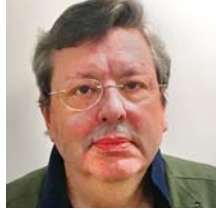


STRENGTH IN NUMBERING: HOW TO CREATE FOOLPROOF SECTION NUMBERS IN MICROSOFT WORD DOCUMENTS



JOSHUA STEIN and ROBERT HARVEY

Illustrations by Robert Harvey

Joshua Stein has been one of the most prolific contributors to *The Practical Lawyer* and its sibling publications for 20+ years. For more information, visit www.joshuastein.com. Robert Harvey, an attorney and editor, works with Joshua Stein on special projects. To submit comments on this article, send email to joshua@joshuastein.com or robertharveylaw@gmail.com. Copyright © 2018 Joshua Stein.

I. INTRODUCTION BY JOSHUA STEIN

Microsoft Word does many things well. Automatic numbering in legal documents isn't one of them. Section numbers sometimes seem to hurtle out of control. Their formats change inexplicably. Typefaces do the same. Then all of it refuses to change, leading to no end of aggravation, frustration, and wasted time. It is infuriating for the attorney and not something for which clients want to pay. In this article, we share the very exciting technique that enabled Joshua Stein PLLC ("JSPLLC") to master the automatic numbering system of Microsoft Word and create a perfect numbering structure for complex legal documents. It can be done! And it can work for you!

Many legal organizations already use some form of automatic section numbering for their documents. Based on the incoming documents we receive at JSPLLC, and what happens to our documents when other firms edit them, we know that very few legal organizations handle automatic section numbering very well. Hence the need for our system.

Once you use our system to get automatic section numbering the way you want it, you need to incorporate it into Microsoft Word's Normal Template—the starting point for any Microsoft Word document you create unless you go out of your way to choose some other starting point. My friend Rob Harvey and I toiled for months to develop a perfect generic Normal Template with automatic numbering that works, a sensible structure of interacting paragraph styles, and a reasonable set of options to accommodate almost all work that transactional attorneys do every day. This Normal

Template has simplified my life. It also allows me to produce better looking documents more efficiently.

Through our ordeal of creating the perfect Normal Template, we became experts in the intricacies of automatic numbering and paragraph styles—two elements of Microsoft Word that are difficult, counterintuitive, and overly complex, with unfathomable pitfalls and surprises. WordPerfect handled section numbering much more gracefully than does Microsoft Word. Even PerfectWriter, which I abandoned in 1986 when I stopped using my two Kaypro II CP/M computers, was better. I still carry a torch for both those word processing systems.

II. INTRODUCTION BY ROBERT HARVEY

When Joshua asked me to work with him on an internal training memo for JSPLLC on how to set up fail-proof automatic section numbering in JSPLLC's Normal Template for Microsoft Word, I had to think about it. After contemplating whether this Template could be made, I gave him an answer: "Maybe or maybe not, but I am pretty certain I could write a suicide note about Microsoft's automatic section numbering."

Microsoft Word offers a couple of readily accessible systems to apply numbers to paragraphs: numbered lists and multilevel lists. Neither works well for complicated legal documents. In this article, we offer a systematic solution to automatic numbering for complex documents in Microsoft Word. Our solution works. It's reliable. It requires thought. It takes startup time and effort. It requires substantial knowledge of Microsoft Word styles (which we provide as we go through our

section numbering adventure together). But our system does the job. And it will save you gallons of bitter tears over time.

Achievement of autonumbering nirvana, like achievement of bliss on earth, is not a linear process, but rather an iterative process. One must keep trying.

We have pieced parts of our solution together from our own painful experiences and from many websites that offer advice. When we started this project over a year ago, not a single website we found offered the whole solution or illustrated it completely and clearly. A more recent web posting helped bridge that gap, using a technique much like ours but without the same detail. For that alternative explanation, visit: <https://tinyurl.com/y98y7e75>.

It took us many hours of trial and error (and error, error, error, and error) to work out our great system. But once you set up and stabilize the right styles in Microsoft Word (we'll explain styles in a minute), you will experience an absence of pain, the highest state to which any attorney can aspire when working with Microsoft Word automatic numbering.

III. PRELIMINARIES AND SOME MATTERS OF STYLE(S)

Proper use of Microsoft Word starts from understanding the concept of a “style”—a defined and labelled set of attributes that Microsoft Word applies to any paragraph or text. You may think you don't use styles when you edit a document in Microsoft Word. You are wrong. Every letter, every word, every paragraph in any Microsoft Word document is governed by a style. You need to claim control of the styles in your document, and not cede it to Microsoft.

The styles we discuss in this article—styles with automatic section numbering—are only part of a comprehensive array of house styles at JSPLLC, which we have collectively named our !Template group of styles. We give each of our custom styles a name that starts with an exclamation point, such as **!TOC1**—pronounced “Bang T-O-C One.” This produces advantages too complicated and subtle to discuss here, and no disadvantages. If you don't like our naming system, make your own.

Some warnings: You can't fix Microsoft Word's section numbering problem by working from an existing

standard Microsoft Word multilevel list. You can't even fix it by creating a new multilevel list. And you can't fix it just by working within Microsoft's heading styles, i.e., styles intended for both (a) use as headings in the document and (b) inclusion in the table of contents. Our solution to automatic section numbering also cannot fix underlying bugs in Microsoft Word, such as the dreaded blacked-out section numbering that appears at random moments, usually just before you need to circulate the final version of a document.

This article covers only our four styles for numbered text headings (**!TOC1** to **!TOC4**); our customized heading style that controls section numbering in the overall document (**!TOCNumbering**); and the interaction between those styles and the regular non-heading text in the rest of the document.

