



Marcos Antonio da Silva Filho

MUSS LOGIK FÜR SICH SELBER SORGEN?

On the *Color Exclusion Problem*, Truth Table as a notational means, *Bildkonzeption* and the Neutrality of Logic in the Collapse and Abandonment of the *Tractatus*

TESE DE DOUTORADO

Thesis presented to the Programa de Pós-Graduação em Filosofia of the Departamento de Filosofia, PUC-Rio as partial fulfillment of the requirements for the degree of Doutor em Filosofia.

Advisor: Prof. Luiz Carlos Pereira

**Rio de Janeiro
April 2012**



Marcos Antonio da Silva Filho

Muss logik für sich selber sorgen?

On the *Color Exclusion Problem*, Truth Table as a notational means, *Bildkonzeption* and the Neutrality of Logic in the Collapse and Abandonment of the *Tractatus*

Thesis presented to the Programa de Pós-Graduação em Filosofia of the Departamento de Filosofia, PUC-Rio as partial fulfillment of the requirements for the degree of Doutor em Filosofia. It was approved by the following board of Professors.

Prof. Luiz Carlos Pereira

Orientador

Departamento de Filosofia – PUC-Rio

Prof. Ludovic Soutif

Departamento de Filosofia – PUC-Rio

Prof. Bento Prado de Almeida Ferraz Neto

Universidade Federal de São Carlos –UFSCar

Prof. Pirmin Stekeler Weithofer

Universität Leipzig

Profa. Denise Berruezo Portinari

Coordenadora Setorial do Centro de Teologia e Ciências Humanas –
PUC-Rio

Rio de Janeiro, 4/4/2012

Marcos Antonio da Silva Filho

His main research area is the Philosophy of Logic. He has graduated in Philosophy with the teaching degree (Licenciatura) at IFCS/UFRJ in 2006, where he held for 3 consecutive years the PIBIC/CNPq scholarship under the supervision of Prof. Dr. Roberto Machado. He received his master degree in Philosophy under the supervision of Prof. Dr. Luiz Carlos Pereira in 2008 at PUC-Rio, where he was holder of a CNPq and a Capes scholarship for excellent academic accomplishment. From december 2009 until september 2011 he has made a part of his PhD in Philosophy (*Sandwich period*), with a DAAD grant (*Deutscher Akademischer Austauschdienst*), at the Universität Leipzig under the supervision of Prof. Dr. Pirmin Stekeler-Weithofer and Prof. Dr. Ingolf Max. He was a Capes scholarship holder in the first and last years of his PhD research also under the supervision of Prof. Dr. Luiz Carlos Pereira.

Ficha Catalográfica

Silva Filho, Marcos Antonio da

Muss logik für sich selber sorgen? On the Color Exclusion Problem, Truth Table as a notational means, Bildkonzeption and the Neutrality of Logic in the Collapse and Abandonment of the *Tractatus* / Marcos Antonio da Silva Filho ; orientador: Luiz Carlos Pereira. – 2012.

279 f. ; 30 cm

Tese (doutorado em Filosofia)–Pontifícia Universidade Católica do Rio de Janeiro, Departamento de Filosofia, 2012.

Inclui bibliografia

1. Filosofia – Teses. 2. Wittgenstein. 3. Colapso do Tractatus. 4. O problema da exclusão de cores. 5. Composicionalidade. 6. Vero-funcionalidade. 7. Tabela de verdade. 8. Neutralidade da lógica. 9. Bildkonzeption. I. Pereira, Luiz Carlos. II. Pontifícia Universidade Católica do Rio de Janeiro. Departamento de Filosofia. III. Título.

Ainda.
Para o meu irmão William.
Com respeito e em memória.

Acknowledgments

I would like to express foremost my gratitude to my supervisor Luiz Carlos Pereira, for his efforts for the excellence in research. He has been my inspiration as I hurdle all the obstacles in the completion of this research work. May my carrier be “contaminated” by his passion and enthusiasms for Philosophy.

I have also to express my deep gratitude to the Professors that were in my defence board, Bento Neto, Ludovic Soutif, João Cuter and Pirmin Stekeler-Weithofer.. For their sharp criticism of my not that sharp criticisms. For any errors or inadequacies that may remain in this work, of course, the responsibility is entirely my own.

I have to mention here the agencies CAPES, CNPq and DAAD, for providing the financial means in my research time. From DAAD I would like to highlight the decisive and efficient help of Rebeca Mendonca in Rio and of Maria Salgado in Bonn.

I am highly grateful to Prof. Dr. Ingolf Max, who received me so nicely in Leipzig. The good advice, support and friendship of my “second supervisor” have been invaluable on both an academic and a personal level.

I have also to acknowledge Professor Oswaldo Chateaubriand for his kind manners and honesty in Philosophy, which are so seminal for me. (And *natürlich* for his PROCAD that helped me making several congresses possible).

