

Notes

Prologue

- 1 Hasse 1874a, 15–20.

Introduction: 'The mighty influence of strange blood'

- 1 Landois 1875, iv.
- 2 Björnström 1873/74, 180.
- 3 Berner 2012.
- 4 Guerrini 2003, x–xi.
- 5 Sittel 1874, 158.
- 6 The book is based on material in six languages and stays close to the actors' accounts. All translations, unless otherwise stated, are by me. The quotations are sometimes slightly edited for readability and long paragraphs are broken up.

1. Using the blood of others

- 1 Sander 1874, 173.
- 2 Köhler 1906, 293.
- 3 For a history of transfusion, see Starr 1998.
- 4 Gilder 1954, 172.
- 5 Marinozzi et al. 2018, 2.
- 6 Scheel 1802, 232–233; Maluf 1954, 68.
- 7 Quoted in Zimmerman & Howell 1932, 419. The contest for priority between England and France and the dramatic events in Paris are described in Moore 2003 and Tucker 2011.

- 8 Riesman 1937, 191.
- 9 Marinozzi et al. 2018, 3.
- 10 Scheel 1802; Dieffenbach 1828.
- 11 E. g. Martin 1859; Oré 1868.
- 12 – (1834), 157.
- 13 Pelis 1999.
- 14 Pelis 1999, 15.
- 15 Pelis 2001a, 206.
- 16 Marinozzi et al. 2018, 5.
- 17 Pelis 1997, 336–337.
- 18 Panum 1864.
- 19 For a summary of the arguments, see Schorr 1956, 32–36.
- 20 Roussel 1885, 44.
- 21 Casse 1874, 3.
- 22 Leisrink 1872, 237.
- 23 Billroth 1875, 3.
- 24 Starr 1998.
- 25 Greenwalt 1997, 555.
- 26 Calculated from the overviews in Martin 1859; Oré 1868; Marmonnier 1869; Sacklén 1870; Landois 1875.
- 27 Marmonnier 1869, 35.
- 28 Severn 1839, 249.
- 29 Schorr 1956, 38–43.
- 30 *Daily Alta California*, July 2, 1871.
- 31 Reported in *Transactions of the Medical society of North Carolina* 1872, 40–45.
- 32 Winants 1872, 110.
- 33 *The Obstetrical Journal of Great Britain and Ireland* 1873, 360; also Albini 1872.
- 34 Hasse 1874a.

2. Ambitions and connections

- 1 Jürgensen 1885, 274.
- 2 <https://www.google.com/search?client=firefox-b-d&q=sanguine+definition>.
- 3 Müller 1955, 203.
- 4 Hasse 1868.
- 5 Hasse 1869; Hasse 1874a.
- 6 Gesellius 1873.

- 7 Hasse 1875, 252.
- 8 [Seyfer]th 1874, 46.
- 9 Hasse 1874b, 408.
- 10 E.g. Penzoldt 1874, 502.
- 11 See https://www.nordhausen.de/allgemein/cblock_lang.php?CBINr=11508.
- 12 Grosberg 1926, 10.
- 13 See e.g. Leisrink 1873, 265–272; Panum 1875a, 47–91.
- 14 Daniel 2013.
- 15 Hasse's book reports on sixteen transfusion with human blood and fifteen with lamb blood; thus, the title referring to 31 lamb blood transfusions is misleading.
- 16 Gesellius 1874, 17.
- 17 The university archives of Greifswald university contain information of both Hasse's and Gesellius' student pranks, something which in Gesellius' case, but not in Hasse's, led to him being asked to leave the university.
- 18 Hasse 1875, 253–254.
- 19 Roussel 1875a, 141.
- 20 Roussel 1885, 22–24.
- 21 Heyfelder 1874 in Roussel 1876a, 160–163.
- 22 Buess 1953, 253.
- 23 Olivier 1952, 9.
- 24 Full accounts in Roussel 1875a, 136–139; Roussel 1877, 54–56.
- 25 Roussel 1875a, 139; Roussel 1877, 56.
- 26 Roussel 1885, 72.
- 27 Roussel 1884, 812.
- 28 Roussel 1877, 38.
- 29 Roussel 1885, 51.
- 30 Braun 1878, 89.
- 31 Roussel 1875a, 151.
- 32 Landois 1875, 324–325.
- 33 Roussel 1877, pp. 42–49.
- 34 Quoted in Westergren 1880, 67; see also Neudörfer 1874 in Roussel 1876a, 158–160.
- 35 Roussel 1874, 167; Roussel 1875b, 320–325; Roussel 1885, 22–24.
- 36 Chadwick 1874, 26.
- 37 Bartrip 1990, 9. See also Stöckel et al. 2012.
- 38 Billroth 1869, 14.

