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Variation and the intersection of practices Allison Hui

Variation is an extremely common feature of social life – we expect to study different school subjects, meet with different clients, develop different skills and become interested in different leisure pursuits over time. Yet despite this prevalence, there are limited conceptual resources for articulating variation within theories of practice. Many established categories exist for discussing variations between people – for example, those related to gender, race and class. A vocabulary for articulating how *practices* vary is, however, comparatively underdeveloped. This chapter extends this nascent discussion – distinguishing variation within practices from variations in relation to the wider nexus of practices and identifying further differences within each of these categories.

To develop an account of how practices vary, I draw upon a range of previous writing. For contemporary theories of practice, as developed by authors such as Giddens, Bourdieu, Schatzki, Shove and Reckwitz, 'the social is a field of embodied, materially interwoven practices' (Schatzki, 2001a: 3) that is 'ordered across space and time' (Giddens, 1984: 2). Multiple practices come together as a nexus with diverse links and relationships that contribute to the production of variation within the social field or plane. Some research traditions resist the move to name and codify practices within this field – as in actor network theory's hesitancy to use summary categories outside the specific empirical contexts in which phenomena have been observed and enacted. However, I follow Schatzki (1996; 2002), Shove (Shove, Pantzar and Watson, 2012) and Reckwitz in identifying and discussing specific practices – *Praktiken* (Reckwitz, 2002b: 249) – that can be recognised as patterns created through the bringing together of a set of activities, materials, understandings and skills. Links and relationships therefore exist between both the components within a practice and between practices themselves.

The dimension of variation best addressed in previous work has been that between different performances of one practice. Since a practice is 'a pattern which can be filled out by a multitude of single and often unique actions' (Reckwitz, 2002b: 250), each time it is performed, different elements are brought together. Close empirical consideration of such processes has highlighted that the same set of activities can never be enacted in exactly the same way, making even 'routine' practices the site of ongoing reproduction and change (see discussion below). Empirical studies have also considered how variations emerge through the circulation of practices to new countries (Shove and Pantzar, 2005a; Wang and Shove, 2008). The ensuing discussion of variation *within* practices consequently focuses on how even a recognisably patterned activity can be internally varied.

Though variation *within* practices has been discussed both theoretically and in relation to empirical cases, much remains to be explored about variation *between* multiple practices – differences that exist between, and are apparent within the connections of, different practices. Concepts that name different types of connected practices – including bundles, complexes or nets (Schatzki, 2002: 154–155; Shove, Pantzar and Watson, 2012: chap. 5) – have so far

received relatively limited discussion and empirical investigation. Yet as this chapter argues, dimensions of variation become intelligible in different ways when considering the nexus of multiple practices.

In order to identify variation, some grounding in a plane of potential similarity is required. That is, the potential to recognise either variation or similarity only ever exists in relation to particular categories that serve as shared points of reference. Ham and hummus can be considered varied in relation to the category of 'sandwich fillings', but not in relation to differentiations between 'protein and non-protein sources' or 'edible or non-edible items'. Within the plane of practices, identifying referents for gauging similarity and difference, and hence variation, could be approached in many ways.

I argue that the intersections between practices are crucial for developing analytic approaches and vocabularies more attuned to variation within a specific nexus of practices. Dimensions of intersection are overlaps and commonalities between practices that may be either material (e.g., a laptop used for leisure and for work) or abstract (a shared category or understanding such as clock time). They are therefore enacted by and exist in multiple material and nonmaterial forms and form points wherein the consideration or performance of one practice might pivot into consideration or performance of another. Theoretical discussions have already supported the existence of such 'shared' aspects or summary units of diverse social practices and this discussion further develops implications for understanding variation. Considering different types of intersection within the plane of practices provides reference points for identifying and discovering similarities and differences among practices.

The main aim of this chapter is to highlight variations within and between *practices* rather than focusing on things that are themselves *situated in between practices*. I therefore use the general terms 'intersection' and 'crossing points' in order to leave open specific forms of interdependence, power and positioning that characterise intersections themselves. That is, variation in types of intersections is not taken up as a central focus. In this chapter, intersections and relations between practices are highlighted in order to acknowledge that while variation may be identified in various forms and through various means, a better understanding is needed of how variation between practices relates to their interconnections and interdependence. As a result, variations within the nexus of practice are summarised in relation to properties that are shared by multiple practices.

