior to action but that both Bourdieu and Giddens theorize practices in such a way that those actions are assumed to be determined by habitus and structuration processes, thus overemphasizing the knowledgeable human agent (see Schatzki, *Social Practices*; Caldwell; Nicolini, *Practice* 68; Maller 56). Other criticisms revolve around the lack of empirical exemplification or analytical toolkit in Giddens’s work (see Nicolini, *Practice*). Both Bourdieu and Giddens are criticized for excluding objects and failing to treat materiality (see Maller; Reckwitz, “The Status”). In dealing with material agents, Latour’s actor-network theory draws attention away from questions of what the actor-networks are actually doing (Shove, Pantzar, and Watson 10). Its principle of symmetry of nonhuman and human agents is also problematic.

By viewing the social world as made up of practices, the analytical focal point of practice theory is the practices themselves. As noted above, this can usefully include a focus on the elements that constitute the practices, the interplay between those elements, and the interconnections between practices. A practice-theory conceptualization of translating or editing therefore offers scope to expand our sociological thinking about translation by decentering both the individual choices of translators and other agents and the sociocultural norms of translation. The focus, instead, is on the anatomy of the practice, breaking it down into constituent elements, tracing the trajectories of elements and practices and their mutually shaping influences. This approach would be particularly fruitful for examining how the practice of translating changes over time, by tracing the reconfigurations of materials, competences, or meanings that, in turn, change and reconstitute the practice. The practice-theory approach also facilitates an examination of the relations between translating and other practices.

**Language Services in a Research Organization**

Workplace observations constitute an effective method of gaining insights into professional practices as enacted by practitioners. Workplace studies of translation are still relatively sparse but steadily growing in number. Risku, Koskinen, and Buzelin
(‘Independent’; ‘Translations’) offer some of the earliest studies, investigating translation in commercial, institutional, and literary publishing settings respectively, from the early 2000s onwards. Translation project management is also a focus for Risku and other studies (see Olohan and Davitti), while the roles of translation technologies and ergonomics are examined in more recent workplace research (see Désilets et al.; Karamanis, Luz, and Doherty; LeBlanc; Ehrensberger-Dow and O’Brien; Ehrensberger-Dow and Heeb). Conceptually, these workplace studies draw on a range of frameworks, including ethnography, actor-network theory, extended cognition, and ergonomics. There remains considerable scope for such studies to be informed by a practice-theory understanding of translating and related practices.

This article therefore combines a practice-theory conceptualization with a workplace-based empirical study involving observations of translating and editing practices in a scientific research organization in a non-Anglophone European country. To preserve the anonymity of the research participants, potentially identifying features of the organization or its location are not described. The organization employs more than 5,000 people and its work is organized in 10 disciplinary institutes, each of which is further divided into 3-14 specializations. It has management structures and an administrative framework commensurate with its size; its administrative units cover the typical range of operations and infrastructure, i.e., IT, human resources, estates, procurement, finance, and others. They also include a language services department, employing three translators (referred to here by pseudonyms Anna, Barbara, and Caroline) and one administrator (Diane), positioned within an administrative unit concerned with “Infrastructure.” The institutional positioning of the language services department is relevant to our analysis and will be examined more closely in the penultimate section of the article.

In accordance with principles and procedures for ethical research, appropriate access and permissions were obtained to carry out workplace observations in the language services department of the organization in 2015. Workplace observations were combined with informal discussions about the work of the four staff members, during and between work sessions, for ex-
ample during lunch breaks. Fieldnotes were compiled following ethnographic principles (see Emerson, Fretz, and Shaw) and later thematically coded, using analytical categories linked to the three-element model outlined above. Since formal interviews were not conducted, quotations used below are from fieldnotes, i.e., my reconstructed narrative of what I observed or heard.

