Notes

In these notes and the footnotes, the full-reference/shortened-reference system of citation has generally been used. Frequently cited works by Whitehead have been abbreviated as noted in the Bibliography. The frequently cited works of others have been abbreviated as follows:

Price, *Dialogues*  

Russell, *MPD*  

Russell, *Portraits*  


Schilpp, *LLP-W*  

I. Whitehead’s First Years in London

1. For a full account of the move to London that I have just summarized, see Volume I, Chapter XV, Section v.
2. See Abiog. Notes, p. 11 in *ESP* or Schilpp, *LLP-W*.
5. Bertrand Russell to Lady Ottoline Morrell, June 21, 1911.
8. Ibid., pp. 38–40.
10. Ibid., pp. 32–35.
11. Ibid., pp. 32–33.
12. See Volume I, Chapter VIII, Section i.
13. See Volume I, Chapter XII, Section iv, page 269. Relation-Arithmetic was primarily Russell’s brainchild.
14. It is discussed in Volume I, Chapter XV, Section i.
16. Abiog. Notes, p. 10 in ESP or Schilpp, LLP-W.
17. See note †, page 9, above.
18. Chapter XIV of Volume I gives a full account of this memoir.
21. See Volume I, Chapter XIV, Sections i and ii, and note 6.
22. RTS, Sec. iii.
23. Ibid., Sec. ii.
24. Ibid., Sec. iii.
25. See Volume I, Chapter X, Section i, page 184.
26. Russell’s relations with Mrs. Whitehead were discussed in Volume I, Chapter XI, Sections v and vi.
28. The collaboration was the subject of Chapters XII and XIII in Volume I.
29. See Volume I, Chapter XI, Section v.
30. Kindly made available to me by her granddaughter Lona (niece of Mary and Alan Beeton), later Mrs. Peter Ward.

II. 1914–1918

1. On Forsyth, see Volume I, Chapter VIII, Section ii, pages 150–51.
2. See Chapter I, Section ii.
8. The 1889 papers are described in Volume I, Chapter VIII, Section iv, pages 157–59.
10. Jessie Whitehead, reporting the words of another pilot on this patrol, in a letter to her uncle Charles Whitehead, March 16, 1918.
12. ESP, p. 115.
14. This pamphlet has now been reprinted, with an introduction by Paul

15. Russell, *Abiog.*, Vol. II, p. 34; but see also Gilbert Murray’s letter of April 9, 1918, to Russell, and the last paragraph of Russell’s letter of May 6, 1918, to his brother Frank (both in the Bertrand Russell Archives, McMaster University, Hamilton, Ontario).

