

The origin of spaces: *The creative space of Darwin's "pencil sketch"*

Dirk Van Hulle¹ Antwerp University-Belgium. Email: dirk.vanhulle@uantwerpen.be. The research leading to these results has received funding from the European Research Council under the European Union's Seventh Framework Programme (FP7/2007-2013) / ERC grant agreement n° 31360911.

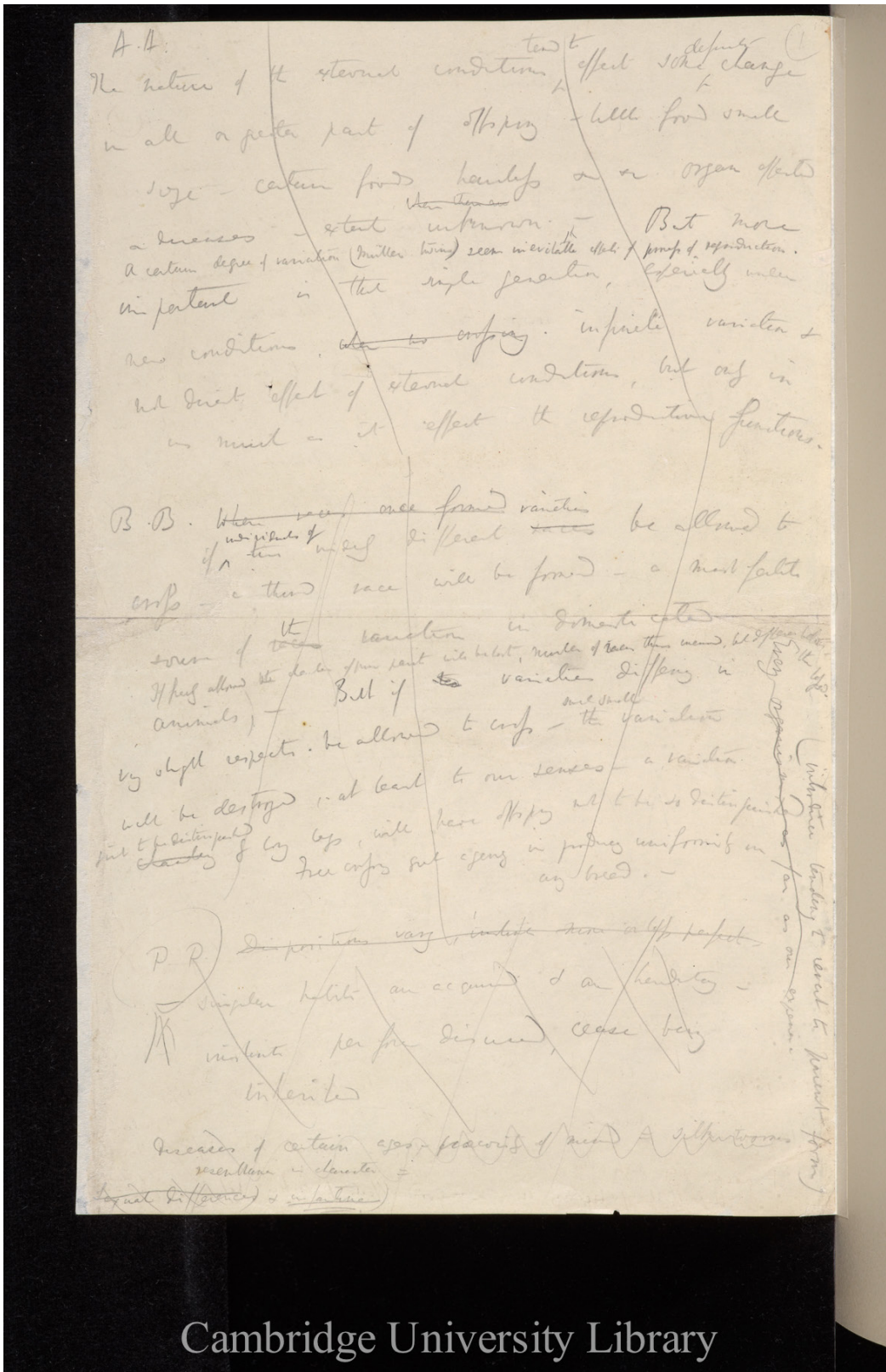
IN THE BEGINNING, THERE WAS A WHITE PAGE. Only gradually did it become a creative space, as Charles Darwin started to fill it with a grey pencil. At each stage in the textual genesis the "text produced so far" had an effect on the continuation of the writing process. The traces on this page may thus help us retrace the origin of that creative space. After a long voyage with the *Beagle* and after having made numerous notes in his so-called "transmutation notebooks", Darwin sat down in 1842 and started writing a "pencil sketch" of his theory of evolution. This sketch, preserved at Cambridge University Library,² can be considered the first draft of *On the origin of species*. It is still a very sketchy version, but it does contain most of the key ideas of his theory, such as the notion of "natural selection" and the analogy between domestic and natural selection as a narrative technique to structure his argument.