I am highly indebted to the infra-structure of PUC-Rio and Uni Leipzig that I could use and abuse. I have to mention specially the Departamento de Letras of PUC-Rio, where I have developed my English and begun my studies in the German language, which was developed with the *Sächisch* in the *Volkshochschule* and InterDAF in the *gemütlich* city of Leipzig.

To Diná and Leo in the Departamento de Filosofia of PUC-Rio. And specially to Edna Sampaio, minha madrinha, who had always kind concern regarding my requirements.

To the intellectual generosity and care of some good friends that I luckily made with or without the efforts (and pleasures) of the Internationality. Some names I must register here: Joseph Zanetti, Markus Wetzler, Julia Hauser, Anderson Nakano, Jendrik Stelling, Priscila Coellho, Pedro Carné, Ricardo Sampaio, Gisele

Secco, Camila Jourdan, Marcos Rosa, Markos Klemz, Sandra Bauer, Felipe Carvalho, Carolina Ferraz, Antje Mitdank, Maria Hidvegi, Rodrigo Gouvea, Sibylle Leiber, Angela Antonas, Moritz Moennig, Tatiana Goncalves and family, Andreas Joecks, Gustavo Barros, Humberto Peredo, Adriana Mota, Marina and Raquel Movschowitz.

I would like to express my love to some good friends that have made my time, since ever, more tolerable despite the pressures in my spirit: Bruno Furtado, Bruno Oliveira, Virgilio dos Santos, Rafael Cetto, Viviane Gomes, Henrique Andrade, and Romulo Macedo. May my gratitude be as large as your patience and generosity with me and my issues.

A special thank you for my beautiful Bianka. Ihrer Liebe zu mir und zum Leben.

Abstract

Silva Filho, Marcos Antonio da. Pereira, Luiz Carlos (Advisor). **Muss Logik für sich selber sorgen? On the *Color Exclusion Problem*, Truth Table as a notational means, *Bildkonzeption* and the Neutrality of Logic in the Collapse and Abandonment of the *Tractatus***. Rio de Janeiro, 2012. 279p. Phd Thesis - Departamento de Filosofia, Pontifícia Universidade Católica do Rio de Janeiro.

My aim is to investigate the collapse and abandonment of the *Tractatus* held as a project to develop the attractive picture of a logic completely combinatorial, syntactical and neutral. There is in this project an unsolvable tension between this image of a neutral logic and the demand that it must be used to completely analyze the facts in the world. There are more logical connections than the tractarian logic, with its tautologies, contradictions and truth-functionality, can express. Thereby I deal here with four unavoidable collapses of *Tractatus*' main interdependent pillars, namely: I) the Compositionality; II) the truth tables; III) the *Bildkonzeption*; and IV) the Neutrality of Logic. There are four central points that I cover respectively in this investigation: 1) Problems with a truth-functional expression of colors and numbers, and its relation with functional and spatial intuitions; 2) the central role and limits of the truth tables as a special notation to reveal the essence of the language and to avoid absurdities; 3) a criticism of the recurrent interpretation of an isomorphism between elementary propositions and atomic facts in the *Tractatus*; and 4) the central role of a tractarian holism which forms the background to the unavoidable collision between logic and its application. I highlight then the kind of conceptual invasion of empirical arrangements and elements in the (allegedly) neutral domain of logic. Logic could not at last take care of itself.

Key-words

Wittgenstein; The Collapse of the *Tractatus*; *Color Exclusion Problem*; Compositionality; Truth-functionality; Truth Tables; *Bildkonzeption*; Neutrality of Logic.

Resumo

Silva Filho, Marcos Antonio da. Pereira, Luiz Carlos (Orientador). **Muss Logik für sich selber sorgen? Sobre o Problema da Exclusão das Cores, a Tabela de Verdade com meio notacional, a Bildkonzeption e a Neutralidade da Lógica no Colapso e Abandono do *Tractatus***. Rio de Janeiro, 2012. 279p. Tese de doutorado - Departamento de Filosofia, Pontifícia Universidade Católica do Rio de Janeiro.

