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When and why was *Remarks on Colour* written – and why is it important to know?

Der Philosoph will die Geographie der Begriffe beherrschen.
(MS 137, 63a, dated 1 July 1948)¹

The publicity material on the cover of the paperback edition of *Remarks on Colour* states that “[t]he principal theme [of the work] is the features of different colours, of different kinds of colour (metallic colour, the colour of flames, etc.) and of luminosity”.² This description, in all likelihood approved, if not written, by the editor, G.E.M. Anscombe, is misleading. While many of Wittgenstein’s remarks are devoted to the nature and motley character of colour with more than a few on the features of different colours, kinds of colour and luminosity, there is much more in the book, and readers coming to it with the publicity material in mind will almost inevitably get the wrong impression. What is said to be the principal theme is at most a minor one, and it is far from self-evident that Wittgenstein is, as also intimated on the cover, out “to destroy the traditional idea that colour is a simple and logically uniform kind of thing”. An examination of when and why Wittgenstein drafted the remarks of the book shows him to be centrally motivated by questions concerning transparency, questions unmentioned in the publicity material and mostly missed or disregarded in the secondary literature.

Remarks on Colour comprises observations that Wittgenstein penned during the last fifteen or so months of his life. His literary executors – Anscombe, Rush Rhees and G.H. von Wright – apparently reckoned “the whole of this material might well be published, as it gives a clear sample of first-draft writing and subsequent selection”. Anscombe allows that much of the material written not subsequently recycled is “of great interest” but decided – this is more obvious in the German version of her preface – that the chosen “method of publication involves the least editorial intervention” (Editor’s Preface). Judging from how she ended up presenting the material, her thought was that Wittgenstein’s remarks would be most satisfactorily published in three separate units – Part I extracted from MS 176, Part II extracted from MS 172 and Part III extracted from MS 173 (for catalogue numbers see von Wright 1993b). Not without reason Anscombe seems to have considered the relatively small number of other remarks

¹ The philosopher wants to master the geography of concepts.

² References in the text are to the published text. The numbering of the remarks is the editor’s, not Wittgenstein’s.

on colour in the final six items in von Wright's catalogue, MSS 172-177, incidental and safely omitted. Certainly there is nothing about colour to speak of in the remarks of MS 172, MS 173 and MS 176 not included in *Remarks on Colour* or in MS 174, MS 175 and MS 177, manuscripts mostly reproduced in *On Certainty* or volume 2 of *Last Writings on the Philosophy of Psychology*.

It would be shabby to quarrel with Anscombe's presentation of the material. Part I, the part written last, is better organised than Part III, from which it was largely drawn, and the remarks seemingly composed during the process of selection usefully fill out the discussion. (Anscombe overstates the degree to which Part I derives Part III when she describes the material in her "Editor's Preface" as a revision of earlier material "with few additions" since about a quarter of the remarks are new.) Wittgenstein's ostensible aim in Part I is to express his most recent thinking about colour simply and sharply, and it is tempting to think little is lost when the material in Part III that was not recycled is relegated to second place, Anscombe's claim in her preface about its "great interest" notwithstanding. Whether or not Part I represents Wittgenstein's considered opinion, there is plenty here for philosophers to get their teeth into, not least his treatment of the problem of which colours are primary, the nature of various kinds of impossible colour and questions regarding the phenomenon of colour blindness. Moreover placing Part II or Part III before Part I would not have made for a better book. The import of the 20 remarks of Part II is not easily fathomed, and starting with the 350 remarks of Part III would have crowded out the 88 remarks of Part I.

Still the book does not have to be read from the beginning, and there are considerable advantages to working through Wittgenstein's preliminary sketches before pouring over his last remarks on the subject. Starting with his "first-draft writing" and reserving his "subsequent selection" for later examination recommends itself, pure scholarship aside, if only because it is not at all apparent what exactly Wittgenstein is about in Part I. Focusing on the remarks that appear at the beginning of *Remarks on Colour* leaves one – if my own experience is anything to go on – with the nagging suspicion that there is more to Wittgenstein's discussion than one is seeing, that he is exercised by a problem or problems he does not, whatever his motives, explicitly state. The strategy of reading Part II and Part III first may not be the key for opening all the locks but it does, I believe, open more than a few. It provides no little insight into what lay behind Wittgenstein's renewed interest in colour, why he put pen to paper, and what he aimed to achieve. His earlier thinking illuminates his final thoughts, and it is clearer that *Remarks on Colour* is a significant document, actually a profound and challenging work of philosophy.

The question of when Wittgenstein wrote the various parts of *Remarks on Colour* is tricky. It is unclear which remarks were drafted first, in particular whether Part II is earlier or later than Part III. Only the first 130 remarks of Part III are dated, and there is no explicit indication in the text when any of the others were set down. In her "Editor's Preface" Anscombe leaves the matter hanging. She states that Part III "reproduces most of a MS book written in Oxford in the Spring of 1950" and Part I "was

written in Cambridge in March 1951”, but she also believes it uncertain “whether Part II ante- or post-dates Part III”. These observations merit consideration since Anscombe was close to Wittgenstein at the time – he was staying in her home for all but a few months between April 1950 and February 1951, during which time the bulk of *Remarks on Colour* was doubtless written. There is, however, reason to hesitate. Apart from the fact that Anscombe sidesteps the problem of whether Part II or Part III was written first, the dates she supplies for the undated part of Part III and Part I deserve a closer look.

Anscombe seems overly cautious about the origins of Part II. As has been noted more than once, Wittgenstein is reasonably regarded as having compiled MS 172, the manuscript from which Part II derives, while at the family home in Vienna between December 1949 and March 1950, i.e. before drafting the remarks of Part III. In his catalogue von Wright states that the remarks “were probably written [...] in the early months of 1950” (Wright 1993b: 498), while Denis Paul, another scholar familiar with the manuscripts, unequivocally declares the remarks were “written in Vienna” and could not “have been written after Part III” (Paul 2007: 299). Even Anscombe herself reports in the “Preface” she wrote for *On Certainty* almost a decade before writing the “Editor’s Preface” for *Remarks on Colour* that she is under the impression that Wittgenstein was in Vienna when he composed MS 172, the source of §§1-65 of *On Certainty* as well as Part II of *Remarks on Colour*. Moreover since the manuscript consists of loose sheets, it may well have been produced when Wittgenstein was in Vienna away from his manuscript books. And most telling of all, there is the fact that Wittgenstein informed Norman Malcolm, von Wright and Rhees in letters penned in January 1950 that he was reading J.W. von Goethe’s *Zur Farbenlehre* [*On the Theory of Colour*] (McGuinness 2008: 456-458). It is not a bad bet that this stimulated him to write the remarks of Part II, Goethe being unmistakably in the background.

