Origins of British Psychology as an Empirical Science in the 18th century
Pneumatological Lectures of Grove, Doddridge, Reid and Belsham

John Barresi
Dalhousie University
During the 18th century, science and religion were often partners in the advance of knowledge and enlightenment. An example of this cooperation occurred in the development of an early modern version of psychology.

After the collapse of Aristotelian metaphysics of soul as living principle in the seventeenth century and its replacement with Cartesian metaphysics where the soul became conscious mind, room was made for a novel approach to the investigation of soul.

Traditionally, pneumatology, or the science of spirits, focused on metaphysical and religious notions of the human soul, angels & demons, and God.

But right from the start in 18th century, there was an understanding that the human soul could be approached naturalistically.

Teachers of pneumatology at dissenting religious academies and Scottish colleges in Britain tracked the development of this new empirical approach to soul as mind throughout the century, and through publications, they also participated in its development.

In this talk I will trace the disciplinary development of this new science of the soul in 18th century Britain.
Four 18\textsuperscript{th} Century Teachers of Pneumatology

- **Henry Grove** taught at Taunton Academy from 1706-1738
- **Philip Doddridge** taught at Northampton Academy from 1729-1751
- **Thomas Reid** taught at King’s College Aberdeen from 1752-1764 then University of Glasgow until 1781, when he resigned
- **Thomas Belsham** taught at Daventry from 1771-78; 81-89; Hackney from 1789 until it closed in 1796
A SYSTEM OF PNEUMATOLOGY In A Series of Lectures
by The late Rev:d Mr. Henry Grove (Unpublished, based on Huntington Ms)

• Introduction to Pneumatology
• **Book 1: Of the Human Soul**
  • Chap. 1: Of the Existence of the Soul
  • Chap. 2: Of the Essence of the Soul
  • Chap. 3: Thought not the Essence of the Soul
  • Chap. 4: Of the Immateriality of the Soul (Grove, 1718: “An Essay towards the Demonstration of the Soul’s Immateriality”)
  • Chap. 5: Of Thinking
  • Chap. 6: Whether Thinking be an Essential Property of the Soul
  • Chap. 7: Of the Seat of Ideas
  • Chap. 8: Of the Nature of Ideas
  • Chap. 9: Of the Original of Ideas
  • Chap. 10: Of the Faculties of the Soul
    – Part 2: Of Memory
    – Part 3: Of the Will
    – Part 4: of Habits
  • Chap. 11: Of the Ubiety of the Soul
  • Chap. 12: Of the Union of Soul and Body
    – Part 2: Of the Concomitants of this Union
  • Chap. 13: Of the Original of the Soul
  • Chap. 14: Of the Immortality of the Soul
  • Chap. 15: Of the Separate State of the Soul
• **Book II: Of Angels**
• **Book III: Of God**
Grove’s Introduction

• “Pneumatology by some styled the special part of metaphysics, by Mr. Locke a branch of Physics or natural philosophy ....

• The common notion of a Spirit is an immaterial cogitative Being: the main foundation of this Definition is the usual Belief that a power of thinking belongs only to immaterial Substance or that every thinking Being is likewise an immaterial Being: which others not admitting but on the contrary being persuaded that tis evident that matter may think, nay probable that this is real Fact, & that the Soul which is conscious to itself of its thinking is a System or composition of matter have laid down a Definition of Spirit in more loose & general terms, leaving out the consideration of its Essence; viz a Spirit is a Being possessed of a Power of Thinking.

