NOTE TO READERS: This is very programmatic. I apologize. The paper is too much a work in progress for rhetorical flourishes to do any good. So I have decided to offer a structured walk-through of my present thoughts. The general topic is knowledge of action. If you are dying for some background, I will be drawing a bit on a very long paper of mine on consciousness in action that is forthcoming in Noûs. You can access a copy here: http://philpapers.org/rec/SHECAA-3

0. Following Elizabeth Anscombe’s pioneering book Intention (2000), many have insisted that the knowledge an agent possesses of her action as it unfolds is in many senses special. Anscombe and those writing in her wake have variously emphasized at least five ways, which we might consider desiderata for an Anscombian account of knowledge of action. Let us say that on a fully Anscombian account, an agent’s knowledge of her action is:

(1) in some sense necessary for or constitutive of intentional action
(2) in some sense practical as opposed to theoretical or speculative
(3) in some sense non-observational
(4) in some sense non-inferential
(5) in some sense immediate, in that the knowledge is not based in prior evidence

(Each of these claims is the source of some contention in the literature, such that it would be possible to spend a good bit of time divvying up various strands of argumentation. We might, for example, separate writers in this stream according to how they elucidate any of these five claims, and we might also separate writers according to which claims each is willing to take on board. I do not engage much with this kind of task here. That said, I should note here that I will not engage with (1) at all, except to say that many have argued that practical knowledge is at least unnecessary for intentional action, and I agree (cf. Davidson 1978; Paul 2009).)

The relevant literature on these issues is interesting for a number of reasons, not all of them to do with the nature of practical knowledge. In attempting to understand the nature of practical knowledge, many writers find it necessary to discuss ancillary issues that, in fact, drive to the heart of the nature of agency itself. In order to elucidate the best account of practical knowledge, one needs to find some clarity regarding (at least) the following series of issues: the roles of belief and perception for intentional action; the relationships between intention, belief, perception, and knowledge; the place of conscious experience in action and in knowledge of action.

There is enough here to keep even the easily bored philosopher interested. There is also so much here that it is difficult to know where to begin: one feels that almost any jumping-off point is somewhat appropriate and somewhat arbitrary. I begin with a selective discussion of what some philosophers have said on relevant issues. This will hopefully provide some structure and motivation for the positive proposal I wish to make.

1: Sarah Paul (2009) rejects all the Anscombian desiderata except non-observationality. She rejects the thought that practical knowledge is non-theoretical because she rejects ‘Strong Cognitivist’ views of intention: views that constitutively connect intentions and beliefs. For Paul, the vehicle of knowledge of action is a belief, and a belief is not, as Anscombe and others insist, the ‘cause of what it understands.’ Paul thinks that intentions cause actions, and that beliefs about action are based upon these intentions (plus favorable background
Pickard, a key feature of practical knowledge is that such knowledge "keeps near perfect intention is incomplete."

The governing intention. A view of knowledge of action of what an agent actually does, even when this falls short of the plan specified in actual actions.

Now, a and attractions of the Anscombian view how well we are doing at a given time. Not only know what we are doing at some very abstract level of description, we also know how well we are doing at a given time. This is no minor quibble. One of the difficulties for and attractions of the Anscombian view is its claim to cover not only what an agent is actually doing. John Schwenkler puts the point well:

[What] Anscombe means to point us toward is a view according to which even what happens in a case of intentional action is something that an agent knows about in a special sort of way: it is not just that I will always know in a way that you cannot the descriptions under which my bodily behaviors count as intentional actions, but also that I will have a special epistemic relationship to those happenings even in the 'extensional' sense, even as they involve 'mere' changes in the physical world. (145)

Now, as Paul herself emphasizes, intention and action are not the same thing. Sometimes actual actions – the things an agent actually does – fall well short of the shiny intentions that initiate and guide the performance of them. Knowledge of action is supposed to be knowledge of what an agent actually does, even when this falls short of the plan specified in the governing intention. A view of knowledge of action that focuses on knowledge of intention is incomplete.

2: The above point is congenial to Hanna Pickard’s approach to practical knowledge. For Pickard, a key feature of practical knowledge is that such knowledge “keeps near perfect
time with the actions themselves” (2004, 206). Of course it is difficult to see how this feature of practical knowledge could be captured without appeal to perception. Pickard recognizes this, and highlights a way that perceptual experience might legitimately ground non-observational knowledge of action.

Many have rejected the thought that perception could ground non-observational knowledge of action. Pickard demurs, arguing that what Anscombe really wants to capture with the notion of non-observational knowledge is knowledge not based in inference. (Notice that while Paul argues that practical knowledge is non-observational in spite of being inferential, Pickard argues it is non-observational because it is non-inferential. This is just one example of what might be a verbal dispute regarding what is non-observational. Alternately, it could be that philosophers are genuinely disagreeing about what ought to count as non-observational.) And Pickard argues that the kind of knowledge afforded by bodily perceptual experience can qualify as non-inferential. For Pickard, this is the case when one’s knowledge of action is procured by “simply tak[ing] the content of a perception on which it is based at face value” (218).

