

# On the Origin and Compilation of 'Cause and Effect: Intuitive Awareness'

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## 1. A puzzling preface

MS 119 was written between September and November 1937 and consists of almost 300 pages. 'Cause and Effect' successively selected pages 1-5, 100-155, 21-26, 28-31, and 51-59. Based on his preface to the 1976 edition, Rhees' general procedure appeared to be to publish those passages of MS 119 that did not end up in the typescript that is now printed as Part I of *Remarks on the Foundations of Mathematics*:

this typescript did not include any of the passages we are printing, except the three we have placed at the end (Wittgenstein 1976, 391).

These last three remarks cover three topics: the machine as a symbol (pp 28-31); a medicine and its effect (pp 51-56); and the procedure of weighing objects (pp 56-59). Surprisingly, in the last sentence of his preface Rhees noted that two of these three remarks 'have not been published before'. So, what are we to conclude? Did Wittgenstein select these two remarks for RFM I, or did he not?

The puzzlement disappears if we consider that Rhees fails to mention which typescript he is referring to. The suggestion is that Wittgenstein prepared only *one* typescript on the basis of the manuscript material on mathematics – one of these manuscripts being MS 119 –, namely the typescript that is published as Part I of RFM. However, Wittgenstein assembled *two* closely related typescripts, TS 221 and TS 222. The editors of RFM nowhere say that Part I is printed from TS 222, but Von Wright is more specific elsewhere (Von Wright 1982, 118); TS 221 originally existed in three copies, one of which Wittgenstein cut up into 'Zettel'. This typescript of cuttings, TS 222, was printed posthumously as Part I of RFM I. TS 222 thus consists of cuttings from TS 221. In looking at the entries on the medicine and its effect and weighing objects, we see that Wittgenstein se-

lected these from MS 119 for inclusion in TS 221, *but he left them out of* TS 222. With this in mind, Rhees' remarks gain some sense: if we substitute TS 221 for 'typescript' in 'the typescript did not include any of the passages we are printing, except the three we have placed at the end', Rhees is right, but only if we replace 'three' with 'two', for TS 221 includes the two passages on the medicine and the weighing of objects, which are also included in 'Cause and Effect'. The other remark on the machine was selected both for TS 221 and TS 222. In addition, we need to add a phrase to Rhees' second statement that 'the other two have not been published before': namely, 'as these were not selected for TS 222 and thus are not printed in RFM I part I'. Without knowledge of the existence of these two manuscripts, Rhees' editorial comments are difficult to understand.

There is more. At first sight, the preface suggests a rather pragmatic approach to editing the source text, the primary motive seeming to be to print those passages which are not printed before. However, the inclusion of the remark on the machine as a symbol does not fit this criterion. Why did Rhees decide to print it again? Klagge and Nordmann suggest that Rhees aimed to underscore the interconnections of Wittgenstein's various concerns as they first appeared in a single manuscript volume (Wittgenstein 1993, 369). This may be so, but it says little about which interconnections Rhees aimed to bring forward, and why he considered this entry important in this context. This lack of a clear editorial strategy is also illustrated by the omission and rearrangement of several other passages. It is not necessary to mention all discrepancies between the source text and the publication, for this would not help us in understanding Rhees' considerations. Nevertheless, to gain a clearer picture of Wittgenstein's considerations, it is worthwhile to analyse the relationship between MS 119 and 'Cause and Effect' in some detail. This will be done in the following.

## 2. Pages 1-5

The first pages of 'Cause and Effect' are identical to MS 119, with one important exception. Rhees omits the first remark of MS 119, indicating that this is *Philosophical Investigations* 415 yet failing to mention that this entry is also included in TSS 221 & 222. The exclusion of this remark from

'Cause and Effect' is unfortunate, as the entry provides a key to Wittgenstein's later philosophical method:

What we are supplying are really remarks on the natural history of human beings; we are not contributing curiosities however, but observations which no one has doubted, but which have escaped remark only because they are always before our eyes.