The translators translated predominantly into English from the language of the country in which the organization was located (henceforth Language A), but also revised one another’s translations, a practice referred to throughout this article as revising. In addition, they performed English-language editing of research articles drafted by scientists who were not native speakers of English—the practice at the heart of this study, referred to as editing. Their translation work encompassed a very wide variety of genres, from highly specialized scientific research articles to popular news items. In addition to translating genres whose purpose was to communicate scientific research to other specialists or a wider public, the translators worked on documents used in the administration of research, e.g., tenders, bids, and contracts, or in the organization’s management, e.g. strategy or policy statements, or in staff training, e.g., course announcements, training materials, feedback questionnaires. Their translations could be found in publications made available in hard copy as well as online and in mobile apps. Translated updates for staff, news, canteen menus, and newsletters were published on a bilingual staff intranet, while other translated documents were published on the organization’s website. Translation assignments ranged in size from a short paragraph of intranet news to an annual report of over 100 pages, with corresponding variation in lengths of time devoted to these tasks. Editing assignments were typically drafts of research articles but also included abstracts and conference papers.

The following analysis focuses mainly on the elements of editing, with the aim of characterizing that practice by understanding its constituent parts. The elements of the practice of editing are examined, organized into materials, competences, and meanings for methodological expediency. As each set of elements is considered, the ways in which those elements form connections between the practices of translating and editing will also
be identified. Where the two practices are closely connected, it is typically because they are linked by virtue of sharing some elements of practice, namely materials, competences, or meanings. In identifying those shared elements, the analysis characterizes some of the qualities of the “connective tissue” (see Blue and Spurling) binding the practices together. By identifying points of comparison and divergence in editing and translating practices in a scientific research organization, this article also explores the relations between translating and other practices that figure in the production and circulation of scientific knowledge.

Materials

In general, practice scholars do not distinguish between different ways in which materials figure in practices. A first attempt to examine the various roles of material entities involved in practices is offered by Shove, who categorizes them into infrastructural, device-oriented, and resource-based materials. These distinctions, explained below, are helpful in considering the ways in which materials figure in the practices of editing and translating, and in considering the connections between the two practices that are established through sharing of materials. This is a first attempt to identify the different roles that materials can assume in the practices of translating or editing. It also responds to calls from Littau and Olohan (“Translators” and “Science”) to move translation studies away from anthropocentric accounts and towards consideration of the material artefacts, technologies, and infrastructures that underpin translation.

All the practices enacted in the research organization can be said to be co-located. Elements such as the physical premises and the utilities, services, and networks provided by the organization fit into Shove’s category of infrastructural materials, also labelled “things in the background” (158). These infrastructural materials are defined as things that are necessary to a practice but do not participate directly in it. In the case of translating and editing in the research organization, the potential list of such materials is long. In addition to office space and furniture, it is likely to include heating, lighting, water, library resources, IT resources, and the internet. It
may also include communal areas, canteen, grounds, parking, bus service, roads, cycle paths, and so on. Many of these infrastructural materials also form part of the background against which other practices within the organization take place, thus creating a form of material link between those practices. For example, the practice of mowing the grass in the organization’s grounds, the practice of translating the organization’s annual report, and the practice of performing a nanoelectronics experiment may share some infrastructure. However, editing a scientific article does not require access to the nanoelectronics lab, and mowing the grass is not internet-dependent; thus the material links are relatively loose.

By contrast, translating and editing share infrastructural materials to a very large extent and are therefore more tightly linked. The two practices are co-located in the much smaller setting of the language services department. This comprises a small suite of neighboring individual staff offices and an administrative office which functions as a hub, all located on one corridor in one part of a large building. These spatial arrangements allow the linguists to move frequently during the day between their own offices and the hub, enabling them, in turn, to conduct face-to-face discussions and meetings, including revision meetings, in their offices and in the hub. The importance of infrastructural materials has been acknowledged to some extent in studies of science (see Latour; Traweek; Hacking; and Knorr Cetina). By contrast, the “things in the background” of translating have only recently attracted attention, notably from researchers interested in the ergonomics of translating (e.g., Ehrensberger-Dow and O’Brien). Infrastructural materials, as “things in the background,” warrant consideration because they are necessarily connected to “things in the foreground,” defined as things visible and actively used in the performing of a practice, also termed “things-in-action” or “device-oriented materials” (Shove 159). The importance of links between infrastructural and device-oriented materials can be observed from the following fieldnote excerpt:

Unlike the other linguists, Barbara has a small standing desk in her office, in addition to her main office desk. She explains that she can suffer from back pain so asked for this desk so that she can sometimes
work standing up. All her translating is done at her main desk, on computer, with a dual-monitor set-up, so obviously she is obliged to sit a lot of the time. However, translation revision is done on hard copies in the department, so Barbara can use the standing desk when she is revising, working with paper and pencil. I ask whether she had considered having a height-adjustable computer desk that she could use standing or sitting. She says she had asked for one but they were very expensive, so she got the second desk instead. It gave her the opportunity to switch between desks and working positions, something I observe her doing on many occasions.