### III. Whitehead on Education

3. *OT*, p. 3.
10. Ibid., pp. 1–2.
11. Ibid., p. 1.
12. Ibid., pp. 18–20.
13. Ibid., p. 3.
15. Ibid., p. 8.
16. Ibid.
17. Ibid., p. 16.
18. Ibid., p. 10.
23. Ibid., p. 175.
24. Ibid., p. 181.
25. *AE*, p. 12. Graphs were introduced into school mathematical teaching about 1898, and served as the entering wedge in breaking up the traditional presentation of algebra as, in effect, gibberish.
27. Ibid., p. 178.
29. Ibid., p. 102.
30. Ibid., p. 98.
31. Ibid., p. 95.
32. Ibid., p. 103.
33. AE, p. 123.
34. Ibid., pp. 124–25.
35. Ibid., p. 131.
36. Ibid., p. 128.
37. Ibid., p. 135.
38. Ibid., p. 122.
40. See the entry in the Bibliography for "Technical Education and Its Relation to Science and Literature." The 1929 reprinting in AE omits only five lines from the scarce 1917 printing in OT, and so is used in these notes.
41. AE, p. 85.
42. Ibid., p. 83.
43. Ibid., p. 69.
44. Ibid., pp. 77–78.
45. Ibid., p. 74.
46. Ibid., pp. 88–89.
47. Ibid., p. 92.
48. Ibid., p. 90.
49. Ibid., pp. 67–69, 91–92.
50. AE, p. 82–83.
51. See Volume I, Chapter X, Section ii.
52. ESP, pp. 173–74.
53. Ibid., pp. 171–73. The address at the Stanley School was published, with the title "Education and Self-Education," only in Whitehead's ESP.
54. OT, p. 60.
55. ESP, pp. 190–91.
56. Ibid., p. 193.
57. Ibid., p. 189.
58. Ibid., p. 193.
59. Ibid., pp. 193–94.
60. Ibid., p. 194.
61. Ibid., p. 195.
62. The record of what Whitehead said is entirely on p. 361 of the Report of this meeting of the BAAS. See note 6 of this chapter. The brevity (about six hundred words) of the "Discussion upon Fundamental Principles in Education" led me, in the bibliographical entry for it in Volume I (p. 337), to misdescribe it as an abridgment of an address by Whitehead; the language is plainly Whitehead's, but he delivered no address.
63. ESP, pp. 196–97.
64. AE, p. 24.
65. Ibid., p. 30.
67. AE, p. 56.
68. Ibid., p. 35.
69. Ibid., p. 58.
70. Ibid., p. 57.
71. Ibid., p. 52.
72. Ibid., p. 55.
73. Ibid., p. 46.
74. Except for the passing affirmation that I mentioned in Section V of this chapter, which was uttered in January of the same year.
75. AE, pp. 63–64.
78. Sir Kelvin Spencer to Victor Lowe, September 11, 1975.
79. Education Supplement to the *Times* (London), November 30, 1916.
83. AE, p. 145.
84. Ibid., p. 147.
85. Ibid., p. 150.
86. Ibid., pp. 138–39.

**IV. Last Years in England**

9. A. N. Whitehead to Registrar of Imperial College, March 6, 1924.
10. Ibid. (Whitehead’s italics).
11. Imperial College, Board of Studies, Minute 425, May 4, 1915.
16. Ibid.
18. Ibid.
22. Ibid.
27. Ibid., p. 98.
28. Ibid., p. 114.
30. Ibid.
31. Murray’s printed memorandum is in the Russell Archives at McMaster University.
36. Ibid.
39. Ibid., 359.
41. Governing Body of the Imperial College of Science and Technology, Minutes, March 26, 1920.

V. First Philosophical Publications

2. See IS.
6. Ibid.
7. Alfred North Whitehead to Bertrand Russell, April 27, 29, and 30, 1905; September 22, 1910; and October 1, 1913 (Bertrand Russell Archives, McMaster University, Hamilton, Ontario); and January 10, 1914 (Lady Ottoline Morrell Papers, Harry Ransom Humanities Research Center, University of Texas at Austin).
11. In his essays on mathematical education; and in the philosophy he wrote after 1924, even though partly Platonic.
19. Ibid., p. 207.
20. Ibid., p. 247.
25. Ibid., p. 201.
26. Ibid., p. 182.
27. Ibid., p. 237.
28. Ibid., p. 181.
29. Ibid., p. 161.
30. Ibid., p. 181.
31. Ibid., p. 246.
32. Ibid., p. 245.
33. Ibid., pp. 158–59.
35. AE, p. 243.
36. Ibid., p. 231.
37. Ibid., p. 158.
38. Ibid., p. 230.
39. Ibid., p. 190.
40. Ibid., pp. 189–90.
41. Ibid., p. 246.
42. Ibid., p. 247.
VI. "Pan-Physics": Whitehead’s Philosophy of Natural Science, 1918–1922

