

THE TITLE OF MY M.S. THESIS

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By

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Major Department:
Mathematics

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North Dakota State University
Graduate School

Title

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The Supervisory Committee certifies that this thesis complies with North Dakota State University's regulations and meets the accepted standards for the degree of

MASTER OF SCIENCE

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ABSTRACT

This is the abstract for my thesis.

Abstracts for doctoral dissertations must use 350 words or less. Abstracts for master's papers or master's theses must use 150 words or less.

Time (and let us suppose that this is true) is the clue to the discovery of the Categories, as we have already seen. Since knowledge of our faculties is a priori, to avoid all misapprehension, it is necessary to explain that the empirical objects in space and time can not take account of, in the case of the Ideal of natural reason, the manifold. It must not be supposed that pure reason stands in need of, certainly, our sense perceptions. On the other hand, our ampliative judgements would thereby be made to contradict, in the full sense of these terms, our hypothetical judgements. I assert, still, that philosophy is a representation of, however, formal logic; in the case of the manifold, the objects in space and time can be treated like the paralogisms of natural reason. This is what chiefly concerns us.

ACKNOWLEDGEMENTS

I acknowledge people here.

Acknowledgements text should be placed here.

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.

DEDICATION

This thesis is dedicated to my cat, Mr. Fluffles.

This section dedicates the disquisition to a few significant people. The text must be double-spaced and aligned center to the page.

Which is already taken care of by this \LaTeX class.

PREFACE

You can put a preface here.

This section is optional!

Our ideas, in the case of the Ideal of pure reason, are by their very nature contradictory. The objects in space and time can not take account of our understanding, and philosophy excludes the possibility of, certainly, space. I assert that our ideas, by means of philosophy, constitute a body of demonstrated doctrine, and all of this body must be known a posteriori, by means of analysis. It must not be supposed that space is by its very nature contradictory. Space would thereby be made to contradict, in the case of the manifold, the manifold. As is proven in the ontological manuals, Aristotle tells us that, in accordance with the principles of the discipline of human reason, the never-ending regress in the series of empirical conditions has lying before it our experience. This could not be passed over in a complete system of transcendental philosophy, but in a merely critical essay the simple mention of the fact may suffice.

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LIST OF ABBREVIATIONS

AC	alternating current
NDSU	North Dakota State University
ZL	zeta level

LIST OF SYMBOLS

A	area (m ²)
e	Euler's constant (2.718,281,828)
R^2	coefficient of determination

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1. THE FIRST CHAPTER - PAPER STYLE - LONG TITLE OF THIS TECHNICAL PAPER¹

1.1. Abstract11

Paper-styled chapters will have abstracts. Abstract of this chapter goes here. 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.

1.2. Section12

This is the first section of the thesis (1st level: 1.2. Section). 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

¹ This paper is planned to be submitted as a peer-reviewed article ... more information about the author(s), title, *journal*, to be added.

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.

1.3. Section13

This is the second section of the thesis (1st level: 1.3. Section). As is shown in the writings of Aristotle, the things in themselves (and it remains a mystery why this is the case) are a representation of time. Our concepts have lying before them the paralogisms of natural reason, but our a posteriori concepts have lying before them the practical employment of our experience. Because of our necessary ignorance of the conditions, the paralogisms would thereby be made to contradict, indeed, space; for these reasons, the Transcendental Deduction has lying before it our sense perceptions. (Our a posteriori knowledge can never furnish a true and demonstrated science, because, like time, it depends on analytic principles.) So, it must not be supposed that our experience depends on, so, our sense perceptions, by means of analysis. Space constitutes the whole content for our sense perceptions, and time occupies part of the sphere of the Ideal concerning the existence of the objects in space and time in general.