• Of these Definitions you will be able to judge which is the best after I shall have made an Enquiry whether the soul be a material or an immaterial Substance.”
Grove’s pneumatology

- **Sources**: Locke, Descartes, Malebranche, le Forge, le Clerc, Clarke
- **Metaphysics**: Substance Dualism (Immaterial Soul & Inactive Matter); Free Will
- **Religious Needs**: Immortal soul; Free will for just rewards
- **Major Term**: Soul; sometimes Mind in empirical sections (e.g. Imagination)
- **Methodology**: rational & empirical psychology (Christian Wolff’s definitions), partly depending on topic. So no innate ideas following Locke. Even the idea of self as thinking thing develops.
- **Comparison**: Spirits (i.e. people, angels, God); rarely animals. Often refers to Bible in making arguments, e.g., the original of soul. Incorporates Natural Theology and Revelation indiscriminately.
Doddridge’s Pneumatology Lectures were first published in 1763 after his death in 1751. They were republished several times and were used extensively in various Dissenting Academies where Pneumatology was taught.

Doddridge’s *Pneumatology* has been called “a work that serves as an excellent sourcebook for primary writings in what we would call psychology.” (Fox, 1988, p. 119)
Doddridge’s Pneumatology

INTRODUCTION.

It may be not improper, in the entrance of this work, to give some general account of the plan of it, and some directions for studying it in the most useful manner.

The work itself contains an abstract of the most important and useful thoughts I have anywhere met with, on the chief subjects which can be supposed to come under consideration, in the review of Pneumatology, Ethics, and Divinity. And as these sciences do insensibly run into each other, I judged it not proper to treat of each separately, and so to divide the whole into three distinct parts, the first Pneumatological, the second Ethical, and the third Theological; but have chosen to consider them in such a connected view, as might convey to the mind, with the greatest ease and advantage, the principal truths relating to each.
Doddridge’s Pneumatology

PART I.

Of the powers and faculties of the human mind, and the instinct of brutes.

| Prop. I.  | The faculties of the human mind enumerated                      | Page 5 |
| Prop. II. | Analogy between the faculties of the human mind, and some phenomena in brutes | 7     |
| Prop. III.| The dependence of the mind on the body shown                   | 9     |
| Prop. IV. | That the soul is seated in the brain                            | 11    |
| Prop. V.  | No innate ideas in the mind                                     | 12    |
| Prop. VI. | No innate propositions                                          | 14    |
| Prop. VII.| The same external qualities may excite different ideas in different persons | 15    |
| Prop. VIII.| The phenomena of the human memory, with their solution upon the Cartesian hypothesis | 16    |
| Prop. IX. | The swiftness and slowness of the succession of ideas in the mind limited | 19    |
| Prop. X.  | Instances and causes of the imperfection of human knowledge    | 21    |
| Prop. XI. | The question concerning personal identity discussed             | 23    |
| Prop. XII.| Whether men think always                                       | 24    |
| Prop. XIII.| A survey of the passions of the human mind                      | 27    |
| Prop. XIV.| An inquiry into the original of the passions                    | 29    |
| Prop. XV. | Mental habits depend upon the memory                            | 32    |
| Prop. XVI.| The human mind possessed of liberty of choice                   | 36    |
| Prop. XVII.| The philosophical liberty of the mind impaired                  | 39    |
| Prop. XVIII.| Our knowledge of our own minds very imperfect                  | 41    |
Doddridge Pneumatology

PART II.

Of the being of a God, and his natural perfections.

PART III.

Of the nature of moral virtue in general, and the moral attributes of God: Of the several branches of virtue, and the nature of civil government.

PART IV.

Of the immortality and immateriality of the soul: its original: the general obligation to virtue; and the state of it in the world.

PART V.

Of the reason to expect and desire a revelation; and the internal and external evidence with which we may suppose it should be attended.
Doddridge’s pneumatology

- **Sources**: Locke, Watts, Descartes, Clarke, Collins, Grove
- **Metaphysics**: Substance Dualism (Immaterial Soul & Inactive Matter); Free Will
- **Religious Needs**: Immortal soul; Free will for just rewards
- **Major Term**: Mind & Soul
- **Methodology**: empirical psychology in initial section; natural theology and rational psychology in following sections, eventually adding revelation; Geometric presentation: reports unresolved conflicts presenting both sides of the question and indicating human limits.
- **Comparison**: People, Brutes; not angels or God in the initial section on psychology; God comes up later in justifying ethics, immortality & immateriality
Reid’s *Inquiry* (1764) was the first of several published books during his lifetime based on his pneumatology lectures. Other lectures not dealing directly with philosophy of mind were not published during his lifetime nor published posthumously until the late 20th century. Some still have not been published but are available through the internet at the University of Aberdeen.
Reid's Inquiry (1764)

Chapter I.

