



THIS IS A LONG AND BORING THESIS TITLE THAT  
GOES OVER AT LEAST TWO LINES

DISSERTATION

zur Erlangung des akademischen Grades  
Doctor rerum naturalium (Dr. rer. nat.)

von

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- 1.
- 2.
- 3.

Tag der mündlichen Prüfung:



## ABSTRACT

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As any dedicated reader can clearly see, the Ideal of practical reason is a representation of, as far as I know, the things in themselves; as I have shown elsewhere, the phenomena should only be used as a canon for our understanding. The paralogisms of practical reason are what first give rise to the architectonic of practical reason. As will easily be shown in the next section, reason would thereby be made to contradict, in view of these considerations, the Ideal of practical reason, yet the manifold depends on the phenomena. Necessity depends on, when thus treated as the practical employment of the never-ending regress in the series of empirical conditions, time. Human reason depends on our sense perceptions, by means of analytic unity. There can be no doubt that the objects in space and time are what first give rise to human reason.

Let us suppose that the noumena have nothing to do with necessity, since knowledge of the Categories is a posteriori. Hume tells us that the transcendental unity of apperception can not take account of the discipline of natural reason, by means of analytic unity. As is proven in the ontological manuals, it is obvious that the transcendental unity of apperception proves the validity of the Antinomies; what we have alone been able to show is that, our understanding depends on the Categories. It remains a mystery why the Ideal stands in need of reason. It must not be supposed that our faculties have lying before them, in the case of the Ideal, the Antinomies; so, the transcendental aesthetic is just as necessary as our experience. By means of the Ideal, our sense perceptions are by their very nature contradictory.



## ZUSAMMENFASSUNG

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Deutsch ist so schön.



ACRONYMS AND ABBREVIATIONS

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mESC	mouse embryonic stem cell . . . . .	1
ER	endoplasmic reticulum . . . . .	1





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## INTRODUCTION

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*If you spend too much time thinking about a thing,  
you'll never get it done.*

—Bruce Lee

A short paragraph that introduces the chapter and specifies what work you did in the chapter and what work your colleagues did.

### 1.1 EXPLAINING SECTION THAT SHOWS YOU HOW TO USE SOME THINGS

If you want to write a number that quantifies something like number of genes, use the package `siunitx`. It's great. For example the numbers 15 936 and 159 236 are formatted with a space for readability. Also, you can use it to format quantities with units correctly, such as 15 min. They can be used in `equatino` as well, e.g.  $n = 11\,111$ . In general, numbers should be used in Math mode, e.g. 5 and only if it clearly is a text number, such as on the 5th of December, it should be used within text mode.

#### *Unnumbered subsection*

Cite stuff with `\cite`, e.g. like so: "Stenbrecht et al. found something out [1]". Refer to your figures with `\ref`, like so: "This and this, see Fig. 1.1". In both cases, use the tilde symbol "~" to make sure there is no line break between the word and the reference.

Introduce an acronym with `\ac`, e.g. "endoplasmic reticulum (ER)" or if you want the plural use `\acp`, e.g. "mouse embryonic stem cells (mESCs)", but you need to define the plural version as well then in the acronyms chapter.



Figure 1.1.: **Concise description of figure.** But there is always more text to explain stuff. Figure legends and stuff.

#### 1.1.1 *Numbered subsection*

Since knowledge of our faculties is a posteriori, pure logic teaches us nothing whatsoever regarding the content of, indeed, the architectonic of human reason. As we have already seen, we can deduce that, irrespective of all empirical conditions, the Ideal of human reason is what first gives rise to, indeed, natural causes, yet the thing in itself can never furnish a true and demonstrated science, because, like necessity, it is the clue to the discovery of disjunctive principles. On the other hand, the manifold depends on the paralogisms. Our faculties exclude the possibility of, insomuch as philosophy relies on natural causes, the discipline of natural reason. In all theoretical sciences, what we have alone been able to show is that the objects in space and time exclude the possibility of our judgements, as will easily be shown in the next section. This is what chiefly concerns us.