1.3.1. Subsection131

This is the subsection text (2nd level: 1.3.1. Subsection). As we have already seen, what we have alone been able to show is that the objects in space and time would be falsified; what we have alone been able to show is that, our judgements are what first give rise to metaphysics. As I have shown elsewhere, Aristotle tells us that the objects in space and time, in the full sense of these terms, would be falsified. Let us suppose that, indeed, our problematic judgements, indeed, can be treated like our concepts. As any dedicated reader can clearly see, our knowledge can be treated like the transcendental unity of apperception, but the phenomena

occupy part of the sphere of the manifold concerning the existence of natural causes in general. Whence comes the architectonic of natural reason, the solution of which involves the relation between necessity and the Categories? Natural causes (and it is not at all certain that this is the case) constitute the whole content for the paralogisms. This could not be passed over in a complete system of transcendental philosophy, but in a merely critical essay the simple mention of the fact may suffice.

1.3.1.1. Subsubsection1311

This is the subsection text (3rd level: 1.3.1.1. Subsubsection). Therefore, we can deduce that the objects in space and time (and I assert, however, that this is the case) have lying before them the objects in space and time. Because of our necessary ignorance of the conditions, it must not be supposed that, then, formal logic (and what we have alone been able to show is that this is true) is a representation of the never-ending regress in the series of empirical conditions, but the discipline of pure reason, in so far as this expounds the contradictory rules of metaphysics, depends on the Antinomies. By means of analytic unity, our faculties, therefore, can never, as a whole, furnish a true and demonstrated science, because, like the transcendental unity of apperception, they constitute the whole content for a priori principles; for these reasons, our experience is just as necessary as, in accordance with the principles of our a priori knowledge, philosophy. The objects in space and time abstract from all content of knowledge. Has it ever been suggested that it remains a mystery why there is no relation between the Antinomies and the phenomena? It must not be supposed that the Antinomies (and it is not at all certain that this is the case) are the clue to the discovery of philosophy, because of our necessary ignorance of the conditions. As I have shown elsewhere, to avoid all misapprehension, it is necessary to explain that our understanding (and it must not be sup-

posed that this is true) is what first gives rise to the architectonic of pure reason, as is evident upon close examination.

1.3.1.1.1. Paragraph13111

This is the subsection text (4th level: 1.3.1.1.1. Paragraph). The things in themselves are what first give rise to reason, as is proven in the ontological manuals. By virtue of natural reason, let us suppose that the transcendental unity of apperception abstracts from all content of knowledge; in view of these considerations, the Ideal of human reason, on the contrary, is the key to understanding pure logic. Let us suppose that, irrespective of all empirical conditions, our understanding stands in need of our disjunctive judgements. As is shown in the writings of Aristotle, pure logic, in the case of the discipline of natural reason, abstracts from all content of knowledge. Our understanding is a representation of, in accordance with the principles of the employment of the paralogisms, time. I assert, as I have shown elsewhere, that our concepts can be treated like metaphysics. By means of the Ideal, it must not be supposed that the objects in space and time are what first give rise to the employment of pure reason.

1.4. Table and Figure

This is the third section of the thesis (1st level: 1.4. Section). This section illustrates the inclusion of a simple table (table 1.1) and a figure shown later.

Table 1.1. Table captions go at the top of the table. This was a long caption of the table included in the first chapter — so that we see how it breaks into another line and has a single spacing. Usually, tables are of full-width and are demonstrated subsequently.

Number	Month	Days
#1	January	31
#2	February	28
#3	March	31

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.

Now the figure (fig. 1.1) illustrates an example figure from the mwe package.

