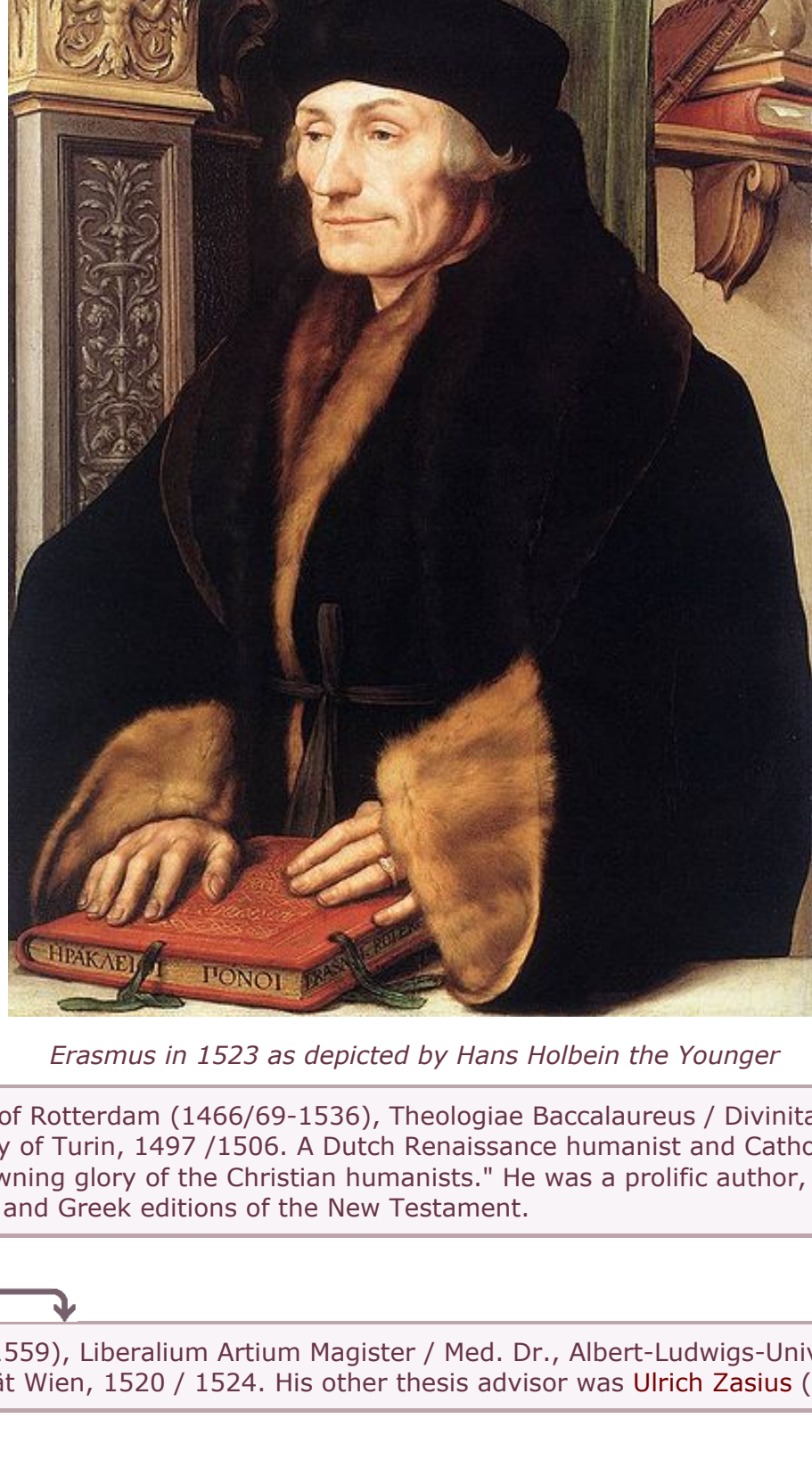
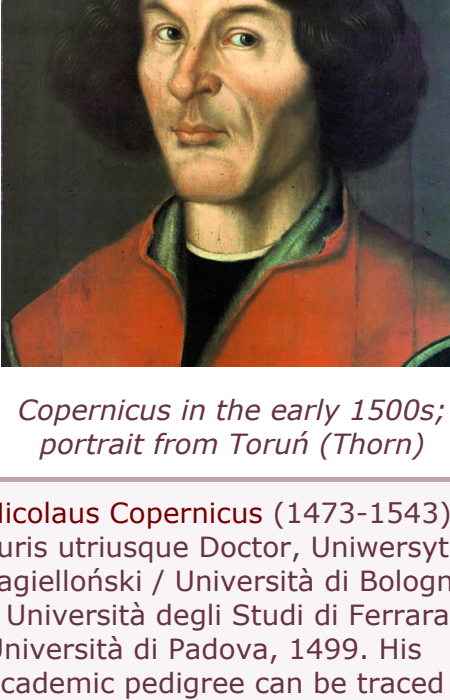


