Beginning My Move to RE

During this time, in 1981, I published a paper with Orna Berry about how I managed to do the best job ever in specifying software that she had to write, in a domain that I knew nothing about.

I agreed to do this job *only* because I was married to her at the time!

Beginning My Move, Cont'd

In retrospect, I consider this to be my first RE paper.

It's certainly one of the very earliest on the elicitation aspect of RE.

Ignorance Hiding

She had to write some programs that played statistical games with experimental data.

I got my lowest Math grade in the undergrad Probability and Statistics class, a B, (it ruined my perfect Math GPA.) because I had *no* intuition for probability.

So, I was ignorant in the statistics domain.

Ignorance Hiding, Cont'd

To be able to hide my ignorance so I could work effectively with the requirements as she expressed them to me, …

I made the experimental data an ADT, with each magic function that I did not understand, e.g., standard deviation or standard error, being a method of the ADT. I knew that the client understood what they mean and how to implement them. So I worked with this ADT with its methods taken as primitive.

Ignorance Hiding, Cont'd

I thought and claimed in this paper that this ignorance hiding technique was the basis of the success …

as well as my ability to nudge the client to give information

and to do strong-type checking on natural language sentences.
(Using the same verb with different numbers and kinds of direct objects in different sentences is a type error.)

Importance of Ignorance

By 1994, I figured out that the reason for the success was not the ignorance hiding, but the very ignorance!

Importance of …, Cont'd

So in 1994, I published "The Importance of Ignorance in RE" claiming that every RE team for a CBS requires along with domain (of the CBS) experts at least one smart ignoramus of the domain, who will

- **provide out-of-the-box thinking that leads to creative ideas, and**
- **ask questions that expose tacit assumptions.**

Empirical Validation

In 2013–2015, my PhD student, Ali Niknafs, conducted controlled experiments to empirically validate that

for the task of brainstorming for requirement ideas, …

among 3-person teams consisting of only computer scientists or software engineers, …

Empirical Validation, Cont'd

the teams with *one or two members ignorant* in the domain …

generated *more and better requirement ideas* …

than teams consisting of …

- ***only ignorants* of the domain or …**
- ***only awares* of the domain.**