Barbara’s translating and revising practices are thus constituted in part by the interplay between her embodied actions (standing, sitting), the infrastructural materials (furniture), and the device-oriented materials (computer hardware and software) that figure in those practices.

Translating and editing share many device-oriented materials. These “things in the foreground” include electronic files, paper files, job sheets, and task schedules, to name but a selection. Most of these materials also figure in Diane’s administrative practices, thus also establishing material connections between the project-managing practices enacted by her and the practices of the linguists. For example, the materials for translating and editing assignments are prepared by Diane, in the administrative hub and made available there, in hard copy folders, for physical collection by the linguists, who return these folders, with updated contents, to the hub on completion. The assignments and their attendant paperwork are then finalized and filed by Diane, again in physical folders and cupboards. In parallel to the physical documentation that moves between offices in the hands of individuals, virtual files and folders are also created and transferred between machines in offices. The materials undergo alteration as their role within the practice changes, and some movements of materials also involve conversion from one form to another, as noted in the following fieldnote excerpt:
Diane has a pile of paperwork for which the assignments have been completed but the paperwork is not yet ready for filing. She starts with the first one at the top of the pile. This is an assignment that has been returned by the linguists in the plastic folder. Diane removes the plastic folder. She completes the commissioning form, changing the date on the form because the assignment has been completed earlier than the target deadline originally agreed, and checking whether any other changes were needed to the information originally recorded about the job and client. She then goes to the scanner in the corridor to scan this final version of the commissioning form. She returns to her office and the scanned document has arrived in her inbox. She retrieves it from there and uploads it to the database and to the relevant virtual folder, having already deleted the incomplete electronic form. She prints the email that had confirmed delivery to the client. She makes sure that all the correspondence and the texts are in the physical folder. She then staples together all of those documents and places the bundle in a tray ready for filing in the big lever-arch folders later.

The hard-copy administrative documentation held for translating and for editing assignments is very similar. For translations, copies of the source and target text are filed, whereas only the edited text is filed for an editing assignment. The other material and spatial elements outlined above are shared, shaping the relatively tight connection between these practices.

However, some differences can be observed between materials employed in the translating practices and those of the editing practices. We may also note how those materials shape the practices and are shaped by them (Shove 159), by contrasting translating with revising and editing. Anna, Barbara, and Caroline translate at their main desk using a dual-monitor setup, with translation memory (TM) software and an integrated termbase displayed on one monitor, and internet search resources and reference materials on the other. Through their bodily movement,
the translators constantly interact with the software interfaces via keyboard, mouse, and their two monitors. By contrast, subsequent revising of translations is first performed on hard copies of translations, with pen and pencil, at a second desk. Revisions are then discussed in face-to-face meetings between translator and reviser, using another meeting table configuration. Following those discussions, the translator returns to her main desk to enter the revisions electronically via the TM interface.

Editing is performed differently. Since scientific authors generally use the LaTeX typesetting system to compose their documents, their drafts often have to be converted to Microsoft Word before the linguists are able to work on them. The conversion can cause difficulties; for example, in one of the articles analyzed, tables were presented in the draft document but several figures were missing, either because they had not been inserted into the LaTeX document yet or because they were lost in the conversion to Word. The linguists also receive documents in PDF format and sometimes have to edit a hard copy, annotating it by hand. When the texts for editing are available in an electronically editable format, as is often the case, editing is done in Microsoft Word at the main desk, using the review functions to track changes and to insert comments into the document. Supplementary reference material may be consulted during this process but is required to a lesser extent than when translating. The editing done by a linguist is not subsequently checked by a colleague, so there is nothing comparable to the hard-copy revision stage, and no face-to-face meetings about editing, and no need for reconciliation of versions within the language services department.

