The articles in this special issue of *Medicine Anthropology Theory* make a powerful argument about the heterogeneity of therapeutic apprenticeships: learning to be an expert within a healing or therapeutic context, whether doctors, shelter workers, or mental health therapists. All five authors are anthropologists, two of whom (Wong, Baim) are also physician-anthropologists who reflect upon their own training, compared with that of the apprentices in their research. Sharing detailed ethnographic vignettes, the authors offer innovative approaches to therapeutic apprenticeship in multiple contexts across the globe. They examine embodied practices of ophthalmology trainees in the US learning to discipline their bodies and eyes while also marvelling at what they see; workers in Mexican migrant shelters developing ‘shelter vision’ as they learned to see and see past the traumas of their migrant guests; budding therapists in a French mental health centre for migrants and refugees dealing with the uncertainty of learning to hear patients’ voices as they converted clinical information from professional therapists into documents; Ukrainian female doctors horizontally segregated into non-surgical specialties by learning to practice a ‘beautiful medicine’ that aligned with national notions of femininity, motherhood, and care; and surgical trainees in China striving towards meeting unattainable national expectations in a perpetual ‘cruel apprenticeship’.

The process of apprenticeship is frequently complex, requiring hundreds of hours to become expert. Anthropologists have long engaged with the learning process
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and the development and mastery of expertise. Some scholars have considered the process of becoming skilled as requiring an immersion in the ‘practical world’ that involves a collection of actors, rules, and communities (Pálsson 1994, 902) where apprentices learn both technical and social skills (Prentice 2007). Learning to think like an expert is contingent on learning to read, talk, and write like one (Mertz 2000) and consciously presenting oneself as an expert to others (Erickson 2008). Other scholars (Carr 2010) have defined apprenticeship as a period of intensive interaction with objects of knowledge and with people who have mastered them. Collaboration, intentionality, observation, and fine-tuned mimicry have been described as central to this process (Carr 2010; Gieser 2008; Pálsson 1994). Apprenticeship usually involves some degree of bodily engagement, often through scaffolding techniques (Gieser 2008) that create bodily proximity between apprentice and expert, whether that is literally shifting from bodily sensations of nausea to confidence (Pálsson 1994); creating skilled vision (Grasseni 2004); or producing caring ties between doctors and patients (Underman 2020). Some scholars have focused on the centrality of language to becoming expert (Mertz 2000), where apprentices learn not only the effects of their speech but also what strategies to use as they speak (Carr 2021). As Carr (2010) argued, expertise can be displayed through an enactment of authority, as well as through language (such as the use of jargon or acronyms) and symbols (such as uniforms or gestures). Thus, apprenticeship is a complex process requiring active engagement and discernment (Grasseni 2004).

Many apprentices within the medical field learn to internalise the values of medicine, such as being efficient and getting things done (Lazarus 1988) or learn to value certain forms of knowledge as they enact their expertise and authority in front of others (Wayland 2003). Scholars have shown how expertise can often emphasise skills while also learning how to incorporate intuition (or hunches) into one’s practice. These hunches can be difficult to verbalise and explain to others, but experts learn to recognise them as an important part of their skillset and decision-making process (Pálsson 1994). For example, when attending during childbirth, midwives have been described as listening to and following their inner voice rather than solely working within protocols (Davis-Floyd and Davis 1996). Intuition can be a powerful way to subvert authoritative knowledge, especially among alternative care providers who work within and outside biomedical systems that build, reflect, and normalise power relations within a community of practice (Jordan 1997).

What most scholars agree on is that apprenticeship is the process of becoming expert. To some degree the former self is broken down in this process and the new practices, tools, or texts become vehicles to teach initiates to ‘think like’ experts (Mertz 2000). Encounters between apprentice and expert allow the former to
present themselves as colleagues rather than subordinates by making themselves look more professional and competent, using technical language, and being more assertive in their approach (Erickson 2008).

The articles in this special issue engage with many of these previous ideas around apprenticeship, while also expanding beyond them, adding complexity to this scholarship. This includes examining contradictory concerns about belonging and uncertainty, seeing and unseeing, empathising and distancing, essentialised or fashioned practice, and emotional or bodily skills. The authors do this by engaging the boundaries between apprentice and expert, the instruments of apprenticeship, the affective and sensory elements of apprenticeship, and valued knowledge(s).