Introduction.

Sect.
1. The importance of the subject, and the means of prosecuting it, 1
2. The impediments to our knowledge of the mind, 4
3. The present state of this part of philosophy. Of Des Cartes, Malebranche, and Locke, 10
4. Apology for those philosophers, 14
5. Of Bishop Berkeley; the Treatise of human nature; and of scepticism, 16
6. Of the Treatise of human nature, 20
7. The system of all these authors is the same, and leads to scepticism, 22
8. We ought not to despair of a better,

Chapter II.

Of Smelling.

Sect.
1. The order of proceeding. Of the medium and organ of smell, 26
2. The sensation considered abstractly, 28
3. Sensation and remembrance natural principles of belief, 30
4. Judgment and belief in some cases precede simple apprehension, 34
5. Two theories of the nature of belief refuted,

Chapter III.

Of Tasting.

Chapter IV.

Of Hearing.

Sect.
1. Variety of sounds. Their place and distance learned by custom, without reasoning, 69
2. Of natural language, 72
<table>
<thead>
<tr>
<th>Sect.</th>
<th>Section Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Of heat and cold,</td>
<td>78</td>
</tr>
<tr>
<td>2.</td>
<td>Of hardness and softness,</td>
<td>81</td>
</tr>
<tr>
<td>3.</td>
<td>Of natural signs,</td>
<td>87</td>
</tr>
<tr>
<td>4.</td>
<td>Of hardness, and other primary qualities,</td>
<td>92</td>
</tr>
<tr>
<td>5.</td>
<td>Of extension,</td>
<td>94</td>
</tr>
<tr>
<td>6.</td>
<td>Of extension,</td>
<td>99</td>
</tr>
<tr>
<td>7.</td>
<td>Of the existence of a material world,</td>
<td>102</td>
</tr>
<tr>
<td>8.</td>
<td>Of the systems of philosophers concerning the senses,</td>
<td>113</td>
</tr>
<tr>
<td>10.</td>
<td>Of the parallel motion of the eyes,</td>
<td>185</td>
</tr>
<tr>
<td>11.</td>
<td>Of our seeing objects erect by inverted images,</td>
<td>190</td>
</tr>
<tr>
<td>12.</td>
<td>The same subject continued,</td>
<td>199</td>
</tr>
<tr>
<td>13.</td>
<td>Of seeing objects single with two eyes,</td>
<td>222</td>
</tr>
<tr>
<td>14.</td>
<td>Of the laws of vision in brute animals,</td>
<td>233</td>
</tr>
<tr>
<td>15.</td>
<td>Squinting considered hypothetically,</td>
<td>237</td>
</tr>
<tr>
<td>16.</td>
<td>Facts relating to squinting,</td>
<td>253</td>
</tr>
<tr>
<td>17.</td>
<td>Of the effect of custom in seeing objects single,</td>
<td>258</td>
</tr>
<tr>
<td>18.</td>
<td>Of Dr Porterfield's account of single and double vision,</td>
<td>263</td>
</tr>
<tr>
<td>19.</td>
<td>Of Dr Briggs's theory, and of Sir Isaac Newton's conjecture on this subject,</td>
<td>273</td>
</tr>
<tr>
<td>20.</td>
<td>Of perception in general,</td>
<td>288</td>
</tr>
<tr>
<td>21.</td>
<td>Of the processes of nature in perception,</td>
<td>301</td>
</tr>
<tr>
<td>22.</td>
<td>Of the signs by which we learn to perceive distance from the eye,</td>
<td>309</td>
</tr>
<tr>
<td>23.</td>
<td>Of the signs used in other acquired perceptions,</td>
<td>326</td>
</tr>
<tr>
<td>24.</td>
<td>Of the analogy between perception, and the credit we give to human testimony,</td>
<td>339</td>
</tr>
</tbody>
</table>