This approach may evoke comparisons to Star and Griesemer's (1989) discussion of 'boundary objects' that mediate between intersecting social worlds. In their example of museum workers, abstract or concrete boundary objects such as specimens, field notes or maps adapt to the different worlds that they are a part of – changing meanings and being managed to maintain at least some common identity that facilitates coherence and translation across worlds (Star and Griesemer, 1989: 393). While this chapter similarly takes intersections to be adaptable – with for instance objects or meanings taking on varied forms in different practices – it also makes several key departures from this work. Firstly, Star and Griesemer emphasise how boundary objects are created in order to work at the boundaries of social worlds – thus presuming the pre-existence of different social worlds and the need to actively create objects that can inhabit more than one (1989: 408). By contrast, I do not presume that bounded practices necessarily precede intersections. It is possible that what will serve as intersections – for instance understandings of spatial or temporal categories (e.g., an objective geographic location or clock time) – pre-exist the emergence of practices that are eventually seen to share them. Secondly, though Star and Griesemer suggest that boundary

objects are actively constructed to span worlds, some intersections between practices may not have been purposely or intentionally forged and may be of comparatively little consequence. While field notes can be written with the explicit intention of translating and circulating knowledge from the person collecting a natural specimen to a museum curator or archivist, all three participants in such an exercise might use objects such as pens or mobile devices without these being actively created as devices to conjoin their practices. Not all objects involved in multiple practices are thus actively enacted to cross boundaries in the sense that Star and Griesemer discuss – and as Nicolini, Mengis and Swam demonstrate (2012). Thirdly, the case of natural history practices leads the authors to focus upon how 'boundary objects are produced when sponsors, theorists and amateurs collaborate to produce representations of nature' (1989: 408). By contrast, I do not take intersections to be necessarily tied to representations. This creates room to investigate how people are enrolled in multiple practices, as well as how particular meanings or spatio-temporal dimensions that have a myriad of representations can be understood as constituting intersections between practices. Finally, and most obviously, while Star and Griesemer's discussion, and related expansions upon it (Nicolini, Mengis and Swan, 2012), emerges from an interest in discussing collaboration and cooperation, this chapter is concerned with expanding understandings of variation and its treatment of intersections is shaped by this aim.

The rest of the chapter is divided into two main sections focusing upon variation within practices and variation in relation to nexus of practices. Each introduces several forms of variation and illustrates these in relation to examples from four cases: birdwatching, eating, identity verification practices and funerals.

Variation within practices

As noted above, theories of practice have already addressed several forms of variation, even if these have not always been articulated as characteristics of variation *per se*. In order to briefly summarise what this work has revealed, this section identifies three different forms: variation as a basic feature, variation as meaningfully constructed and variation in the constituent elements of a performance.

Variation as a basic feature

Firstly, variation can be understood as a feature to consider in understanding and analysing all practices – that is, no matter their particularities, they are marked by continuous internal variations. The conceptual distinction between practices as entities and as performances (Shove and Pantzar, 2007: 154) helps to reveal and reinforce the centrality of variation within a world of practices. A practice-as-performance takes place at a particular space and time when understandings, materials, practitioners and activities come together in a particular way. For example, at 12:37 p.m. on 4th December 2015, I made a sandwich in my kitchen at home using plate, knife, bread, toaster, ham, mustard and cheese. Many such performances, undertaken by multiple practitioners in diverse spaces and times, can be conceptually brought together in considering a practice-as-entity. In this case, the entity in question could be the practice of making lunch, or more specifically of making sandwiches, or even of making ham and cheese sandwiches, depending on how the analytic boundaries are drawn. What is important in making this summary move to practice-as-entity is that entities are inherently varied internally – they cannot help but encompass differences because of the unpredictable and diverse nature of performances. Even if I make ham and cheese sandwiches every day for lunch, this routine precludes exact repetition. Despite my best efforts, I will never get the

same amount of mustard on the bread in exactly the same pattern. Some days the toaster might make the bread more or less crispy, in response to the latter's age and texture. There may be more significant irritations or disruptions – the store not stocking my normal brand of bread or receiving a text in the middle of the sandwich-making process – that alter the performance further. The patterning that makes practice-entities intelligible to practitioners and researchers alike is inseparable from and consistent with the variation that is an inevitable dimension of performances (and thus entities).