Each of the articles discusses the boundary between the apprentices and the experts, whether examining how enskilment shifts as apprentices move towards expertise or how apprentices might be caught in structural boundaries within the system. Bonnie Wong describes how surgical training is situated in the national imaginaries of the Chinese state and is unbounded by time or institution, leading to surgical apprentices feeling precarious and constantly evaluated. The boundary between novice and expert was porous, where trainees were expected to produce something beyond just good health for their patients and instead also align with China’s ‘technonational aspirations’ to compete with the international scientific community. As other scholars have described, it is evident that technical skills are only a small part of what these surgeons were expected to learn (Prentice 2007). Unlike other research on surgical training, however, which shows that apprentices learn by participating in a bounded experiential form of practice (Jensen et al. 2018), Wong’s work showcases how surgical apprentices felt unmoored by the lengthy nature of training. This length not only necessitated countless hours of hands-on skills but also attending to national mandates about becoming good doctors, making their work count beyond the patient, and collecting data for publication in international journals. These apprentices carried the burden of becoming experts, while also fearing bringing shame to themselves and their profession if they did not comply with these expectations.

David Ansari’s article powerfully illustrates how apprenticeship allowed mental health apprentices at a Parisian mental health centre for migrants and refugees to understand how the learning process and the movement into membership were socially constitutive. What was especially fascinating from an anthropological perspective was that the centre incorporated central medical anthropology concepts (e.g., illness versus disease; explanatory models) into their training, expecting all apprentices to engage with and apply them in caring for their patients. One of Ansari’s key contributions is the idea of a ‘paper patient’, where apprentices were expected to take the richness of the patients’ voices and narratives and
flatten them into the documents and forms. It was evident that even though the therapists-in-training loved the work they did, they felt uncertain and tended to struggle with the boundary between the complexity of patients' stories and the need to condense them into legible documents for their supervisors.

Other articles describe how the boundaries in the apprenticeship were more subtle. Maryna (Bazylevych) Nading describes how female physicians navigated the boundaries between surgical specialties deemed too physical and embodied (and too masculine) and non-surgical specialties considered clean, artistic, or refined (and feminine). She analyses Ukraine’s ‘cult of motherhood and family’ where how, paradoxically, despite over 70 per cent of Ukrainian doctors being female, there was marked gender segregation of women into particular specialties. Like the surgeons in Wong’s work, who were expected to align with national mandates, these doctors also worked within a system where they learned that particular types of clinical labour amplified their social roles as mothers, extending their social roles as mothers to the nation. In the process, most learned to accept the essentialised notion that their bodies belonged in some spaces and not others.

Experts are embedded in ongoing practices and interactions and can either display a tacit or explicit pedagogy to apprentices. The articles in this special issue illustrate that, while apprenticeship might overtly focus on the transfer of a skill, there is also a wider transfer of associated attitudes and behaviours acquired by seeing experts perform the inalienable property of the craft (Gamble 2001). Many of the technical skills in these settings are transferred in an explicit and active manner to apprentices, such as how therapy apprentices in Ansari’s ethnography were taught to use documents to present cases, or how the US ophthalmology students described by Baim in his article on learning to see in ophthalmology learned to use the slit lamp or the ophthalmoscope and lens. Boundaries are evident in how they had to shift from the jerky, inexpert bodily comportment of the novice to the smooth and practised comportment of the expert.

In other contexts, the attitudes and approaches are more tacit and transferred in a less overt way, such as how shelter workers in John Doering-White’s article learned to cultivate emotional restraint and a certain insensitivity to the trauma experienced by the guests who were using the Mexican migrant shelter. He describes how the shelter workers cooperated and learned to see past the migrants’ scripts and (not) see their trauma by participating in explicit moments of enskilment and apprenticeship. He argues that ‘shelter vision’ became a way for aid workers to tacitly refuse to engage with the assumption that migrants are toxic—whether as victims or victimisers. The shelter workers had to negotiate the boundary between their understanding of the migrants’ realities while balancing
the need to not be seen by the outside world to explicitly condone some of the migrants’ actions.

Some of the authors in this issue showcase communities of practice among therapeutic apprentices (Lave 2011), which offers a powerful framework for recognising and explaining paradoxes and incongruences in therapeutic apprenticeship (Egan and Jaye 2009). Adam Baim describes how apprentice ophthalmologists learned to train their hands and other senses to see the eyes of others through their own sight as they transformed into ‘visual experts’. He shares his own vulnerabilities and fears as a trainee and addresses the troubling incongruity regarding how ophthalmologists are expected to have perfect vision themselves while being dedicated to improving that of their patients. Other authors in this special issue, such as Wong, add nuance to understandings of communities of practice by emphasising trainees’ perpetual apprenticeship. Her article shows effectively how surgical trainees felt stuck on the periphery because the national image of a ‘good doctor’ was unattainable and became an obstacle to their becoming experts. They thus learned that knowledge was ever-changing and highly dependent on the larger context shaping what would happen next (see Carr 2021).