Even without going into further details regarding the use of software interfaces, search tools, web resources, etc., we can note that translating, revising, and editing share some but not all of their spatial/material elements, and that the materials can be seen to shape differences between practices. This has implications also for the competences enacted in and by the practices, to be discussed in the next section.

The third category of materials discussed by Shove are resource-based materials, namely materials that are used up and thereby reconfigured in the course of a practice (159). For ex-
ample, flour, yeast, water, and fuel are used up and reworked in the practice of baking bread. Of particular interest to Shove’s studies of consumption and sustainability are changes in status as materials are used and reconfigured. The idea of practices “making, repairing, adapting or somehow intervening in the lives and flows of things” (159) raises questions to consider regarding the translating and editing of texts. Although the energy consumed by translating could be of interest in a different kind of discussion, here it is useful to think about how translating or editing intervenes in the lives and flows of things. Those things are typically physical and electronic texts, files, and databases. For example, in the case of editing, a text—flawed in the eyes of its producer—is delivered by the author, worked on by a linguist in their editing practice, and returned to the author in a materially modified form. Arguably, clients may consider the practice of translation in a similar fashion; the translation may well be regarded as the reworked material output of a practice into which a source text was fed. Moreover, the file containing the source text is not returned to the client but in its place a file containing a translation is delivered, thus potentially contributing to a construal of translation as material exchange.

Clients may or may not be cognizant of the other objects and infrastructures that participate in the translation practice, so their view of translation as a site of material transformation or exchange may be restricted to the source and target texts. However, other material transformations also figure in the practice. As translating proceeds, termbases and translation memories are expanded with new terms and new translation units, so that these databases also undergo material transformation. These resources are used again for new translation jobs, and shared between translators, so materials accumulate but also circulate. Files and folders are created on computer servers, using up storage space. Physical spaces are also used up; Diane constantly adds to the lever-arch folders holding records of translation assignments, and the records expand into new folders when the existing ones become full, moving onto additional shelves in the floor-to-ceiling office cupboards.

Material transformation, exchange, and circulation in the research organization does not end with translation, as many of
the texts translated are destined for publication. Most texts are delivered by translators in files in generic office software formats. Further material transformations then ensue in the publishing practice, whether to produce a web page, the text boxes for a tablet app, or articles on the pages of a glossy magazine. An example of how materials, in turn, constitute and shape practices is observed in the problems encountered by the linguists who are asked to check the final proofs of the text they have translated for an institutional tablet app but who cannot easily do so because they do not have a tablet at their disposal.

Having seen how translating and editing practices can be linked materially and spatially, it is useful to consider how they may also be linked temporally, or via chains of action. For example, the sequential imperative of translating and revising is clear; revising a translation requires the translation to be completed first. In this language services department, which operates on the principle that all translation work is revised shortly after translation, these two practices are highly co-dependent. They co-exist, are in proximity to one another, and must be enacted in a sequence.

The practices of scientific authoring and translating or editing are linked more loosely, with some flexibility in sequencing. Authoring has to precede translating or editing, but authoring can happen independently of both, and further authoring may follow editing. The authoring and translation or editing of a journal article generally precedes submission to the journal. The following fieldnote excerpt relates to a paper which had just been edited by Anna, giving an indicative sequencing of authoring, planning for editing, and editing:

I could see from the email correspondence that the initial request came via email from the author a month ago, giving the approximate document length, of 5,500 words, the date of planned submission to the language services department, and the date on which the author wanted it to be returned to him. He was allowing 7 days for the editing, and giving a month’s notice of submission. From the later correspondence, it was clear that the author delivered the document two days
later than originally agreed, and the agreed return date was also shifted back by two days by the language services department, and this deadline was met.

Editing can alternatively follow on from the refereeing process, where it may be a pre-requisite for final acceptance and publication. Thus, translating or editing can operate as links in the chain of actions that lead to scientific publishing, but with some flexibility of timing, particularly for editing. Many members of this highly international research community also write their contributions in English and do not require translation or editing by the language services department. Given the collaborative nature of scientific authoring (also discussed below), it is also likely that some translation and editing is performed within research groups, i.e., elsewhere within or outside the organization. There is scope for future research to examine editing practices as performed elsewhere and to compare them with editing as performed by linguists.