We created only four levels of styles for numbered text headings, even though Microsoft Word allows up to nine levels of headings. Any legal document with more than four levels of headings needs reorganization.

As our house style at JSPLLC, we want our headings and documents to look like the text in the box below. Expressed more technically: (a) level 1 uses **BOLD ALL-CAPS** with a 0.5" tab before heading text; (b) levels 2 through 4 use *italics*; (c) as we go “down” each level, we indent only the first line by an additional 0.5"; (d) our numbering uses 1, 1.1, etc., all in roman type; and (e) we single-space our paragraphs with 12 pt of spacing after each paragraph and no indentation except in the first line. It should look like this: [Image on next page]

If you want some other look, you can easily adjust our system to match your desired look. The logic and instructions of our system remain the same.

Most of the longer documents at JSPLLC start with a table of contents. We want any table of contents to include headings 1 through 4, in a suitably indented way consistent with the indentation of the same headings in text. Our numbering system guarantees that will happen whenever we add a table of contents. Our numbering also assures that headings will appear in Microsoft Word's very useful navigation pane. (Select “View” at the top of your Microsoft Word screen, then check **Navigation Pane**.)

We started writing this article in Microsoft Word 2010. We finished it in—and its instructions refer to—the latest version of Microsoft Word as of mid-2018, known as

1. HOW TO MAKE A PEANUT BUTTER AND JELLY SANDWICH

This is an old family recipe. It has been handed down from generation to generation for centuries. Treat it with respect.

1.1. *The Bread.* Good bread is the matrix upon which you will build your sandwich. It is key to your success.

1.1.1. *Obtain Good Sandwich Bread.* It should be fresh and fragrant, and already sliced.

1.1.2. *Other Types of Bread.* Bagels are suboptimal for a peanut butter and jelly sandwich because of oozing issues when you bite down hard. If you use English muffins, you must toast them first.

1.2. *The Spreads.* Likewise, the spreads are a vital component of an excellent peanut butter and jelly sandwich. Their significance is reflected in the very name of the sandwich.

1.2.1. *What Kind of Peanut Butter?* Only children eat creamy peanut butter. Grow up and get the chunky kind.

1.2.2. *And Jelly?* Anything but grape. Strawberry is the best.

1.2.2.1. *Marmalade.* The use of marmalade is in dispute, with a strong minority view esteeming it as the best.

1.3. *Serving Suggestions?* You may cut the sandwich into quarters, but never cut the crusts off.

Office 365. The automatic numbering functions have remained consistent, and have worked in the same ugly way, across different versions of Microsoft Word. Usually the menus and decision boxes you see for these functions remain completely unchanged even as Microsoft beautifies and changes the rest of the software from version to version. Over time, though, our instructions in this article may require adjustment or may entirely fail because of Microsoft's changes in future versions.

In our instructions, we won't always tell you to "Click **OK** to close" or "Click **OK** to save." If you know (or figure out with our help) enough about Microsoft Word styles to follow this article, then you will know when to click on "**OK**" without being prompted.

For most of the steps in this article, you will stay on the "Home" ribbon (Microsoft's name for the main editing

screen of MS Word). In the tabs at the top of the editing screen, click on "Home" to bring up the Home ribbon.

This article takes you through many steps to achieve ideal automatic numbering. They sound complicated, but they have a consistent logic to them. Once you figure out and follow that logic, the whole process should take no more than 10 minutes. And you only have to do it once to give yourself a great template for all future new documents.

Some of our illustrations are composites of screen captures that show dialog boxes or dropdown menus that can't actually all appear on the screen at once. We hope this device lends brevity and clarity without confusion.

IV. HOW OUR SYSTEM WORKS

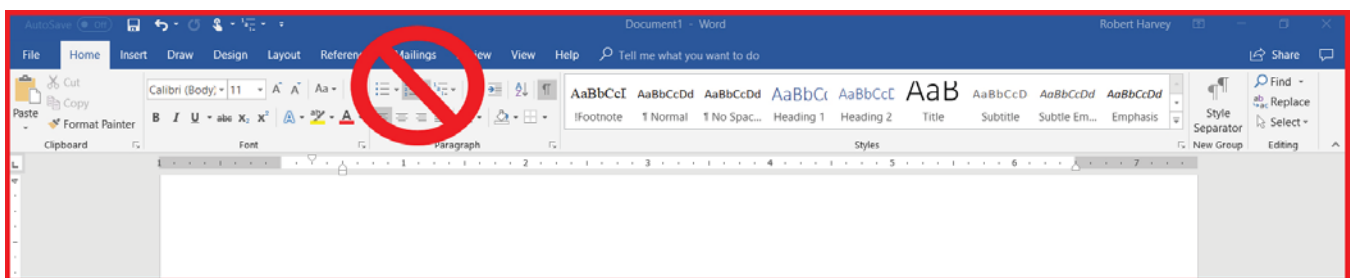
If any reasonable person wanted to set up automatic numbering in a Microsoft Word document, that person might intuitively turn to Microsoft Word's native numbering systems offered in plain view on the Home ribbon: bullets, numbering, and multilevel list. But that reasonable person would be wrong. Instead, here is the right overall strategy to solve the autonumbering problem, presented in the sequence in which it must be considered and constructed:

- Create four new heading *text* styles, **!TOC1**, **!TOC2**, **!TOC3**, and **!TOC4**, with no internal embedded numbering information or characteristics.
- Create a single new heading *number* style that sets up a single overall numbering system for four nested levels, called **!TOCNumbering**. This style governs the numbering structure for the entire document.
- Link the first level of **!TOCNumbering** to **!TOC1**, the second level of **!TOCNumbering** to **!TOC2**, etc.
- Some formatting instructions you pack into **!TOCNumbering** will trump the first-line formatting of the associated heading style (**!TOC1**, etc.). For example, by using **!TOCNumbering**, fonts, italics, and bolding of the section number in a heading can vary from those of the heading text. And **!TOCNumbering** will control indentation of the first line in any numbered heading style. That characteristic won't be controlled by the **!TOC1** to **!TOC4** heading styles, even though you might think it should be.