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A second theme in these articles encompasses how apprentices used instruments in their work. In their journey to expertise, apprentices build ‘an intimate relationship’ with cultural objects (Carr 2010, 20), coordinating their sensory knowledge (Harris 2021). The aim for an apprentice is to gain a state of unity between the user and the tool in order to create a fusion of two beings with one perception (Gieser 2008). The engagement with these cultural objects confers value and expertise on the user (Carr 2010). In Wong’s work, surgery was seen as a representation of modernity because of its use of technology and up-to-date facilities. The apprentices in Baim’s article learned to use ophthalmology tools to examine people’s vision while simultaneously relying on their own sight. Baim provides detailed descriptions of the very intricate and precise relationship between apprentice ophthalmologists and instruments. Not only did apprentices spend significant time practising, to get a feel for the instrument, they needed to learn the sometimes counterintuitive ‘simultaneous alignment’ of several elements, including language (learning to give instructions to patients); the position of the light, eye pieces and lens; and the alignment between the examiner’s and the patient’s head and eye.

Some of these articles describe the handling of paperwork as instruments that apprentices used to classify and archive the stories of their patients or guests. Many of these institutional systems are structured so that even the most well-
intentioned practitioners feel pressured to filter through people’s narratives in order to reduce the complexity, find the vital information, and record it in forms (Colas 2020). Although forms can be important training tools, they sometimes provoked uncertainty. The forms used by the apprentices in Ansari’s research created uncertainty as the therapists-in-training were taught to edit out information that was not considered relevant. However, because of the emphasis on the paper forms rather than on the patient voices themselves, the therapists-in-training did not feel like apprentices. They did not gain unity with these forms, instead rejecting them as part of their apprenticeship. The shelter workers described by Doering-White, however, had a different relationship to paperwork than that of Ansari’s therapists-in-training. The shelter workers learned to work through intake forms in an expedient manner because taking more time would affect how quickly and efficiently the shelter was able to keep up with the number of daily migrant guests it received. While both the therapists-in-training and the shelter workers had to flatten narratives into text, the latter learned to be pragmatic, balancing ‘speed with care’, not listening to all the stories of trauma or getting to the bottom of the issues that their guests described. The use of photos in the intake process was interesting, as it opens up questions about whether surveillance is (un)consciously part of this ‘shelter vision’, and how workers use the images alongside the intake forms.

As part of the tools of enacting expertise, apprentices also must master a register—for instance, specialised language, terminology, jargon, and facial expressions (Carr 2010). The apprentices in these articles learned to present to others: showing their formal abilities with tools or paperwork, interacting with patients or guests, or presenting themselves as moral participants in the national imaginaries. The surgical residents in Wong’s ethnography learned to transform the value of their patients into cases, publications, or metrics that could be read and evaluated by the international medical community. In contrast, the female doctors in Nading’s article learned the unwritten rule that some bodies belonged in some spaces and not others. If they transgressed these rules, they would be reminded through the hidden curriculum (for example, by being ignored by male doctors) that they did not belong.

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These articles also describe the bodily, affective, and sensorial components of apprenticeship. Baim’s article describes how ophthalmology apprentices learned to see the eyes of their patients, which were produced as relational phenomena. He uses vignettes to show how the apprentices loved being recognised as experts and how they felt especially proud at being able to do something that was inaccessible to others. The sensorial was clearly evident in the awe the residents
felt when engaging with the eye. Vision is an embodied skill rather than a detached gaze that connects to other sensorial skills in the process (Grasseni 2004). The apprentice ophthalmologists learned to engage their own sensory disciplining where vision was both an object of scrutiny and a lived experience.