These examples have illustrated some of the trajectories of materials and their transformations. Things, including texts, are necessary constitutive components or elements of the practices of editing, translating, and publishing. Their significance to the practices lies in how they are handled and interpreted (Reckwitz, ‘The Status” 210), for which a range of competences are also necessarily enacted.

**Competences**

Translation studies has a long history of discussing competence and has generated a proliferation of terms, definitions, and models relating to translation competence and translator competence. While earlier contributions tended to focus on linguistic competence, the notion of translation competence was expanded in the 1990s and beyond to incorporate other dimensions, resulting in several componential models (see, for example, Hurtado Albir) where linguistic competence features as but one dimension, alongside translational, intercultural, technological, interpersonal, professional, strategic, or other competences.

Underlying the lists of competences and subcompetences of such componential models is a notion of knowledge as something
that is encoded and can be acquired through transfer from one brain to another. Competence is regarded in a relatively static way, with the models offering relatively little empirical or conceptual insight into the dynamics of competence development. Kelly and Kiraly both argue that these views of competence have led to training curricula that are compartmentalized and reductionist. Kiraly proposes a more dynamic modelling of translator competence development, and works with an understanding of competence as something that emerges, dynamically and unpredictably, in authentic situations through active and embodied processes. This represents a refinement of his earlier contributions on social constructivist approaches to translator education, and is encapsulated in this description of how competence emerges in work placements:

The professional work done in the workplace can be seen to be comprised of multi-phase and multi-dimensional authentic projects, through which disparate knowledge and skills evolve in a largely spontaneous and indeed chaotic fashion as the placement student progresses from one project to the next. (Kiraly 139-40)

This view of competence is much more closely related to the practice-theory perspective, where competences are defined as “multiple forms of understanding and practical knowledgeability” (Shove, Pantzar, and Watson 23). Practice theorists focus on “knowing-in-practice,” i.e., knowing that is not prior to practice but rather emerges in and through practice. Knowing is therefore understood as embodied, relational, collective, and emergent, to an even greater extent than in Kiraly’s depiction or in other recent accounts of situated learning in translation studies (see González-Davies and Enríquez-Raído) or notions of extended cognition (see Risku and Windhager). Perspectives on knowing-in-practice in the domains of telemedicine, product development, and engineering offered models for the analysis of the situated, embodied, and collective knowing that emerges in the translating practice enacted in this language services department (see Olohan, “Knowing”). Drawing on that practice-theory understanding of competence, this section examines how competences
participate in the editing practices, identifying where shared competences create connections between editing and translating.

Given that some materials are shared across translating and editing practices, competence in handling those materials is also shared. Central to both practices is the enactment of language-specific and genre-specific understanding. English-language editing is usually focused on a single genre, the research article, so would not require mastery of the broad range of genres encountered by the linguists when translating. However, in both translating and editing research articles, the linguists enact a knowing-in-practice that enables them to produce research articles that will function as such, in specific communicative situations. Both translating into English and editing in English require the genre-specific understanding to be language-specific too. Other forms of competence that feature prominently in practices of both translating and editing include understanding of scientific ideas, from a range of specializations. In translating, knowing also revolves around domain-specific research and terminology retrieval. This knowing comes into play, but to a lesser extent, in revising translations and in editing; the reviser generally relies on the thorough research carried out by the translator, and the English-language editor similarly relies to a large extent on the author’s familiarity with specialist concepts and terms. Competence in working with the organization’s chosen TM software is central to the translation practice, and is also employed in the final stages of the revising process, but is not relevant for editing. A range of other document repositories and reference resources are used skilfully by the linguists in the course of both practices.