I think Pickard is right to emphasize a role for bodily perceptual experience, and right as well that some beliefs about action come about in part because we take the content of such experience at face value. Since I wish to build upon Pickard, however, here I note two possible worries one might have about what she says. First, Pickard wishes to move from bodily experience alone to knowledge of action. Since many actions involve non-bodily events, one might wonder how or if Pickard’s account extends to these. (Pickard explicitly restricts her account to basic actions: those actions an agent can intentionally perform without intentionally doing anything else. In my view, however, the issue of basic actions is orthogonal to the present concern. We want to know how far into the environment knowledge of action might extend, whether the action in question is basic or not.) I return to this issue below.

Second, Pickard needs it to be possible that one can get knowledge of action by taking the content of bodily experience at face value. As she recognizes, this commits her to a view on the content of bodily experience: such experience must be rich enough to justify non-inferential transitions from the content of the experience to the content of beliefs or judgments about what one is doing. Pickard argues from the richness of other forms of perceptual experience to the richness of bodily experience:

[W]e hear not just sounds but words; we feel not just an impenetrable surface, but a table. Given that body awareness is a form of perception, we should be willing to consider the possibility that its content is comparably rich: when one acts with one’s body so as to pick up a cup, the content of the awareness one has of one’s body is as of picking up a cup. (220)

Maybe this is right. But the point is debatable. Perceptual experience might not be rich. And even if it is, it might not be rich enough to include awareness of action. Pickard wants to capture this thought: “one can be aware from the inside not just of one’s arm rising, but of raising it” (206). It is not clear that bodily experience alone can deliver this: what in bodily experience distinguishes active from passive movement? In my view we need more than bodily experience alone to make this distinction. I return to this point below.
3: John Schwenkler offers another take on what it is for practical knowledge to count as non-observational. Like Pickard, Schwenkler grounds such knowledge in perceptual experience. He differs in extending the grounds to all forms of perceptual experience. The key, for Schwenkler, is to see that practical knowledge does not require a special source (e.g., a non-perceptual source) to qualify as non-observational. Rather, practical knowledge can qualify as non-observational in virtue of its special functional role. Perceptual experience of action as it unfolds plays a role in “shaping the unfolding of the very action it is an awareness of” (148). Schwenkler offers a conductor as an example:

It is because the conductor can hear the music that the instrumentalists produce that he knows how things presently stand and where he needs to proceed from here; and if his knowledge were other than it is – if, say, the musicians got off track, or if he misheard which notes the strings were playing and felt a mistaken need to correct them – then the future course of his action would be quite different. The agent does not act without keeping track of his actions; he cannot be knowledgeably self-controlling without being perceptually self-aware. In this way, human agents are at once doers and perceivers . . . (149)

Schwenkler’s emphasis on visual and auditory perception does have the following salutary upshot: it gives his account a better chance of explaining, not only knowledge of action in good cases, but knowledge of action in bad cases as well. Even so, does Schwenkler’s account give us enough to claim that knowledge of action is genuinely non-observational? For Schwenkler the key is the functional role: the agent-in-action utilizes perception in a way that makes the agent “at once” a doer and a perceiver. But this point is consistent with the following one: in being at once a doer and a perceiver, the agent-in-action has practical knowledge that is grounded in both observational and non-observational sources. The question is whether perceptual experience provides non-observational grounds. In my view this is stretches the term ‘non-observational’ beyond recognized usage.

Perhaps this is a merely verbal dispute. Or perhaps I have failed to understand something about non-observational grounds for knowledge. I will not worry any more about it here. My main worry regarding Schwenkler’s account is the same as my main worry regarding Paul’s and Pickard’s. These accounts are incomplete. I like the emphasis on intention in Paul, but I think she ignores other important grounds for practical knowledge. And I like the emphasis on perceptual experience in both Pickard and Schwenkler, but I think they ignore important other grounds for practical knowledge. What all these accounts miss is the role of agentive experience that, in combination with these other sources, forms the grounds for practical knowledge.

4: When an agent acts, she usually has a range of experiences that attend various parts of the activity. Some of these experiences are perceptual; some are not. Importantly, for present purposes, some of these experiences are distinctively agentive. In a recent paper Shepherd emphasizes the so-called experience of trying.