Variation as meaningfully constructed

A second aspect of variation within practices concerns the limits of their intelligibility. Variations not only emerge through performance, but are also made sense of through shared meanings, understandings and goals. As a result, practitioners (re)produce distinctions that articulate and evaluate variations within a practice. Going beyond tacit limits disrupts working or practical understandings of 'the' practice.

Within birdwatching, for example, practitioners distinguish types of involvement and levels of knowledge – with 'birdwatchers' being those with more casual commitment and limited knowledge, 'birders' being more involved and knowledgeable and 'twitchers' being not only obsessively engaged with the practice but also far more mobile – seeking rare or far-flung birds. These terms articulate different variants of meaningful participation in the practice and the communities that gather around them.

The enactment of variations within practices also involves the establishment of meaningful boundaries within which practices are conducted and understood. Hägerstrand discusses the 'tolerable flexibility' that exists for the successful performance of any project – 'to what extent projects can "survive" interruptions' (1996: 669). Though he does not use this concept in relation to social practices, I suggest that it is important in relation to the meaningful construction of variation. While categories may seem to simply name variations within a practice, they may also mark what are understood to be the limits of tolerable variation – bounding the difference that is understood as still plausible or acceptable for participants. Where variations threaten to derail a practice, obstruct the achievement of a goal or transform a performance beyond acceptable bounds, practitioners acknowledge them as intolerable and therefore inappropriate. In this way, while all categories create boundaries and help articulate variations, within practices they can also become enrolled in normative assessments and processes whereby some variants are encouraged and others discouraged.

How tolerable variation is made meaningful is thus highly consequential for potential courses of action. Consider again practices involving food. Despite having the potential to cook and eat a wide range of food types at any meal, there is remarkably little overlap between the types of food consumed at breakfast, lunch and dinner in the UK (Yates and Warde, 2015). The variation between meals is marked by the different names given to them and is also shaped by understandings of socially appropriate and 'normal' foods for each. While it would be possible to make and eat a roast chicken for breakfast, socially such variation contravenes established sets of meanings and would therefore likely be deemed absurd. Variation within practices is therefore acknowledged and limited in important ways by the shared meanings that are constructed and reproduced by practitioners.

Variation in the constituent elements of a performance

The third aspect of variation within practices relates to the varied sets of elements that can be integrated into any one performance. As Reckwitz highlights, many different elements are brought together in a practice: 'forms of bodily activities, forms of mental activities, "things" and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge' (2002b: 249). While multiple elements are needed for a performance, there are different possibilities that might suffice. That is, 'a practice involves different sets of objects that are used in different circumstances' (Hui, 2012: 206). Toast can be made using toaster or a grill or a wood fire and mustard can be spread using a knife or, if none is available, the back of a spoon. In addition to the variation that occurs when the same set of elements is used in multiple performances, there is also variation that emerges from using different sets of acceptable elements. Discussions of how variants of practices emerge through global circulation often rest upon the recognition that changing the spaces and cultural contexts in which performances occur involves changes in elements that prompt new variations (Shove and Pantzar, 2005a; Maller and Strengers, 2013; Hui, 2015).

Another example of this can be found in the variation of funeral services. In modern Western countries, funeral services have evolved into three primary models: those that are institutionally commercial (led by a funeral director), institutionally municipal (led by municipal officials) or institutionally religious (led by religious officials) (Walter, 2005: 177). Within each institutional model, religion may or may not play a cultural role – as for instance in the US, funeral home services that are structured as Christian services or the predominance of church services in culturally secular Sweden (Walter, 2005: 182). Each of these models involves different types of spaces with diverse collections of things, understandings, institutional rules and practitioners coordinating the service. Participants might have quite diverse suggestions and expectations of what elements a funeral service should include – based both on personal histories of participation in funeral or religious practices and their knowledge of and familiarity with the deceased. As a result, even within the same country, city or building, funerals can involve widely differing set of elements, with services an eclectic mix of activities of varied provenance and with diverse relationships to the family, attendees and deceased. Humanist services can include the Lord's Prayer (Holloway et al., 2013: 41), Pink Floyd may be played at a church service (Szmigin and Canning, 2015: 755) or, as I experienced, the deceased's refusal to convert to Catholicism can be discussed during her Catholic wake. Depending on the institutions and practitioners involved, some variations may be deemed outside acceptable bounds while others are permitted because they contribute to the funeral's aims of meaningfully memorialising the departure of a loved one. The practitioners and institutions involved in any performance of a funeral negotiate and shape the set of elements that end up being incorporated, contributing to the combination of similarities and differences that distinguish it from other performances.