As analyzed in Olohan (“Knowing”), the skillful coordinating and balancing of the group’s workloads is shared interactively within the team, with constant review and negotiation of assignment allocations and adaptation to changing circumstances. The revising of translations was also seen as a particularly salient site of relational knowing, enacted through the negotiated understandings of the text that emerge from joint discussions between translator and reviser, which also require both parties to exercise specific embodied and interpersonal abilities. These forms of knowing emerge as integral to the practice of revising as conducted in this organization.
Relational knowing is also in evidence in English-language editing, although the human interaction proceeds very differently. In editing, the interaction is between the editor in the language services department and the author who is external to the department. The following fieldnote excerpt indicates one particular function of that interaction: “Sometimes papers are received for editing which have been rejected by a journal on the basis of their English. Anna comments that post-rejection cases can require, not just editing assistance, but also what she calls ‘psychological support.’” This remark highlights Anna’s knowing-in-practice relating to procedures, pressures, and perceptions of scientific publishing, and the relational nature of her editing competence, whereby editing is not merely manipulation of text on a computer screen but interaction with an author towards a shared purpose. This is made more explicit as she talks about how the interaction happens: “A small number of scientists arrange meetings to go through the corrections on their papers in detail, while others might come to discuss specific points. Discussion can also be via email or comments on the text.” It is the latter form of interaction that I observe in the workplace as the linguists complete editing assignments. I also study the material traces of that interaction in previously edited and annotated texts. In the case of these electronically edited texts, interaction is accomplished using Microsoft Word’s reviewing functions. The linguists demonstrate their interpersonal ability via textual manipulations and comments. Examination of a selection of edited documents shows that the communication between authors and linguists is two-way, and bilingual. The interactions serve a number of purposes. Most commonly observed, authors use in-text comments to express their uncertainty about their choice of expression, to ask questions about how something is understood or should be written, and to explain in Language A what they had intended or would like to express in English.

In one text, for instance, the author uses a comment to ask for specific advice about usage: “For all the words highlighted in green, I’m unclear when I should use the ‘ing’ form or the infinitive. I would be pleased to receive an explanation” (my translation here and in the examples below). As Anna, the editor, encoun-
ters those highlights, she offers explanations in comment format, for example, in correcting *is used creating scenarios*, she notes that “to use is always followed by the infinitive.” For *in order to achieve*, also highlighted by the author but not requiring editing, Anna explains that “it is always *in order to*.” Similarly, for the highlighted *to be able to use*, she notes that “to be able to is always followed by the infinitive.” Explanations for the latter two instances and others within the text are offered for formulations that have not required correction, but for which the author had requested advice. In his email correspondence accompanying the draft paper, the author also asks explicitly for feedback to improve his level of English. Anna, in addition to returning the edited text, offers advice on the use of definite articles, colloquialisms, tenses, prepositions, nominalization, and sentence structures. This elucidation of points of English grammar not only serves to explain the corrections made but also performs an additional function of encouraging the author to learn and improve his language usage and to avoid similar problems in future writing:

Anna shows me an English grammar book that she finds useful. It explains English grammar through the medium of Language A and she says that sometimes she scans a section or two and sends that to authors, to help them to improve their understanding and usage.

Elsewhere, an author describes their own English-language expressions as “contorted” or “awkward” and asks their editor if they can think of a better formulation. Other comments made by authors refer to their inability to express an idea in English; they use the comment to say what they had intended to express in Language A. This kind of interaction in Language A, or in a combination of Language A and English, makes this editing practice different from those provided by the scientific publishers or the editing companies, which are focused on production of English, with no direct reference to other languages in which the authors may be more proficient. By contrast, the authors in this research organization assume that the linguists understand Language A and explicitly call on the linguists’ ability to translate from that lan-
language into English. Individuals, as hosts or “carriers” of practices, are thus also “crossing points” of practices (Reckwitz, “Toward” 256), that is to say, they carry out many different practices and they constitute a point where the practices meet. It is evident that the linguists of the language services department are crossing points of scientific translating and scientific editing, with bilingual competences shared by both practices. This is also an instance of what Shove, Pantzar, and Watson describe as “cross-practice creep,” as the linguists’ competences move between the two practices (52).