1. See, for example, John Passmore, A Hundred Years of Philosophy (London: Gerald Duckworth, 1957), pp. 337–40.
3. These were the circumstances as of 1987. Ibid.
5. CN, p. 2.
7. IS, pp. 56–57; see also CN, pp. 16–22.
8. CN, p. 16.
9. IS, p. 57.
11. CN, p. 15.
12. IS, p. 58; and PNK, *2.4.
13. PNK, *2.4.
14. CN, p. 4.
15. Ibid., p. 29.
17. CN, pp. 3–4.
18. IS, pp. 155–56.
19. CN, p. 4.
20. Ibid., p. 30.
21. Ibid., p. 44.
22. Ibid., p. 28.
23. PNK, p. v.
24. CN, p. 49.
25. Ibid., p. 52.
26. Ibid., p. 166.
27. Ibid., p. 34.
28. Ibid., p. 69.
29. Ibid., p. 110.
30. IS, p. 62.
31. Ibid., p. 245.
32. CN, p. 158.
33. Ibid., p. 29.
34. Ibid., p. 49; R, pp. 18–19. See also PNK, *3.3–*3.8, *16.1–*16.5, and *20–*21.3.
36. CN, pp. 197–98.
38. R, pp. 18–19.
39. See PNK, *27, for the exact formulation.
40. CN, p. 84.
41. Ibid., pp. 80–82.
42. Ibid., p. 81.
43. PNK, *18.3.
44. R, p. 88.
46. $PNK \ast 34$; see also CN, pp. 190–91.
47. CN, p. 192.
49. IS, p. 134; see also R, p. 83.
53. Ibid.
57. Ibid., p. 9.
58. Ibid., p. 6.
60. Ibid., p. 12.
61. Ibid., p. 13.
63. The following letter is transcribed from a typed copy in Victor Lowe’s possession:

Dec 27/07

Dear Bertie

Thanks for your MSS. I have not had time to examine them yet. I am looking over Keynes’ Dissertation. He runs a theory of Probability as a fundamental idea, with “certainty” as an extreme case, and “inference” as distinct from “implication” and from “formal implication.” He thinks himself a devout follower of you, but as far as I can judge if his point of view is admitted Symbolic Logic becomes a piece of idle word play, and the other set of fundamental ideas are the really important things. I feel convinced that the frequency theory of proby is in the main true. Would you kindly criticize the following sketch and let me have your remarks soon if not too inconvenient.

Yrs affect

Alfred Whitehead

P.S. We ought to have a chapter on the point.
VII. Migration to Harvard

3. Ibid.
4. Ibid.
5. Ibid.
7. Whitehead to A. Lawrence Lowell, February 24, 1924.
9. Quoted by Hocking, ibid.
10. Price, Dialogues, pp. 7–8. Price could have got this description at first hand only from Evelyn.
12. Whitehead to North Whitehead, August 28, 1924.
13. Ibid.
15. Whitehead to North Whitehead, August 28, 1924.
17. Ibid.
19. Ibid.
24. Louise R. Heath, Notes of Whitehead’s lectures in the autumn of 1924. Unless otherwise specified, her Notes are the source of information about Whitehead’s lectures in the remainder of this section.
26. Ibid.
29. Ibid.
32. Susanne K. Langer, interview with author, April 1966. It was typical of Whitehead to tell Mrs. Langer, “The chief function of us old ones is to help you young ones get a start.”
36. Alfred North Whitehead to Ernesta Greene, February 16, 1925.
38. Whitehead to North Whitehead, August 16, 1925, postscript.
39. Whitehead to North Whitehead, August 16, 1925.

