

Philosophy of Engineering and Technology 18

Sven Ove Hansson *Editor*

# The Role of Technology in Science: Philosophical Perspectives

 Springer

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# Philosophy of Engineering and Technology

## Volume 18

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Sven Ove Hansson  
Editor

# The Role of Technology in Science: Philosophical Perspectives

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# Preface

In some quarters philosophy seems to be conceived as an activity to be performed as independently as possible of the empirical conditions under which it takes place. The ideal philosopher, one would believe, is one who thinks as if he or she were a brain in a vat, capable of thinking on behalf of all possible, potential beings, independently of who we are. Needless to say there are no good reasons to believe this to be possible.

It is much more constructive to base our philosophical endeavours on the admittedly trivial but nevertheless important insight that philosophy is a human enterprise. It is an attempt to understand ourselves and the world that we live in. Therefore it must take into account the basic facts about how we as human beings interact with each other and with the world we live in. One of these basic facts is that we are tool-making animals. With the help of technology we have radically transformed – and continue to transform – the conditions under which we live and the ways in which we understand ourselves and the world.

In this perspective, technology has an important role to play in all branches of philosophical inquiry. The philosophy of science is one of the best examples. Few if any scientific investigations would be possible without technological devices. Many of our procedures for these investigations, such as experiments and measurements, have a strong technological background, and the same applies to important thought models that we employ in science, such as the notion of a mechanism. This book aims at bringing out the omnipresence of technology in science and showing why it must be closely attended to in philosophical reflections on science.

I would like to thank the publisher and the series editor Pieter Vermaas for their helpfulness and their strong support of this project and all the contributing authors for great work and for their commitment to this project.

Stockholm, Sweden  
October 2, 2014

Sven Ove Hansson





# Contents

## Part I Introductory

- 1 **Preview**..... 3  
Sven Ove Hansson
- 2 **Science and Technology: What They Are and Why Their  
Relation Matters** ..... 11  
Sven Ove Hansson

## Part II The Technological Origins of Science

- 3 **Technological Thinking in Science**..... 27  
David F. Channell
- 4 **The Scientific Use of Technological Instruments** ..... 55  
Mieke Boon
- 5 **Experiments Before Science. What Science Learned  
from Technological Experiments** ..... 81  
Sven Ove Hansson

## Part III Modern Technology Shapes Modern Science

- 6 **Iteration Unleashed. Computer Technology in Science** ..... 113  
Johannes Lenhard
- 7 **Computer Simulations: A New Mode of Scientific Inquiry?**..... 131  
Stéphanie Ruphy
- 8 **Adopting a Technological Stance Toward the Living World.  
Promises, Pitfalls and Perils** ..... 149  
Russell Powell

**Part IV Reflections on a Complex Relationship**

**9 Goal Rationality in Science and Technology.  
An Epistemological Perspective** ..... 175  
Erik J. Olsson

**10 Reflections on Rational Goals in Science and Technology;  
A Comment on Olsson** ..... 193  
Peter Kroes

**11 The Naturalness of the Naturalistic Fallacy and the Ethics  
of Nanotechnology** ..... 207  
Mauro Dorato

**12 Human Well-Being, Nature and Technology.  
A Comment on Dorato** ..... 225  
Ibo van de Poel

**13 Philosophy of Science and Philosophy of Technology:  
One or Two Philosophies of One or Two Objects?** ..... 235  
Maarten Franssen

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**Part I**  
**Introductory**