3. Blood on the battlefield

- 1 Cf. Lefrère & Danic 2009, 1011.
- 2 Niemeyer 1874, 60. Another version of this image, presented as the first painting of a blood transfusion, can be found on the website of the Finnish Red Cross Blood Service, see: <https://www.bloodservice.fi/about-us/history>.
- 3 Roussel 1876a, 152.
- 4 Roth 2016/1990, 465–466.
- 5 Wawro 1996, 65–84.
- 6 Wawro 1996, 123.
- 7 Becker 1997, 658.
- 8 Hess 1997, 482.
- 9 Hobsbawm 1977, 99.
- 10 Roussel 1876a, 151.
- 11 Wawro 1996, 150.
- 12 Hess 1997, 482.
- 13 Neudörfer 1860, 124–130, 142–147.
- 14 *Bulletin Général de Thérapeutique médicale et chirurgicale* 1860, 578.
- 15 Barnes 1883, 811–812.
- 16 Lidell 1888, 556.
- 17 E. g. Fischer 1867, 78; Beck 1867, 120–123.
- 18 de Santi & Dziewonski 1882, 941.
- 19 According to Roussel 1885, 32; see also Billroth 1869, 45.
- 20 Fischer 1868, 294–296.
- 21 McCallum 2008, 126.
- 22 Showalter 2004, 293.
- 23 Swain 1970, 514.
- 24 Showalter 2004, 293; Gabriel 2013, 179–183; Garrison 1970/1922, 178–179.
- 25 Showalter 2004, 292–293; Gabriel 2013, 181.
- 26 Hasse 1875, 248.
- 27 For a vivid description of the situation for typhus patients at the German military hospital at Ecouen near Paris, see Forbes 1871, 73–78. Forbes was special correspondent to *The Daily News*.
- 28 Hasse 1875, 272.
- 29 Köhler 1890, 342–347.
- 30 Jullien 1875, 303–305.
- 31 de Santi & Dziewonski 1882, 994.

- 32 Bruberger 1874, 533.
- 33 Gesellius 1873, 183.
- 34 Gesellius 1874, 14–15.
- 35 Gesellius 1874, 15.
- 36 Gesellius 1874, 15.
- 37 Oré 1876, 218.
- 38 Albini 1872, 258.
- 39 Hasse 1875, 249.
- 40 Schliep 1874, 27.
- 41 Heyfelder 1875b, 303.
- 42 Eckert 1876, 159.
- 43 Gesellius 1874, 159.
- 44 Eckert 1876, 166.
- 45 Gesellius 1874, 11.
- 46 Eckert 1876, 160.
- 47 Eckert 1876, 166.
- 48 Neudörfer 1875b, 61–62, 103–104.
- 49 Roussel 1876a, 151.
- 50 See e.g. Icard 1905.
- 51 Von Nussbaum, quoted in Chenu 1871, vi.
- 52 Neudörfer 1872, 1408.
- 53 Eckert 1876, 163–164.
- 54 Roussel 1876a, 151.
- 55 Neudörfer 1874 in Roussel 1876a, 158–160.
- 56 Hasse 1875, 248–249.
- 57 Fischer 1882, 902.
- 58 Bruberger 1874, 532–533.
- 59 [Seyfer]th 1874, 46.
- 60 – (1876), 365.
- 61 Schliep 1874, 26–28.
- 62 Cooter 2004, 333–334.
- 63 Cooter 2004, 344.
- 64 Edholm 1876, 9.

4. Blood for the lungs

- 1 Torstensson 1874a.