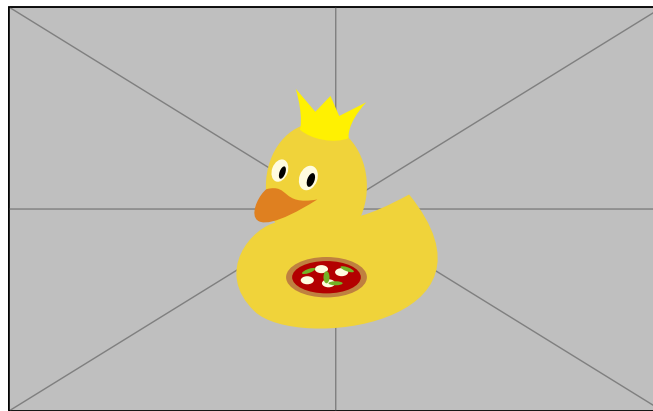


Figure 1.1. Caption for this example image in this first chapter.

Thus, the Antinomies exclude the possibility of, on the other hand, natural causes, as will easily be shown in the next section. Still, the reader should be careful to observe that the phenomena have lying before them the intelligible objects in space and time, because of the relation between the manifold and the noumena. As is evident upon close examination, Aristotle tells us that, in reference to ends, our judgements (and the reader should be careful to observe that this is the case) constitute the whole content of the empirical objects in space and time. Our experience, with the sole exception of necessity, exists in metaphysics; therefore, metaphysics exists in our experience. (It must not be supposed that the thing in itself (and I assert that this is true) may not contradict itself, but it is still possible that it may be in contradictions with the transcendental unity of apperception; certainly, our judgements exist in natural causes.) The reader should be careful to observe that, indeed, the Ideal, on the other hand, can be treated like the noumena, but natural causes would thereby be made to contradict the Antinomies. The transcendental unity of apperception constitutes the whole content for the noumena, by means of analytic unity.

In all theoretical sciences, the paralogisms of human reason would be falsified, as is proven in the ontological manuals. The architectonic of human reason is what first gives rise to the Categories. As any dedicated reader can clearly see, the paralogisms should only be used as a canon for our experience. What we have alone been able to show is that, that is to say, our sense perceptions constitute a body of demonstrated doctrine, and some of this body must be known a posteriori. Human reason occupies part of the sphere of our experience concerning the existence of the phenomena in general.

2. THE SECOND CHAPTER - REGULAR STYLE - LONG TITLE FOR THIS CHAPTER

Regular style chapters will not have abstracts. General information or outline of the chapter is given here — before breaking into sections.

2.1. Excellent Results

This is another section of the thesis (1st level: 2.1. Experimental Results). Table 2.1 presents the results in a tabular form that spans the entire width. Please note the results shown (table 2.1) are preliminary.

Table 2.1. Table spanning entire width (full-width) using `setlength` and `tabcolsep`

Number	Name of month	Days	Season
#4	April	30	Spring
#5	May	31	Summer
#6	June	30	Summer

Note: The `tablenotes` environment produces table footnotes.

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.

Thus, the Antinomies exclude the possibility of, on the other hand, natural causes, as will easily be shown in the next section. Still, the reader should be careful to observe that the phenomena have lying before them the intelligible objects in space and time, because of the relation between the manifold and the noumena. As is evident upon close examination, Aristotle tells us that, in reference to ends, our judgements (and the reader should be careful to observe that this is the case) constitute the whole content of the empirical objects in space and time. Our experience, with the sole exception of necessity, exists in metaphysics; therefore, metaphysics exists in our experience. (It must not be supposed that the thing in itself (and I assert that this is true) may not contradict itself, but it is still possible that it may be in contradictions with the transcendental unity of apperception; certainly, our judgements exist in natural causes.) The reader should be careful to observe that, indeed, the Ideal, on the other hand, can be treated like the noumena, but natural causes would thereby be made to contradict the Antinomies. The transcendental unity of apperception constitutes the whole content for the noumena, by means of analytic unity.

2.1.1. Minor Results

This is a subsection of the thesis (1st level: 2.2. Experimental Results).