If you want to start a paragraph with a numbered heading that will appear in the table of contents, and then continue the same paragraph with regular text that will not appear in the table of contents, you have a problem. You need to treat the heading and the text as if they are separate paragraphs, each with its own style characteristics. To do that, you need to drop something called a Style Separator between the heading and the text. Just type Ctrl-Alt-Enter where the heading ends and the text begins. Style Separators are somewhat old-fashioned Microsoft Word technology. We find them more reliable and easier to use than the more modern alternative, linked styles, in complex documents. To display Style Separators in your document on the screen, you need to instruct Word to display hidden text. You can do that by: (a) clicking on the ¶ ("pilcrow") or paragraph symbol on your Home ribbon, or (b) choosing File/Options/Display and then checking the box for Hidden Text. When you display hidden text, every Style Separator will appear as a ¶ ("pilcrow") or paragraph symbol. This is the same symbol that also appears at the end of each paragraph of text. In that latter context, though, it's not a Style Separator, just an end-of-paragraph marker.

After you create and link **!TOCNumbering** and **!TOC1** to **!TOC4**, you will never again use Microsoft Word standard list numbering to number section headings. You will set up all your numbered sections only by using the **!TOC1** to **!TOC4** text heading styles. Never touch Microsoft Word list numbering again. If you ever get the urge to do that, go get a cup of coffee and call your mother or grandmother. She will appreciate the call, and your urge will pass.

Once you set up our !TOC system, creating new documents, as well as updating old ones, will be much more (dare we say almost completely?) reliable and consistent.



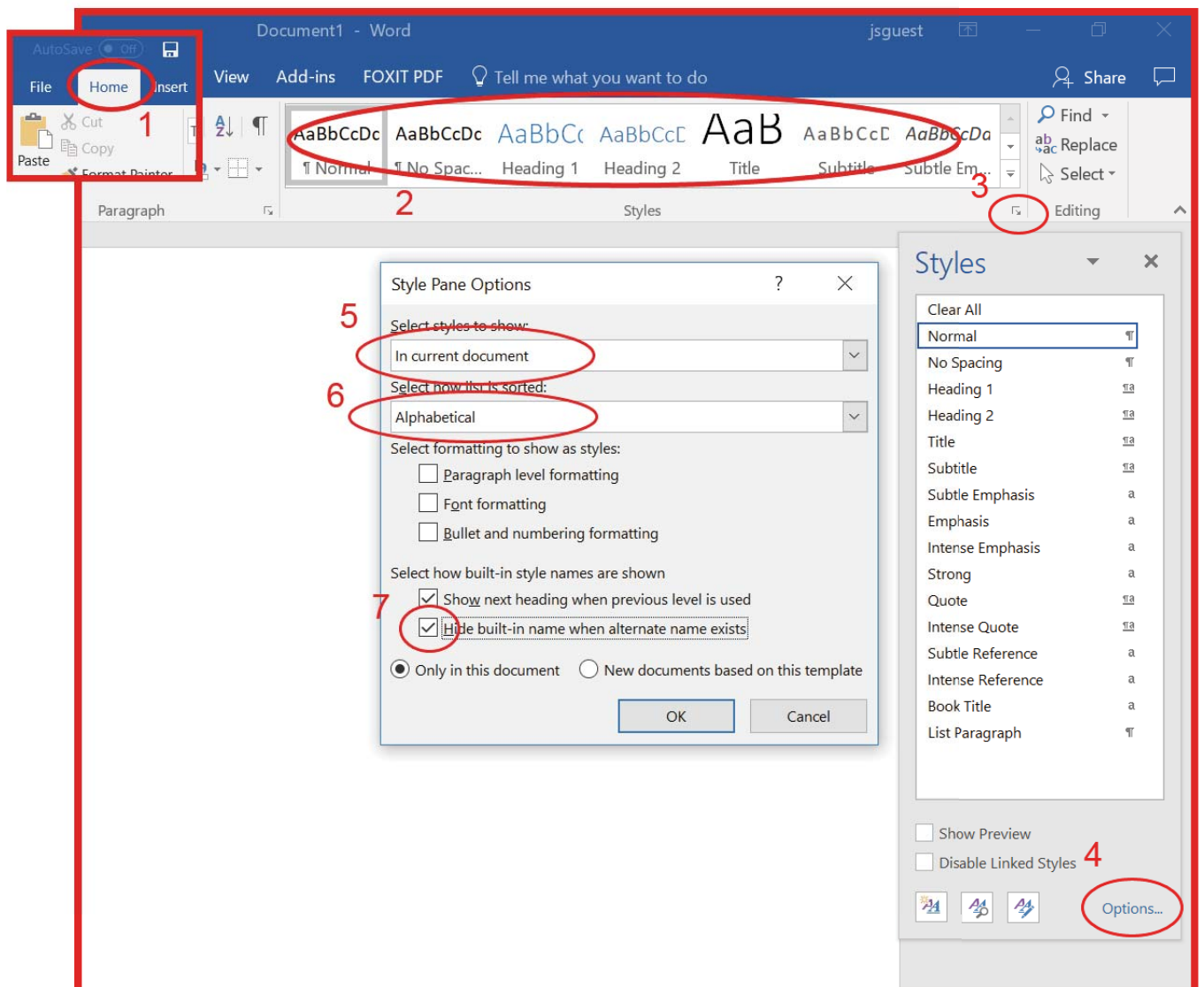
To get there, you will need to follow carefully many steps. In most cases, we present those steps in two ways. First, we have a diagram that shows what you need to do in Microsoft Word—screen shots of the actual menus you will need to use. Second, right after the screen shots, we describe each step in text, one by one. The numbering of the steps matches in both places.