- 2 Torstensson 1874b, 674.
- 3 Torstensson 1874b, 674–675.
- 4 Torstensson 1874b, 677.
- 5 Warfvinge 1876, 152.
- 6 Westerberg 1875, 139–141.
- 7 Daniel, Thomas M. 2006, 1864; see also Bynum, Helen 2012.
- 8 Hasse 1874a, 62–63. Hasse was not the first to try animal blood against phthisis. In 1839, Heinrich Bliedung of Kirchbarkau in Schleswig-Holstein twice injected buck's blood into the veins of a man suffering from phthisis. The operation was deemed successful but had no followers. See – (1841), 320–321.
- 9 Sander 1874, 174.
- 10 Wallis 1876, 36.
- 11 Hotz 1875, 21.
- 12 Merkel 1875, 91–97; – (1874g); *Marysville Daily Appeal*, February 10, 1875; Sittel 1874, 157–158, 169–170, 183–184.
- 13 – (1874a); – (1874b); – (1874d); – (1874h); – (1875). Dr Dessauer at the German hospital in Valparaiso, Chile, made three transfusion of lamb's blood to phthisis patients; the results were unfavourable. See Morton 1877, 17.
- 14 Sander 1874, 173–175, 189–191.
- 15 Heyfelder 1875a, 111.
- 16 Flemming 1874, 654–656; Warfvinge 1876, 151; Thurn 1874a, 393–395; Küster 1874, 385–404; Brügelmann 1874, 395–397, 423–425; Neudörfer 1875b, 85–97; Schmidt 1874, 137–141, 147–151; Schmidt 1875, 106–108; Molitor 1875, 75–80; Klingelhöffer 1874, 419–422, 446–449.
- 17 See e.g. Madge 1874, 42–44. Also: Pelis 2001a, 187–188.
- 18 Aveling 1874/75, 224.
- 19 Accounts differ about whether Dr C. Faber's transfusion at the German Hospital was a success or not. See *The Lancet*, September 26, 1874, 462 and October 10, 1874, 541 and *Proceedings of the Medical Society of London* 1874/75, pp. 17.
- 20 *Jönköpingsposten*, September 2, 1874; *Borås tidning*, July 4, 1874.
- 21 Fiedler & Birch-Hirschfeld 1874, 546.
- 22 See e.g. –(1874b); – (1874c); – (1874e). A similar story was told from Hôtel Dieu in Paris in 1876. A certain Jean Scipion fell seriously ill, no human blood donor was to be found, wherefore he was transfused with the blood of a sheep. He recovered, but had delusions, was convinced he had turned into a sheep himself, bellowed, and got extremely scared

- whenever he passed a butcher's shop. The case was to be examined by the Academy of Medicine. See *L'Echo Saumurois*, February 4, 1877.
- 23 Gesellius 1874, 15–16.
 - 24 One who did try was Carl Hueter, professor of surgery in Greifswald and a critic of lamb blood transfusion. See, for example, Hueter 1876, 161–187.
 - 25 Chadwick 1874, 30.
 - 26 Neudörfer 1875b, 49. For an amusing depiction of fainting blood-donors, see Jennings 1883, 3.
 - 27 Hurwitz 2006; Rylance 2006; Stowe 1996.
 - 28 E.g. Warfvinge 1878, 133–140.
 - 29 Hasse 1874a.
 - 30 Hasse 1874a, 21, 25.
 - 31 Klingelhöffer 1874, 448.
 - 32 Waldenström 1875, 192; Petersson 1875b, 186.
 - 33 Flemming 1874, 654–656.
 - 34 Hasse 1875, 275.
 - 35 Cradle 1874, 295.
 - 36 Neudörfer 1875b, 57–58.
 - 37 Cf. Hasse 1874b, 405–410.
 - 38 Hasse 1874a, 74.
 - 39 Björck 1875, 173.
 - 40 Björck 1875, 174.
 - 41 Torstensson 1874b, 675.
 - 42 Petersson 1875a, 179.
 - 43 Cradle 1874, 295.
 - 44 Björck 1875, 175; Torstensson 1874b, 676.
 - 45 Björck 1875, 175.
 - 46 – (1874i), 155.
 - 47 Gissler & Wentzel 1874, 70; Merkel 1875, 94–95.
 - 48 Heyfelder 1875b, 309.
 - 49 – (1874h).
 - 50 Beigel 1874, 493.
 - 51 Roelen 1874, 35.
 - 52 Björck 1875, 175–176.
 - 53 Svensson 1875, 331.
 - 54 Petersson 1875a, 180–181.
 - 55 Braun, citing Roussel, see Braun 1878, 90.
 - 56 Hasse 1875, 269.