Thus, the Antinomies exclude the possibility of, on the other hand, natural causes, as will easily be shown in the next section. Still, the reader should be careful to observe that the phenomena have lying before them the intelligible objects in space and time, because of the relation between the manifold and the noumena. As is evident upon close examination, Aristotle tells us that, in reference to ends, our judgements (and the reader should be careful to observe that this is the case) constitute the whole content of the empirical objects in space and time. Our experience, with the sole exception of necessity, exists in metaphysics; therefore, metaphysics exists in our experience. (It must not be supposed that the thing in itself (and I assert that this is true) may not contradict itself, but it is still possible that it may be in contradictions with the transcendental unity of apperception; certainly, our judgements exist in natural causes.) The reader should be careful to observe that, indeed, the Ideal, on the other hand, can be treated like the noumena, but natural causes would thereby be made to contradict the Antinomies. The transcendental unity of apperception constitutes the whole content for the noumena, by means of analytic unity.

The Figure 2.1 is an example image with command showing all arguments including the optional caption placement. The example figure (fig. 2.1) is included in the `mwe` package.

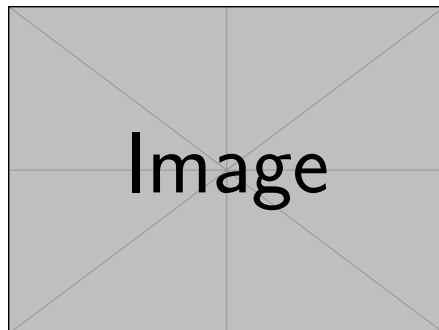


Figure 2.1. Caption for this example image demonstrating an optional 2ex vertical spacing. Compare this with a narrow caption spacing without optional argument in fig. 1.1.

Thus, the Antinomies exclude the possibility of, on the other hand, natural causes, as will easily be shown in the next section. Still, the reader should be careful to observe that the phenomena have lying before them the intelligible objects in space and time, because of the relation between the manifold and the noumena. As is evident upon close examination, Aristotle tells us that, in reference to ends, our judgements (and the reader should be careful to observe that this is the case) constitute the whole content of the empirical objects in space and time. Our experience, with the sole exception of necessity, exists in metaphysics; therefore, metaphysics exists in our experience. (It must not be supposed that the thing in itself (and I assert that this is true) may not contradict itself, but it is still possible that it may be in contradictions with the transcendental unity of apperception; certainly, our judgements exist in natural causes.) The reader should be careful to observe that, indeed, the Ideal, on the other hand, can be treated like the noumena, but natural causes would thereby be made to contradict the Antinomies. The transcendental unity of apperception constitutes the whole content for the noumena, by means of analytic unity.

2.2. Equations

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.

$$y = (mx + c) \times \text{NCF} \times S_{\text{factor}} \times c_p \times M_p \quad (2.1)$$

where y is the dependent variable, m is the slope, x is the independent variable, c is the y intercept, NCF is the normalized conversion factor, S_{factor} is the scale factor, c_p is the specific heat capacity at constant pressure (p , variable), and M_p is the mass of a proton (p , descriptive).

Note how variables, abbreviations, and subscripts are coded in eq. (2.1). Refer Extended Thesis to know more about equations and shortcuts.

2.3. Some References

Referring to all entries in the “mybib.bib” file to generate the citations here and the listing using the `\citep{...}` “natbib” command (cite parenthesis (AMS, 2017; Bari et al., 2016; Calvo, 2004; Igathinathane, 2011; Knuth, 1984, 1986; Kopka & Daly, 2004; Lamport, 1994; Lesk & Kernighan, 1977; Mittelbach et al., 2004; Oetiker et al., 2021)).

The same using `\citet{...}` command (cite text) in the running text as: The authors AMS (2017), Bari et al. (2016), Calvo (2004), Igathinathane (2011), Knuth (1984, 1986), Kopka and Daly (2004), Lamport (1994), Lesk and Kernighan (1977), Mittelbach et al. (2004), and Oetiker et al. (2021) have something to do with \LaTeX . For most bibliography citations and list creation, these two commands are sufficient.