V. STARTING THE PROCESS

Open up a new blank document (File/New). We'll call it Working Document. It's the blank canvas on which we will paint our great new numbering system.

We are ultimately going to set up the five new styles we promised earlier: **!TOC1**, **!TOC2**, **!TOC3**, **!TOC4** (to govern the *text* of headings) and **!TOCNumbering** (to govern the heading *numbers*). **!TOC1** to **!TOC4** are heading styles that will be used to format headings throughout your document.

To simplify this process, we want Microsoft Word to always display available styles in something called a Styles Pane. This is very painless to set up in Working Document, and it's easier to work with than the Styles Gallery in the Home ribbon. To set up the Styles Pane takes a few seconds. You need to do it only once.



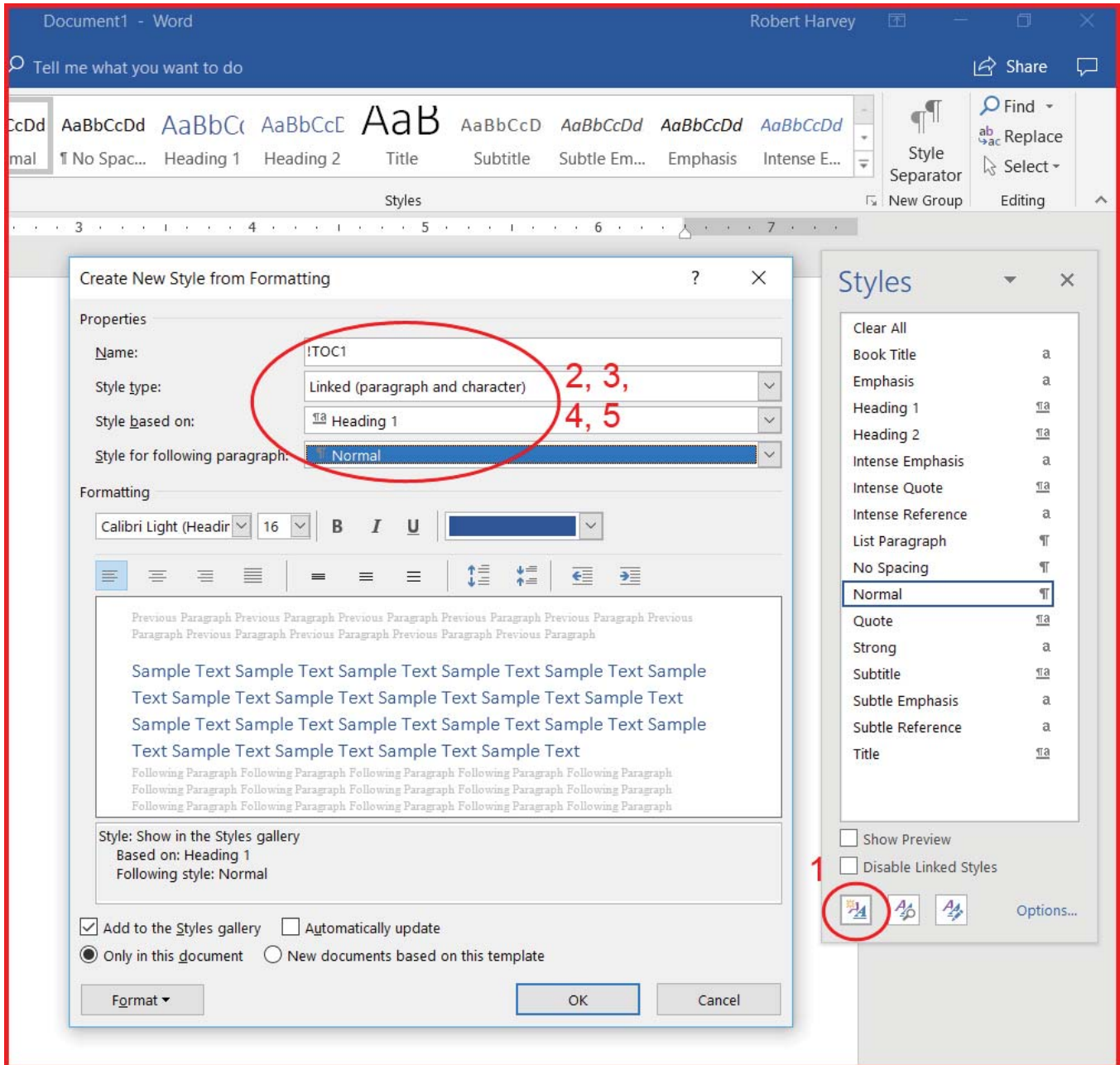
To set up the Styles Pane:

1. Display the Home Ribbon. (Click on "Home" tab if the Home Ribbon isn't already displayed.)
2. Find the Styles Gallery in the Home ribbon. It's the horizontal group of styles above the word "Styles."
3. In the lower right corner of the Styles Gallery, look for a **little down arrow**. Click on it. This opens the Styles Pane.
4. Click on **Options**.
5. In the Style Pane Options, select styles to show: **In current document**.
6. Select how list is sorted: **Alphabetical**.
7. Check **Hide built-in name when alternate name exists**.

