

My Universe



v0.1

Niels G. W. Serup

Contents

1 Introduction	2
2 Meta	2
3 The Basics	3
4 The Next Level	4

1 Introduction

I have attempted to define a universe. It is a work in progress and might have bugs.

2 Meta

The newest version of this work is available at <http://metanohi.name/writings/myuniverse/>. This is version 0.1.

Copyright ©2013 Niels G. W. Serup ngws@metanohi.name

This work is free. You can redistribute it and/or modify it under the terms of the Do What The Fuck You Want To Public License, Version 2, as published by Sam Hocevar. See <http://wtfpl.net/> or below.

DO WHAT THE FUCK YOU WANT TO PUBLIC LICENSE
Version 2, December 2004

Copyright (C) 2004 Sam Hocevar <sam@hocevar.net>

Everyone is permitted to copy and distribute verbatim or modified copies of this license document, and changing it is allowed as long as the name is changed.

DO WHAT THE FUCK YOU WANT TO PUBLIC LICENSE
TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. You just DO WHAT THE FUCK YOU WANT TO.

3 The Basics

Let us define the basic assumptions of the universe.

Axiom 3.1 (Existence). *Let x be something. We have*

$$x$$

In other words, x exists.

This axiom is very useful.

Axiom 3.2 (Nonexistence). *Let x be nothing. We have nothing. In other words, x does not exist.*

To make the universe more interesting we need more basic truths.

Axiom 3.3 (Comparability). *Let x exist and y exist. x and y can be compared.*

Axiom 3.4 (Difference). *Let x exist and y exist. We have*

$$x \neq y$$

That is, some x can exist where something which is not x exists.

Corollary 3.1 (Existence of at least two things (Axiom 3.4)). *Let x exist and y exist, and require that $x \neq y$. We have*

$$x, y$$

It follows from Axiom 3.4 that both x and y can exist.

This is far from enough.

Theorem 3.1 (Multiple differences). *We have*

$$y, x \neq y \quad \forall x$$

In other words, for all x , something can exist which is not x .

Proof 3.1 (Multiple differences (Theorem 3.1)). *Let x exist. According to Axiom 3.4, some y exists for which something which is not y also exists. If $x = y$, we are done; otherwise, it must be the case that $x \neq y$, in which case we are also done.* \square

Support for multiple differences is not useful if there is not support for the existence of more than two things.

Axiom 3.5 (Existence of more than two things). *Let n , where $n > 2$, be the number of things that exist. They exist.*

Now we have a nice little universe to play with.

4 The Next Level

I think my universe is quite nice as it is, but surely it can be improved, and more details can be extrapolated from the existing truths.