

Let's face it

A belligerent column by Alain Schremmer.

Once upon a time, somebody suggested that the following placard be erected on Verdun's battlefield:

Here died over a million French and German soldiers, for nothing, absolutely nothing at all.

To which it was pointed out that this was not entirely true. World War I did benefit a select few.

Foremost, and as a fit counterpart to the unknown soldier, were the discrete rich. There were, for instance, those who were selling to the Germans the famed French 75mm field gun while the Germans were selling to the French ammunitions for the very same gun. Thus, some Germans were killed by German shells while some French were killed by French guns. Not that they, presumably, cared: the shelling at Verdun was such that a great number of them were fraternally plowed under. Then there were those French who sold only to the French army and those Germans who just sold to the German army. But even they did all right.

Then, most of the French soldiers who died where either peasants or intellectuals. Peasants, because women, it was suddenly discovered, could do the work just as well. At least during the war. Afterwards, Intellectuals, because, really, who needs them? Not that intellectuals were against the war, mind you, they were, just like everybody else, all for it. At least at the beginning. Afterwards, they could only shut up since they were in uniform. Presumably, it was simply because they were perceived as expendable, as not serving any useful purpose in the war effort: How many propagandists can you employ? If you happened to be a teacher, you were among the first to go to the front: Elementary school teachers as noncoms, secondary school teachers as officers.

Those who, by and large, did not go to the front were the industrial workers who were manufacturing arms, ammunitions etc. It was going to be left to Rosie the Riveter to prove that women could do that too.

And, of course, those who absolutely couldn't go were those with such responsibilities in businesses' efforts to serve their country as to warrant their affectation in the ministries or even in industry, often enough in their own plant. I mean the plant belonging to them rather than the plant to which they belonged.

Then there was, for instance, the French politician who made a career because, having given his son to France, as the phrase went, he was of course immune to any criticism. This, in turn, allowed him

to send more people to kill and be killed. With great regrets of course. It is said that his speeches at the Assemblée Nationale were wonderfully moving. The audience wept.

Then there were the military. Seriously, what is one's chance to get a real promotion in peace time? And, beyond a certain rank, the risk to oneself is so very small: While the Germans did try to shell Paris with the Grosse Bertha, I do not know that they succeeded in killing anyone in the ministries. Certainly no general.

I do not know what the situation was on the German side but I would be surprised if it was that different.

The ostensible purpose for the French had been to reconquer Alsace which had been seized by the huns in 1870. Ever since that time, all true French patriots had had their eyes glued to the blue line of the Vosges. These are the eastern mountains dominating Alsace, from which, it was hoped, France's avenging armies would one day victoriously storm to liberate the Alsatians from the unspeakable teutonic tyranny. So, in 1918, Alsace was duly liberated and returned to the French fold. As it happens, the Alsatians weren't that completely overwhelmed by joy that, upon homecoming, they weren't able to exact a few special privileges from the French Government.

What does this have to do with Mathematics? Everything: The recourse to war is the quintessential abdication of logic, of critical thinking, of intellectual rigor, of everything we stand for. Or, at least, of what we claim to stand for. Suppose for instance that one of our students, despairing to come up with the required proof, came up with a semi-automatic weapon: "All right wise guy, is *this* a proof or is it a proof"? While I, for one, would be immediately convinced by such a powerful argument, I must say that, in the back of my mind, there would linger some sort of vague discontent, some sort of longing for a kinder kind of argument.

Now all those who decided on making war had been, at one time or another, students of teachers like ourselves. So, in a sense, the war was the failure of these teachers. That they died for their sins, though, was no poetical justice. Still, where did they go wrong? And, are *we* doing any better?

What more is there to say? We mourn for a time and then life goes on and we teach on. Some of our students will go on to become war profiteers. Some others will go on to become generals. Some will go on to become admirable people. Some will

go on to become teachers. How can we tell? How can we affect things?

In more than one way, this is a continuation of my previous column, in which I recommended the reading of Colin McGinn, *Homage to Education*, in the August 16, 1990 issue of the London Review of Books.

Teaching at Community College of Philadelphia, my chances of having among my students the leaders of tomorrow are practically nil. On the other hand, *all* my students will eventually be affected by what these leaders of tomorrow will be doing. Perhaps I can try to cause my students not to be taken in by those leaders when they extol the virtues of war. Perhaps I can help them develop the critical apparatus which will make them see that the conditions supposedly requiring a war always find their roots in a carefully hidden past. *Why* did the archduke get assassinated? Perhaps it will lead them to recognize, a long time before the proclamation of war as inevitable least evil solution, what it is that will lead to this proclamation and perhaps they will thereby eventually avert the proclamation.

In a related matter, consider the article that appeared in the April 1991 issue of *On Campus* on why "[not to] buy Japanese cars, Union-busting tactics exposed." I have no quarrel with the reasons given. Certainly the Japanese companies do not have the interests of their workers as primary concern. But I would have been more sensitive to *On Campus's* argumentation should they have explained why they are zeroing in on Japanese manufacturers. I was not under the impression that US manufacturers had their workers' welfare particularly close to their heart. Certainly not to their pocketbook. Or the public at large's for that matter. I seem to remember, for instance, something about cars going BOOM when rear-ended. There was also something about it being cheaper to settle out of court with n victims than diminish the profit by 25¢ times m when m was in the millions. Now here was naked, cold hard logic. Who taught them that? Or rather, who didn't teach them that, when you model a situation, you have to keep in mind that you can never take all the factors into account and that, therefore, you must be ready at all time to modify the model to take into account what you previously thought negligible?

But the AFT, if nothing else, seems to be weary of contradiction. It does not adjure us not to buy Korean cars. Maybe this has something to do with the fact that the UAW collaborated years ago on preventing Korean auto workers from unionizing efficiently, thereby ensuring to the Korean manufacturers a plentiful supply of docile, underpaid workers. Here again is sparkling logic at work.

In a previous column, I left it as an exercise to answer the question:

Why is the bottom number in a fraction called the denominator and the top number the numerator?

I must regretfully report that no one gave the right answer. In fact no one bothered to answer at all. I will nevertheless assume that everybody knew the answer. But then how comes *not one* of my students knows the answer?

Maybe, to amplify on a previous column, this has something to do with the fact that, for whatever reason, and even though we keep talking about meaningful applications, when it comes to numbers we never, ever use any unit. In other words, we use $\frac{3}{5}$ rather than $\frac{3}{5}$ 🍏 just in the same way that we use 2 rather than 2🍏. Must look more mathematical that way.

But none of my students *knows* what fractions are. All they can do, the best of them at least, is to operate on patterns. Because they cannot read $\frac{3}{5}$, that is because they cannot assign a *meaning* to it, all they can do is to take this number and multiply it with that number and then add Why not read $\frac{3}{5}$ 🍏 as "3 of which it takes 5 to make an 🍏"?

I often pose to my students the following problem: Explain to me, a foreigner who knows only what a *dollar* is and who knows only about *whole* numbers, what a *dime* is. They cannot.