Attending to such variation in sets of elements is also important in relation to the potential flexibility of any one type of element. That is, there is more flexibility regarding exactly which elements are used in some practices than in others. Think for instance of the range of identification cards, such as drivers' licences, passports and birth certificates, that 'establish the identity of the bearer for purposes of state administration' (Torpey, 2000: 159). These documents are used for a range of activities: verifying one's identity when applying for a bank account or commencing new employment; one's age for alcohol purchases; or one's citizenship when accessing 'certain rights of democratic participation (e.g., voting), public services (e.g., medical care) and transfer payments ("welfare")' (Torpey, 2000: 165; Wang, 2004). In most cases, any one of a number of reputable forms of identification would be acceptable for each of these checks. Yet in the case of migrants, passports may become the

only acceptable form of identification due to the inconsistent language and format of international drivers' licences and birth certificates. Moreover, when one is engaging in a border check at an airport or roadside border station, only passports are appropriate, as other forms of identification do not have the same international status or capacity to be stamped and thus do not fulfil the requirements of this practice.

Elements such as materials can thus vary in terms of their importance to particular practices. On one hand, they can be obligatory when there are no other elements that can be substituted and their presence is a necessary condition for continuing essential processes – as in passports at border checks. On the other hand, they may be substitutable – as in the case of different types of identity documents – or negotiable – if different processes can be conducted in their absence – or entirely optional. There are differing degrees of potential flexibility for particular elements within any practice, as well as for the variations associated with the different combinations of elements that characterise any one performance.

Variation in relation to the nexus of practice

Though multiple forms of variation can be identified within practices, focusing exclusively upon these provides a restricted account of how variation matters for theories of practice. Many important questions about relations between multiple practices relate to variations in the links and connections between practices and the consequences of these variations for the trajectories both of the practices involved and the complexes they form. Therefore, while variations within practices are not necessarily independent of those between practices — changes in one could affect the other — it is useful to distinguish between them in order to highlight different methods and approaches needed to study and analyse them.

The question therefore becomes: how do intersections of practices reveal and relate to variations between practices? This section addresses three types of intersection – spatiotemporal, practitioner/material, and conceptual – using these to identify features of variation and suggest future lines of investigation.

Variation in terms of spatio-temporal intersections

As many authors have discussed, the particularities of practices emerge alongside their spatial and temporal dynamics. Bourdieu, for instance, suggested that 'practice is inseparable from temporality, not only because it is played out in time, but also because it plays strategically with time and especially with tempo' (1990: 81) and practices are similarly inseparable from their mobilities (Hui, 2013: 892). Schatzki elaborates upon these points by noting that the doings and sayings of practices are anchored at a range of paths and places (2010b: 59) that enrol past, present and future through 'acting toward an end from what motivates' (2010b: 37). Limited work has been done thus far to explore the implications of these insights for not only individual practices but also for the project of conceptualising interconnections between practices.

Such an exercise depends on identifying and working with methods that reveal connectivity. Understandings of clock or calendar time and geographic space as dimensions that exist independent of human activity have long been used as benchmarks against which to reveal and assess variation. Take for example cross-national time use studies based on diaries that record activities undertaken at particular times of day by participants residing in specific countries. When analysis is undertaken, comparing data from two different years or from two

different countries in the same year, it is the temporal structure of clock hours in a day and the spatial container of a country's political-geographic boundaries that are taken to be common reference points in terms of which notable variations are identified. Warde et al., for example, use time use data to reveal 'considerable national variation in patterns of food preparation, eating at home and eating out' which they relate to how consumption is institutionalised in each country (2007: 363). Varying links between food preparation and eating, food provision and regulation, as well as comparisons of the time spent engaged in different patterns of eating, are used to dispute the idea that there has been global convergence in food cultures and related practices (Warde et al., 2007: 380).