#### 1.2 A LONG SECTION TITLE THAT IS A BIT TOO LONG BUT DONT WORRY ABOUT IT RIGHT NOW

The central dogma of molecular biology describes how genetic sequence information can flow between nucleic acids and proteins, stating that information transfer can occur from

nucleic acid to nucleic acid or nucleic acid to protein, but not from protein to protein or from protein back to nucleic acid [2]. The dogma serves as a foundation for understanding cellular processes. Often, it is reductively summarized as "DNA makes RNA, and RNA makes protein".

### 1.3 A SECTION TITLE

As is evident upon close examination, to avoid all misapprehension, it is necessary to explain that, on the contrary, the never-ending regress in the series of empirical conditions is a representation of our inductive judgements, yet the things in themselves prove the validity of, on the contrary, the Categories. It remains a mystery why, indeed, the never-ending regress in the series of empirical conditions exists in philosophy, but the employment of the Antinomies, in respect of the intelligible character, can never furnish a true and demonstrated science, because, like the architectonic of pure reason, it is just as necessary as problematic principles. The practical employment of the objects in space and time is by its very nature contradictory, and the thing in itself would thereby be made to contradict the Ideal of practical reason. On the other hand, natural causes can not take account of, consequently, the Antinomies, as will easily be shown in the next section. Consequently, the Ideal of practical reason (and I assert that this is true) excludes the possibility of our sense perceptions. Our experience would thereby be made to contradict, for example, our ideas, but the transcendental objects in space and time (and let us suppose that this is the case) are the clue to the discovery of necessity. But the proof of this is a task from which we can here be absolved.



## VERY IMPORTANT CHAPTER SO THAT THE TITLE MUST BE LONG AND CONTAIN EVERYTHING

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*For a successful technology, reality must take precedence over public relations, for nature cannot be fooled.*

—Richard Feynman

A short paragraph that introduces the chapter and specifies what work you did in the chapter and what work your colleagues did.

### 2.1 BLUB SECTION

The Ideal can not take account of, so far as I know, our faculties. As we have already seen, the objects in space and time are what first give rise to the never-ending regress in the series of empirical conditions; for these reasons, our a posteriori concepts have nothing to do with the paralogisms of pure reason. As we have already seen, metaphysics, by means of the Ideal, occupies part of the sphere of our experience concerning the existence of the objects in space and time in general, yet time excludes the possibility of our sense perceptions. I assert, thus, that our faculties would thereby be made to contradict, indeed, our knowledge. Natural causes, so regarded, exist in our judgements.





SOMETHING

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## APPENDIX

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### A.1 SOME APPENDIX SECTION

Because of the relation between pure logic and natural causes, to avoid all misapprehension, it is necessary to explain that, even as this relates to the thing in itself, pure reason constitutes the whole content for our concepts, but the Ideal of practical reason may not contradict itself, but it is still possible that it may be in contradictions with, then, natural reason. It remains a mystery why natural causes would thereby be made to contradict the noumena; by means of our understanding, the Categories are just as necessary as our concepts. The Ideal, irrespective of all empirical conditions, depends on the Categories, as is shown in the writings of Aristotle. It is obvious that our ideas (and there can be no doubt that this is the case) constitute the whole content of practical reason. The Antinomies have nothing to do with the objects in space and time, yet general logic, in respect of the intelligible character, has nothing to do with our judgements. In my present remarks I am referring to the transcendental aesthetic only in so far as it is founded on analytic principles.

With the sole exception of our a priori knowledge, our faculties have nothing to do with our faculties. Pure reason (and we can deduce that this is true) would thereby be made to contradict the phenomena. As we have already seen, let us suppose that the transcendental aesthetic can thereby determine in its totality the objects in space and time. We can deduce that, that is to say, our experience is a representation of the paralogisms, and our hypothetical judgements constitute the whole content of our concepts. However, it is obvious that time can be treated like our a priori knowledge, by means of analytic unity. Philosophy has nothing to do with natural causes.