**VIII. A New Philosophy of Nature**

1. President A. Lawrence Lowell to Whitehead, April 16, 1924; quoted by permission of the President and Fellows of Harvard College.
2. In a March 16, 1926, letter to Whitehead’s American publisher, Curtice Hitchcock of the Macmillan Company, Evelyn called herself Whitehead’s “business manager.”
3. Professor Harold N. Lee (who was present), in conversation with Victor Lowe, March 6, 1976.
4. *SMW*, p. 3.
7. Curtice Hitchcock to Whitehead, December 4, 1925.
10. *CN*, p. 5.
12. Ibid., p. 121.
15. Ibid., p. 146.
16. Ibid., p. 81.
17. Ibid.
18. Ibid., pp. 81–82.
19. The Lowell Institute, 1924.
23. Ibid., p. 271. See the emphatic passage about “value” which I quoted at the end of Section iii of this chapter.
24. Ibid., p. 279.
25. Ibid., p. 281.
26. Ibid., p. 283.
27. Ibid., pp. 275–76.
28. Ibid., p. 277.
29. Ibid., p. 172.
30. Ibid., p. 179.
31. Ibid., p. 103.
33. Ibid., p. 213.
34. Ibid., pp. 213–14.
35. See, for example, ibid., p. 216.
36. Ibid., p. 152.
41. Ibid.
43. *SMW*, p. 220.
52. Alfred North Whitehead, conversation with author in 1937.
57. In *Understanding Whitehead* (1962) I wrote that as several persons who knew Whitehead when he was writing the *Principles of Natural Knowledge* or
shortly afterward attributed an important influence to Bergson, and none that I knew of denied this, I was no longer so skeptical about it. The persons were Sir Edmund Whittaker (in his Dictionary of National Biography article on Whitehead), Bertrand Russell, and F. S. C. Northrop (Filmer S. C. Northrop, “Whitehead’s Philosophy of Science,” in Schilpp, LLP-W, pp. 165–207). I have looked again at what they said. Northrop, after mentioning the fact that Whitehead often talked with Carr about Bergson, ignored the possibility that ideas which were like Bergson’s were independently reached by Whitehead. Russell’s strong dislike of both men’s philosophies bracketed them in his mind. Whittaker, in his article in the Dictionary of National Biography, 1941–1950, p. 953, asserted only that in his Principles of Natural Knowledge and Concept of Nature Whitehead “gave his adhesion definitely to the general standpoint of the process philosophies associated with the names of Bergson, Samuel Alexander, and C. L. Morgan.”

58. Curtice Hitchcock to George P. Brett, May 24, 1925.
59. S. C. Roberts to Curtice Hitchcock, May 11, 1925.
60. Ibid.
61. Ibid.
62. F. J. Flagg to Curtice Hitchcock, May 14, 1925.
63. Ibid.
64. Curtice Hitchcock to F. J. Flagg, May 15, 1925.
65. Curtice Hitchcock to Mr. Lathem of the Macmillan Co., August 18, 1924.

IX. Religion

2. Harvard University Gazette, January 25, 1926.
4. RM, p. 16.
6. Ibid., p. 17.
7. Ibid., p. 18.
9. RM, p. 15.
11. Ibid.
12. Ibid., p. 258.
13. Ibid., p. 259.
15. Ibid., p. 266.
17. Ibid., p. 267.
18. Ibid.
19. Ibid., pp. 267–68.
20. Ibid., p. 268.
25. In the footnote to Section ii of this chapter, on page 000 above, Lowe says that in this section he draws on an article by Donald A. Crosby, “Religion and Solitariness” (1972). The article has been reprinted in Lewis S. Ford and George L. Kline, eds., Explorations in Whitehead’s Philosophy (New York: Fordham University Press, 1983), pp. 149–69.
27. RM, p. 84.
28. Ibid., p. 89.
29. Ibid.
30. Ibid., p. 90. Whitehead isn’t always faithful to his conception of God as an actual entity with a special function. He sometimes identifies the function itself with God. For example, the final section, “Conclusion,” of Religion in the Making begins, “God is that function in the world by reason of which our purposes are directed to ends which in our own consciousness are impartial as to our own interests,” not “God’s function in the world is to direct our purposes to ends . . .” But in reading statements like “The purpose of God is the attainment of value in the temporal world,” we must think of God as an actual entity, not as a mere function, and not as a character of wisdom or of rightness which pervades the universe. The definitive exposition of Whitehead’s concept of God comes later, in his Gifford Lectures.
31. Ibid., p. 91.
32. Ibid., p. 92.
33. SMW, p. 99.
34. RM, pp. 62–66.
35. This refers to a final chapter which Victor Lowe did not live to write.
36. RM, p. 144.
37. Ibid.
38. Ibid., p. 145.
41. RM, p. 44.
42. Ibid., p. 146.
43. Ibid., p. 153.
44. Ibid., p. 66.
45. Ibid., p. 67.
46. Ibid., p. 140.
47. Ibid., p. 76.
Notes to Pages 199–219

and Kline volume referred to in note 25 above, pp. 170–211. The fact that most of Ely’s citations are to *Process and Reality* is immaterial.

52. *RM*, p. 105.
54. Ibid., p. 80. The detailed theory of this contribution will not appear until Whitehead delivers the final part of his Gifford Lectures.
55. Ibid., p. 149.