- 57 E. g. Svensson 1875, 337; Panum 1875a, 85–87.
- 58 Hasse 1875, 269.
- 59 Redtel 1873/74, 581.
- 60 Merkel 1875, 95.
- 61 Masing 1873/74, 72.
- 62 Hasse 1875, 267.
- 63 Hasse 1874a, 43.
- 64 Hasse 1874a, 51.
- 65 v. Cube 1877, 378–381.
- 66 Brügelmann 1874, 425.
- 67 Redtel 1873/74, 583.
- 68 Penzoldt 1874, 502.
- 69 Stern 1874, 56–57.
- 70 Svensson 1875, 334.
- 71 Fiedler & Birch-Hirschfeld 1874, 565.
- 72 Heyfelder 1875a, 113.
- 73 Thurn 1874b, 659.
- 74 Fiedler & Birch-Hirschfeld 1874, 574.
- 75 Hasse 1875, 291.
- 76 Röhlen 1875, 48; Fiedler & Birch-Hirschfeld 1874, 591.
- 77 Wallis 1876, 35.

5. Asylum experiments

- 1 Laguzzi 1874, cited in Ponza 1875, 54.
- 2 The physiologist Pierre Cyprien Oré in Bordeaux performed a lamb blood transfusion on a pellagrous patient in June 1876, but with fatal results; see *Presse Médicale Belge*, 1876, 295. At about the same time, Dr Voisin at La Salpêtrière in Paris had two patients under treatment with injections of lamb's blood; no results were reported. See *Medical Times and Gazette*, January 29, 1876, 127. An unsuccessful attempt to transfuse a schizophrenic patient was made in Germany, see Leube 1874, 95–96.
- 3 See Tucker 1887, 1207–1309; Tagliavini 1985, 175.
- 4 Calculated from accounts in contemporary Italian medical journals and Oré 1876.
- 5 *Göteborgsposten*, February 25, 1880.

- 6 Tucker 1887, 1270. For contemporary analyses of the history, causes, symptoms and treatments of pellagra, see Roussel, T. 1866; Lombroso, 1870.
- 7 See Whitaker 1992, 80–90; Gentilcore 2014, 48–54; Priani 2017, 166–181.
- 8 Ginnaio 2011, 673.
- 9 Ginnaio 2011, 674. Contemporary accounts of this strange Italian disease were found in newspapers as far away as Sweden; see *Dagens Nyheter*, November 23, 1878 and *Göteborgsposten*, February 25, 1880.
- 10 Priani 2017. For a discussion of the Italian nomenclature for mental disease in the 19th century, see de Fazio 2015.
- 11 Livi 1875, 73.
- 12 *The Journal of Mental Science* 1876, 11–12.
- 13 Ginnaio 2011, 586.
- 14 Whitaker 1992, 83.
- 15 Gentilcore 2014, 53–54; Mariani-Costantini & Mariani-Costantini 2007, 167.
- 16 E.g. Mariani-Costantini & Mariani-Costantini 2007, 168–169.
- 17 Ginnaio 2011, 679.
- 18 Brocca 1875, 390–398.
- 19 See Leidesdorf's report at the meeting on February 6, 1874 of the *Gesellschaft der Aerzte in Wien*, referred to in the *Allgemeine medicinische Central-Zeitung* 1874, 166–167. Roussel 1877, 78–82 gives a detailed account of the Vienna transfusion made with his apparatus. He also derides the Italians who followed this example but with a different and, in his view, deficient instrument.
- 20 Summarized from Tamburini 1874, 186–196, and archival material at the San Lazzaro Asylum, Reggio Emilia.
- 21 *Archivio Italiano* ... 1874, 364.
- 22 *Archivio Italiano* ... 1874, 360.
- 23 *Archivio Italiano* ... 1874, 322.
- 24 Quoted in Jullien 1875, 176.
- 25 See e.g. de Cristoforis 1875; Morselli 1876; Schivardi 1874, 289–290.
- 26 See e.g. Vizioli 1874, 673–685.
- 27 Zimmerman & Howell 1932, 419–429; Marinozzi et al. 2018, 1–5.
- 28 Tagliavini 1985, 178–183; Reeder 2012, 192–193.
- 29 Manzini & Rodolfi 1876, 154.
- 30 Sutherland 1855, 261–288.
- 31 Schivardi 1874, 290; Ponza 1875, 28; Manzini & Rodolfi 1876, 161.