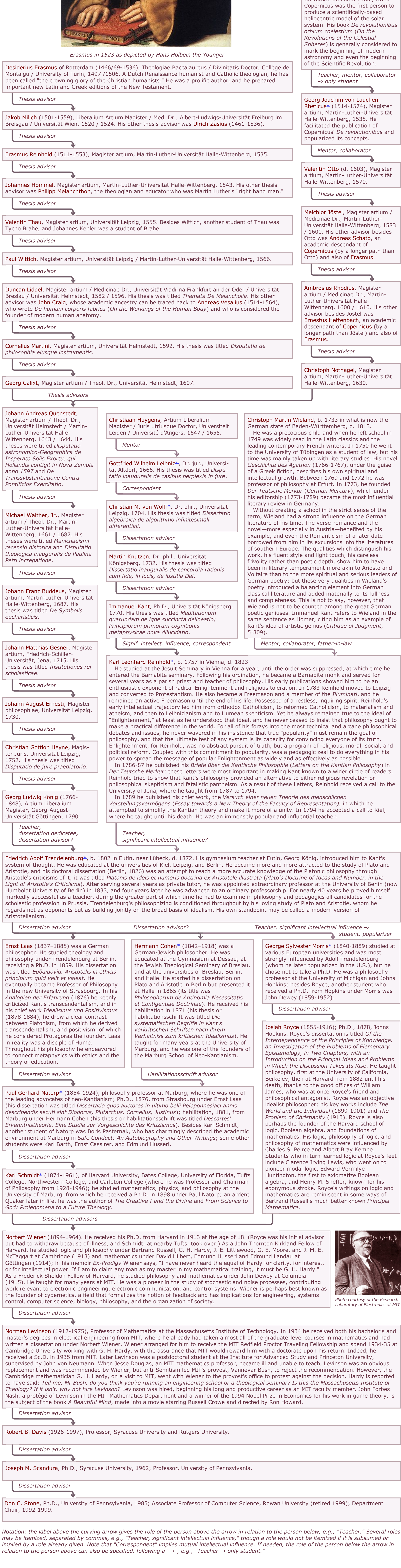
A Tentative Academic Lineage



Erasmus in 1523 as depicted by Hans Holbein the Younger



Copernicus in the early 1500s; portrait from Toruń (1700)



Notation: the label above the curving arrow gives the role of the person above the arrow in relation to the person below, e.g., "Teacher." Several roles may be itemized, separated by commas, e.g., "Teacher, significant intellectual influence," though a role would not be itemized if it is subsumed or implied by a role already given. Note that "Correspondent" implies mutual intellectual influence. If needed, the role of the person below the arrow in relation to the person above can also be specified, following a "->", e.g., "Teacher-> only student."

This draft chart (at www.donstonetech.com/Charts/AcademicGenealogy/StoneAcademicGenealogy.htm) was prepared by Don Stone, donstonetech.com. (It was most recently updated on 10/29/2017.) I would be grateful for any corrections or additional information, particularly for descriptions of the nature of some of the relationships (often not literally "advisor"). I hope that this webpage can be a vehicle for a collaborative process of refining and documenting especially the European portion of this lineage. Note that I have not verified most of the information for the period before 1750.