Both Baim and Doering-White overtly use terms related to sight in their articles. One could ask whether seeing for these apprentices is a process of seeing the whole, integrated person—or is this, as Taylor and Wendland (2015) suggested, a process of unseeing: paying attention to what is considered ‘important’ while ignoring what is not? That is, apprentices often learn to see past and ignore the social and economic circumstances of patients or migrant guests because this information would generate uncertainty in the apprentices themselves ‘as to the potential causes and treatments of the [person’s] problem within [an institutional] framework’ (Holmes and Ponte 2011, 172) as well as about their own knowledge and skills. Unseeing is especially evident in Ansari’s work when he describes how the process of distilling referral information was sometimes overwhelming for therapists-in-training, as they had to learn to focus on the information valued by senior clinicians, while unseeing other details. The female doctors in Nading’s research seemed to consciously unsee the national strictures about essentialised forms of medicine that they should practise. Among the shelter workers in Doering-White’s research there was a curious mix of deep empathy and lack thereof in their engagement with their vulnerable guests, where they detached from the minutiae but embraced the larger political action of caring for migrants. Workers developed skilled shelter vision as they learned to see past the traumas experienced by the migrants by being somewhat insensitive to them. Doering-White provides insights into his own socialisation and describes shelter vision as an embodied and tacit form of competent looking where the workers learned how to respond to the ambiguities surrounding the lives, experiences, and choices of the migrants passing through the shelter.

These articles showcase the emotional journey of apprenticeship, whether awe, elation, fear, or frustration. Wong skilfully describes how surgical trainees felt immense pressure because they were torn between using their time to develop skills, see more patients, or collect data to write manuscripts. She uses the term ‘buffeted’ to describe their lack of agency and their apparent lack of heart for the work (see Wendland 2010). Unlike the therapists-in-training or the ophthalmology residents, who chose their careers based on deep personal interest, the apprentices in both Wong’s and Nading’s studies often seemed to follow a professional path set out by others, which was closely connected to national narratives of excellence. The female doctors in Ukraine extended ‘female’ care work activities (such as household management) to their profession and were
described as *berehynias*—protectresses of their home, their patients, and the nation.

Finally, apprentices learn new ways to see, speak, and write, and new hierarchies of valued knowledge, often as they struggle with new roles and identities (Good 2011; Carr 2021). These formative acts (Good 1994, 81) are powerful ways of acting in these spaces that literally shape and reshape apprentices’ bodies and minds, imbuing them with new ways of thinking and speaking (Mertz 2000). Ansari describes how therapists-in-training struggled with identifying the patient’s voice in the referral documents and transferring it effectively into the forms. The form thus had a value as a tool for the apprentices to learn to read beneath the surface of the referral documents, and to be more aware of how external providers might use othering language. But it also created friction between themselves, their developing therapeutic identities, and the supervisors. They did not seem to feel that they or their skills were valued by their supervisors, describing their experiences as more like typists than therapists. They were expected to learn to speak like experts in this process, but struggled with finding their own voice. They learned to be good colleagues by avoiding both the offloading of patients onto others and the making of problematic referrals.

The doctors in Nading’s and in Wong’s articles extended their clinical labour to the social roles needed and valued by the nation. The doctors in Nading’s article learned to align their professional lives with Ukraine’s national values that equated femininity with motherhood, thus selecting ‘clean’ or ‘graceful’ non-surgical specialties that allowed them to develop their devotion as mothers as well as cultivate a professional identity. Working in non-surgical specialties enhanced the female doctors’ moral and cultural authority, and thus their identities as mothers could transcend professional uncertainties. The surgical trainees in Wong’s work, however, lived in a perpetual state of uncertainty. They took on the ‘dreams of a nation’ by striving to be good doctors, but the unbounded nature of the apprenticeship left them uncertain as to how to attain those dreams. Wong describes in vivid prose how the surgical residents felt immense pressure to sustain a national narrative of excellence, and the effect of moral judgements about a perceived lack of work ethic. She shows how embodied surgical training can be: where it is not just learning technical abilities, but also a way of seeing, judging, and being.

To conclude, all five articles in this special issue show how interactive practices have bodily and cognitive dimensions, wherein apprentices must learn skills and know when to respond to patients, when to intervene, when to be pragmatic, how to speak to experts and develop a register of expertise, or how to convert complex stories into simpler documents. The authors show how apprentices are expected
to learn the skills of their new practice as well as engage in emotional labour to manage and see past cruel optimisms, uncertain futures, unattainable aspirations, essentialised practice, or careful calibrations. Put together, the articles present incongruences and paradoxes in the apprenticeship process. These incongruences appear within the apprentices’ emotional journey: they sometimes felt demoralised, uncertain, or bleak; at other times they might experience wonder, pleasure, or empowerment. There are also important paradoxes regarding the effect of the larger nation state on people’s apprenticeship journey, ranging from having an immaterial or imperceptible effect to being one of the central forces shaping expertise. The implications of these authors’ ideas thus extend existing scholarship on expertise, as they clearly show how apprenticeship is a process of self-making an identity that is constantly being formed.

About the author

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