Update of Galois Fields PhL 1.9.13

I finally found the files here E:\Projects, Frozen 2004-\BTS Stuff 1991-1997\BTS 91\Galois Book . I then made a scratch copy on the desktop so I can try different things.

The font is Palatino 10.

First step: Use the organizer to bring in ALL styles from normal.dot, let them override existing styles in the doc. For starters, this gets the main text to be my usual "normal" style, TNR 11 point, proper spacing, and so on. After doing this, I find that subscripts and superscripts are these styles

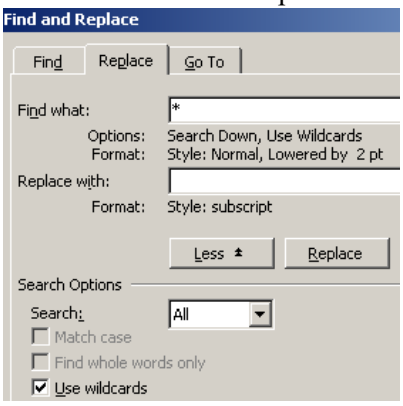
Normal + Palatino, 9 pt, Lowered by 2 pt
Normal + Palatino, 9 pt, Raised by 3 pt

This is something I must have set up long ago, perhaps it came in from the Mac world that way.

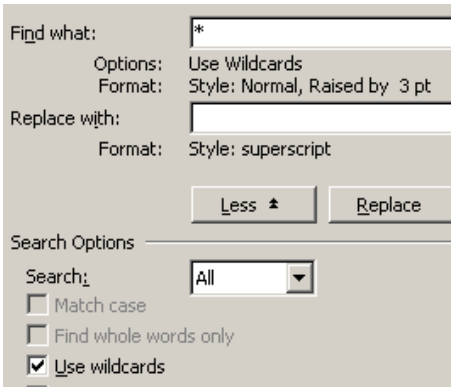
Question #1. How do you rescue the existing "subscripts" and "superscripts" ?

Answer: Do this, where * is a "find what" wildcard

subscripts:



superscripts:



The finder finds them, and the replacer replaces them, and it works perfectly. It did 177 replacements just in Chapter 1. And then maybe 77 superscripts replaced. Things suddenly look very good.

Second Step (after the above). Select headings and make them headings in some reasonable manner.

Third Step: realign all tables and graphics.

Headings: I can apply the styles, but I am not sure of the organization in terms of (a), (b) and so on. Maybe I just won't have that.

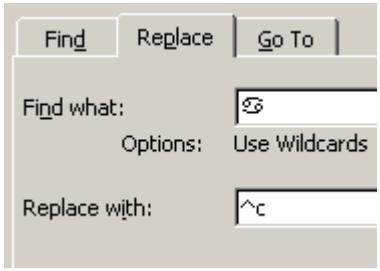
I have so far fiddled only section 1, there are no equations of figures, let's try another section. But I see that there is maybe only one figure in the entire document.

General Plan: Let's start over on this Galois document. There are 8 chapters. Let's get them all into one document so I can do lots of things all at once, rather than one section at a time. To do this, start a new container doc, and them paste in the chapters one at a time. I did this and we are at 96 pages, not bad. Now do the First Step above: DONE. Next do the subscripts and superscripts. For superscripts there were 2038 replacements made! And there were 1566 subscripts replaced! Very nice.

It looks pretty good even at this early point, but the heading situation is very confused. I guess I will first install Chapter headings at level 2. DONE. This will need much tuning, but leave for now.

I notice some missing characters as little squares. They have different char codes, but there are not too many of them, I could fix them manually looking at the source document.

Another issue: **Greek letters** should be changed from symbol to TNR. I could not do this generally, but since α appears lots of times, I did this



where I copied an α to the clipboard, then paste that where t "fully alpha" appears. There were maybe 700 of these replaced.

Question: What are the vertical bars that I used for matrices?

I can't seem to select them. Found it! It is a form of a "tab" stop, you select the whole thing and slide them!

$$n = (p_1)^{m_1} \cdot (p_2)^{m_2} \cdot (p_3)^{m_3} \quad ...$$

$\in$ element of, got lost from mac
$\Rightarrow$ also seems to get lost

Step: Replace two spaces with one space, I like one space after each sentence nowadays. DONE.

Status 7:30 PM Weds Jan 9. I have cleaned up the major obvious items. The task is now a large one -- I have to read my own 100 page paper on this subject and try to understand it! It also needs some kind of Overview, the reader has no idea what is going on in this monster! But I think I got a good start on the cosmetic transformation from the old Mac type documents to my current formats.