The hypothesis that Wittgenstein wrote Part II in Vienna has not gone unquestioned. Thus it has been argued that the hypothesis labours under the difficulty that Wittgenstein wrote on 16th January to Malcolm that he is “not writing at all because [his] thoughts never sufficiently crystallize”, a confession that may be thought to cast “some doubt” on the suggestion, if not derail it altogether (McGuinness 2008: 458). This hardly settles the matter, however. In the letter Wittgenstein wrote to Rhees on 22nd January he announces that he has “written down some *weak* remarks”, remarks that could well be those on colour in MS 172 reproduced as Part II of *Remarks on Colour*. This is not an implausible conjecture even granting the remarks of Part II are not noticeably weak (despite how some of them are expressed). Wittgenstein grumbled about what he was getting done when, on any reasonable measure, his work was going fine, and there is no other document in the *Nachlass* that fills the bill (or compelling rea-

son to think the remarks in question have been lost or destroyed).³ And why suppose Wittgenstein's comment about weak remarks in his letter to Rhees is "in slight contradiction to [...] the letter to Malcolm"? His thoughts could have gelled between 16th January and 22nd January sufficiently for him to have started writing, and he could have set down some, if not all, the remarks of Part II during the week.⁴

The date of composition of Part III poses a problem since the material falls into two distinct sections. For one reason or another, Anscombe chose to publish the material drawn from MS 173 as a single unbroken unit and to leave unnoted that III, 1-130 and III, 131-350, hereafter Part IIIA and Part IIIB, were not composed at the same time (MS 173, p. 0v-31v and p. 47v-100r).⁵ There is not even a dividing line in the published work between the two sets of remarks, just a cursory note in the "Editor's Preface" alerting the reader about the omission of "material on 'inner-outer' [i.e. the relationship of our inner lives to our outer behaviour], remarks about Shakespeare and some general observations about life". This is especially unfortunate since it masks that Wittgenstein broke off writing on colour to discuss psychological concepts (MS 173, p. 31v-47v; LWPP II, p. 60-71) and discourages investigation of why Wittgenstein revisited the topic subsequent to discussing psychological concepts.⁶ Presumably he stopped writing on colour because he took himself to have said all he had to say about colour after composing III.130 and only later came to see that he had more to say about it. But when? While there can be little question when he began and finished writing Part IIIA, when he began and finished writing Part IIIB is harder to establish.

Part IIIA was compiled, as Anscombe takes the whole of Part III to have been compiled, in the spring of 1950, i.e. on my accounting sometime after Part II. Wittgenstein has a note at the beginning of MS 173, not reproduced in *Remarks on Colour*, to the effect that he had arrived back in England from Austria on 23rd March 1950, and it cannot seriously be doubted that he wrote the 130 remarks of Part IIIA during the next three weeks. (There are eight dates interspersed dates: "24. 3. 50" before RC III, 1; "26. 3. 50" before RC III, 4; "27. 3. 50" before RC III, 25; "28. 3. 50" before RC III, 43; "29. 3. 50" before RC III, 60; "30. 3. 50" before RC III, 70; "11. 4. 50" before RC III, 125; and "12. 4. 50" before RC III, 127.) This is a large amount of material for Wittgenstein to have written in so short a period, and since the material is not noticeably rough, it is a reasonable

³ There is nothing on colour in MS 170 and just a parenthetical remark about reddish-green leaves in MS 171 (LWPP II, 59). I believe and shall argue shortly that the only remarks of consequence on colour in MS 169 were drafted after the remarks of Part II.

⁴ It is also somewhat misleading to suggest that Wittgenstein's remarks on colour were "inserted in a longer set of reflections, mostly on themes to do with certainty" (McGuinness 2008: 458). The sheets reproduced in *Remarks on Colour* are separated from the sheets reproduced in *On Certainty*.

⁵ "The Part III notes come in two sections" (Paul 2007: 301). For the division of Part III into Part IIIA and Part IIIB, see Rothhaupt 1996: 380.

⁶ It is not impossible that some or all of Part IIIB was composed at the same time or even after MS 174 or MS 175.

conjecture that he was working from notes. It is hard to believe anyone, even someone capable of writing as fast as Wittgenstein, could pen all but nine of the remarks in just five days. Still we can be pretty sure that the remarks themselves postdate rather than antedate the remarks of Part II – and all the more so when the nature of the remarks themselves, yet to be discussed, is taken into account.

Unlike the remarks of Part IIIA, the remarks of Part IIIB are undated, and there is no sign in the text of exactly when they were drafted beyond the fact that they occur later in the manuscript and hence must have been drafted after 12th April 1950. The only clue as to how long after is that von Wright reports that colour was the main topic of conversation when Wittgenstein was staying at his home in late April and early June 1950 (Wright 1993a: 478). While hardly decisive, this suggests, if only weakly, that the remarks were set down at least in part soon after the remarks of Part IIIA. It is even possible that Wittgenstein composed some of Part IIIB before the end of April, a remark in MS 174 being dated 24th April 1950 (MS 174, p. 2r; LWPP II, p. 81). In any event the order in which Part II, Part IIIA and Part IIIB were written can be safely taken to match the order in which the manuscripts appear in the catalogue. A lower catalogue number does not necessarily signify earlier composition – when a document was written was only one consideration at play when the catalogue was drawn up – but it is practically certain that the remarks derived from MS 172 precede the remarks drawn from MS 173 and Part IIIA precedes Part IIIB.