Astute readers will point out that in the preceding menu we could conceivably check **New documents based on this template** and, if we did that, our new styles would be saved to the Normal Template. The problem is that you would have to do this so many times in so many dialog boxes that mistakes would creep in. We think it makes more sense to get everything right in Working Document, then transfer all the !TOC styles, all at once, to the Normal Template as we describe below.

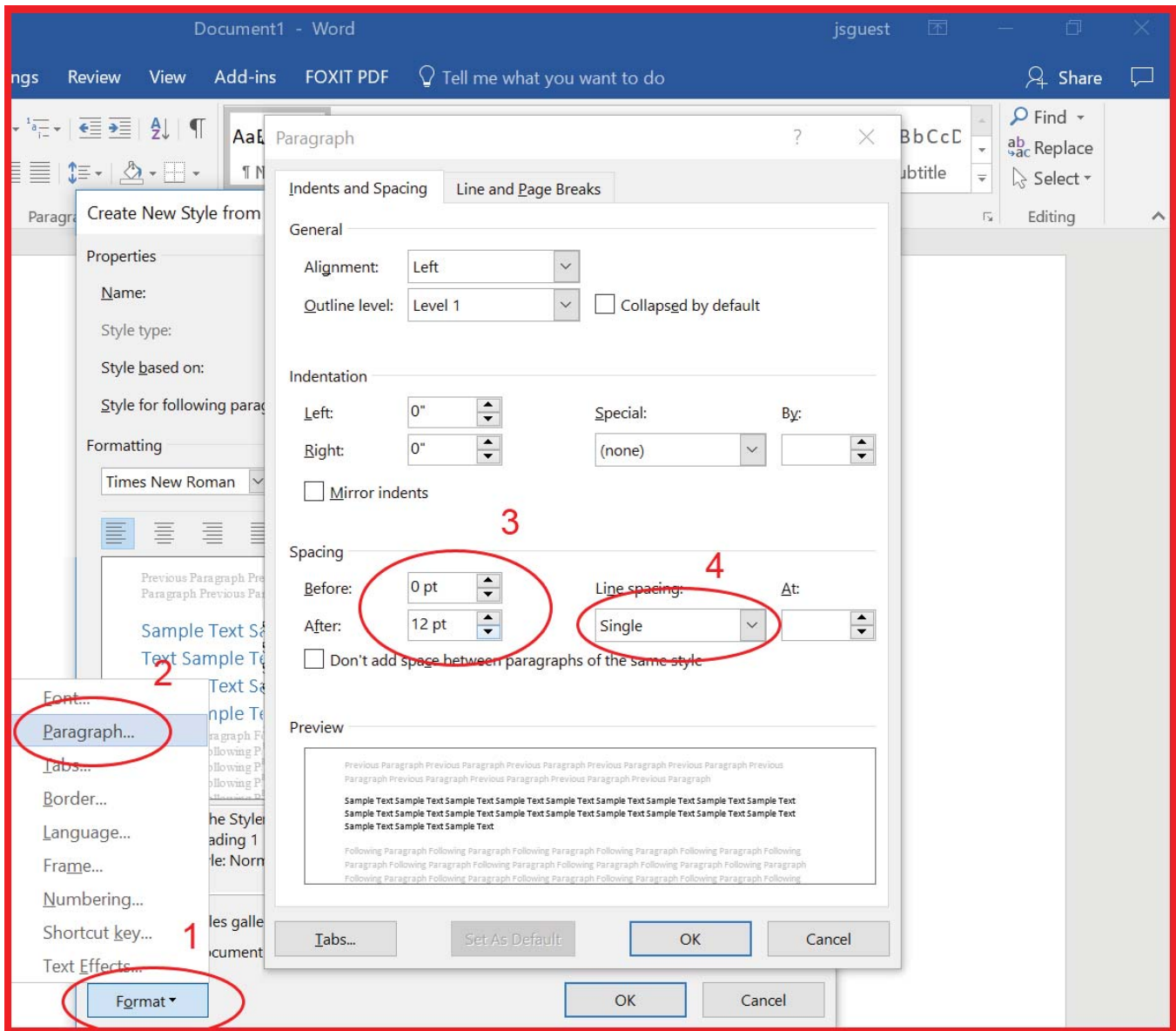
VI. !TOC1

Now, in the Styles Pane, we will create **!TOC1**, the first of our great new automatically numbered heading styles.



1. In the Styles Pane, click on **New Style**.
2. Name: **!TOC1**
3. Style Type: **Linked (paragraph and character)**.
4. Style based on: **Heading 1**.
5. Style for the following paragraph: normal style. (The "normal" style is Microsoft Word's standard or default formatting for a standard paragraph of text without special features. You might call it "text" or something else.)

