Philosophical Investigations
Rule-following

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We considered Wittgenstein’s reasons for thinking that *language*, like *game* is a *family resemblance* concept.

As with games, languages do not everywhere follow rules.

This was in stark contrast with the views of TLP.

The view of the status of logic has also changed radically.

The view of philosophy has largely stayed intact: it is a therapeutic process.
Talk outline

The Cube

Dispositions

Reading
Grasping at a stroke

Starting at §139, Wittgenstein begins a discussion of meaning, understanding and rule-following that is at the heart of PI.

He first considers some cases that put pressure on the meaning is use picture.

The theme is that we can grasp meaning in a flash or at a stroke:

But can’t the meaning of a word that I understand fit the sense of a sentence that I understand? Or the meaning of one word fit the meaning of another? – Of course, if the meaning is the use we make of the word, it makes no sense to speak of such fitting. But we understand the meaning of a word when we hear or say it; we grasp the meaning at a stroke, and what we grasp in this way is surely something different from the ‘use’ which is extended in time. (138)
Grasping *at a stroke*

- The argument here is something like:
  1. If meaning is use, there is no meaning prior to use.
  2. When we grasp meaning *at a stroke*, what we grasp is prior to use.
  \[\therefore\] 3. Meaning is not use.

- Wittgenstein spends the first part of the rule-following discussion arguing against 2.
Grasping at a stroke

* What happens when you grasp meaning in this way?
* What happens when you grasp the meaning of ‘cube’?
* Perhaps a picture comes to mind:

> Perhaps you say: “It’s quite simple; if that picture occurs to me and I point to a triangular prism for instance, and say it is a cube, then this use of the word doesn’t fit the picture.” – But doesn’t it fit? I have purposely so chosen the example that it is quite easy to imagine a method of projection according to which the picture does fit after all. (139)
Imagine I have a mental picture of a cube.

To decide whether a candidate object is a cube, I *project* from the picture to the object.

If the points of my picture map one-to-one onto the points of the object, I apply the word ‘cube’.

But what’s to stop me projecting onto e.g. a triangular prism?

If I map from vertices to vertices, I won’t apply ‘cube’ to triangular prisms.

If I map from *faces* to vertices, I may apply ‘cube’ to triangular prisms.
Mental pictures

- Response: my ‘picture’ of a cube is associated with a _correct_ method of projection.
- E.g. My picture is of two cubes, with a projection between them.

_{But does this really get me any further? Can’t I now imagine different applications of this schema too? (141)}_

- This richer picture might not settle how to judge objects.
- If the projections originate with vertices, I may get the right results.
- If the projections originate with faces, I may not.
Nevertheless, we clearly can grasp the meaning of ‘cube’.

Wittgenstein thinks there are two criteria we may have here:

- on the one hand, the picture (of whatever kind) that he visualizes at some time or other;
- on the other, the application which – in the course of time – he makes of this image. ...

Can there be a collision between picture and application? Well, they can clash only in so far as the picture makes us expect a different use; because people in general apply this picture like this. (141)

Use can fit the mental picture, but won’t always.
The key point seems to be that a picture can never force a certain use.

E.g. nothing in our mental picture of a cube forces the application of ‘cube’ to only cubes.

This point is important: Wittgenstein doesn’t want any meaning-determining picture if it’s prior to use.
Meaning is use

- Is there another sense in which the use can fit the picture? What about learning to determine the subject of a sentence by means of the question “Who or what ...? – Here, surely, there is such a thing as a subject’s ‘fitting’ this question ... We find it out much as we find out which letter of the alphabet comes after ‘K’ by saying the alphabet up to ‘K’ to ourselves. Now in what sense does ‘L’ fit this series of letters? (137)

- This does seem to be a case of use fitting meaning, and not vice versa.
Meaning is use

- Although the use can be said to fit the picture, this isn’t a problem.
- The picture is there because of the use the expression has.
- It is because people will tend to get a cube when asked for a cube that we have the picture.
- So the explanatory order is:
  1. People use the word ‘cube’ in various ways.
  2. We form a mental picture of a cube because of this use.
  3. Subsequent use can fail to match the picture.
- Understanding is demonstrated in the moment through use.
- The picture comes from use, not the other way around.
- Nothing that has been said is inconsistent with this view.
Talk outline

The Cube

Dispositions

Reading
“But how can it be? When I say I understand the rule of a series, I’m surely not saying so on the basis of the experience of having applied the algebraic formula in such-and-such a way! In my own case at any rate, I surely know that I mean such-and-such a series, no matter how far I’ve actually developed it.” –

So you mean that you know the application of the rule of the series quite apart from remembering actual applications to particular numbers. And you’ll perhaps say: “Of course! For the series is infinite, and the bit of it that I could develop finite.” (147)
Imagine I am teaching a pupil the Arabic number system by writing down initial segments: 0, 1, 2, 3, ...

How do we know when the pupil has mastered the instruction?

It cannot be their having *used* the series, since they can only have counted some finite segment.

The force of the example is this:

1. The pupil has grasped the meanings of number-words.
2. This grasp cannot be manifest in their *use*.
3. Meaning is not use.

Wittgenstein must defeat this argument.
Mistakes

- The pupil may make:
  1. systematic mistakes, by e.g. having learnt the wrong formula; 
     Or 
  2. random mistakes, by e.g. failing to have grasped any formula.