The discussion of Part I, like the discussions of Part II and Part IIIB, is undated. It is entirely uncontroversial, however, that it was composed after Part IIIB, this being the main source of many of its remarks (there are no remarks in Part I deriving from Part II and just a few remarks from Part IIIA). Since Wittgenstein died on 24th April 1951, the material must have been put together in mid-to-late 1950 or the first months of 1951. Less obvious, however, is whether it was put together before or after 1st January 1951. It has been suggested that it was compiled some time in 1951 (Nedo 1993: 145), even as late as March 1951 (Anscombe, “Editor’s Preface”) or – as the Bergen Electronic Edition has it – after 1st April 1951. At first blush, a 1951 date is reasonable since the remarks in MS 176 immediately following the remarks published as Part I are dated 21st March 1951. But against this suggestion there is the awkward fact that the final remarks of MS 175 are also dated 21st March 1951, and it is beyond belief that Wittgenstein could have written in a single day the 88 remarks of Part I of *Remarks on Colour* many of which are new, along with nine fairly substantial remarks on certainty (MS 175, p. 74v-78v; OC, 417-425). A more likely hypothesis, I venture to suggest, is that Wittgenstein began MS 176 before completing MS 175 and used the empty pages of MS 176 on running out of room in MS 175. He had gone back and forth between manuscript volumes more than once before, and he could have compiled Part I just a few months, possibly a few weeks, after writing Part IIIB rather than the best part of a year afterwards. If forced

to guess when he compiled the material, I would say he compiled it before going to Norway in October–November 1950, while there, or soon after returning to England.⁷

Having considered when Wittgenstein wrote the various parts of *Remarks on Colour*, I turn to the question of what could have spurred him to discuss colour in 1950 and why he set down the remarks of Part II (and later still the remarks of Part IIIA, Part IIIB and Part I). True to form, he does not say what he is aiming to show but plunges straight in. The sole tipoff regarding his decision to re-examine the topic – besides what can be gleaned from the discussion of Part II itself – is that he reports in his January 1950 letters to Malcolm, von Wright and Rhees that has been finding Goethe’s *Zur Farbenlehre* worth thinking about. It has to count for something that he informs Malcolm that the book, “with all its absurdities, has very interesting points”, informs von Wright that the book is “partly boring and repelling but in some ways also very instructive and philosophically interesting”, and informs Rhees that while the book “attracts and repels”, “[i]t’s certainly philosophically interesting”. What might have caught his eye? Since he does not say in his three letters or, as far as I know, anywhere else what he finds “philosophically interesting”, there is no alternative to looking for hints in the text.⁸

While it has been suggested that “[i]t would be easier to tell a consistent story about [Wittgenstein’s] colour ideas without [Part II]” (Paul 2007: 299), I believe the material is singularly revealing both regarding Wittgenstein’s thinking about colour and his decision to write again about it. Wittgenstein begins, not uncharacteristically, with a terminological observation and notes that “the colour-impression of a surface” can be equated with “the composite of shades of colour, which produces the impression” (RC II, 1).⁹ Next Wittgenstein introduces what seems to be his leading idea, the idea he mainly wants to emphasise. He writes: “Blending in white removes the *colouredness* [Farbige] from the colour; but blending in yellow does not. – Is that the basis of the proposition that there can be no clear transparent white?” (RC II, 2).¹⁰ This in turn prompts him to ask: “What then is the essential nature of *cloudiness* [*das Wesentliche des Trüben*]?” and declare: “[R]ed or yellow transparent things are not cloudy; white

7 Though the remarks on certainty in MS 176 are continuous with the remarks on colour, they seem – judging from the handwriting – to have been drafted at different times. Von Wright has MS 176 down in his catalogue as from “1950; 10 March–21 April 1951” (Wright 1993b: 489).

8 The question of why Wittgenstein began reading Goethe’s book seems unanswerable. I see no reason, however, to think he opened it “exactly with the intention of spurring himself to philosophize” (Monk 1990: 561).

9 Since MS 172 comprises loose-leaf pages, RC II, 11–20 could have been composed before RC II, 1–10. Internal evidence, however, counts against this possibility (cf. Rothhaupt 1996: 377–379). For a contrary view, see Salles 2001.

10 To scotch a possible misunderstanding I should point out that Wittgenstein is not saying when white is added, something colourless will sooner or later result, just noting that the more white that is added, the less coloured the colour will be (and hence will eventually become opaque white).

is cloudy” (RC II, 4). Moreover a few remarks further along he adds: “The blending in of white obliterates the difference between light and dark, light and shadow [*Hell und Dunkel, Licht und Schatten*]”; does that define [*bestimmt*] the concepts more closely? Yes, I believe it does” (RC II, 9). What he is saying – I fancy this is the thought that gelled in January 1950 – is that there is no such colour as transparent white since white is essentially cloudy.

If RC II, 1-10 can, as I believe, be regarded as indicating how Wittgenstein was thinking in early 1950, he returned to the topic of colour because he became puzzled by the impossibility of transparent white. He is to be regarded as taking up the topic of colour between writing to Malcolm on 16th January and writing to Rhees on 22nd January because he noticed something in *Zur Farbenlehre* about transparent white. I picture him thinking he needed to examine closely why white is (logically) never transparent and, more generally, why some colours can (logically) be transparent and some not, this being something he had not previously looked into. It would be rash to regard his remarks at the beginning of Part II as proving he wrote them because he came to think it incumbent on him to explain why white is invariably opaque while red, yellow and other spectral colours can be either transparent or opaque. But there seems no other reason for him to have discussed the topic and every reason to think his reading of *Zur Farbenlehre* had something to do with it. This would account for his newfound interest in colour and is, I submit, a good working assumption, at least pending evidence pointing the other way.¹¹

Be this as it may, it is hard to miss that the discussion of RC II, 1-10 is in the spirit of Goethe’s treatment of colour in *Zur Farbenlehre*. The suggestion that blending in white removes colouredness, the idea that cloudiness “conceals forms because it obliterates [*verwischt*] light and shadow [*Licht und Schatten*]” (RC II, 5) and the claim that white “does away with darkness [*Dunkelheit*]” (RC II, 6) are all Goethean in spirit. While Wittgenstein had little time for Goethe’s Aristotelian view of colour as caused by the interaction of light and darkness at light/dark boundaries, he allies himself with Goethe – at the level of concepts – when he connects whiteness with cloudiness and speaks of blending in white as obliterating the difference between light and dark, light and shadow. For him the interconnections among the notions of “white”, “cloudiness”, “light-dark” and “light-shadow” that Goethe stresses go a long way to “defin[ing]” the concepts. (At RC II, 10 Wittgenstein adds that were anyone not to “find it to be this way, it wouldn’t be that he had experienced the contrary, but that we wouldn’t understand him”). Moreover besides offering an analysis cast in terms of concepts of the sort Goethe favoured, Wittgenstein explicitly observes that “[p]henomenological analysis (as e.g. Goethe would have it) is analysis of concepts” (RC II, 16).