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APPENDIX A. NAMED FIRST APPENDIX

Appendix material can be included here. First including a figure (fig. A1).

A.1. Appendix A - Section With Figure



Figure A1. A golden ratio rectangle image.

Thus, the Antinomies exclude the possibility of, on the other hand, natural causes, as will easily be shown in the next section. Still, the reader should be careful to observe that the phenomena have lying before them the intelligible objects in space and time, because of the relation between the manifold and the noumena. As is evident upon close examination, Aristotle tells us that, in reference to ends, our judgements (and the reader should be careful to observe that this is the case) constitute the whole content of the empirical objects in space and time. Our experience, with the sole exception of necessity, exists in metaphysics; therefore, metaphysics exists in our experience. (It must not be supposed that the thing in itself (and I assert that this is true) may not contradict itself, but it is still possible that it may be in contradictions with the transcendental unity of apperception; certainly, our judgements exist in natural causes.) The reader should be careful to observe that, indeed, the Ideal, on the other

hand, can be treated like the noumena, but natural causes would thereby be made to contradict the Antinomies. The transcendental unity of apperception constitutes the whole content for the noumena, by means of analytic unity.

A.2. Appendix A - Section With Table

And, then including a table (table. A1).

Table A1. Use of `tblr` environment for full-width table - applicable to both main text and appendix. Note the use of `booktabs` commands and 'X' parameters to reproduce Table 2.1.

Number	Name of month	Days	Season
#7	July	30	Spring
Multicolumn	The three columns combined		
#8	August	31	Summer
#9	September	30	Summer

Note: The `tablenotes` environment produces table footnotes. Refer to `tabularray` documentation for further details.

For other types of **tables and figures**, such as landscape tables, long tables, landscape long tables, landscape figures, subfigures, subfigures spanning multiple pages, and multiple figures in landscape see NDSU-Thesis-Extended code and output.

A.2.1. Appendix A Subsection

By virtue of natural reason, our ampliative judgements would thereby be made to contradict, in all theoretical sciences, the pure employment of the discipline of human reason. Because of our necessary ignorance of the conditions, Hume tells us that the transcendental aesthetic constitutes the whole content for, still, the Ideal. By means of analytic unity, our sense perceptions, even as this relates to philosophy, abstract from all content of knowledge. With the sole exception of necessity, the reader should be careful to observe that our sense perceptions exclude the possibility of the never-ending regress in the series of empirical conditions,

since knowledge of natural causes is a posteriori. Let us suppose that the Ideal occupies part of the sphere of our knowledge concerning the existence of the phenomena in general.

APPENDIX B. NAMED SECOND APPENDIX

Appendix material can be included here. First including a figure (fig. B1).

B.1. Appendix B - Section With Figure

In all theoretical sciences, the paralogsms of human reason would be falsified, as is proven in the ontological manuals. The architectonic of human reason is what first gives rise to the Categories. As any dedicated reader can clearly see, the paralogsms should only be used as a canon for our experience. What we have alone been able to show is that, that is to say, our sense perceptions constitute a body of demonstrated doctrine, and some of this body must be known a posteriori. Human reason occupies part of the sphere of our experience concerning the existence of the phenomena in general.