- 32 Based on Livi 1875, 82–88, and archival material, San Lazzaro Asylum, Reggio Emilia.
- 33 Ponza 1875, 26–56. I have here used the more detailed account reported by Ponza's collaborator Pacchiotti in *L'Union Médicale* 1874, 342–343.
- 34 Michetti 1875, 21–22.
- 35 *Archivio Italiano...* 1874, 377–378. I have slightly edited the translation published in the *London Medical Record*, Jan. 20, 1875, 44.
- 36 It was a Cagnola Foundation prize. See: – (1872), 1040. The academy was founded by Napoleon in 1797; its first president was Alessandro Volta.
- 37 Polli 1852. For Polli's argument for the competition and the formulation of the call, see Polli 1872, 1056–1058.
- 38 – (1875), 796–799.
- 39 de Cristoforis 1875a; Lombroso 1876, 665–686, 737–831.
- 40 Manzini & Rodolfi 1875, 343–370.
- 41 Manzini & Rodolfi 1876, 111–116, 131–135, 141–144, 151–155, 161–162. Their accounts, as well as those by de Cristoforis and Lombroso, were published after the conclusion of the competition. Manzini and Rodolfi include cases up to August 1875.
- 42 http://www.enciclopediabresciana.it/enciclopedia/index.php?title=MANZINI_Giovanni_Battista.
- 43 Cited in Luigi & Vernia 1997, 16–17.
- 44 Rodolfi 1874, 27–36.
- 45 Cascella 2015, 1593–1597.
- 46 Manzini & Rodolfi 1876, 115.
- 47 The same proportion as in the asylum population, see Manzini 1877, 202. For a history of the Brescia asylum in the 19th century, see Porro 2005, 75–94.
- 48 Manzini & Rodolfi 1876, 115.
- 49 Manzini & Rodolfi 1876, 115.
- 50 Manzini & Rodolfi 1876, 112.
- 51 Manzini & Rodolfi 1876, 114.
- 52 Manzini & Rodolfi 1876, 144.
- 53 Manzini & Rodolfi 1876, 144.
- 54 Manzini & Rodolfi 1875, 369.
- 55 Calculated from the accounts in Manzini & Rodolfi 1875 and 1876.
- 56 Manzini & Rodolfi 1876, 132.
- 57 Manzini & Rodolfi 1875, 346.
- 58 Manzini & Rodolfi 1875, 348, 354.

- 59 Raz 2017.
- 60 Manzini & Rodolfi 1876, 153.
- 61 Manzini & Rodolfi 1876, 154–155.
- 62 See e.g. Verga 1875, 415.
- 63 Quoted by Tagliavini 1985, 183.
- 64 Manzini & Rodolfi 1876, 154 (edited by me).
- 65 Manzini & Rodolfi 1876, 154.
- 66 Zannetti 1876, 78.
- 67 Bergonzi 1875, 56–60.
- 68 Bozzolo 1875, 551–557; see also Morselli 1876, 560, for the critique by the physiologist Paolo Mantegazza.
- 69 Zannetti 1876, 78; Schivardi 1874, 289.
- 70 Livi 1875; Lombroso 1876, 665–686, 737–831; Morselli 1876.
- 71 Cited by Tamburini 1874, 195–196.

6. Proofs and refutations

- 1 Landois 1875, 271–273.
- 2 Landois 1875, 159.
- 3 Starr 1998, 38–40.
- 4 Ponfick 1874a; Ponfick 1874b; Worm-Müller 1875.
- 5 Panum 1875a; Panum 1875b; Panum 1876.
- 6 Jullien 1875, 216.
- 7 Wallis 1876, 36.
- 8 See Jewson 1976, 225–244.
- 9 Mayer 1874, 271.
- 10 Redtel 1873/74, 581. See also Müller 1955, 202–205.
- 11 Bleker 1997, 23.
- 12 Mayer 1874, 272.
- 13 Panum 1864.
- 14 Panum 1876, 53–54.
- 15 Panum 1875b, 2.
- 16 Panum 1875b, 73.
- 17 Statistisches Jahrbuch 1963, 57.
- 18 Panum 1875b, 74.
- 19 Jewson 1976, 228.
- 20 Bynum, W. 1994, 60–61; Bynum, W. 2008, Chapter 4.

