

**Science and Knowledge  
in Bernardin de Saint-Pierre's  
*Études de la nature*  
(1784)**

Submitted by Jean Eileen Luck to the University of Exeter as a  
thesis towards the degree of Doctor of Philosophy in French  
January 2013

This thesis is available for Library use on the understanding that it is  
copyright material and that no quotation from the thesis may be published  
without proper acknowledgement.

I certify that all material in this thesis which is not my own work has been  
identified and that no material has previously been submitted and  
approved for the award of a degree by this or any other University.

Signature:

## Abstract

Jacques-Henri Bernardin de Saint-Pierre is identified more with his novel *Paul et Virginie*, than with the *Études de la nature*. However, the publication of the *Études* in 1784 established him as a serious student of the natural world. Study of the work reveals a multifaceted personality: a classical scholar; a mathematician; a trained military engineer/geographer; a resolute character, who pursued, and achieved his literary aims despite years of financial insecurity; an obdurate character, who never deviated from his sincerely held, but erroneous, scientific beliefs; one of the most widely travelled men of his age, whose observations and experiences added interest and authority to his descriptions; an avid reader, especially of accounts by other voyagers, evidence of which, is seen frequently in the *Études*; a philosopher, whose opinions revealed a close study of established, eminent thinkers; an enthusiastic, amateur botanist, who was inspired by Pierre Poivre on the Île de France and by his later friendship with Rousseau.

Other studies have addressed diverse aspects of Bernardin's life and work, but by concentrating mainly on the *Études de la nature*, and with reference to the manuscripts, I propose in this thesis to examine how an apparently random, disordered text, with fourteen *Études* of disproportionate lengths, many digressions, and a plethora of stylistic devices, proved such a resounding success and transformed Bernardin's fortunes. I hope to explain this accomplishment by investigating Bernardin's method of working, and how far the structure and content of the *Études* conform to, or diverge from, his stated plan at the beginning of the *Étude première*: 'Je formai, il y a quelques années, le project d'écrire une histoire générale de la nature, à l'imitation d'Aristote, de Pline, du chancelier Bacon, et de plusieurs modernes célèbres.' My analysis will concentrate primarily on the use he made, for various purposes, of contemporaneous sources, and those of the preceding two centuries.

## **Acknowledgements**

I wish to thank my Supervisor, Malcolm Cook, for giving me the opportunity to research a PhD thesis at Exeter University and for his unfailing help and encouragement from beginning to end. I have appreciated his invaluable guidance, his constant support and his unlimited patience.

I wish also to thank the AHRC for funding my research as part of the Bernardin de Saint-Pierre Correspondence Project.

My thanks are due to Exeter University, which hosts the Le Havre manuscripts, thereby enabling me to research much material locally.

## Table of Contents

<b>Abstract</b>	<b>2</b>
<b>Acknowledgements</b>	<b>3</b>
<b>Preface</b>	<b>6</b>
<b>Introduction</b>	<b>7</b>
<b>Chapter 1</b>	<b>12</b>
The Pathway to Success	12
1.1    Bernardin’s Early Life	12
1.2    The <i>Études</i> in Preparation	16
<b>Chapter 2</b>	<b>35</b>
Influence of significant figures from the sixteenth and seventeenth centuries	35
2.1 Montaigne	40
2.2 Locke	42
2.3 Descartes	45
2.4 Hobbes	49
2.5 Leibnitz	50
2.6 Rabelais, Cervantes, Corneille, Pascal, Boileau-Despréaux, Molière, Racine, Bossuet	53
2.7 Fénelon	56
2.8 La Fontaine	64
<b>Chapter 3</b>	<b>83</b>
Major influences from the eighteenth century	83
3.1 Montesquieu	83
3.2 Voltaire	101
3.3 La Mettrie	103
3.4 Rousseau	106
<b>Chapter 4</b>	<b>125</b>
Science	125
4.1 The Influence of Newton	125
4.2 Giovanni-Domenico/Jean Dominique Cassini	139
4.3 Pierre Bouguer	141
4.4 Voyagers’ Reports	143

<b>Chapter 5</b>	<b>159</b>
Natural History	159
5.1 General aspects	159
5.2 Fish	194
5.3 Travellers' Reports	204
<b>Chapter 6</b>	<b>211</b>
Investigation of any similarity between content of the <i>Études</i> and articles in <i>l'Encyclopédie</i>	211
<b>Chapter 7</b>	<b>223</b>
Bernardin's use of information from other Voyagers	223
<b>Chapter 8</b>	<b>234</b>
Bernardin's personal experiences	234
<b>Conclusion</b>	<b>244</b>
<b>Appendix A</b>	<b>250</b>
Folder 112 Manuscripts	250
Folder 112 Transcriptions	254
<b>Appendix B</b>	<b>259</b>
Travel writers mentioned in the <i>Études de la nature</i> in alphabetical order	259
<b>Appendix C</b>	<b>272</b>
Personal experiences in chronological order	272
<b>Appendix D</b>	<b>276</b>
A Brief Inventory of Manuscripts relating to the <i>Études</i>	276
<b>Bibliography</b>	<b>284</b>