¹¹ It is important to remember that Wittgenstein takes it to go without saying that there is logically, not just physically, no such colour as transparent white. Cf. my 2014 article.

The impossibility of transparent white would have struck Wittgenstein as deserving special attention, one of his major concerns, early and late, being to show that logical impossibilities are syntactical, linguistic, grammatical. It was a leitmotif of his philosophy that there is no possibility or impossibility that is not at root conceptual, and he would have thought – on pain of exposing his philosophical vision to serious criticism – that he needed to explain the logical impossibility of transparent white. What he requires, he would have realised, is a “grammatical rule” that accounts for its incongruity. Since this incongruity cannot be explained by the simple expedient of noting that white is an opaque colour – and doubly so since the German for “opaque” is “*undurchsichtig* [not transparent]” – he would have felt he needed an analysis of white that entails that it, unlike red, yellow, green and blue, is never transparent. For him “White surfaces are opaque” is on a par with “Circles are constructible through three non-collinear points”, the one because “transparent” and “white” go hand in hand, the other because the same is true of “circle”, “collinear” and “point”.¹²

One reason the observation that white is essentially opaque would have set Wittgenstein back on his heels is that it is in sharp conflict with the conception of colour grammar he had been working with for the previous two decades. Prior to 1950 he had taken the logic of colour concepts to be captured by various representational devices – the colour circle, the colour octahedron and the colour double cone, in particular. Thus in *Philosophical Remarks*, a set of remarks compiled in 1930, he writes: “[T]he colour octahedron [i.e. a double pyramid with white and black represented at the apexes and red, blue, green and yellow at the corners of the base] is grammar” (PR, 39).¹³ This conception has considerable merit but falls short when it comes to transparent colours – and likewise for the other representations Wittgenstein mentions. Since such representations make no provision for transparent colours, only for (opaque) surface colours, they do not explain the difference between transparent white and transparent red. In 1950 Wittgenstein would have recognised that however well the colour octahedron and the like capture the relationships among spectral colours, they require supple-

¹² In a book heavily influenced by Wittgenstein’s thought, W. H. Watson writes: “What the proposition [‘A circle can be drawn through any three points, which are not collinear’] asserts is a rule of logical grammar about the words ‘circle’ and ‘point’ ” (Watson 1938: 11).

¹³ Wittgenstein also refers to the colour octahedron as “a grammatical representation, not a psychological one” (PR, 1) and adds it “is grammar, since it says that you can speak of a reddish blue but not of a reddish green, etc” (PR, 39). (This is because red and blue are represented as adjacent, red and green as opposed.) Also note that Wittgenstein reportedly asserted in a lecture in February 1930 that both the colour octahedron and Euclidean geometry are “a part of grammar” (LWL, p. 8).

mentation or replacement.¹⁴ In particular he could no longer accept that the colour octahedron provides an adequate “bird’s-eye view [*übersichtliche Darstellung*] of the grammatical rules [governing colour]” (PR, 1).¹⁵

Though Wittgenstein does not expressly point out that the colour octahedron fails to capture the grammar of colour in its entirety, he remains wedded to the general philosophical conception of colour that undergirds his remarks about the colour octahedron in *Philosophical Remarks*. RC II, 2-10 provide an analysis of whiteness that explains why it is never transparent or – what comes to the same thing – why it is definitive of white that it is opaque. As in *Philosophical Remarks* and other earlier work, he hopes to demonstrate that a necessity is linguistic, not empirical (or metaphysical), and continues to hold that an “analysis of concepts [...] can neither agree with nor contradict physics” (RC II, 16). To his way of thinking the proposition about blending in white mentioned in RC II, 2 cannot be “a proposition of physics” and nobody should “believe in a phenomenology, something midway between science and logic” (RC II, 3).¹⁶ While he no longer takes colour concepts to be as compactly representable as he had taken them to be in *Philosophical Remarks*, he still thinks their grammar is representable and believes a satisfactory (grammatical) representation would state what can and cannot be sensibly said about colour. He does not disown the idea of the colour octahedron as encapsulating the grammar of surface colours, just insists that accommodation be made for transparency and transparent colours.

At this juncture I can imagine it being objected that I am wrong about the development of Wittgenstein’s thinking about colour since the impossibility of transparent white is discussed in MS 169, a manuscript that appears in the catalogue before MS 172 (MS 172, 77v-80v; LWPP II, p. 47-48). If MS 169 was compiled in the first half of 1949 (Wright 1993b: 488) or in the summer of the same year or soon after (Gennip 2003: 131), the discussion of transparent white in Part II of *Remarks on Colour* was not Wittgenstein’s first discussion of the subject but one penned months after he had initially treated it. Before jumping to conclusions, however, it should be noted that MS 169 may not have been produced all at once and the remarks on transparent white, which occur in the final pages of the manuscript, may have been written after the remarks in

14 It is no objection that Wittgenstein says in *Philosophical Remarks* that the colour octahedron provides a “rough representation” (PR, 1). His thought is that this representation charts the main contours of our use of colour words in much the same way that elementary logic charts the main contours of our use of “and” and “not”. He was not budgeting for transparency and would not have regarded “transparent” as comparable to “not not” used to indicate strong disagreement.

