



## Farewell to “W” (Herbert Saul Wilf), a True VISIONARY for Whom EVERYTHING was INTERTWINED

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The better half of WZ pair [1], the “W”, the first (and the more complex one of the) “pair of complex variables” (see footnote at p. 2 of the masterpiece [2]) left this world on Jan. 7, 2012. But only his body!

W was an outstanding *combinatorialist*, of course, but as I have already said in the tribute [3] his *influence* and *vision* far transcends any one specialty.

In the Philadelphia Inquirer obit [4], W’s wife of 59 plus year, midwife guru Ruth Tumen Wilf, is quoted saying that “for him, teaching and research were **deeply intertwined**”. True, of course, but **not only** “teaching and research”. Also *pure* and *applied*, *conceptual* and *computational*, *problem solving* and *theory building*, *global* and *local*, *strategic* and *tactical* and so on and so forth.

It is a mark of an interesting person that his or her children are interesting and diversified in their talents, interests, and activities. Herb had three wonderful children: Susan [5], a brilliant Chinese scholar, David [6], a brilliant lawyer, and Peter [7], a brilliant paleontologist. And he had *twenty eight* brilliant academic children [8], all different than each other, including a bishop [9]! He also has six brilliant biological grandchildren, and 21 talented *academic* grandchildren.

And Herb was such a *mensch*. He made sure that Sister Celine [10] would get the recognition that she so deserved, and flew his plane to her convent, in order to conduct a historic interview [11] that is preserved for posterity.

W was also one of the greatest lecturers that I have ever known. For an example, watch his great lecture whimsically titled “How to lose as little as possible”: [12]

And W was not only a great problem-solver, but like Erdős, also a great problem-poser. Please try to solve any of his unsolved problems [13], that he only posted a year ago. Myself, I have no clue how to solve

any of them, and I could only say something [14] about the sixth problem.

On Feb. 2, 2012, I gave a talk about W at the Rutgers Experimental Mathematics Seminar [15], that was (like all talks in that seminar where the speaker agrees) videotaped and uploaded to YouTube [16]. There I highlighted some of my favorite W gems, including the Greene-Nijenhuis-Wilf probabilistic proof of the hook-length-formula [17] and the *gorgeous* Calkin-Wilf Recounting of Fractions [18].

## References

- [1] [http://en.wikipedia.org/wiki/Wilf%E2%80%93Zeilberger\\_pair](http://en.wikipedia.org/wiki/Wilf%E2%80%93Zeilberger_pair)
- [2] <http://www.math.rutgers.edu/%7Ezeilberg/mamarim/mamarimPDF/rational.pdf>
- [3] <http://www.math.rutgers.edu/%7Ezeilberg/mamarim/mamarimPDF/w80.pdf>
- [4] [http://articles.philly.com/2012-01-15/news/30629212\\_1\\_american-mathematical-society-penn-faculty-assistant-professor](http://articles.philly.com/2012-01-15/news/30629212_1_american-mathematical-society-penn-faculty-assistant-professor)
- [5] <http://paper-republic.org/translators/susan-wilf/>
- [6] <http://www.gibsondunn.com/lawyers/dwilf>
- [7] <http://www3.geosc.psu.edu/%7Epdw3/>
- [8] <http://www.genealogy.ams.org/id.php?id=15200>
- [9] <http://www.centraldiocesepncc.org/OurBishop.dsp>
- [10] [http://en.wikipedia.org/wiki/Mary\\_Celine\\_Fasenmyer](http://en.wikipedia.org/wiki/Mary_Celine_Fasenmyer)
- [11] <http://vimeo.com/5381704>
- [12] <http://www.youtube.com/watch?v=X4zdU5AHkGM> (part 1),  
<http://www.youtube.com/watch?v=EV6buzdX5jo> (part 2),  
<http://www.youtube.com/watch?v=w4rf20dK47c> (part 3),  
<http://www.youtube.com/watch?v=WSSjwJS3JBE> (part 4).
- [13] <http://www.math.upenn.edu/%7Ewilf/website/UnsolvedProblems.pdf>
- [14] <http://www.math.rutgers.edu/%7Ezeilberg/mamarim/mamarimhtml/dmp.html>
- [15] <http://www.math.rutgers.edu/%7Ebnaka/expmath/>
- [16] <http://www.youtube.com/watch?v=rnFWmswEFA> (part 1),  
<http://www.youtube.com/watch?v=8NwFQG03tzU> (part 2).
- [17] <http://www.math.upenn.edu/%7Ewilf/website/Probabilistic%20proof.pdf>
- [18] <http://www.math.upenn.edu/%7Ewilf/website/recounting.pdf>