In such cases, temporal or spatial characteristics are treated as relevant commonalities in the field of practices in relation to which varying links and dynamics of practice might be revealed. While providing useful insights, this approach falls foul of Bourdieu's warning about eliding the differences between analysts' and practitioners' logics and spatio-temporal foci: 'like the map which substitutes the homogeneous, continuous space of geometry for the discontinuous, patchy space of practical pathways, the calendar substitutes a linear, homogeneous, continuous time for practical time, which is made up of islands of incommensurable duration, each with its own rhythm, a time that races or drags, depending on what one is doing' (1990: 84). Nonetheless, focusing upon temporal or spatial intersections can reveal important variations in how practices are interlinked and interrelated, including variations in the meanings and understandings that guide their spatio-temporal dynamics.

A study by Markham Schulz (2015), for example, uses comparative research (between France, the United States of America, and Norway) to reveal variations in how people negotiate the transition from work to non-work practices. Focusing on the 5–9 p.m. period when professional workers are most likely to be finishing work and moving on to personal activities in non-work spaces, Markham Schulz uncovers different understandings shaping these transitions in space and between practices. In France, managerial cohorts gain social prestige by working late (and thus delay leaving work), while in Norway those who do not leave work when expected are stigmatised for the apparent lack of a fulfilling personal life. In the US, he found more internal differentiation and discovered that individual companies interpret acceptable boundaries and shifts between work and personal time in different ways. Treating the temporal zone of early evening hours as an intersection between practices in different countries allows Markham Schulz to investigate how relationships between work and non-work practices are negotiated – and to reveal the specific understandings, institutional contexts and sequencing of activities that constitute 'variations' between countries.

Variations in the nexus of practice can thus be identified through reference to shared spatio-temporal characteristics. Though objective features – such as clock time – are often used in this role, there is room for exploring how other aspects of spatio-temporality (shared rhythms, paths, sites, etc.) could be mobilised in analysing variation.

Variation in terms of practitioners or materials at the intersection of practices

In addition to intersecting spatially and temporally, practices intersect through practitioners and materials that are shared between them. People, Reckwitz argues, are crossing points: 'As there are diverse social practices, and as every agent carries out a multitude of different social practices, the individual is the unique crossing point of practices' (2002b: 256). They thus

embody intersections of numerous practices – working, cooking, eating, washing, banking, fundraising, exercising, gardening, training and more. This positioning can bring benefits – such as the development of skills or understandings that can be incorporated into a different practice – and challenges – involving seemingly incompatible meanings or the competition between skills that degrade or obstruct each other (e.g., muscular strength and flexibility). Some aspects of this positioning have been investigated within literature on multiple careers – for example, in relation to women's careers as mothers and professionals (Crompton and Sanderson, 1986; Evetts, 1994; Eaton and Bailyn, 2000). Much more remains to be understood, however, including how embodied skills or competences develop through involvement in more than one practice and how these differences underpin variations both in the performance of specific practices and in how multiple practices hang together.

The material components of practices can be similarly understood as intersections between multiple practices. Elements of practices are 'a point of *connection* between them' – albeit not fixed and static points but ones more akin to 'zones of overlap and intersection' (Shove, Pantzar and Watson, 2012: 113) or 'a form of connective tissue that holds complex social arrangements in place, and potentially pulls them apart' (Shove, Pantzar and Watson, 2012: 36). While not using the concept of material 'elements', Schatzki highlights the ability of practices to 'overlap': 'a particular doing, for instance, might belong to two or more practices by virtue of expressing components of these different practices' organizations [*sic*]' (2002: 87). Since practices are seen by Schatzki to be 'intrinsically connected to and interwoven with objects' (2002: 106), it follows that objects might similarly be points of overlap and intersection between multiple practices.

Having acknowledged that practitioners and material components can be positioned at the intersection of practices, there are several implications for analysing these features as vectors of variation. Firstly, one might extend a consideration of multiple elements of practice to investigate not variation within practices (as discussed above), but rather variation between them. The materials used to make a sandwich, for example, are also included within the larger set that is used at funerals (e.g., for serving snacks after a memorial service), even if other materials such as flower arrangements or printed orders of service are not included within both sets. The sets of materials used in multiple practices overlap to varying degrees and provide links and interdependencies of varying strength. Compared to the set of objects used in food preparation, funerals have a more complex and wider-ranging set extending beyond food preparation and also including religious rituals, public communication and memorialisation, bureaucratic procedures and burial. Examining sets might thus help to reveal variations in the density and patterning of material links between practices.