15 In my view Lee rightly stresses that transparent white is a major topic of concern in *Remarks on Colour* but misses that it poses a major problem for the conception of the colour octahedron as grammar (cf. Lee 1999: 231) while McGinn rightly notices that the colour octahedron over-idealises but misses that it does not explain the impossibility of transparent white (cf. McGinn 1991: 442).

16 Here, evidently, “phenomenology” is to be understood different from what how it is understood in RC II, 16. Wittgenstein is not equating it with the analysis of concepts.

Part II, indeed after the remarks of Part IIIA. They differ in tone and substance from the few brief remarks on colour earlier in the manuscript, and it is hardly impossible that Wittgenstein was using spare pages to jot down a thought or two.¹⁷ In addition, as will soon become evident, the discussion of transparent white in MS 169 is closely allied with the discussion in Part IIIB.

But am I not stretching it when I suggest that Wittgenstein was moved to write again on colour by what he read in *Zur Farbenlehre* about transparent white? There is little to be concluded from the fact that Wittgenstein speaks of himself as reading Goethe's book and in *Remarks on Colour* refers more frequently to Goethe than to any other thinker. He does not explicitly mention Goethe's views about transparency, only recommends reading him as analysing concepts and expressing conceptual truths (compare RC III, 125 and RC I, 70-71). Nor does Wittgenstein cite, even allude to, Goethe's characterisation of white as "the simplest, brightest, first, opaque occupation of space" (Goethe 1970, #147), his claim that "[t]ransparency itself, empirically considered, is already the first degree of the opposite state" (Goethe 1970, #148) or his thesis that it is a "tendency of a transparent medium to become only half-transparent" (Goethe 1970, #238). The fact that he says in his letter to Rhees that he has been reading "parts of Goethes [sic] *Farbenlehre*" is no guarantee that he had been reading the parts touching on transparency and whiteness.

It would be premature, however, to discount the hypothesis that Wittgenstein was motivated to discuss transparency and transparent white by reading *Zur Farbenlehre*. However shaky the suggestion that he read Goethe's remarks on the topic, he had to have read the letter from Philipp Otto Runge that Goethe reproduced as an appendix to his book, a letter in which transparency and transparent white figure prominently. Runge is the most cited writer after Goethe in *Remarks on Colour* and his letter is quoted, albeit in Part IIIA and Part I, not in Part II. Thus Wittgenstein writes: "Runge to Goethe: 'If we were to think of a bluish orange, a reddish green or a yellowish violet, we would have the same feeling as in the case of a southwesterly northwind'. Also: what amounts to the same thing, 'Both white and black are opaque or solid. [...] White water which is pure is as inconceivable as clear milk'" (RC III, 94, ellipsis in the original; also at RC I, 21, slightly modified, as from "Runge"). Given that Wittgenstein took "reddish green" to be linguistically anomalous, he could not but have been struck by Runge's comparison of "reddish green" with "a southwesterly northwind" and "transparent white" with "reddish green".¹⁸

17 There are lines in MS 169 before and after the material on transparent white, in fact unusually many dividing lines at the end of the manuscript. On the manuscript itself cf. Rothhaupt 1996: 369-372, and note that von Wright and Nyman suggest in their "Editors' Preface" to *Last Writings* that the manuscript falls into two parts, namely 2-41 and 41-49. (LWPP II, p. ix)

18 It is worth noticing that the compass perspicuously represents direction and treats north and southwest as opposed in much the same way that the colour octahedron perspicuously represents colour and treats red and green as opposed.

Accepting that Wittgenstein wrote RC II, 1-10 of *Remarks on Colour* with the object of explaining the impossibility of transparent white, the question of why he wrote RC II, 11-20 and Part IIIA is easily answered. Having explained to his own satisfaction why white is essentially opaque, he would, naturally enough, have taken it upon himself to re-examine the problem of colour as if for the first time and without preconception. He had fallen into the trap of touting an oversimplified conception of colour once and would not have wanted to fall into the same trap again. This would have been reason enough for him to proceed in the second half of Part II to discuss various topics on more or less loosely related to transparent white and to broaden the focus in Part IIIA to encompass additional sorts of colour. It made sense for him to consider, as he does in Part II, how a painter would depict objects through coloured glass, how things look in different sorts of light and whether “white light” is an intelligible concept, and discuss, as he does in Part IIIA, the use of the “-ish”-suffix, the notion of a pure colour and the concepts of brown and luminous grey.¹⁹

So much for Part II and Part IIIA of *Remarks on Colour* and the role of the discovery of transparent white in Wittgenstein’s thinking in early 1950. The question that now arises is why, after penning a fair number of remarks on “the inner and outer”, he suspended writing on this and began again to write on colour, i.e. why he wrote the remarks of the rest of MS 173, the material comprising Part IIIB. One possibility is that he had set down all he had to say about psychological concepts and decided to continue exploring colour concepts for want of something better to explore. Alternatively he may have decided to excerpt and reorganise what he had written in Part II and Part IIIA. And it is possible too that he came to think he had something extra or different to say about colour, even perhaps that he needed to correct what he had said in Part II or Part IIIA. Unfortunately, yet again, he does not explain himself. Prior to examining Part IIIB itself, all that can be said for sure is that he was moved to think again about colour, to put pen to paper and discuss it rather than go on studying psychological concepts or return to the investigation of certainty he had begun in MS 172.