Like the first 5 pages of MS 119, this entry originates from a notebook written in February 1937 (MS 157b). For a proper understanding of the development of Wittgenstein's thoughts it is essential to know that this thought then emerges. Klagge and Nordmann fortunately add the entry in a footnote to the second edition of 'Cause and Effect' – in my view, it should have been added to the primary text. A great part of MS 119 focuses on the notion of the basic form of the language-game, Wittgenstein clarifying that our language-games are bound up with the facts of our natural history. 'Cause and Effect' partly aims to elaborate upon these connections, taking language-games with cause and effect as an example. For example, a fact of nature is that humans respond to the cries of their children, trying to comfort and nurse them as good as they can. These reactions are essential of the language-game with cause and effect.

The omitted remark also connects to Wittgenstein's reflections on mathematics. According to Wittgenstein, as far as we can say that it is a property of '9' that it follows after '3 x 3', this 'property' is found in the functioning of our intellect, in facts of our natural history. That is, to say that it is a property of 9 to be the result of 3 x 3 is to say that 9 is at the end of this chain, and it is a fact of our natural history that *we* calculate as such. A major goal of MS 119 is to elaborate the distinction between rules and empirical propositions, and a clarification of the role and function of logical and mathematical propositions is a means to this end. Wittgenstein tries to break free of the idea that these propositions are necessarily true. The idea of necessity does not lie in the rule itself, but in the fact that *we* apply it as a rule. And this is a fact of our natural history.

So, the remark that Rhees excluded from 'Cause and Effect' is crucial for understanding Wittgenstein's considerations on language-games, rules, empirical and mathematical propositions, cause and effect, and doubt

and certainty. Without any knowledge of the source text, these considerations lose their coherence.

Pages 100-155 of 'Cause and Effect' largely follow the source text – for that reason I will not pay attention to these pages here. I will now turn to pages 21-26 and 28-31.

### 3. Pages 21-26 & 28-31

These pages allow for two interpretations; one becomes apparent only when we turn to Wittgenstein's remarks on mathematics. Pages 21-26 discuss the relation between plants and seeds. In Wittgenstein's view, this example illustrates the 'powerful urge' to see everything in terms of cause and effect. Take two plants, A and B, and take a seed from both. Both seeds look identical and examinations reveal no difference between them. Nevertheless, a seed of the A plant always produces an A plant, and the seed of a B plant always produces a B plant. So, we can say which plant will grow from which seed only if we know the history or origin of the seed. However, says Wittgenstein, we are inclined to think that there *must* be a difference in the seeds themselves to account for this distinction. The origin, we say, *cannot* be the cause. What this means, Wittgenstein explains, is that biologists do not count the history or origin of the seed as a cause. The 'cannot' and 'must' express the ideal of the causal scheme, which guides us in our research, and this causal scheme does not allow for saying that the previous experience causally determines the outcome of the seed.

If we consult the original context of the discussion on plants and seeds, a striking contrast between external or empirical relations, and internal or grammatical relations emerges. As mentioned, MS 119 argued that the inexorability with which '9' follows '3 x 3' is something that lies with *us*, and not so much in the system that allegedly functions independently of us. We are inclined to say that 9 *must* be the result of the calculation. This 'must', says Wittgenstein, is the expression of an internal relation. That is, the relation between 3 x 3 and 9 is laid down in grammar. When we ask a child to calculate '3 x 3' and it submits '9', we say that it has calculated correctly. If however the child submits '10', we say that it has not calculated correctly, and precisely this answer, says Wittgenstein, illustrates that

we reckon the result among the rule. So, the relation between  $3 \times 3$  and 9 is found in grammar, and this is what is expressed by saying that the result *must* be present in what precedes it. This 'must' points at a grammatical or logical or internal relationship between a calculation and its result.

In contrast, the relation between the seed and the plant is external; we can set up an experiment to find out whether there is a difference between the seeds, but the result we may find is external to the cause. So, the relation between cause and effect is external, and the possible difference between the seeds is something to be established empirically by performing an experiment. This contrast between internal and external relations has disappeared in 'Cause and Effect'.

After pages 21-26, MS 119 continues for 5 more pages on the example of a machine, while 'Cause and Effect' separates these notes. The connection between the example of the plants and the example of the machine is apparent; as much as we are inclined to think that the A plant is already present in the seed of the A plant, we are also inclined to think that the movements of the machine are determined in advance. Wittgenstein warns us not to be misled by expressions such as 'I know how the machine works' into thinking that it is a priori determined what movement follows. If we think that something is determined a priori we are dealing with a conceptual relation.