Secondly, questions about how variations between practices affect practitioners could be pursued through a consideration of what multiple practices require of the same person. This line of investigation could extend work on multiple careers, for instance, to consider relationships between practices other than work and family life. It could also usefully extend understandings of the intertwining of careers in different practices. Some relationships between practices are marked by commensalism wherein performances of one benefit from, and also presuppose, careers in another. When dual careers are not present, as in this example of religious and funeral practices, it becomes problematic for practitioners:

Ian['s funeral] was in a church because he was buried in the churchyard, but I'm not religious at all so there's no religious aspect for me. We had some hymns, two or three hymns that his mother chose, and nobody knew them. I thought that was

hideous, because nobody was singing, everyone was just looking around a bit, embarrassed, they were just hymns no one had ever heard of (Szmigin and Canning, 2015: 756).

Such moments of discomfort demonstrate that while participation in funeral practices is not dependent upon participation in religious practices, the symbiotic relationship between these practices – with activities and knowledge used in one having been developed in the other – places demands upon practitioners that cannot always be fulfilled. Practices vary in terms of the extent to which they cultivate the skills, understandings and knowledge that are demanded of practitioners performing them. While funerals regularly draw upon elements from religious practices, identity-checking procedures do not similarly do so. Where practices involve many elements that practitioners would need to develop through other practices, this can be an indicator of the closer intertwining of practices.

Thirdly, the temporalities of materials' or practitioners' links to different practices could shape processes of transformation and thus constitute forms of variation. Elements and practitioners do not exist out of time – like practices they have histories and temporal characteristics. A skill cannot be demonstrated before it has been learned, or a material used before it has been created. The situation of materials and practitioners at the intersection of practices is therefore indicative of chains of interaction between practices – processes whereby inputs to one practice are transformed into outputs that may become inputs of another practice.

Take passports for example. Before passports can be checked during identity procedures, they must be created, and this involves what have grown to become elaborate practices including filling out forms, taking carefully-specified photos, collecting professional attestation of likeness or personal acquaintance, providing supporting identity documents and submitting biometric measures such as fingerprints. These activities and their traces now feed into administrative procedures wherein forms, photos, attestations and documents are reviewed, assessed and processed before the production of the object itself – a document that often remains the property of the state and is connected to a myriad of databases through computer-readable codes. These passports, themselves traces of administrative and identification practices, have from their moment of creation a defined lifespan noted by their expiry date, as well as spatialities of expected relevance – the border checkpoints and immigrations halls where they become a part of different bureaucratic processes.

Practices thus relate to passports in different ways. For the person completing a passport application, the passport is something only imagined – a goal towards which activities are oriented. For those working in passport offices, it is an output and trace of activity – something generated and circulated if valid inputs have been provided and appropriate documentation processes are completed. For border agents, the passport is a pre-requisite input that is then scanned, examined, considered, recorded and potentially stamped. Through these linked practices, a necessary temporal sequence is established for any one practitioner, wherein border checks are not possible without having previously applied for and received a passport. In addition to being 'a necessary but not sufficient condition to be admitted into a country' (Wang, 2004: 357), passports act as a necessary but not sufficient condition for the performance of certain practices. The sequences of which they are a part involve the orchestration of practices involving multiple sets of practitioners – applicants, government administrators and border security agents – often situated in different locations.

As this example highlights, materials (and similarly practitioners) are wrapped up in chains of actions, inputs and outputs. Practices transform materials and people's bodies into different forms. Series of inputs and outputs thus help to determine possible sequences through which practices are linked. Birth certificates are needed to obtain passports, which for migrants are needed to obtain health cards or numbers, which are needed to give birth to a child in a hospital, which will then prompt a further application for a birth certificate. Rawolle (2010) has used the term 'chains of production and consumption' to discuss such sequences in relation to Bourdieu's work, emphasising that attempts to circulate specific traces or accounts between practices can be more or less successful. This is an important point, as even seemingly established sequences and chains can transform or be interrupted. Yet I have resisted the terms 'production' and 'consumption', because Rawolle's account foregrounds the intended orientation of chains: 'the production of specific practices is oriented towards ... likely consumption patterns' (2010: 127). Though identity documents are produced through practices thus oriented, they are also more ambiguously situated – with passports being used for example to check in to hotels even when other forms of identification would be sufficient. Chains of actions, inputs and outputs can thus be at times unintended or unanticipated by participants engaged in one or more of the interlinked practices.