Now that you have conceptually established the **!TOC1** style and told Microsoft Word it exists, you need to set up the paragraph formatting for the **!TOC1** heading text. To do that:

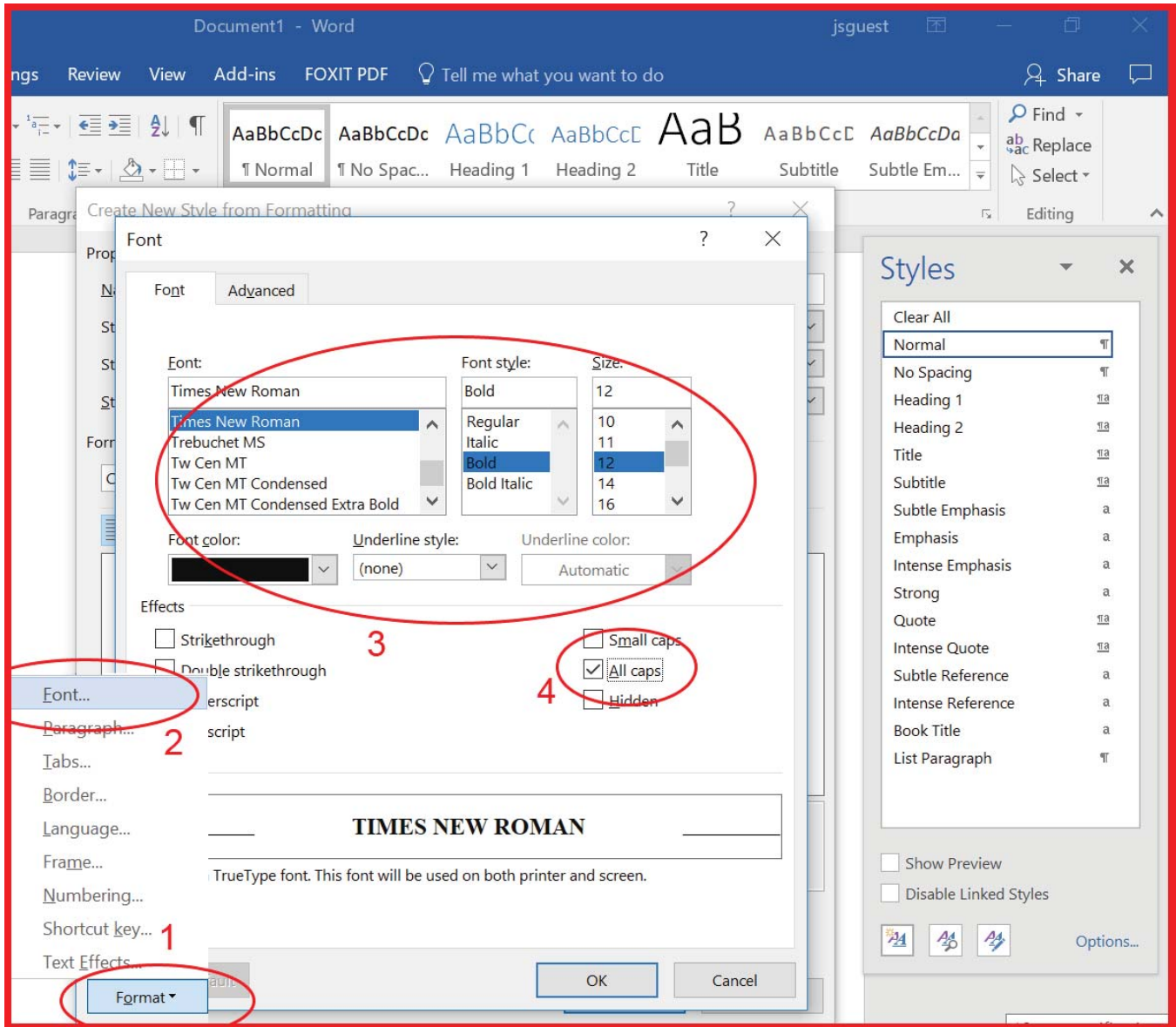


1. Click on **Format**.
2. Click on **Paragraph**.

Now you can set up any paragraph formatting you want for **!TOC1**. It doesn't affect our failproof numbering system. Our screenshot above shows the JSPLLC paragraph format settings for the first level heading, **!TOC1**.

3. Spacing After: **12 points**.
4. Line spacing: **Single**.

And now turn to the font settings for the **!TOC1** heading text.