² Accessible online at: <<http://cudl.lib.cam.ac.uk/view/MS-DAR-00006/33>>. The verso at: <<http://cudl.lib.cam.ac.uk/view/MS-DAR-00006/34>>.

The first folio of this sketch is a particularly good example to study the materiality of the creative space. For even though genetic criticism tends to concentrate on artistic – especially literary – production, the composition of scientific writings also requires creativity. And Daniel Ferrer's definition of genetic criticism as "*la science de l'invention écrite*"³ certainly also applies to a genetic analysis of Darwin's *Origin*.

³ FERRER, D. *Logiques du brouillon: modèles pour une critique génétique*. Paris: Seuil, 2011, p. 184.

It may sound self-evident that the first folio has two sides, but in this case it is especially significant. What looks like the recto side of the first page in the document preserved in Cambridge probably does not contain the very first words of the sketch. According to David Kohn's team at the American Museum of Natural History, the "Original version" started on what is now referred to as the verso of this page:



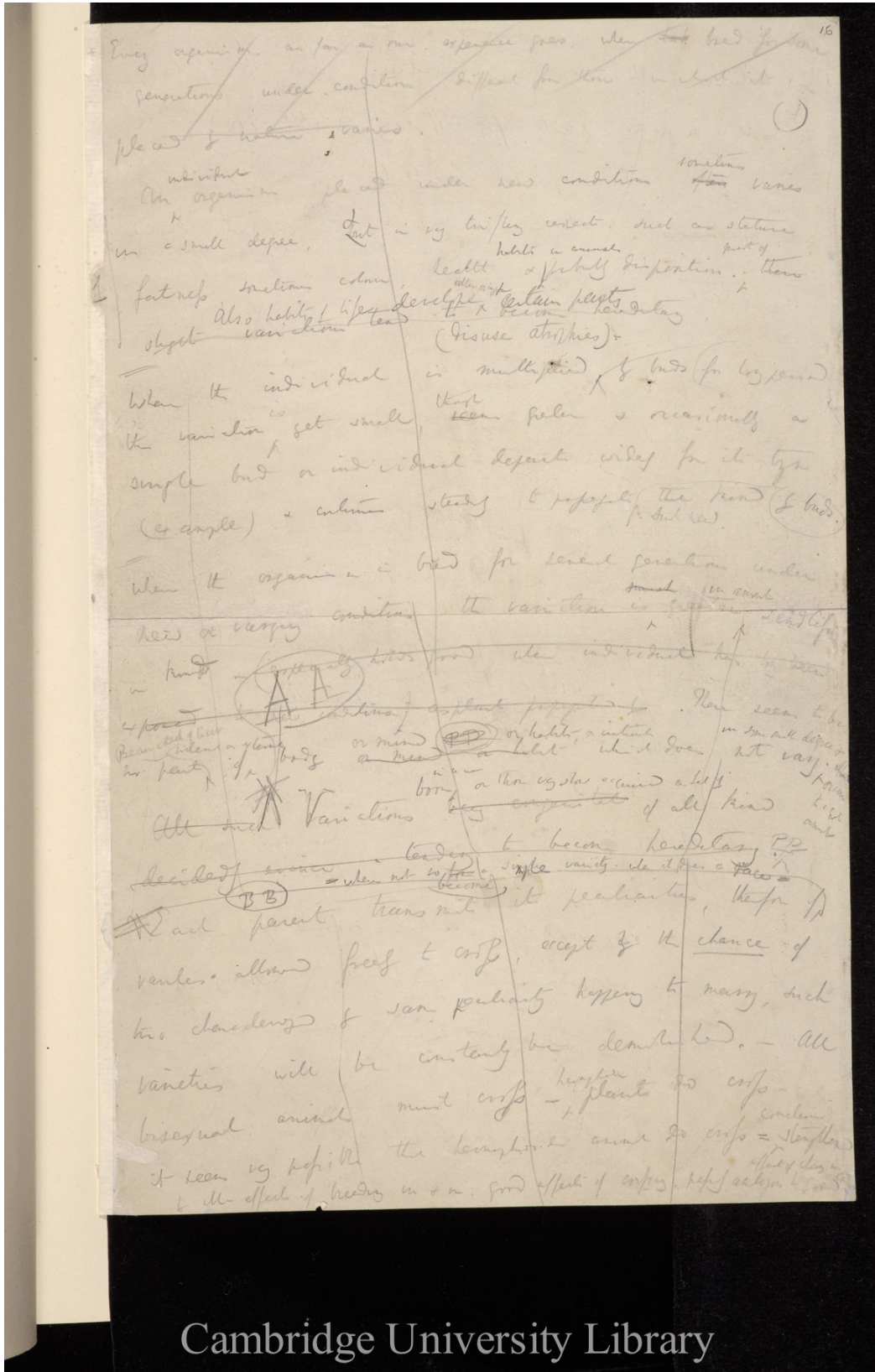
⁴ Note on the transcription: This transcription, encoded in TEI compliant XML, was made during the Beagle project of the Dutch and Flemish television, VPRO/Canvas in January 2010. For this project, several scientists were invited on board of the sailing vessel *Stad Amsterdam*. My assignment was to make a newly marked-up transcription of the pencil sketch during the stretch from the Galápagos Islands to Tahiti. I have reported on my findings in the VPRO blog during the voyage (<http://beagle.vpro.nl/#/blog/item/2741/>; <http://beagle.vpro.nl/#/auteur/item/143/>) and in the monograph *Modern manuscripts: the extended mind and creative undoing from Darwin to Beckett and beyond* (London: Bloomsbury, January 2014). In the meantime, Cambridge University Library has made the images of the pencil sketch available online (<http://cudl.lib.cam.ac.uk/view/MS-DAR-00006/1>) and David Kohn's team at the American Museum of Natural History has made provided a transcription. A diplomatic transcription is anticipated but not available yet.