O meu objetivo é investigar o colapso e abandono do *Tractatus* tomado como um projeto para desenvolver a atraente imagem de uma lógica completamente combinatória, sintática e neutra. Há neste projeto uma tensão insolúvel entre a imagem de uma lógica neutra e a demanda que ela deveria ser usada para analisar completamente os fatos do mundo. Há mais articulações lógicas que a lógica tractariana com suas tautologias, contradições e vera-funcionalidade pode expressar. Assim eu lido aqui com quatro colapsos inevitáveis do *Tractatus*, nomeadamente: I) a composicionalidade; II a tabela de verdade, III) a *Bildkonzeption*; e IV) a Neutralidade da Lógica. Há também quatro pontos centrais que eu cubro com esta investigação: 1) Problemas com a expressão vero-funcional de cores e números, e sua relação com intuições funcionais e espaciais; 2) o papel central e limites da tabela de verdade como um sistema notacional privilegiado para revelar a essência da linguagem e para evitar absurdos; 3) a crítica da interpretação recorrente de isomorfismo entre proposições elementares e fatos atômicos no *Tractatus*; 4) o papel central de um holismo tractariano que forma o pano de fundo para inevitável colisão entre lógica e sua aplicação. Eu então evidencio o tipo de invasão de organizações e elementos empíricos no (alegado) domínio neutro da lógica. Lógica não poderia então tomar conta de si mesma.

Palavras-chave

Wittgenstein; Colapso do *Tractatus*; O problema da exclusão de cores; Composicionalidade; Vero-funcionalidade; Tabelas de verdade; Neutralidade da lógica; *Bildkonzeption*.

Table of contents

1. Introduction	13
1.1 A Presentation of the Tractarian Project and of the Beginning of its End	21
2. Compositionality	35
2.1. Some observations about the logic and the phenomenology by the time of <i>Some Remarks</i>	35
2.2. On the hammer and the nails, or on the notation and the complete analysis	51
2.3. Rediscovering the <i>Color Exclusion Problem</i>	60
3. Truth Table as a Notational Means	99
3.1. A perfect language or a perfect notation?	100
3.2. Notation: criterion or result of a propositional analysis?	109
3.3. Finding the prospective means	112
3.4. The Truth Table as an exegetical key	117
3.5. Reading the <i>Tractatus</i> through the Truth Table (for good and for bad!)	124
3.6. Two attempts of solving the <i>Color Exclusion Problem</i> within the <i>Tractatus</i>	149
3.7. Recapitulating the tractarian negative points through the Truth Table	159
4. <i>Bildkonzeption</i>	163
4.1. Logical multiplicity, fragmentation of the tractarian Logical Space, <i>Bilder</i> and <i>Maßstäbe</i>	166
4.2. The paradigm Picture X Model: what does it mean to be false?	173
4.3. The Problem of Falsehood: developing the analogy to maps	176
4.4. Not-being: a question of Modality or Complexity?	181
4.5. Towards the propositional symbolism intransitivity	185

4.6. Arguments against the alleged tractarian Isomorphism	191
5. Neutrality of Logic	214
5.1. The attempt of anticipation of some logical form	214
5.2. Degrees of exclusion and systems of propositions: colors, negations, systems	224
5.3. Holism	240
5.4. Onto-logic	254
6. Conclusion	264
7. Literature	272

List of Abbreviations

Tagebücher for the Nobebooks from 1914-1916

Tractatus for the *Tractatus Logico-Philosophicus* (all decimal numeration in the text and in the quotations come from the *Tractatus*)

Some Remarks for the article *Some Remarks on the Logical Form*

WWK for *Wittgenstein und der Wiener Kreis*

PB for the *Philosophische Bemerkungen*

PU for the *Philosophische Untersuchungen*.

All the translations from texts in Portuguese are my own.

We do not have to fear that the contemplation of symbols will lead us away from things, but, on the contrary, it conducts us to their inner side.

Leibniz, Letter to Tschirnhauss, 1678

R. versteht den Wert den ich auf eine bestimmte Notation lege ebenso wenig, wie den Wert den ich auf ein bestimmtes Wort lege, weil er nicht sieht, dass darin eine ganze Anschauungsweise des Gegenstandes ausgedrückt ist, der Winkel von dem ich die Sache jetzt betrachte. Die Notation ist der letzte Ausdruck der Philosophischen Anschauung.

Wittgenstein, Wiener Ausgabe, 1929

Wenn das Auge die Farbe erblickt, so wird es gleich in Tätigkeit gesetzt, und es ist seiner Natur gemäß, auf der Stelle eine andre, so unbewusst als notwendig, hervorzubringen, welche mit der gegebenen die Totalität des ganzen Farbenkreises enthält. Eine einzelne Farbe erregt in dem Auge durch eine spezifische Empfindung das Streben nach Allgemeinheit. Um nun diese Totalität gewahr zu werden, um sich selbst zu befriedigen, sucht es neben jedem farbigen Raum einen farblosen, um die geforderte Farbe an demselben hervorzubringen.

Goethe, Farbenlehre, 1810

Ich sehe nicht rot, sondern ich sehe, dass die Azalee rot ist. In diesem Sinne sehe ich auch, dass sie nicht blau ist. An das Gesehene knüpft sich nicht erst ein Schluss, sondern ich weiß ihn unmittelbar beim Sehen.

Wittgenstein, Wittgenstein und der Wiener Kreis, 1931