ABBREVIATIONS:
MGP: the Mathematics Genealogy Project (<http://www.genealogy.ams.org/>)
PFT: the Philosophy Family Tree (<https://philosophyfamilytree.blogspot.com/Philosophy+Family+Tree>)
PFT Blog: the Philosophy Family Tree Blog (<http://philfamilytree.blogspot.com/>)

GENERAL COMMENTS:
A proper presentation of an academic genealogy should have many of the characteristics of a well-done family genealogy: sources should be specified for all information, inferences and hypotheses should be identified as such and explained, conflicting sources should be analyzed (with greater weight generally given to "primary" sources, e.g., university records, dissertation title pages), etc. In addition, for academic genealogies the nature of each relationship should be specified (and sourced), e.g., "Teacher", "Significant intellectual influence", "Dissertation advisor", etc. I have made a start in this direction with the notes below, focusing first on disputed or murky areas.

COMMENTS ON RELATIONSHIPS:
The interesting aspect of an academic pedigree is that it involves the transmission of knowledge, methodology, and even outlook, through a sequence of student/mentor relationships. The relation of dissertation advisor to advisee is a typical team for this intellectual transmission in recent times. (Of course, in some cases the former students may revise the conceptual framework in which they were trained or transmitting it to others, or they may even reject it completely.) In earlier times, the mentor/student relationship might not involve thesis advising and might even occur outside an academic context (e.g., the case of Copernicus/Rheticus). Biographical information must be examined in order to see whether the relationship was sustained over a period of time and whether significant intellectual transmission took place.
In the above chart I have used two shades for the curved arrows connecting mentors and their students.

- The more frequent darker arrows are used to connect a dissertation advisor to the dissertation's author (or for some United Kingdom universities even into the early 1900s, an M.A. advisor to his/her advisee).
- The lighter arrows are used for relationships other than advisor to advisee.

- For the period prior to 1800:
 - The darker arrows also are used, or connected, to a student receiving the degree master of arts, philosophy, or law, or another degree in law, theology, or medicine.
 - The lighter arrows are generally used for relationships other than thesis advisor to author, but darker ones may be used in such cases if it seems clear that significant intellectual transmission occurred even though not via thesis advising.

This approach can require some biographical investigation and interpretation and thus can be somewhat subjective, but it reflects my emphasis on intellectual transmission.

Note that Josh Dever, who maintains the PFT, says (<http://archive.is/NP75#questions>, accessed 10/29/2017): "What relationship is being tracked in the tree? As much as possible, I have assigned parentage according to the official dissertation advisor. This means, in particular, that parentage should not be read as 'greatest philosophical influence.' If philosopher X worked closely with Y and Z in graduate school, and Y in fact played the greatest role in the shaping of the dissertation, but Z was the official chair, then Z goes down as the parent of X." The advantage of this approach is that it is completely objective. Since I have no reluctance to supply multiple "parents" (unlike Dever), I would handle this situation by having appropriately labeled arrows from both Y and Z to X.

COMMENTS ON RELATIONSHIPS from Jan den Hollander:
The older relationships (early 19th century or before) are not as clearcut as many people seem to think or believe. In the early 19th century there was really no university; the advisor may have made a major contribution to the thesis or—more commonly—none at all. I believe that this may explain the somewhat obscure circumstances of Trendelenburg's or Cohen's thesis. What I suggest may have happened is that they wrote their theses on their own, in their own time, with little or no supervision at all. (Or perhaps some coaching from a gymnasium teacher, like in Trendelenburg's case from König.) After the work was finished, the candidate submitted it to the university, and his degree was examined by a committee. If the committee approved it, then the candidate got an opportunity to defend it, and if successful, he got his thesis. Strictly speaking, the closest thing to an advisor would be the chairman of the examination committee (or the dean/chairman of the department), but in fact his contribution as an advisor would be exactly zero. That may also explain why Trendelenburg's thesis was dedicated to König, printed in Leipzig, but defended in Berlin, or in Cohen's case why his thesis was defended in Halle rather than Berlin.

MEDIA COVERAGE OF THIS LINEAGE:
"Math Masters Trace Their Intellectual Lineage," by Samuel Arbesman, *Wired*, June 2011 (http://www.wired.com/magazine/2011/05/st_mathancestry/). This article and the chart are based on the MGP, so it is surprising that the line from Abraham Kästner to Johann Pfaff to Carl Friedrich Gauss was not included in the chart.

TERMINOLOGY:
The **habilitation** is the Habilitation-*post-doctoral* qualification needed to lecture at a university in Germany and other countries. It requires the candidate to prepare a thesis (the *habilitationsschrift*) based on independent rather than supervised research. An academic committee examines the candidate on this thesis; a lecture by the candidate may also be part of the process.