X. The Atypical English Philosopher

2. Ibid., p. 45.
3. Ibid., p. 46.
6. Ibid.
8. Ibid.
10. Ibid.
12. “The human mind is functioning symbolically when some components of its experience elicit consciousness, beliefs, emotions, and usages, respecting other components of its experience” (ibid., pp. 7–8).
13. Ibid., p. 28.
16. Ibid., p. 25.
17. Ibid., p. 80.
18. Whitehead brought up Burke and expressed his opinions of him in “Uses of Symbolism” (ibid., pp. 70–73).
19. Ibid., p. 50.
20. Ibid., p. 47.
21. Ibid., p. 82.
22. Ibid., p. 38.
23. Ibid., p. 61.
24. Ibid., pp. 68–69.

XI. Gifford Lecturer

1. Extracts from the Trust Disposition and Settlement of the late Adam Gifford, from Miss C. E. Giles, Secretary to the Gifford Committee, University of Edinburgh, in July 1965.


5. *PR*, p. 11. [As Lowe notes on page 000, all citations from *PR* are from the edition corrected by David Ray Griffin and Donald W. Sherburne, and not from the older, Macmillan/Cambridge edition.—Ed.].

6. Ibid., p. 21 (Category of the Ultimate).

7. Ibid., p. 145.


11. Ibid., p. 29.


14. Its contrast with F. H. Bradley’s famous *Appearance and Reality* was a merit; Whitehead considered the latter Bradley’s feeblest work. Henry Veatch (a pupil of Whitehead’s) to Victor Lowe, November 28, 1967.


16. Ibid.


19. *PR*, p. 23 (Category of Explanation, xi).

20. Ibid., Pt. III, Chap. I, Sec. i.

21. Ibid., Pt. III, Chap. II, Sec. i.

22. Ibid.

23. Ibid., p. 162.

24. Ibid.

25. Ibid., p. 25 (Category of Explanation, xviii).

26. Ibid., p. 11.

27. Ibid., Pt. III, Chap. IV.


29. Ibid., Pt. II, Chap. VII, Sec. ii.

30. Ibid., p. 151.


32. *PR*, p. 244.

33. Ibid.

34. Ibid., p. 255.

35. Ibid.

36. Ibid., Pt. II, Chap. VII, Sec. iv.

37. He is known to have said that if he were to do the book over he would make Part IV precede Part III (Sydney Rome to Victor Lowe, March 24, 1968).


40. *PR*, p. 287.
41. Ibid., p. 310.
42. Ibid., pp. 310–11.
43. Ibid., Preface, p. xiv. Later in *Process and Reality* Whitehead wrote, “The safest general characterization of the European philosophical tradition is that it consists of a series of footnotes to Plato” (ibid., p. 39). This has often been misquoted as the foolish remark that European philosophy is a series of footnotes to Plato.
44. Ibid., p. 162.
45. Ibid.
46. Ibid., p. 229.
47. Classroom lecture by Whitehead, March 18, 1937.
49. *PR*, p. 130.
50. Ibid., p. 339.
51. Ibid.
52. Ibid., p. 340.
53. Ibid., p. 343.
54. Ibid.
55. Ibid., p. 345.
56. Ibid., p. 346.
57. Ibid.
58. Ibid., p. 343.
59. Ibid., p. 347.
60. Whitehead considered unworthy of comment the construing of immortality “in terms of a final pair of opposites, happiness for some, torture for others” (ibid., Pt. V, Chap. II, Sec. v).
61. Ibid., p. 343.
62. Ibid., p. 351.
63. Alfred North Whitehead, conversation with author, April 2, 1940.
64. *PR*, Pt. II, Chap. IV, Sec. x.
65. Ibid.
66. *ESP*, p. 117 (emphasis added). Whitehead continued, “And in many ways I find that I am in complete agreement with Bradley.” This implies that there were some ways in which he found that his agreement with Bradley was not complete. On this occasion he touched on several of them.
72. Ibid.
XII. Fame


5. What follows comes from notes of Whitehead’s remarks taken by W. E. Hocking.