As a final example of in-text interactions, the texts examined contain several instances where editors make changes to the text in their editing practice but add a note to the author to indicate that they are unsure of their changes or unsure if they have correctly understood what the author had intended to express. Through these author-editor interactions, the commented text represents emerging collaborative knowing, constructed through the initial drafting of the scientist and the commenting actions of both scientist and linguist. The next section explores the meanings of this practice from the perspective of multiple authorship and institutional jurisdictions.

Meanings

In discussing meanings, the third of the three elements of their model of practices, Shove et al. focus attention on the meanings carried by the practices within the social order, considering aspects such as the relative positioning of practices and the dynamic status of practitioners.

One avenue for examining meaning-related connections between translation and editing and other practices in this institutional setting is to consider the issue of jurisdiction, defined as “the abstract organization of expert tasks” (Blue and Spurling 30). Here we look at how the language services department is positioned institutionally. It sits, conceptually and physically, in the “Infrastructure” unit in the organizational structure. Also housed in “Infrastructure” is the organization’s library service, its publishing house, publications portal, and information portal. Thus, “Infrastructure” combines services that provide support for research
activities, in the form of documentation, publication, and information management, including language services. This positioning of the language services department reflects and perpetuates an institutional understanding of translating and English-language editing as closely connected to research and information management, akin to the library and publishing services. The language services department also shares a building (and other infrastructural materials) with some of those other research-support services, including the library, thus creating links in spatial-material terms too.

The research organization also has an “External Relations” unit, in which a corporate communications department is located. That department deals with media and press relations, marketing, and news publications. It is responsible for producing a wide range of institutional publications (newsletters, magazines, intranet), i.e., much of the material that is translated into English and then published in both languages. It would be feasible for the language services department to be housed within that unit, as support for corporate communications and external relations. It is arguably significant that it is instead positioned as infrastructural support for research, thus institutionally aligned more with research practices than with external relations practices. This juristicational division can be a source of tension and conflicts, as illustrated by an incident related by Barbara:

For one of the newsletters that the language services department had translated recently, someone in corporate communications had made changes to the English text after the proofs had been checked by the linguists, thereby introducing errors into the text. The linguists were very annoyed when they saw this, to the extent that they resolved that they would insist that the credit to the language services department be removed from future publications if that kind of thing happened again.

The representation of the language services department on the institutional website also positions the practices of translating and editing as aligned more closely with research activities than ad-
ministrative services. The linguists are listed on the departmental webpage with their BA or MA degree titles and their working languages. Visually, this differs from the list of staff in the corporate communications department, who are presented by name and with a corporate-style photograph. Of course, this difference in visual presence and representation could simply be the result of the challenges of harmonizing websites in a large organization. However, the signaling of academic qualifications and linguistic capabilities of the language services staff resembles the presentation of research staff, for whom academic expertise plays a central role.

The importance of the symbolic meanings of jurisdictions is reflected in the publishing of the organization’s newsletters, reports, and brochures. These are translated into English, and the publication details given on the translated document follow a similar pattern each time. Members of the corporate communications team responsible for conception and editorial work (in Language A) are listed by name, thus attributing credit to the individuals involved. The credit for the language services department follows, and this always acknowledges the department as a whole, with no individuals named. This elision of individual contributions into a departmental one gives visibility to the department, institutionally and externally. It may also reflect the collaborative nature of translating and revising, and the notion of “multiple translatorship.”

The idea of multiple translatorship has been developed along similar lines to multiple authorship (see Stillinger), a concept encountered more in the context of literary production than in scientific domains. Multiple translatorship draws attention to the numerous parties who may be involved in translation production but who may not typically be granted visibility in publishing or in research (see Jansen and Wegener). The myth of the single author, and by extension the single translator, prevails in literature. However, collaboration between scientists in research and writing is the norm, and this aspect of multiple authorship is typically made more visible in scientific publishing through a list of collaborating authors. Teixeira da Silva and Dobránszki offer an in-depth insight into how scientific authorship is variously defined in codes relating to the responsible conduct of scientific research. There is tension between, on the one hand, a notion of au-
Authorship that is restricted to “scientists who had an important and essential (i.e. irreplaceable) intellectual contribution” and, on the other hand, a more inclusive notion of authorship encompassing “individuals within a team who have contributed an active task that is essential (i.e. nonredundant) to the completion of a project, even if they are replaceable” (97). While editing appears to fit within the latter definition, contributions to the writing of a paper alone tend not to meet authorship criteria for most publishers and organizations. Occasionally, those who make contributions such as technical editing, language editing, and proofreading are deemed to be “contributors” and are formally acknowledged as such. However, most publishers consider that contributors must have participated in “certain substantive aspects of the research project” (Teixeira da Silva and Dobránszki 102). Although definitions for “substantive” or alternative formulations are seldom offered in journals’ publishing policies, it is clear that editing is not regarded as fitting into this category of contribution. It is not conventional for journal articles to attribute authorship to language editors or to acknowledge their work. The contribution that linguists in the language services department make to authorship is thus hidden from view.