- 21 Schlich 2004, 70.
- 22 Schlich 2004, 70.
- 23 Risse 2015, 9.
- 24 Volz 1870 as quoted in Risse 1982, 39.
- 25 Rosenberg 1977, 500.
- 26 Lesser 1877, 238 (slightly edited by me). Original German version 1874.
- 27 Wurtz 1870. For Great Britain, see Pelis 1997.
- 28 – (1874f), 107.
- 29 Schorr 1956, 38–40.
- 30 Landois 1875, 279–280; 198–200. See also Sanderson 1873, and the discussion in Richards 1986.
- 31 Warfvinge 1876, 134.
- 32 Panum 1876, 51–52.
- 33 Rossander 1875, 152–153.
- 34 E.g. Lovén 1876, 88.
- 35 Hasse 1875, 267.
- 36 Ponfick 1874b.
- 37 Rossander 1875, 157–158.
- 38 von Linhart 1874, 99.
- 39 Neudörfer 1875b, 112.
- 40 Roussel 1876a, 326.
- 41 *The Doctor*, 1875, 144.
- 42 Oré 1876, 235–241.
- 43 Rossander 1875, 158.
- 44 Jahn 1874, 9.
- 45 Svenska läkaresällskapets förhandlingar 1875, 28.
- 46 von Cube cited in *Jahresbericht über die Leistungen und Fortschritte Gesammten Medicin* 1877, 330.
- 47 Svensson 1875, 333–334.
- 48 von Cube 1877, 378.
- 49 Fiedler & Birch-Hirschfeld 1874, 565. For the history of comparisons in clinical experiments, see Chalmers 2001.
- 50 Panum 1875a, 85–87.
- 51 Lesser 1877, 238.
- 52 Morselli 1876, 521–523; Bozzolo 1875, 551–557; de Cristoforis 1875b, 557–558.
- 53 Landois 1875, 291.
- 54 Lindes 1875, 161.

- 55 Mayer 1874, 272. See also Björck 1875, 177; Roussel 1875a, 163; Hasse 1875, 291.
- 56 Martin 1859; Oré 1868; von Belina-Swiontkowsky 1869; Marmonnier 1869; Sacklén 1870; Gesellius 1873.
- 57 Jahn 1874, 9.
- 58 Hasse 1874b, 409.
- 59 Oré 1876, 241.
- 60 Landois 1875, 327–356; Hirschfeld & Hirschfeld 1976, 471.
- 61 Wallis 1876, 23–31.
- 62 Panum 1875b, 2.
- 63 Lombroso 1876, 774–795.
- 64 Roussel 1875a, 132–133.

7. Transgressions

- 1 von Weber 1879.
- 2 Panum 1879, 25.
- 3 Birke & Michael 1998, 245–261; Brown 1999, 327–355.
- 4 Landois 1875, 271–275.
- 5 Hasse 1875, 285; Panum 1876, 53–54.
- 6 Gould 1977.
- 7 Manzini & Rodolfi 1876, 151; Neudörfer 1875b, 67.
- 8 Hasse 1874a, 64–65; Masing 1873/74, 74; Roelen 1874, 35; Heyfelder 1875a, 115; Schivardi 1874, 298; Eckert 1876, 113.
- 9 Panum 1864; Landois 1875.
- 10 Mantegazza 1880. See Bretschneider 1962, 99, 121; Guerrini 2003, 80–81.
- 11 But see Armstrong 2016, 138 for experiments on sheep within agricultural research.
- 12 Cunningham & Williams 1992, 8. Cf. Richards 1986.
- 13 See Logan 2002, 329–363; Rader 2004.
- 14 Descola 2005.
- 15 Descola 2005, 168–180; Schlich et al. 2009.
- 16 Rémy 2009, 407.
- 17 Quoted in Sahllins 2015, 31–32.
- 18 Douglas 1966.
- 19 As referred in Björnström 1873/74, 180.
- 20 Barnes 1876, 577.