Turning to the text itself, it is clear from the first couple of pages of Part IIIB that Wittgenstein is neither developing thoughts he had had while writing on “the inner and outer” nor embellishing, reworking, bringing together or reordering what he had written in Part IIIA. He does not take up the topic of colour where he left it nor does

¹⁹ The topic of transparency is not neglected in Part IIIA, just treated more cursorily. In addition to quoting Runge at RC III, 94, Wittgenstein couples transparency with saturation (RC III, 14), reconsiders the task of painting transparency (RC III, 23), links transparency with black and white (RC III, 24), contrasts transparency with cloudiness (RC III, 70) and notes that Runge observes that “there are transparent and opaque colours” (RC III, 76). Still I would question whether Wittgenstein’s “discovery” of the opacity of white structures the whole document and informed his remarks from beginning to end (cf. Lee 1999: 217). Rather it seems to have prompted him to discuss colour again. Also compare Waismann: “[Wittgenstein] has the marvellous gift of always seeing everything as if for the first time.” (Waismann 1979:26)

he recycle remarks, his usual practice when separating wheat from chaff.²⁰ The remarks of Part IIIB are new, and Wittgenstein is most charitably read as returning to the drawing board because he had fresh thoughts to express.²¹ Sometime after completing Part IIIA, he seems to have come round to thinking that he had not properly understood the concept of transparency and that his account of the impossibility of transparent white leaves something to be desired. In Part IIIB he discusses the nature of transparency itself, something he had not explicitly done in Part II or Part IIIA, and he supplements his explanation of the phenomenon with a markedly different explanation of the impossibility of transparent white from the one he had floated earlier. Roughly stated, his remarks on transparent white in Part IIIB differ from the remarks in Part II and Part III in that they focus on transparency rather than on whiteness, and the influence of Goethe is much less in evidence.

Wittgenstein seems to have come round to believing – this would be sometime after 12th April 1950 – that he had misconstrued the notion of transparency, at least placed the emphasis in the wrong place. He does not deny that the opacity of white is connected with cloudiness but no longer sees the absence of cloudiness as the defining characteristic of transparency. Perhaps because he had been overly influenced by Goethe’s discussion of colour in *Zur Farbenlehre* and had accorded too much weight to the thought that “[b]lack and white themselves have a hand in the business, where we have the transparency of a colour” (RC III, 24), he had treated the opacity of opaque surfaces instead of the transparency of transparent ones as crucial. As he now sees it, transparency is a matter of “see-throughness”, not the absence of cloudiness, and a transparent white glass is impossible because of the essential “non-see-throughness” of white rather than to its essential cloudiness. (Wittgenstein’s missing that that the German for “transparent”, “*durchsichtig*”, literally means “through-viewable” is not especially odd, English speakers being just as liable to overlook the etymology of “transparent” [literally “appearing across”].)

There is in any case more than a few remarks in Part IIIB underlining the connection between transparency and “depth” and “behindness”. This is something Wittgenstein seems not to have appreciated earlier and he now underlines the point. He identifies transparency with seeing “something as lying *behind* the glass” (RC III, 141), says “[t]he various ‘colours’ do not all have the same connexion with three-dimensional vision” (RC III, 142), observes that this has to do with “the connection between three-dimensionality [and] light and shadow” (RC III, 144), notes that “[t]ransparent’ could be compared with ‘reflecting’” (RC III, 148) and states that “[t]ransparency and reflection exist only in the dimension of depth of a visual image” (RC III, 150). Similarly

20 There is very little overlap between Part IIIB and Part IIIA. The “correspondences” listed in Rothhaupt (Rothhaupt 1996: 426) are at most rough correspondences of theme.

21 Paul takes Wittgenstein to make a “new start” (Paul 2007: 301) but does not explain what this consists in or why Wittgenstein started afresh.

a bit further along in Part IIIB he says straight-out: “The impression of a coloured transparent medium is that something is behind the medium. Thus if we have a thoroughly monochromatic visual image, it cannot be one of transparency” (RC III, 172). And later still he adds: “The colour of a transparent glass could be said to be how a white light source, seen through it, would appear” (RC III, 183, translation revised slightly). In these remarks the difference between transparent and opaque colours is traced to their connection with “depth”.

The conception of transparency as involving “three-dimensionality” augurs a major shift in Wittgenstein’s thinking about colour concepts. Pre-1950 he had treated the language of colour as an autonomous department of language, one altogether separate from the language of spatial position (and the concepts of up-down, in front-behind, right-left, etc.). Throughout the 1930s and 1940s he adhered to the view adumbrated in *Philosophical Remarks*, namely: “It is clear that there isn’t a relation of ‘being situated’ which would hold between a colour and a position, in which it ‘was situated’. There is no intermediary between colour and space. Colour and space saturate one another” (PR, p. 257; also compare TLP, 2.0131 and 2.0251). Only in 1950, when he came to reflect on the impossibility of transparent white, I am speculating, did he notice that the logic of colour concepts is intimately related to the logic of spatial concepts in the form of the “dimension of depth”. This was no small shift in viewpoint. The colour octahedron had been his prime example of a perspicuous representation, and colour language his stock example of an autonomous subdivision of our language.²²

Wittgenstein would have realised that regarding transparency as essentially connected with “behindness” meant he needed a new account of the impossibility of transparent white. Noting that white is cloudy and cloudy surfaces function as opaque barriers leaves out the “dimension of depth”, and in Part IIIB Wittgenstein takes up the task of finding a substitute explanation. He considers why it is senseless to speak of seeing something as lying behind a white surface and why the concept of white is different from the concept of red in point of its “see-throughness”. Why is it, he in effect asks, that “behindness” is always absent in the case of white, only sometimes absent in the case of red, a question more easily raised than answered? Whence in Part IIIB he comes back to the problem, actually (though rarely noticed) comes back to it several times and has several stabs at explaining the difference. While he touches on other topics with the object, as I understand him, of further exploring the ins-and-outs of colour language, much of his discussion, especially in the first hundred or so remarks

²² Arguably, the analysis of opacity in terms of cloudiness provided in Part II involves no more reference to spatial or similar concepts than the concept of “darkness” and no more signals a radical departure from the views of 1930-1949 than an analysis of brown as “a ‘reddish-blackish-yellow’” (RC III, 126). McGinn observes that Wittgenstein believed we “overestim[at] [...] the degree of independence of colour concepts and spatial concepts” (McGinn 1991: 442) but makes nothing of the point.

of Part IIIB, is devoted to accounting for the impossibility of transparent white given his revised conception of transparency.²³

The discussion of Part IIIB begins almost immediately with remarks on the topic of transparent white. After some brief preliminary observations (RC III, 131-135), Wittgenstein argues that there can be no transparent white glass since black and white seen through such a white glass, were one possible, would appear the same, not as they should appear through a transparent glass (RC III, 136). He writes: “By analogy with other colours, a black drawing on a white background seen through a transparent *white* glass would have to appear unchanged as a black drawing on a white background. For the black must remain black and the white, because it is also the colour of the transparent body, remains unchanged”. Otherwise put, a transparent white glass is impossible since the opposite assumption reduces to absurdity (compare proving there can be no greatest prime number by showing that were there a greatest prime there would be an even greater one). The key point is that transparent white is ruled out by virtue of logic, not by virtue of how the world happens to be. As in Part II, Wittgenstein appeals to what he takes to be a rule of grammar, his thought being that, given how we think and speak of transparency, white surfaces are never transparent.