Consider lifting a heavy weight with one’s arm. Doing so, one will often experience tension in the elbow, strain or effort in the muscles, heaviness or pull on the wrist, and so on. In addition, there is an aspect of this experience that is not to be identified with any of these haptic elements, or with any conjunction of them. When
lifting the heavy weight, one has an experience of trying to do so. Put generally, the experience of trying is an experience as of directing effort (however minimal) towards the satisfaction of an intention (this is not to say that possessing a concept of intention or of an intention’s satisfaction is necessary for the capacity to have such experiences). In the example at hand, it is a phenomenal character as of directing effort towards the movements of the arm. (forthcoming)

For Shepherd, the direction of effort is a kind of experiential mandate: “When I have an experience of trying to raise my arm, I have an experience as of mandating that my arm rise” (forthcoming).

How do experiences of trying relate to the perceptual experiences agents often have while acting? Shepherd argues for the following view.

The experience of acting typically consists of temporally extended experiences from more than one modality. These experiences are easily associated with the action being performed in virtue of the fact that their contents fit coherently into the agent’s broader plan for action. And their contents fit coherently in virtue of the fact that they are functionally integrated and structured by what the agent is trying to do. (forthcoming)

In support of this view, Shepherd cites two kinds of evidence. First, there is broad empirical support that integrated intermodal processing influences conscious experience. This is to say that the content of experience in any given modality (e.g., visual, haptic, etc.) is often influenced by non-conscious processing of information drawn from another modality. Consider, for example, the Rubber Hand illusion. If one views a rubber hand being stroked by a tool while one is at the same time having one’s own hand stroked by a tool, one will begin to feel that the rubber hand is one’s own, even if it is located some distance away (e.g., across a table). This indicates that visual and haptic perceptual processing is in close communication to produce one’s bodily experience of the hand’s location.

Second, Shepherd discusses evidence that what one is trying to do at a time structures one’s perceptual experience in a coherent way. For example, self-generated movement is associated with attenuated sensory processing and attenuated sensory experience (Helmchen et al. 2006), as well as changes in the temporality of experienced events (Haggard et al. 2002). This indicates that an agent’s perceptual experience in action is shaped in certain ways to fit the agent’s (often conscious) direction of effort.

Recall Pickard’s claim that perceptual content is rich enough to include awareness of the action itself: “when one acts with one’s body so as to pick up a cup, the content of the awareness one has of one’s body is as of picking up a cup” (2004, 220). I am not sure whether that is true, but the picture Shepherd offers makes it seem much more plausible. Once we consider the full range of experience-types that normally accompany action, and if we agree with Shepherd that the experience of acting consists in (at least) a range of co-conscious, closely related and functionally integrated intramodal experiences, we might be tempted by the following possibility.

Perhaps the experience of acting is in part constituted by essentially multi-modal experience. This might be the case if, as Casey O’Callaghan has argued, experience sometimes involves intermodal feature binding awareness. In intermodal feature binding awareness, “features consciously perceived through different modalities can perceptually
appear to be bound and thus to belong to the same thing” (forthcoming). If intermodal feature binding awareness occurs, then some conscious experiences “may not be factorable without remainder into co-conscious modality-specific components that could have occurred independently from each other” (forthcoming). Perhaps this is the case for experiences of acting.

5: How does Shepherd’s picture of the experience of acting bear on what we should think about an agent’s knowledge of action as it unfolds? Here is a proposal. As the agent acts, she forms a range of experiential beliefs about what she is doing. These beliefs are formed in the way experiential beliefs normally are — they result from an agent’s taking her experience at face value. These are beliefs about what the agent is doing, as opposed to beliefs about what is merely happening, in virtue of at least two facts regarding the relevant experiences. First, the relevant experiences are experiences of what the agent is doing, rather than experiences of what is merely happening. This is so because the experiences include and are structured by experiences of trying. Second, the contents of the relevant experiences fit coherently into the agent’s broader plan. As such, the experiences are easily associated with what the agent is actually doing.

This is not to deny that background beliefs will play a role here. Recall that Paul requires four kinds of background belief to play a role for the agent’s knowledge of action. An agent must believe she has the ability to do what she intends to do, she must believe the circumstances are favorable; she must believe she is a reliable agent (and thus likely to carry through on her intention), and she must have beliefs regarding ‘the way some action descriptions apply partly in virtue of [one’s] intention in acting’ (2009, 18). This last requirement is meant to give Paul’s account the capacity to account for knowledge of what the agent is actually doing, rather than knowledge merely of what the agent intends to do.

Interestingly, Paul adds a potential fifth background requirement in a footnote. She writes:

One further thing the agent might be required to know in order to have non-observational knowledge of what he is doing is that his intention is what is moving him to act . . . If the agent does not believe his intentions will be effective in moving him, his knowledge of what he intends to be doing cannot justify a belief about what he is actually doing. (18, fn. 69)

I agree with Paul that background beliefs about ability and circumstances are likely important. But my proposal is much cleaner in the sense that it allows us to dispense with some of these background requirements. The fourth requirement, in particular, only secures knowledge of action at a high level of abstraction. It does not secure knowledge of what the agent is doing when the execution of the action is not going perfectly according to plan. By contrast, beliefs about what the agent is doing based upon the agent’s experience of acting can fairly easily secure this knowledge. Further, beliefs regarding the effectiveness of the intention do not seem to be required if the agent’s beliefs about action are based on co-conscious experiences of effort directed towards the satisfaction of an intention and of the efficaciousness of the effort (via various perceptual experiences).