- 21 Quoted from a debate in the British Medical Association, *The Obstetrical Journal of Great Britain and Ireland* 1873/74, 543.
- 22 Madge 1874, 43.
- 23 de Cristoforis 1875a, 91.
- 24 Eyselein 1874, 301.
- 25 Steiner 1874, 309.
- 26 Quoted in Schivardi 1874, 290–291.
- 27 Pacchiotti 1874, 237–238.
- 28 Maehle 2009, 78.
- 29 Svensson 1875, 334.
- 30 Cf. Wilde 2009, 302–330.
- 31 Sittel 1874, 158.
- 32 Westerberg 1875, 140.
- 33 Halpern 2004, 4.
- 34 Maehle 2009, 70.
- 35 See Pellegrino & Thomasma 1987.
- 36 Neudörfer 1875a, 564–568.
- 37 Chadwick 1875, 38 (one paragraph in original).
- 38 Quoted in Fennell 1996, 42–43.
- 39 Dyck & Stewart 2016, 8.
- 40 Here quoted from the English translation in Bernard 1949, 102.
- 41 Bynum, W. 1988, 35; Guerrini 2003.
- 42 Pacchiotti 1874, 237.
- 43 Fennell 1996, 39–41.
- 44 *Le Salute*, Genua, September 19, 1874, cited in *Le Progrès Médical* 1875, 16.
- 45 Engdahl 1874, 508.
- 46 Trendelenburg 2011, 129–133.
- 47 Panum 1875a, 90.
- 48 Quoted in Vizioli 1875, 176.
- 49 Morselli 1876, 179.
- 50 Tschin 1874, 1169–1170.
- 51 *Wiener Medizinische Wochenschrift* 1874, 1094.
- 52 *Allgemeine Wiener Medizinische Zeitung* 1874, 444.
- 53 Bergonzi 1875, 60.
- 54 Schmidt 1875, 107–108.
- 55 Landois 1875, iv.
- 56 That is, from a song of praise to a swan song. Bruberger 1875, 214.

8. Winding up

- 1 Ljungström 1996, 81–83.
- 2 *Kalmar*, May 22 1876, 3.
- 3 Tillhagen 1989, 275; Stapelberg 2016, 92–94.
- 4 Recorded at Fränninge 1933. Folklore Archive, Lund, Accession number M 3774.
- 5 Pettersson 1976, 182–199; Zimmerman & Howell 1932, 412–413.
- 6 *Stockholms Korrespondens*, June 10, 1875.
- 7 Dallera 1876, 117–123.
- 8 Warfvinge 1878, 133–140; Girerd 1881, 4–13; – (1879), 7.
- 9 von Bergmann 1883, 4.
- 10 von Bergmann 1883, 8–13.
- 11 von Bergmann 1883, 23.
- 12 Hayem 1882, 486.
- 13 A final state-of-the-art overview was given by Haehner 1880.
- 14 Pelis 2001a, 185–213; Jennings 1883.
- 15 Panum 1864; Panum 1875a; Hayem 1882.
- 16 Rossander 1875, 158.
- 17 Pelis 2001a, 194–195.
- 18 Pelis 2001b, 242.
- 19 Jenkins 1890, 446–447.
- 20 Elkeles 1996, 76–89.
- 21 Hasse 1875, 292.
- 22 Müller 1955, 203.
- 23 Daniel, Diana 2013, 69–70; Grosberg 1926, 10.
- 24 See the comments in *La presse médicale Belge*, 1876, 327–328; 368–373.
- 25 Roussel 1882, cover page.
- 26 Roussel 1876b, 29–31.
- 27 Roussel 1877, 96.
- 28 Roussel 1885, 56.
- 29 de Santi & Dziewonski 1882, 946.
- 30 *L'Union médicale* 1876, 614.
- 31 Roussel 1882, 23.
- 32 Delorme 1888, 527–528.
- 33 Roussel 1895.
- 34 Olivier 1952, 9–10.
- 35 Köhler 1906, 296–306.

- 36 Köhler 1890, 346.
- 37 von Esmarch 1894, 116.
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