Wittgenstein develops much the same argument in a later remark. At RC III, 173 he writes: “Something white behind a coloured transparent medium appears in the colour of the medium, something black appears black. According to this rule a black drawing on white paper behind a white transparent medium must appear as though it were behind a colourless medium”. As before, he argues by *reductio ad absurdum* that transparent white is impossible since a transparent white surface would appear colourless, not both transparent and white. The argument is again logical, the conclusion being understood to follow from the “rule” that through a coloured medium white takes on the colour of the medium and black stays black. In fact Wittgenstein points out that this last observation (there is, as the editor notes, an arrow in the manuscript pointing to it) is “not a proposition of physics, but rather a rule of the spatial interpretation of our visual experience” or, what amounts to the same thing, “a rule for painters” to the effect that white objects have to be painted the colour of a surface for the surface to appear transparent.

In subsequent remarks Wittgenstein attacks the problem from a slightly different angle. He first considers how objects appear through transparent green, red and other coloured glass (compare RC III, 175, 179 and 184), then argues: “If a pane of green glass gives the things behind it a green colour, it turns white to green, red to black, yellow to greenish yellow, blue to greenish blue. The white [transparent] pane should, therefore, make everything whitish, i.e. it should make everything *pale*; and, then why shouldn't it turn black to grey? – Even a yellow glass makes things darker, should a

²³ In what follows I outline Wittgenstein's rather complicated exploration of transparency and transparent white in Part IIIB and Part I. For more detailed discussion see my 2014.

white glass make things darker too?” (RC III, 191). This line of argument – that transparent white glass should make white things appear both lighter and darker, an out-and-out impossibility – is one Wittgenstein seems to have found especially compelling (the argument or a close variant of it is developed in RC III, 192-194 and 243). Moreover he acknowledges that he is appealing to a rule of grammar. He writes: “White seen through a coloured glass appears with the colour of the glass. That is a rule of the appearance of transparency” (RC III, 200). Once more the discussion is logical, Wittgenstein’s thought being that it follows – given the logic of colour concepts – that white is essentially opaque.

Much the same argument is canvassed in MS 169, a compelling reason, surely, for thinking that the remarks on transparent white in this supposedly earlier manuscript were written around the same time as the remarks in Part IIIB and after the remarks in Part II and Part IIIA. Expressing the point, if anything, more sharply, Wittgenstein writes: “Flat black seen through yellow glass is black, white is yellow. Therefore analogously black must appear black seen through transparent white, and white white, i.e. just as through a colourless glass. – Is red now to appear whitish? i.e. pink? But what will a dark red, which tends towards black, appear as? It should become a blackish pink, i.e. a greyish red, but then black probably will not remain black” (LWPP II, p. 47). Moreover he avers: “White seen through yellow wouldn’t become yellowish-white but yellow. And yellow seen through white – should it become whitish-yellow or white? In the first case the ‘white’ glass acts like colourless glass, in the second like opaque glass” (LWPP II, p. 48). In other words, when one thinks through how the spectral colours would appear behind white transparent glass, mindful of how white appears through yellow or red transparent glass, one ends up stymied.

Returning to the remarks of Part IIIB, the question arises – assuming Wittgenstein began writing them with the object of conveying new thoughts about transparency and transparent white – of why he discusses the matter at such length rather than simply states how he now sees things. The answer cannot, I think, be simply that he was enamoured by his treatment of the problem and could not resist repeating himself. This would be out of character, and there is much in Part IIIB that can hardly be counted as mere repetition. Moreover there seems to be a more compelling reason. He is, I believe, most plausibly read as revisiting the topic because he was not fully satisfied that he was right about how a white transparent glass, were one possible, would behave. At RC III, 137 he entertains the possibility of “a glass through which black looked like black, white like white, and all the other colours appeared as shades of grey; so that seen through it everything appears as though in a photograph”. At RC III, 175 he asks: “[W]hy shouldn’t we want to call [a glass through which everything appeared in shades ranging from white to black] *white*? Is there anything to be said against doing this; does the analogy with glass of other colours break down at any point?” And at RC III, 185-186 he wonders whether a “white” pane should, like a green pane, give “things its colour” and whether – accepting that a “thin layer of a coloured medium colours things only weakly” – we should suppose that “a thin ‘white’ glass

[...] doesn't quite remove all their colour". Nor is this the end of the matter. Wittgenstein continues to hesitate (see, e.g., RC III, 205, 208 and 242).

As for Part I, it needs noting straight off that the remarks on the topic of transparency and transparent white, like the remarks on other topics, are mostly extracted from Part IIIB. There is nothing on transparency deriving from Part II or from Part IIIA except the quotation from Runge at RC I, 21).²⁴ Wittgenstein mostly recycles remarks about transparency and transparent white verbatim, his apparent aim being to reorganise and pare down what he had earlier written. While he devotes more remarks to transparency than to any other topic, some 22 of the 88 remarks of Part I being, on a conservative count, on this subject, he does not clarify the matter to any significant degree but leaves it practically in the same state as in Part IIIB. He repeats what he said there about the nature of transparency, restates his explanation of transparent white and expresses the same hesitations about how objects should appear through a transparent white glass. It is not true, as has been suggested (cf. Brenner 1999: 117-127) that Wittgenstein comes to a definite conclusion. Rather he confines himself to restating thoughts he seems to have believed worth preserving and questions he believed worth pursuing.