- He argues that there is no sharp distinction here.
  
  has he got the system if he continues the series correctly up to this point? – Perhaps you will say here: to have got the system (or again, to understand it) can’t consist in continuing the series up to this or that number: that is only applying one’s understanding. (146)

- We derive a sequence of numbers from a formula.

- So if we fail to derive the next instance, we haven’t applied the formula correctly.
Let’s consider the case of learning the alphabet.

Perhaps the grasp is dispositional:

*If one says that knowing the ABC is a state of mind, one is thinking of a state of an apparatus of mind (perhaps a state of the brain) by means of which we explain the manifestations of that knowledge. Such a state is called a disposition.* (149)

If the pupil *had* been asked for a particular member of the series, they would have responded such-and-such.
Dispositions

The proposal isn’t entirely successful:

*But it is not unobjectionable to speak of a state of mind here, inasmuch as there would then have to be two different criteria for this: finding out the structure of the apparatus, as distinct from its effects. (Nothing would be more confusing here than to use the words “conscious” and “unconscious” for the contrast between a state of consciousness and a disposition. For this pair of terms covers up a grammatical difference.*) (149)

Here, there seem to be two senses of ‘disposition’:

- what would happen were certain conditions to obtain
- an actual feature underlying this behaviour
Dispositions

- Suppose that someone has a disposition to correctly recite the alphabet.
- And suppose the state underlying this disposition is $S_1$.
- Wittgenstein’s point seems to be that we cannot identify the understanding with $S_1$.
- Why? Because the *only* evidence we have is behavioural.
- Let’s say we observed someone correctly reciting the alphabet but who lacked $S_1$.
- For them, $S_2$ seems to underly the disposition.
- We would not conclude that they did not know the alphabet.
Talk outline

The Cube

Dispositions

Reading
Wittgenstein now considers the case of learning to read. The beginner reads the words by laboriously spelling them out. – Some words, however, he guesses from the context, or perhaps he already partly knows the passage by heart. Then his teacher says that he is not really reading the words (and in certain cases that he is only pretending to read them). If we think of this sort of reading, the reading of a beginner, and ask ourselves what reading consists in, we’ll be inclined to say: it is a distinctive conscious mental activity. We also say of the pupil: “Of course, only he knows if he is really reading or merely saying the words off by heart.” (157)
Is the pupil reading?

Wittgenstein seems to think there is no answer to this question.

But remember that games often don’t have rules everywhere defined.

Reading is an activity – it is something you *do*.

But what the pupil *did* is observable to all.

Whether there was an internal change we cannot know.
Reading

► Perhaps this ignorance is simply due to our lack of knowledge about the brain.

► Maybe, if we looked inside the pupil's brains, we would see a clear difference.

   And it presumably must be like that – for otherwise how could we be so sure that there was such a connection? That it is so is presumably a priori – or is it only probably? And how probable is it? Now, ask yourself: what do we know about these things?

   – But if it is a priori, that means that it is a form of representation which is very appealing to us. (158)

► There is still a semantic decision to be made here, even when we have all the information.

► Why do we have such a priori confidence that there is such a connection?
In fact, that there is a characteristic experience is neither necessary nor sufficient for reading.

Not necessary:

*But imagine the following case: we give someone who can read fluently a text that he has never seen before. He reads it to us – but with the feeling of saying something he has learnt by heart (this might be the effect of some drug). Would we say in such a case that he was not really reading the passage? (160)*
Not sufficient:

*Or again, suppose that a man who is under the influence of a certain drug is presented with a series of written signs (which need not belong to any existing alphabet). He utters words corresponding to the number of the signs, as if they were letters, and does so with all the outward characteristics and feelings of reading. (We have experiences like this in dreams ...)* (160)
Reading

- Perhaps someone is reading when they derive the sounds from the words.
- The most obvious example would be someone referring to a table of sounds.

*But suppose that when he did this, he always wrote b for A, c for B, d for C, and so on, and a for Z?* – Surely we’d call this too a derivation by means of the table. – He is using it now, we might say, according to the second schema in §86 instead of the first.

... 

*Suppose, however, that he does not stick to a single way of transcribing, but alters it according to a simple rule: if he has once written n for A, then he writes o for the next A, p for the next, and so on.* – *But where is the boundary between this procedure and a random one?* (163)
Reading

- Importantly, all of these processes are *derivations*.
- None are random but, after a time, will be virtually indistinguishable from random processes.
- Where is the dividing line?
- Wittgenstein's conclusion: *derivation* is a family resemblance concept:

  *[The initial case] was, to be sure, a special case of deriving; what is essential to deriving, however, was not hidden here beneath the exterior, but this ‘exterior’ was one case out of a family of cases of deriving.* (164)

- And so is reading:

  *And in the same way, we also use the word “read” for a family of cases. And in different circumstances we apply different criteria for a person’s reading.* (164)
How convincing is this?
Remember that *family resemblance* is not *vagueness*.
But the example points more to the vagueness of *derivation*.
The initial table represents a clear case of derivation.
At the other extreme, we have randomness.
It may be unclear where to draw the boundary.
But there may nevertheless be some characteristic of all derivations.