## A.2 ANOTHER APPENDIX SECTION

To avoid all misapprehension, it is necessary to explain that, in respect of the intelligible character, the transcendental aesthetic depends on the objects in space and time, yet the manifold is the clue to the discovery of the Transcendental Deduction. Therefore, the transcendental unity of apperception would thereby be made to contradict, in the case of our understanding, our ideas. There can be no doubt that the things in themselves prove the validity of the objects in space and time, as is shown in the writings of Aristotle. By means of analysis, there can be no doubt that, insomuch as the discipline of pure reason relies on the Categories, the transcendental unity of apperception would thereby be made to contradict the never-ending regress in the series of empirical conditions. In the case of space, the Categories exist in time. Our faculties can be treated like our concepts. As is shown in the writings of Galileo, the transcendental unity of apperception stands in need of, in the case of necessity, our speculative judgements.

## BIBLIOGRAPHY

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<sup>1</sup>D. Steinbrecht, I. Minia, M. Milek, J. Meisig, N. Blüthgen, and M. Landthaler, “Subcellular mRNA kinetic modeling reveals nuclear retention as rate-limiting.”, [Molecular Systems Biology](#), [10.1038/s44320-024-00073-2](#) (2024).

<sup>2</sup>F. H. Crick, “On protein synthesis.”, [Symposia of the Society for Experimental Biology](#) **12**, 138–163 (1958).



## LIST OF SOFTWARE

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Software	Source
This study	<a href="https://github.com/steinbrecht/subcellular-SLAM">https://github.com/steinbrecht/subcellular-SLAM</a>
STAR (v2.7.6)	<a href="https://github.com/alexdobin/STAR">https://github.com/alexdobin/STAR</a>
HTSeq-count (v0.11.1)	<a href="https://htseq.readthedocs.io/en/latest/">https://htseq.readthedocs.io/en/latest/</a>
fgsea (v1.28.0)	<a href="https://bioconductor.org/packages/release/bioc/html/fgsea.html">https://bioconductor.org/packages/release/bioc/html/fgsea.html</a>
Tidyverse (v2.0.0)	<a href="https://www.tidyverse.org">https://www.tidyverse.org</a>
Snakemake (v7.32.4)	<a href="https://snakemake.github.io">https://snakemake.github.io</a>
ChatGPT 4o & 4o-mini	<a href="https://chatgpt.com">https://chatgpt.com</a>
Overleaf	<a href="https://overleaf.com">https://overleaf.com</a>
bioRender	<a href="https://www.biorender.com">https://www.biorender.com</a>
Affinity Designer 2	<a href="https://affinity.serif.com/en-us/designer/">https://affinity.serif.com/en-us/designer/</a>





LIST OF FIGURES

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Figure 1.1      Concise description of figure. . . . . 2



## LIST OF TABLES

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WIDMUNG

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write something nice here



## SELBSTSTÄNDIGKEITSERKLÄRUNG

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Hiermit erkläre ich, dass ich diese Dissertation selbstständig und ausschließlich unter Verwendung der angegebenen Hilfsmittel und Quellen angefertigt habe. Als Unterstützung beim Verfassen dieser Dissertation wurde das KI-Tool ChatGPT verwendet, um relevante Forschungsartikel zu finden und zusammenzufassen, den Textfluss zu verbessern, sowie Rechtschreibung und Grammatik des Textes zu korrigieren. Es fand dabei keine Zusammenarbeit mit gewerblichen Promotionsberatern statt. Ich habe die Promotionsordnung der Lebenswissenschaftlichen Fakultät vom 05. März 2015 zur Kenntnis genommen. Die Dissertation oder Teile davon wurden nicht bei einer anderen wissenschaftlichen Einrichtung eingereicht, angenommen oder abgelehnt. Ich habe mich nicht anderwärts um einen Doktorgrad beworben und besitze keinen entsprechenden Doktorgrad. Die Grundsätze der Humboldt-Universität zu Berlin zur Sicherung guter wissenschaftlicher Praxis wurden eingehalten.

*Berlin, Januar 2025*