It remains to consider the importance of knowing when *Remarks on Colour* was written and why. There are four lessons I draw from the present discussion. The most obvious is that a study of Wittgenstein's remarks in the order of composition illuminates the nature of his investigations of colour and puts the reader in a better position to appreciate the discussion of Part I. It brings out the central role of transparency and transparent white in *Remarks on Colour* and exposes the error of taking him to be primarily concerned with the impossibility of reddish-green, primary colours, the relationship of lightness and darkness or other topic that he had previously discussed. In particular reading Part II first reduces the chance of his treatment of transparent white being regarded as of secondary importance, the first appearance of the topic in Part I being at RC I, 17, a fifth of the way into the material (and after the remarks at RC I, 9-14 on reddish green). Furthermore when the material is read as written, it is difficult to overlook that Part I summarises Wittgenstein's chief results, both positive and negative, indeed provides what for all the world looks like an interim report and agenda for future inquiry.

Reading *Remarks on Colour* in the order composed rather than the order published also makes clear that Wittgenstein is not out to convey a view of the logic of colour concepts he had already adopted. When the material is approached naturally, starting at the beginning of the book, it is all too tempting to ask what he is trying to get over and to imagine he ends up with definite conclusions. Special effort is required to resist reading him as saying things he does not explicitly say, a trap less easy to fall into when

²⁴ Wittgenstein could have written the sentence of RC III, 76 repeated at RC I, 17 from memory. This sentence aside, the two remarks are very different.

Part II and Part III are read first. It is not only the careless reader who is apt to interpret him as solving problems concerning colour rather than as exploring “the geography of concepts”. And when Part I is regarded as free-standing, the discussion can seem exceedingly weak and the explanation of the impossibility of transparent white seem to fall short for reasons of the very sort noted by Wittgenstein himself. There is no guarantee that this will not occur when the work is read as I have intimated it is best read. But so read, it is harder to miss that Wittgenstein is grappling with the question of the grammar of transparency rather than providing an alternative grammar to the grammar he took the colour octahedron to provide, something he does not – and does not claim to – do.

A related point is that in *Remarks on Colour* Wittgenstein does not offer a philosophical theory about transparency, never mind one about colour in general. While his investigations are often described as exploratory rather than explanatory, critical rather than speculative, this crucial insight tends to be honoured more in the breach than the observance, and it helps restore the balance to read Part II and Part III before Part I. Studying Wittgenstein’s words with an eye on what he says about transparent white is a useful antidote to the common practice of interpreting him as defending, unwittingly if not wittingly, substantive philosophical views. One sees he is engaged in a project of the sort he describes in the preface of the *Investigations*, i.e. as supplying “as it were, a number of sketches of landscapes which were made in the course of [...] long and involved journeyings” (PI, Preface). In fact this description applies better to *Remarks on Colour* than to the more finished works like the *Investigations*. In *Remarks on Colour* Wittgenstein is unsure of where he ought to end up, and it is clearer why he takes philosophical problems to be “of the form: ‘I don’t know my way about’ ” (PI, 123). He continues to hope to provide a perspicuous representation of colour grammar but does not know what form it will take, even whether there is a perspicuous representation to be had.²⁵

And lastly I would underline that an examination of Wittgenstein’s remarks in the order he wrote them belies the widespread opinion that in the mid-1930s he stopped viewing language in calculus-like terms and started viewing it in terms of language-games. The work begins with a reference to two language-games (RC I, 1; also RC III, 131), and one is easily misled into interpreting Wittgenstein as concerned with the use of colour language rather than with the logical relations among colour concepts. Even here, though, he does not endorse the so-called “language-game model” of language, the burden of his remark being that “non-temporal” propositions are categorically different from “temporal” propositions. He is orienting the discussion to come

²⁵ Nor should it be forgotten that Wittgenstein attached great importance to the identification and invention of philosophical problems and, far from dismissing philosophy, he treated it with the utmost seriousness. As he is reported as having put it: “One must not in philosophy attempt to short-circuit the problems” (AWL, p. 109; dated 1934/1935).

by reminding the reader that propositions may be logical, grammatical, conceptual as well as empirical. In fact there are very few references to language-games in *Remarks on Colour* and none to speak of in the material on transparency. For the most part the discussion is devoted to the (logical) nature of the phenomenon and why transparent white is grammatically (logically) aberrant. Rather than treat language anthropologically, Wittgenstein aims to clarify “the logic of colour concepts” (RC I, 22; also RC III, 188).²⁶ It is by no means fortuitous that he speaks of “a sort of mathematics of colour” (RC III, 3) and takes colour to have a “geometry” (RC III, 86 and RC III, 154; also RC I, 66).²⁷

I trust I shall not be read as suggesting that *Remarks on Colour* is bound to be misunderstood when read starting with Part I. Wittgenstein’s references to Goethe, his different views regarding transparency and transparent white, and his hesitations are there for all to see – and it would be a decisive blow to my account of the origins of the book were they not. My point is that Wittgenstein’s line of thought is far from evident when Part I is read first and Part III treated as a single continuous discussion instead of as two separate sets of remarks. Readers who treat Part I exclusively or regard the rest of the book as merely subsidiary are unlikely to see the importance of transparency in Wittgenstein’s thinking and his shifting views about it. And still worse, Part II may strike them as “dull stuff” (Monk 1990: 564) and Part III reckoned as “a repetitive and rather laboured attempt to clarify the ‘logic of colour concepts’” (Monk 1990: 566). Following in Wittgenstein’s footsteps increases the chance of the development of his thought being properly appreciated, to say nothing of how he conceives the philosophical enterprise. Above all, it is not so easy to neglect his interest in discovering new philosophical problems or to discount the value he accorded to conceptual analysis.²⁸

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²⁶ It is, I believe, wrong to take Wittgenstein to be aiming in *Remarks on Colour* to get clear about “two distinct but related language-games”, one “for describing the colours of the natural world”, the other underpinned by “the precise system of colours that is defined by monochromatic samples of colour arranged on the colour wheel” (McGinn 1991: 442).

²⁷ What went by the board in the mid-1930s, I would argue, was not the “analysis of concepts” as such, only over-strict conceptions of conceptual analysis. For details see my 2013.

²⁸ I am indebted to Nuno Venturinha, Frederik Gierlinger, Mauro Engelmann and Paul Forster for comments. Thanks also to Lynne Cohen for help with the final version of the paper.

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