Conclusion

The dominance of English in academic and scientific domains has long been criticized, e.g., by Swales when he referred to English as Tyrannosaurus rex, “a powerful carnivore gobbling up the other denizens of the academic linguistic grazing grounds” (374). Similarly, Bennett drew attention to the suppression of non-Anglophone rhetorical forms and systems of knowledge by translators who superimpose Anglophone conventions and epistemologies on the work of non-Anglophone scientists (see “Epistemicide”). Both Swales and Bennett advocate resistance to the “triumphalism” and the hegemony of English academic discourse, on the part of English teachers and translators respectively. Translators, it is argued, need to have a finely honed understanding of the epistemologies and genres at stake, so that they can subvert the hegemonic discourse where they have the opportunity to do so.
This study of the institutional practices of translating and editing highlights the dominance of the hegemonic discourse; authors and editors collaborate towards a shared aim of publishing and, rather than resist, challenge, or subvert, they typically conform to a shared understanding of the genre of the Anglophone journal article.

An early workplace study in the publications unit of a large government agency (see Thompson and Rothschild) showed that its editors made efforts to communicate with their authors to gain trust and approval for their changes. The efforts made by editors and authors to establish channels of communication are also in evidence in the research organization studied here. In a survey focusing on the author’s perspective on editing, Eaton et al. found that some authors like to discuss problems with editors and have face-to-face meetings during the editing process. Likewise, I noted how the linguists in the language services department worked collaboratively with their authors to help them to understand the changes made to their text, whether through in-text comments, email correspondence, or face-to-face meetings. Furthermore, they demonstrated their motivation to help the authors to improve their writing for the future, offering both linguistic and moral support.

Studies such as Lanier’s, focusing on technical editing in a monolingual environment, highlighted how authors can react negatively to editorial interventions or consider some changes made to be superfluous or without sufficient justification. However, the bilingual nature of the editing done by translators exhibits key differences when compared to editing in monolingual environments. In the language services department, translating and editing are practices closely connected by an array of material, spatio-temporal and competence-related elements. The bilingual editors exercise their linguistic authority and expertise in both languages through their interventions and comments, and this is typically not challenged, but is rather expected and relied upon by the authors. Moreover, the jurisdictional positioning of language services as research support highlights the symbolic meanings carried by those services within the social order of the institution. Here, translating and editing, as collaborative and specialist practices, are connected to research and publishing, not just in spatial-material and tempo-
eral aspects but also in institutionally shared understandings of how the practices are organized and made visible.

If authors in the research organization under study resort to scientific publishers who offer an English-language editing service as part of their publishing practices, the editing would no longer be co-located with scientific authoring but externally, with the commercial publisher. The potential absence of shared materials, competences, and meanings is likely to have implications for the constitution of the practices themselves; this would merit further investigation by comparing those editing practices, which are necessarily monolingual, with editing performed by translators.

Practice scholarship, finally, is a new but potentially fruitful approach to researching translation and related practices. This kind of analysis, centered on editing but also identifying some of the connections between editing, translation, and publishing, focuses on the interplay between materials and the activities of human practitioners. It also considers how materials (such as devices, resources, or infrastructures) are transformed, reworked, adapted, and circulated in and through practices. It thus provides a conceptual toolkit for a materially aware and dynamic account of practices. Given the ongoing and far-reaching evolution of translation and related practices, the potential of this approach to describe and explain changes in practices makes it particularly useful for further application in translation studies.

Works Cited