So it looks like my proposal is a genuine advance on Paul’s in that it better captures knowledge of what the agent is actually doing.
6: It might be worth stepping back to consider how the above proposal fares regarding Anscombe’s desiderata. According to Anscombe, an agent’s practical knowledge is

(1) in some sense necessary for or constitutive of intentional action
(2) in some sense practical as opposed to theoretical or speculative
(3) in some sense non-observational
(4) in some sense non-inferential
(5) in some sense immediate, in that the knowledge is not based in prior evidence

I have set (1) aside, since I view it as false but do not wish to repeat the arguments of others. I have not said anything about (2). Some in this literature seem to equate (2) with (3) – the thought is that if one can give an account of non-observational knowledge, one will have shown how the knowledge is practical in some relevant sense. I am not sure this is right. For Anscombe, this feature of knowledge seems tied to its direction of fit. Following Aquinas, she thought practical knowledge was ‘the cause of what it understands.’ Some have taken Anscombe to be talking about formal causation here – if that is how we are to read her, then I am likely to reject (2). I do think that practical knowledge is important for and closely related to intentional action, but I do not think that the connection is one of formal causation. (One way to put this is as follows. Kieran Setiya (2011) argues that the will is a capacity for practical knowledge. I would argue that the will is a capacity for goal achievement generally, and for intention and desire satisfaction more specifically.)

Might practical knowledge be the essential cause of what it understands? Many find this dubious. On relatively standard views of action, intentions (or events of intention acquisition) are the essential cause of actions. An agent’s knowledge of action, however, is more closely tied to her beliefs about action. (We might maintain that intention constitutively involves belief, or is identical in some way to belief (cf. Velleman 2000; Setiya 2007). I find Paul’s (2009) arguments against these kinds of views devastating.) If this is right, we might need to give up the attempt to interpret this desideratum in such a way that it comes out true. (This is not to deny that practical knowledge might play important causal roles for intentional action. In other work I have argued that conscious cognition is important not only during the planning phases of action, but throughout action implementation as well.)

Let us move on to the last three desiderata. My proposal might be able to deliver knowledge of action that is both non-inferential and non-observational. When the agent takes at face value experiences of trying to A (and when the relevant belief amounts to knowledge), she will have non-inferential knowledge of what she is trying to do. When this is accompanied by a range of perceptual experiences, perhaps the agent will have non-inferential knowledge of what she is actually doing.

Whether this is so might depend on what one wants to say about the content of experiences of action. Recall the two possibilities canvassed above.

Sparse. The experience of acting consists in a range of co-conscious, closely related and functionally integrated intramodal experiences, and nothing more.

Rich. In addition to the kinds of experiences allowed by Sparse, the experience of acting includes intermodally bound contents. In particular, it involves experiences of trying bound to relevant perceptual experiences such that the result is a multimodal
experience of action not factorable without remainder into co-conscious experiences of trying and relevant perceptual experiences.

I do not know whether Sparse or Rich is true. But if Sparse is true, then the beliefs an agent forms on the basis of experiences of acting are arguably inferential. I say this because if Sparse is true, then the belief that I am A-ing is one step removed from the experiences that justify my belief. Arguably, taking this step requires inference. If this is right, then non-inferentiality may depend on a rich view of the content of experiences of acting.

I doubt the same thing is true of immediacy. Whatever the content of experiences of acting, it looks plausible that the beliefs based upon these experiences will not be based on prior evidence. So I want to claim that my proposal captures immediacy.

What about non-observationality? It is true that part of the ground of such knowledge will be perceptual, and in a sense observational. But here a point made by many others (e.g., Falvey 2000; Moran 2004) is worth repeating. It is often the case that observational data is not rich enough to deliver knowledge of what the agent is doing. To know this, we need to know, at the very least, what an agent intends to do. The agent’s intention structures the observational data, yielding a description of her activity that is rich enough to justify beliefs about her actions. In my view, an agent’s own knowledge of her action as it unfolds is shaped not only by a general knowledge of what she intends to do, but also by a more fine-grained knowledge of what she is consciously trying to do. As a result, the agent’s knowledge of her action as it unfolds will be at least partially non-observational. And indeed, as others have argued, the fact that perception plays a role in justifying this knowledge might be consistent with the general Anscombian thought that this knowledge is special in the sense that observational data alone could not provide the needed justification.