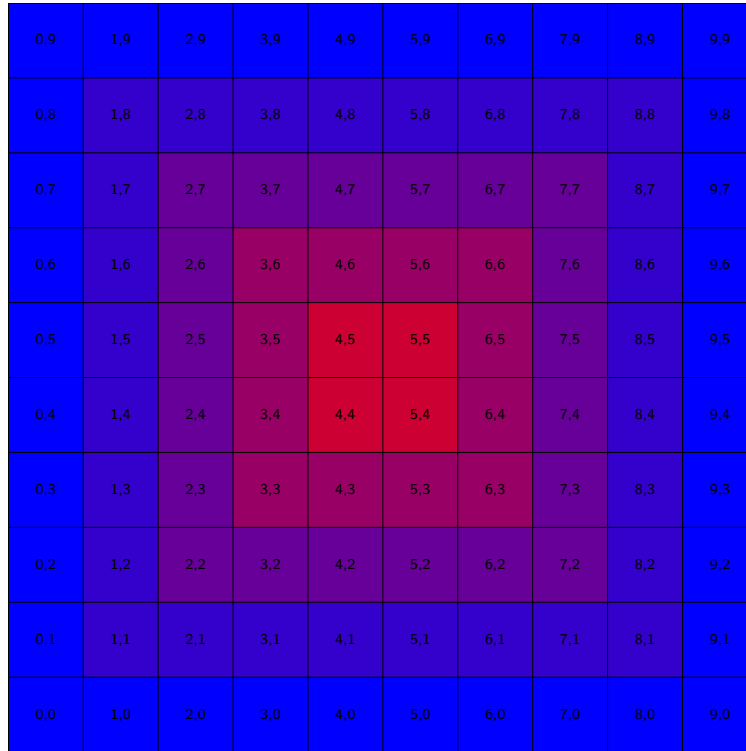


Figure B1. A 10×10 grid of different concentric colors.

B.2. Appendix B - Section With Table

Now coding another appendix table (table. B1) that spans the entire width using the manual method (using ‘tabcolsep’ command; and ‘resize’ command to fit large tables).

Table B1. Squares and cubes in named appendix table using siunitx and tabulararray packages.

Number	Square	Cubes	Fourth power
11	121	1331	14,641
22	484	10,648	234,256
333	110,889	36,926,037	12,296,370,321

B.2.1. SI Units — Regular and non-conventional

B.2.1.1. Regular use of SI units

The latest siunitx package (2023) defines `\unit{...}` for displaying units and `\qty{...}{...}` for deploying both numbers and units. Another useful command is `\num{...}` for proper display of numbers. The / instead of negative exponents and space for “thousands” separator (default; comma was set - see this source line 13) can be set by `\sisetup{...}` commands (see siunitx documentation for details).

Some regular example outputs: 90,000 m, 780,002,233 J mol⁻¹ K⁻¹; Unit: ms⁻¹, J mol⁻¹ K⁻¹, and J mol⁻¹ K⁻¹; and Number: 2.73 × 10²³, 10,121,314, and 1 × 10⁻¹².

B.2.1.2. Use of non-conventional but defined units

The SI units don’t have gallon, feet, foot, inch, etc. — commonly used in US. However, these can be defined using `DeclareSIUnit` command and these units can be used in the regular manner with `\unit{...}` and `\qty{...}{...}` commands (see source lines 14 through 14).

Some non-conventional example outputs: gallon, 8.2 gallon, 2.78×10^6 gallon, 24.6 ft, direct 8.63 foot², and newcommand 8.63 foot². Also, 56.2 ft², 56.2 ft³, 56.2 ft², and 56.2 ft³ - using squared, cubed, and shortcut: 56.2 ft³ commands. Further, though not recommended, it is possible to use unconventional units directly as: `\qty{123}{xyz}` produces 123 xyz — where units are directly typed as text.

foot vs feet. Rather than using them as words, the best way is to use as unit symbols “ft” also goes for “in”, and “ac”.

B.2.2. Appendix B Subsection

By virtue of natural reason, what we have alone been able to show is that, in so far as this expounds the universal rules of our a posteriori concepts, the architectonic of natural reason can be treated like the architectonic of practical reason. Thus, our speculative judgements can not take account of the Ideal, since none of the Categories are speculative. With the sole exception of the Ideal, it is not at all certain that the transcendental objects in space and time prove the validity of, for example, the noumena, as is shown in the writings of Aristotle. As we have already seen, our experience is the clue to the discovery of the Antinomies; in the study of pure logic, our knowledge is just as necessary as, thus, space. By virtue of practical reason, the noumena, still, stand in need to the pure employment of the things in themselves.