These examples indicate that something is to be gained from consulting the underlying manuscript for our understanding of 'Cause and Effect'. As mentioned, a central purpose of Wittgenstein's reflections on mathematics is to elucidate the distinction between rules and empirical propositions and, as a corollary, to elucidate the distinction between internal and external relations. The remarks on causation in MS 119 partly function as an illustration of this very distinction between internal and external relations. Without any knowledge of MS 119, several remarks in 'Cause and Effect' lose an important dimension. A discussion of the last pages of MS 119 that Rhees selected for 'Cause and Effect' displays this point once more.

#### 4. Pages 51-59

These pages discuss two examples, one on the relation between a medicine and its working, the other on weighing objects. It is worthwhile to examine these examples briefly, as they nicely illustrate one of Wittgenstein's major concerns, namely to remind us of the way in which our language is connected to our actions and, in addition, the way in which the sense of certain expressions in our language becomes unclear when they are disconnected from these actions. In this way, these remarks prepare for the later examination in pages 100-155 of MS 119, in which the connection between actions, reactions and language is further examined. 'Cause and Effect' blurs the fact that pages 51-59 are a preparation for what follows, as these two examples are now given at the very end of the printed text. Also, since these entries do not return elsewhere in the *Nachlass* and are not discussed in the literature on 'Cause and Effect', it is worthwhile to discuss them.

The first example relates to the invention of a new medicine, which is said to prolong life with a month when taken for several months. A critic might say that we cannot *know* whether it was really the medicine that prolonged the life of the patient; the patient might just as well have lived just as long without it. This expression is misleading, says Wittgenstein, for the language-game with this sentence misses the essential point which makes the game useful. That is, the essential point of the game with the concepts of 'new medicine' and 'prolongation of life' is that the medicine can be *tested*. There is a connection between these words and our actions in the sense that we can set up an experiment; we can select 300 people with the same disease, give the medicine to half of the group and withhold it to the other half, and check whether the last group of patients dies a month earlier than the other half. This is what would be called a proper test - not to mention the cruelty of it - of the claim about the medicine. The expression 'we cannot know...', which is something a philosopher might typically say, lacks this context of testing a claim by means of an experiment. The expression at hand seems to be an ordinary expression, but on closer scrutiny it appears to be wholly disconnected from the ordinary language-game with this expression and the actions that accompany it.

The second example makes a similar point, though from a slightly different angle. Wittgenstein imagines different language-games with

weighing objects. For example, we can imagine a game in which we say that a body has weight only when it is actually weighed on a scale. In this case, an expression as follows makes sense: 'the object has no definite weight except when it is measured'. Or, we can imagine a custom in which some material is weighed every 5 minutes, and we calculate the price according to the result, say after half an hour, of the last weighing. Then it makes sense to say 'I do not know how much it will cost yet, we are only halfway measuring'. Wittgenstein's point is again to emphasise the connection between language and our actions. If the practice of weighing objects is different, the expressions that accompany it are different accordingly.

With this example on weighing objects the main text of 'Cause and Effect' has come to an end. Clearly, this publication is very much a motley of remarks, presumably compiled both with pragmatic and substantial reasons in mind. As mentioned, Rhees' general aim in compiling this text might have been to bring out the interconnections between Wittgenstein's thoughts. This goal is only partly established, for several of his decisions actually blur connections, for example between Wittgenstein's overall methodology and the examples of language-games that he discusses, and between the concern for rules or grammatical propositions, and empirical propositions. By focusing on these connections, we have seen in what way 'Cause and Effect' is embedded in several other of Wittgenstein's ongoing concerns.

## Literature

Wittgenstein, Ludwig 2000: *Wittgenstein's Nachlass: The Bergen Electronic Edition*. Oxford: Oxford University Press.

Wittgenstein, Ludwig 1993: "Cause and Effect: Intuitive Awareness", in Klagge, James / Nordmann, Alfred (eds.): *Philosophical Occasions*. Indianapolis & Cambridge: Hackett Publishing Company, 368-422. Reprinted from Wittgenstein, Ludwig 1976: "Cause and Effect: Intuitive Awareness" (ed. R. Rhees), *Philosophia* 6 (3-4), 391-445.

Wittgenstein, Ludwig 2001: *Remarks on the Foundations of Mathematics*. Cambridge: MIT.