Such sequences where one material is required for the production of another, or one set of experiences and skills are required for participation in another practice, represent dimensions of variations. For example, practices may vary in terms of how many inputs or outputs they have – and the extent to which these are consequential for other practices. In addition, variation between practices may be identified in relation to the materials or practitioners involved: not all materials will appear equally frequently as inputs or outputs, and some embodied skills or knowledge may be developed only by carefully selected practitioners in specific practices – think for instance of companies whose food production relies upon a 'secret sauce' or 'special technique'. Practices also vary in terms of their position within temporal sequences – the extent to which they draw upon particular inputs and outputs and thus need to occur before or after other practices. Investigating these temporal sequences can additionally pinpoint variation in the accessibility of practices to particular practitioners – the inability to obtain materials or develop competences may constrain continued participation in interconnected practices.

Variation in terms of groups and categories

While the bodies of practitioners and materiality of objects function as tangible points of intersection between practices, there is also a range of more ambiguously tangible things that can be similarly positioned. For Shove, Pantzar and Watson, meanings exist alongside materials as elements of practices that are shared and therefore 'zones of overlap and intersection' (2012: 113). Likewise, Schatzki discusses how components such as rules can apply to multiple practices (2002: 87). The diverse traces left by meanings, rules, concepts or categories can be difficult to follow as they weave through the plane of practices. In order to focus this final subsection, I therefore take up a very specific set of meanings and categories related to groups – in particular those through which groups of practitioners are defined.

This focus is useful in a number of ways. Firstly, it builds upon practitioners' roles as crossing points within the plane of practices. For each practice a person participates in, there is a group of other practitioners – some with whom performances are shared spatially or temporally, and others with whom direct contact might be established occasionally, or never. Being at the intersection of many practices is therefore also being at the intersection of many

groups of practitioners. Secondly, the importance of groups that gather together by virtue of shared practices has already been established within literature on communities of practice. Dissatisfied with predominant understandings of learning as formal knowledge transfer from teachers to pupils, Lave and Wenger (1991) proposed that learning instead be situated within and as an outcome of a range of shared practices. In addition to foregrounding practices, they argued that learning is relational and therefore needs to be studied by attending to collectives or groups rather than individuals (Fuller, 2007: 19). There is scope for both extending this interest in groups beyond the topic of learning and for further questioning how groups are themselves conceptualised. Nicolini, for instance, suggests that by reifying the notion of 'community', Wenger draws too strongly upon positive framings of the term (2012: 90-91). More commonly, concepts that indicate particular groups of people – girls/boys, Christians/Muslims, professionals/manual workers – are regularly evoked in representing specific practices, even though they differ from groups of *practitioners* and yet the implications of such categories for *multiple practices* have not been discussed at length by practice theorists.

Before considering how such categories might help to constitute or reveal variation within the plane of practices, I outline three means whereby groups – multiple things or people that are understood to be related – are formed. Communities of practice literature focus upon the formation of groups through co-present interaction and shared performances. Families, for instance, eat and cook together, at more regular temporalities for immediate family members or less regular ones for extended family. Yet this is only one way that family groups are made. The family as an intelligible and meaningful group is also enacted by those not belonging to it: clerical staff in governmental agencies enact the family through procedures such as the registration of marriages and births and the production of identity documents or dependent visas that give families rights in relation to other practices legislated by governments. Groups are thus (re)produced through practices that label, codify and create traces of their existence. Such traces can then lead families to be treated as a group in other practices – for instance being allowed to approach border agents together rather than individually. Thirdly, general understandings of what family is and what family means are also produced through practices that refer to non/fictional families. Novels, television programmes and housekeeping magazines as well as blogs, portraits and songs, all contribute to how the category of 'family' is made meaningful. Children begin learning such meanings through picture books and early schooling and continue encountering them as adults in the anthropomorphised descriptions of animals in documentaries and the deriding of problematic families in news stories. 'Family' groups are thus made through the circulation of cultural products enacting diverse meanings, the creation of material traces with implications for other practices and the performance of shared practices. Other groups are constituted in similar ways, although with different emphasis upon the various forms of enactment involved. Groups of 'birders' or 'birdwatchers', for instance, are made meaningful through blogs, websites and birding books and are performed by groups of co-present enthusiasts, but are rarely defined or recognised in these terms by non-birdwatchers or by formal institutions.