A.A.⁴

The nature of the external conditions ^{tend to} effect some ^{definite} change in all or greater part of offspring – little food small size – certain foods hairless &c &c [...] (CUL DAR: 16v)

This scenario is very plausible. The assumption is that Darwin, in a second phase, wrote the revised version on what is now the recto (CUL DAR 6: 16r).⁵

⁵ What is a bit confusing is that these two versions are referred to as separate "manuscripts" (the "First Ms" starting with "The nature"; the "Second Ms" starting with "Every organism").



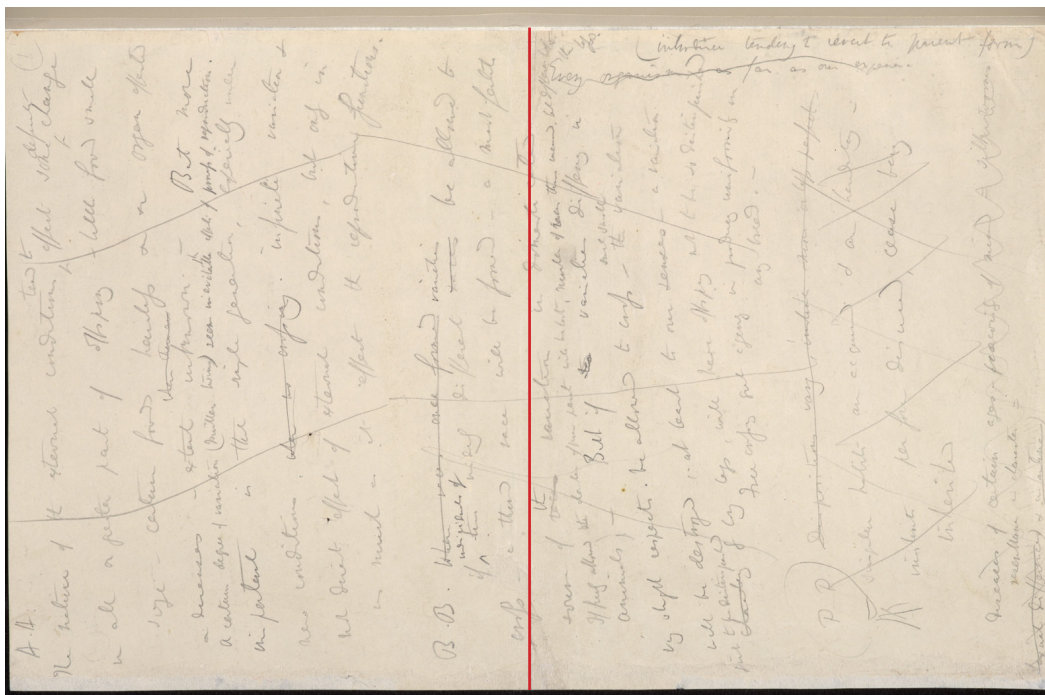
Cambridge University Library

While he was writing the revised version he decided he could still use the “Original Version” and indicated the place where it had to be incorporated by means of an insertion mark, the double “A.A.”, which is also written above “The nature ...”. As the first footnote on the CUL website suggests,

The First Ms p 1 was written on what is now the verso of folio 16. It was ultimately rejected, but not discarded. Instead, the sheet was turned over and a passage in the right margin of First Ms p 1 (“Every organism, as far as our experience”) was started over and expanded to: “Every organism as far as our experience goes, when bred for some generations under conditions different from those in which it was placed by nature varies”.⁶

⁶ See <http://cul.lib.cam.ac.uk/view/MS-DAR-00006/33>

The question I would like to investigate is whether an alternative scenario might be equally plausible. The folio shows a fold in the middle.



It cannot be excluded that Darwin started by taking the piece of paper in landscape format, then folded it and initially tried to write his sketch on folded pages, starting the opening sentence:

[1]
Every organism, as far as our experience

But after seven words, he interrupted the writing of this sentence and crossed it out. He folded the paper open again, turned it around so that he had it in front of him in portrait format and started writing the same sentence again, this time without interruption:

[2]

~~Every organism, as far as our experience goes, when tak bred for some generations under conditions different from those in which it was placed by nature varies.~~

He then crossed this out and wrote a new opening sentence:

[3]

An ^{individual} organism placed under new conditions ^{sometimes} often varies in a small degree and in very trifling respects such as stature, fatness, sometimes colour, health, ^{habits in animals} and probably disposition.

This scenario comes closer to Kohn, Smith and Stauffer's 1982 suggestion published in the *Journal of the History of Biology* ("New Light on *The foundations of the origin of species*: a Reconstruction of the Archival Record"). In this article, the authors discerned two writing layers, which they called Draft A and Draft B. Draft A did not start with "The nature ..." but with the deleted sentence [2]. My suggestion is that this sentence was preceded by a *faux départ* (the half-sentence [1]) on the other side of the page, and that the page was initially folded.