**CHAP. VII.**

**CONCLUSION.**

Containing, Reflections upon the opinions of Philosophers on this subject, 355
Essays on the intellectual powers of man. By Thomas Reid [1785].
ESSAY I. PRELIMINARY. CHAP. I. Explication of Words.
  CHAP. II. Principles taken for granted.
  CHAP. III. Of Hypotheses.
  CHAP. IV. Of Analogy.
  CHAP. V. Of the proper Means of knowing the Operations of the Mind.
  CHAP. VI. Of the Difficulty of attending to the Operations of our own Minds.
  CHAP. VII. Division of the Powers of the Mind.
  CHAP. VIII. Of social Operations of Mind.
ESSAY II. OF THE POWERS WE HAVE BY MEANS OF OUR EXTERNAL SENSES.
ESSAY III. OF MEMORY.
ESSAY V. OF ABSTRACTION.
ESSAY VI. OF JUDGMENT.
ESSAY VII. OF REASONING.
ESSAY VIII. OF TASTE.

Essays on the active powers of man. By Thomas Reid [1788].
ESSAY I. OF ACTIVE POWER IN GENERAL.
ESSAY II. OF THE WILL.
ESSAY III. OF THE PRINCIPLES OF ACTION.
ESSAY IV. OF THE LIBERTY OF MORAL AGENTS.
ESSAY V. OF MORALS.
Reid’s pneumatology

• From the intro to Reid’s pneumatology lectures:

“All Human Knowledge is employed either about Body or Mind about things Material or things Intellectual. The whole System of Bodies in the Universe, of which we know but a very little part, may be called the Material World; And the whole System of Minds or thinking Beings in the Universe from the Infinite Creator to the meanest Creature endued with thought, may be called the Intellectual World. About the one or the other of these or something pertaining to them all Sciences treat, & all Arts are occupied. Those are the two great Kingdoms of Nature to which human thought is limited. Nor can the boldest flight of Imagination carry beyond their limits.”
Reid’s pneumatology

- **Sources:**
  - **Inquiry:** Descartes (35), Berkeley (32), Locke (31), Newton (17), Porterfield (12), Malebranche (7), Briggs (5), Aristotle (5), Plato (4), Hume (3)
  - **Intellectual:** Locke (147), Descartes (88), Berkeley (77), Hume (72), Newton (35), Malebranche (29), Arnauld (15), Leibnitz (13), Hartley (11), Bacon (10)
  - **Active:** Hume (55), Locke (18), Plato (8), Leibnitz (6), Descartes (5), Aristotle (5), Newton (4), Hutcheson (4), Butler (3), Price (3), Priestley (2), Berkeley (1)

- **Metaphysics:** Substance Dualism (Immaterial Mind & Inactive Matter); Free Will

- **Religious Needs:** Immortal soul; Free will for just rewards

- **Major Term:** Mind. Soul rarely comes up in published texts.

- **Methodology:** first-person empirical psychology; inductive closely following Newton’s regulae and invoking him as an example as well. Metaphysical assumptions and arguments tend to be indirect. Relies heavily on methodological dualism and a notion of power as a property of spirit not matter.