What are the implications of a category such as 'family' for conceptualising variation in the nexus of practices? For one, looking at how 'family' is invoked or reproduced across different practices demonstrates that people can have quite different roles depending on how they are positioned in relation to different practices. Practices vary not only in how they incorporate and enact groups, but also in terms of the extent to which these groups generate variation within the practice. When the O'Brien family goes through border-crossing procedures at an airport, there is no expectation that the border agent's questions and

passport-stamping procedures will differ from those adopted only moments earlier for the Rossi family and no expectation that the families will respond differently. However, these two families would be likely to generate and reproduce significantly different variants of funeral practices should one of their members pass away. Moreover, they will each reproduce different nexuses of practice – not all families ski or play board games.

In addition, reference to different groups and categories could be useful in identifying patterns of accessibility within the plane of practices. In some instances, the ability to participate in a practice depends upon one's membership in a particular group. While such dynamics have been well-considered in sociological literature on socio-demographic distinctions such as gender, class and religion, this could be extended to encompass the implications of other groupings – such as alumni of a particular school who might be given special rates on insurance packages or musicians who belong to a union and therefore have access to jobs that are not available to others. In some instances, groups may be determined within the practice in question, but in others the definition or membership of a group is imported from one or more other practices – thus enacting links and relationships between multiple practices. Categories of appropriate and inappropriate participants may thus be meaningful only in relation to a nexus of practices and variations in accessibility only intelligible through a consideration of how group categories are enacted and drawn upon across multiple practices.

Considering the groups and categories that are enacted within practices can reveal other dimensions of variation, since not all practices reproduce group membership in the same ways. Identity checking practices enact families, national citizens, il/legal mobiles, migrants and asylum seekers through carefully orchestrated bureaucratic procedures. By contrast, performances of cooking and eating enact such groups as families, friends, foodies, chefs and amateurs, but the categories involved are often ambiguous, with unclear implications for other practices. Some practices enact more formalised groups, for example through the recording of members or explicit codes of conduct, while others reproduce informal associations (e.g., a group of 'regulars' at the pub). Variations in the types of groups enacted provide one means of differentiating types of interdependence between practices. For example, those which involve and reproduce formalised categories with accompanying material traces – such as official records – may engender more intelligible chains of action and more precisely defined sequences of inputs and outputs than those through which more diffuse meanings (e.g., cultural representations) are carried. Moreover, any such differences and observed chains will be variable over time even where group categories remain present. For example, looking at how 'family' has been enacted historically will reveal changing links between practices – illustrating further variations in how 'family' functions as an intersection between practices. For many years the importance of religious practices and organisations was central to the constitution of families – both through marriage ceremonies and teachings about the impropriety of conceiving children out of wedlock. Yet today even families that are not recognised by certain religious groups (e.g., homosexual partners with adopted children) are formally recognised through civil ceremonies and adoption documents. Transformations in the nature and prevalence of family businesses and multi-generational homes similarly indicate that the meanings and practices of families have changed over time, transforming patterns of linkages in the nexuses of practice.

Conclusion

As this chapter has made clear, dimensions of variation are themselves varied. Identifying variation depends upon a point of reference in terms of which judgments of similarity and difference are made. There are endless possibilities for specifying terms and instances of variation. My aim in this chapter was not to characterise all possible variations within a world of practices – such a task is impossible. Instead, I have articulated different analytic strategies that can be used to name and discuss select types of variation and I have considered some of the implications these distinctions raise for understanding a world of overlapping and interconnected practices.

Variation is a feature of all practices and of relations between them. Analysing variations therefore generates further questions about how practices interconnect and about change within a field or nexus of practice. Discussions of variation prompt further thought about how varied temporalities and spatialities are constitutive of not only practices but also nexuses of practice. Articulating dimensions of variation is also crucial for addressing questions about power and norms within a field of practices: how do variations between practices inform understandings of accessibility, power and interdependence? On what basis might normative assessments of acceptable or intolerable variations in practices be made? Extending analyses of variation along these lines could also inform more empirically focused questions such as: on what basis should practices be selected for empirical study? While this question must be answered in relation to the concerns and questions at hand, being able to articulate dimensions of variation within a nexus of practices is important for justifying why some practices might be more suitable for investigating particular issues than others. While these questions have not been taken up in detail here, this chapter has helped develop a language and set of analytic tools for articulating variations within and between practices that will support their exploration in the future.

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