NOTES:
Much of the biographical information is from Wikipedia (a convenient first source to check, though not always reliable or well-documented). Most of the earlier data on degrees, dissertations and dates comes from the MGP. I have generally inferred the relation of "thesis advisor" for this earlier period, except when I had explicit information to the contrary (as with Copernicus and Rheticus, for example).

* **Karl Schmidt**: Additional information about Schmidt comes from the Carleton College archives, as reported in <http://www.math.uct.edu/~thermal/ch3hist.html> (accessed on 11/30/2008).

* **Paul Gerhard Natorp**: Some biographical material on Natorp begins on p. 3 of vol. 1 of *Cohen und Natorp*, by Helmut Holzhey, Basel/Stuttgart: Schwabe & Co., 1986; his education at Strasburg is covered on pp. 4-5. Helmut Holzhey is Natorp's advisor for his habilitation, received in 1881 from Marburg, according to http://www.phil-fak.uni-duesseldorf.de/philo/nrw_phil/liste.html (accessed 11/30/2008).

* **Hermann Cohen**: I have put a "Dissertation advisor" label between Trendelenburg and Cohen, because Cohen's dissertation, while begun at Berlin (where Trendelenburg taught), was presented at Halle, and his degree was received from there. However, "Hermann Cohen's History and Philosophy of Science," a 2004 Ph.D. dissertation submitted by Lydia Paterson to McGill University, footnoted 9 on p. 9 says, "Cohen's dissertation was submitted with the following list of professors: 'Scholis suis sum vitorum III. Boeckh, Du Bois Reymond, Haupt, Steinthal, Trendelenburg, Werder' (Kinkel 1924, 39)." This latter reference is to *Hermann Cohen; Eine Einführung in Sein Werk*, by Walter Kinkel, Stuttgart: Strecker und Schröder, 1924. See [Jan den Hollander's comments on relationships](http://jan.den.hollander.com/relationships) above.

* **George Sylvester Morris**: The MGP says that Morris received a Ph.D. in 1868 under Trendelenburg (<http://www.genealogy.ams.org/id.php?id=95530>, accessed 11/30/2008); but Morris did not get a Ph.D. for example, *Pioneer: A History of the Johns Hopkins University, 1874-1889*, by Hugh Hawkins, says (p. 190) "Morris had worked in the German universities from 1866 to 1868 but had not elected to take a Ph.D."

* **Friedrich Adolf Trendelenburg**: both the MGP and the PFT (accessed 11/30/2008) give Trendelenburg as (one of) Trendelenburg's advisor(s), but Reinhold taught at Kiel and died in 1823, whereas Trendelenburg presented his dissertation in 1826 at Berlin. See the detailed discussion of Trendelenburg by Philip Kremer in the PFT Blog, <http://philfamilytree.blogspot.com/2005/12/additions-and-corrections.html>, about 1/3 of the way down the page (accessed on 11/30/2008). Kremer quotes from several sources, based on which he guesses that Trendelenburg's advisor/examiner was either Hegel or Schleiermacher. Trendelenburg's dissertation is online (<http://books.google.com/books?id=ahqU57pGg&printsec=title#v=onepage>, accessed 11/30/2008); it is dedicated to G. H. Hardy, on a visit to MIT, went with Wiener to the provost's office to protest against the decision. Hardy is reported to have said: *Tell me, Mr. Bush, do you think you're running an engineering school or a theological seminar? Is this the Massachusetts Institute of Technology? If it isn't, why not hire Levinson?* Levinson was hired, beginning his long and productive career as an MIT faculty member. John Forbes Nash, a protégé of Levinson in the MIT Mathematics Department and a winner of the 1994 Nobel Prize in Economics for his work in game theory, is the subject of the book *A Beautiful Mind*, made into a movie starring Russell Crowe and directed by Ron Howard.

* **Robert B. Davis** (1926-1997), Professor, Syracuse University and Rutgers University.

* **Joseph M. Scandura**, Ph.D., Syracuse University, 1962; Professor, University of Pennsylvania.

* **Don C. Stone**, Ph.D., University of Pennsylvania, 1985; Associate Professor of Computer Science, Rowan University (retired 1999); Department Chair, 1992-1999.



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