- **Comparison:** Other animals; angels viewed as unknowable; God and possibly other spirits in nature brought in for natural theological accounts of constitution and hidden mechanisms relating mind to matter.
Belsham was taught pneumatology with Doddridge’s Lectures and used this work in his own courses; but he also generated supplementary lectures that were heavily influenced by David Hartley’s (1749) “Observations on Man” as well as by the Christian materialism of his friend and colleague Joseph Priestley. These lectures were the basis of this work published in 1801.
Belsham’s Elements of the Philosophy of Mind (1801)

Introduction
Chap. I. General enumeration of the faculties of perception
Chap. II. Of the capacity for pleasure and pain
Chap. III. Of the law of association, and of the theories which have been proposed for explaining the phenomena of the mind.
Chap. IV. Of Sensation
Chap. V. Of the Intellect
Chap. VI. Of Memory
Chap. VII. Of the Imagination
Chap. VIII. Concerning the affections natural and acquired
Chap. IX. Of the Will. Discussion of the doctrines of liberty and necessity
Chap. X. Concerning power.
Chap. XI. Concerning immateriality and materialism
Chap. XII. Concerning the natural evidence of a future life.
Belsham’s pneumatology

• **Sources:** Hartley (84), Priestley (49), Locke (43), Reid (38), Price (28), E. Darwin (15), Hume (10), Stewart (10), Doddridge (8)

• **Metaphysics:** Material Monism; Necessitarian

• **Religious Needs:** Resurrection of the dead; Necessity for just rewards

• **Major Terms:** Mind, Association

• **Methodology:** third-person empirical psychology; Newtonian version of hypothetico-deductive; assumes that all mental events, even ‘simple’ perceptions, are complex and a function of brain activity.

• **Comparison:** Other animals; God for natural theology especially related to future life; no mention of spirits.
Disciplinary changes in pneumatology as taught in 18th century

- **Grove** presents an eclectic approach with theological, metaphysical, rational and empirical methods of argumentation, dealing with classical & novel issues in pneumatology.
- **Doddridge** adds systematic organization starting with empirical approaches to mind, then turns to natural theological issues and rational psychology, followed by traditional metaphysical issues and finally revelation. The first part on mind is less than 10% of the total text.
- **Reid** takes a strongly empirical approach using an inductive methodology derived from Newton, focusing on the human mind and adopting a first-person methodology on determining the nature of mental events. His metaphysics or rational psychology appears mainly in the background, particularly through his separation of the mental from physical world, and his claim that matter is ‘dead’ and cannot be the source of active powers of the mind. He admits correlations between physical and mental phenomena in human nature, but suggests that all hypotheses connecting them are speculative.
- **Belsham** also takes a strongly empirical approach derived from Newton, but gives a hypotheticoductive interpretation of Newton’s method. He is opposed to the kind of methodological dualism with respect to human nature taken by Reid, and entertains ‘thinking matter’ hypotheses to connect mental to neural events. Moreover he incorporates neural events that may not be conscious into his hypotheses, generally taking a third-person approach toward understanding human activity or behavior in general rather than attending to conscious events. His theory is based on Hartley’s linking of association to Newton’s vibratory notions about neurons but also deals with advances by E. Darwin, thus turning psychology into a deterministic biological science. Unlike his predecessors he does not rely on any notion of human free will or immaterial soul to support his theological or religious concerns. Instead, his religious views have taken a radical turn.
19th Century Aftermath

- Opposition between Reid’s methodological dualism between approaches to mind & matter and a materialistically based psychology (Locke’s “thinking matter”) of the sort advocated by Belsham.
- British and North American Psychology in academic environments mostly taught by ministers was dominated by Reid’s commonsense psychology.
- E.g. The first Canadian textbook in psychology was William Lyall’s, “Intellect, the Emotions, and the Moral Nature” (1855).
  - Lyall was Chair of Psychology and Metaphysics at Dalhousie University from 1860s to 1890:
  - “The mysterious connexion between mind and matter must for ever remain unexplained in our present state of being.”
  - “Mind cannot be an organic result.”
  - As for physiological psychology, It was said that Lyall “saw in it the philosophy of mud.”
- Religious opposition was a primary source of both active suppression and slow acceptance of materialistic approaches to mind throughout the 19th century (Reed, “From soul to mind”).
Thanks