Admittedly, this is a mere detail, a material trace of a false start. But it does indicate a hesitation that marked the *incipit* of this early draft of Darwin's *On the origin of species*. The first transcription of this document by Darwin's son Francis was part of a book called *The foundations of the origin of species*, a title that suggests stability. This false impression of stability is reinforced by Francis Darwin's editorial decision to leave out the first deleted lines on the page and start only with the first undeleted sentence (sentence [3]). Of course it is easy to criticize this work with hindsight. This was a pioneering work of transcription and in 1909 the standards were different: Francis Darwin's aim was to make this complex document readable by turning it into a reading text. More than a century later, however, we can now study this document, not as an essay, but as a sketch. What looked like a confident opening sentence in *The foundations* thus turns out to be the result of a hesitant process.

It is thanks to initiatives such as the American Museum of Natural History's Darwin Manuscripts Project and Cambridge University Library's outreach programme, making high-resolution digital facsimiles available online that everyone can now follow this process of hesitation. This does not diminish Darwin's accomplishment one bit; on the contrary. Darwin's "pencil sketch" is truly a "modern" manuscript in the sense that – unlike many Medieval manuscripts – it shows decision-making as an often groping process, marked by numerous deletions, additions and substitutions. The manner in which Darwin allowed himself to hesitate, nuance and revise makes the "pencil sketch" such a fascinating document. Details such as the fold in the paper and the unfinished sentence [1] give us clues to reconstruct the origins of spaces such as this folio, a creative space that has been instrumental in giving shape to a groundbreaking idea. The "pencil sketch" shows how difficult it was for Darwin to formulate his theory and how carefully he kept refining and revising it – a process that continued after the first publication of the *Origin* in 1859 and every subsequent edition during his lifetime. In that sense, *On the origin of species* was a "work in progress" and the "pencil sketch" shows Darwin as a writer at work, thinking on paper.

*All the available images belong to Cambridge Digital Library, Darwin Manuscript Collection. Site: <http://www.cam.ac.uk/>

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