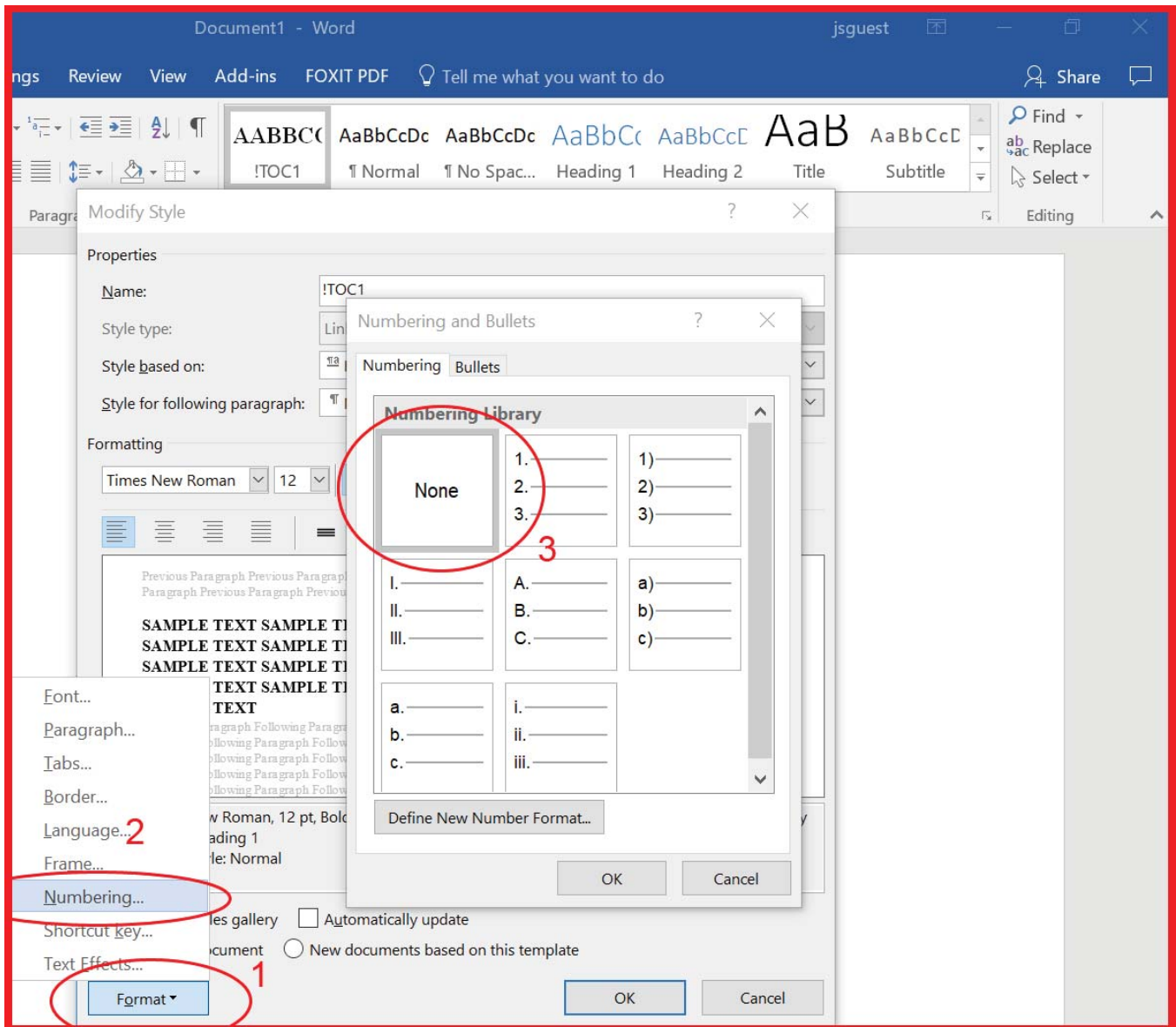


5. Click on **Format**.
6. Click on **Font**.

Again, you can choose your own fonts and sizes. Our screenshot above shows JSPLLC's font setting for **!TOC1**.

7. Font: **Times New Roman 12 point bold**.
8. Effects: **All caps**. (This makes every letter in **!TOC1** a capital letter, whether or not it was originally typed that way, when the heading appears in the text of your document. The table of contents will turn out better if, when you use **!TOC1**, you Type the Actual Text of the Heading in Mixed Case.)

This next step doesn't look like much, but it's crucial. We need to make sure **!TOC1** doesn't try to number the heading. So we select None for Numbering and Bullets. That sets the stage for **!TOCNumbering**, a totally separate style, to govern the numbering of all headings in the document:

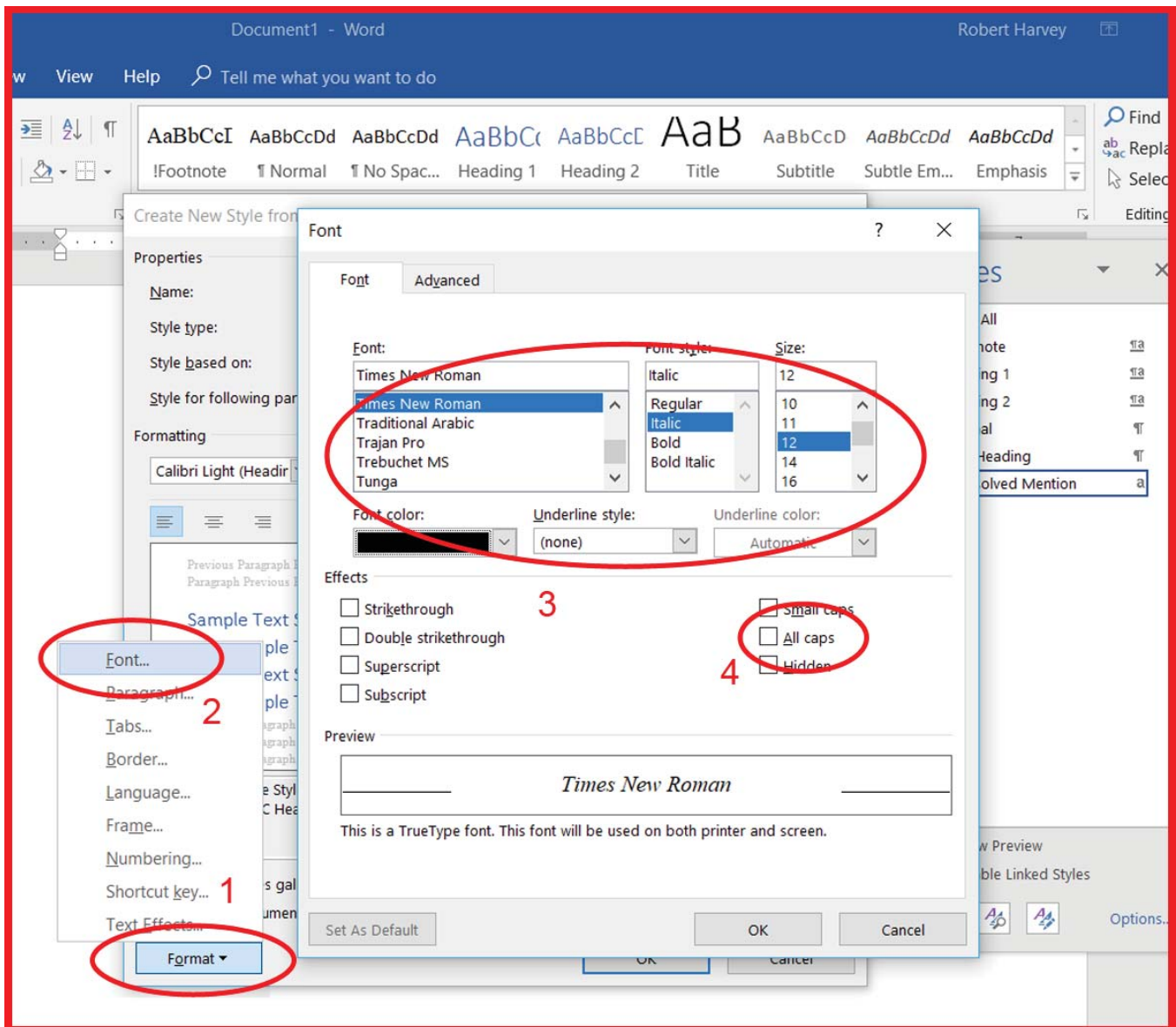


1. Click on **Format**.
2. Click on **Numbering**.
3. In the Numbering and Bullets dialog box, select **None**.

The numbering of all sections in our document (including the first line indent, formatting and font of the number, and any tab between the number and the heading text) will now be governed by **!TOCNumbering**, our powerful new heading *number* style, not by **!TOC1**, which is just a heading *text* style, governing only the text of the heading.

VII. !TOC2 TO !TOC4

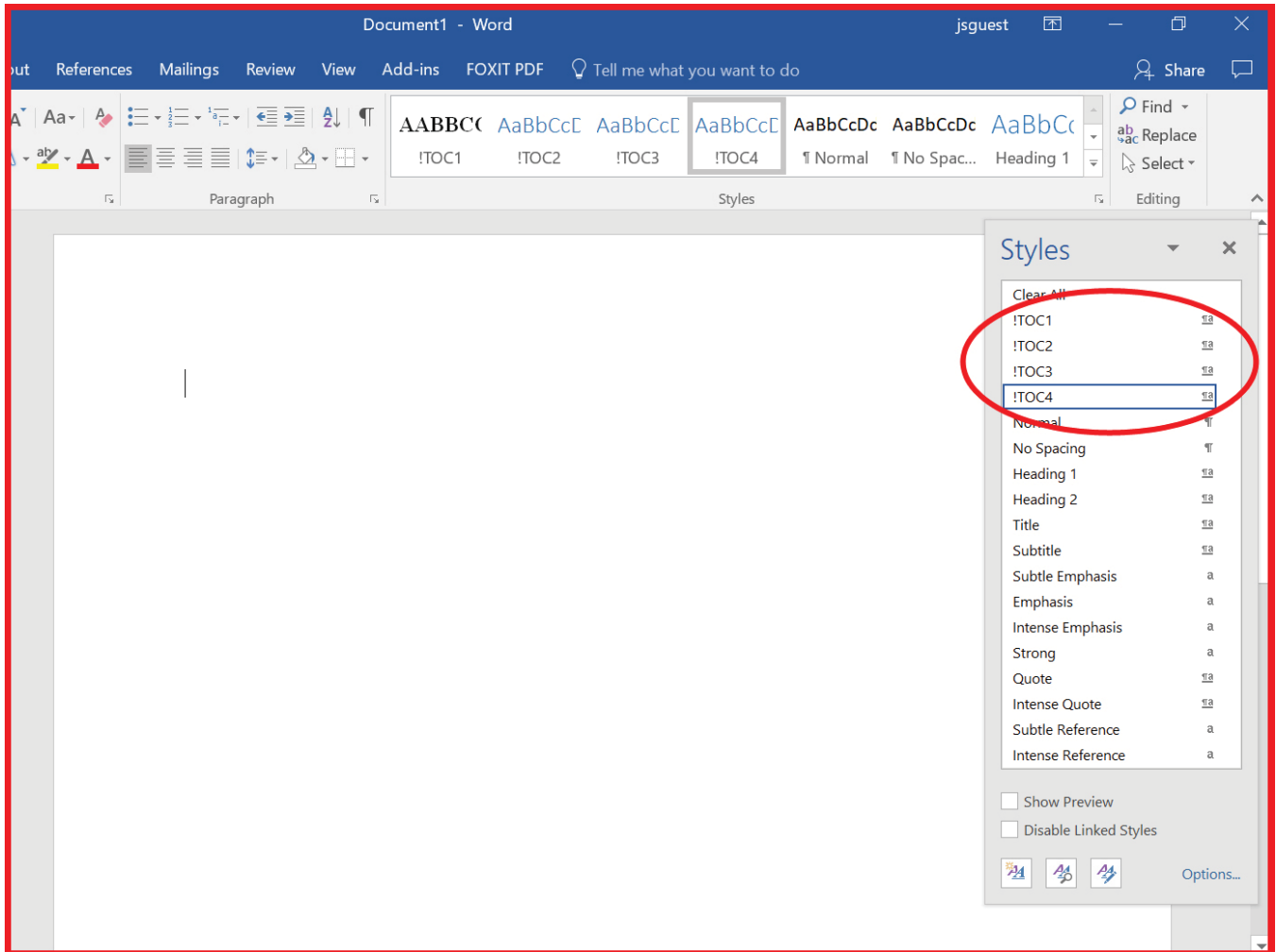
For the most part, the above process works for **!TOC2**, **!TOC3**, and **!TOC4** (basing them on Heading 2, Heading 3, and Heading 4, in that order). One difference in the JSPLLC house style is the font, which for **!TOC2**, **!TOC3**, and



!TOC4 are like this:

1. Click on **Format**.
2. Click on **Font**.
3. Font: **Times New Roman 12 point italic**.
4. Effects: This time **All caps** is not checked.

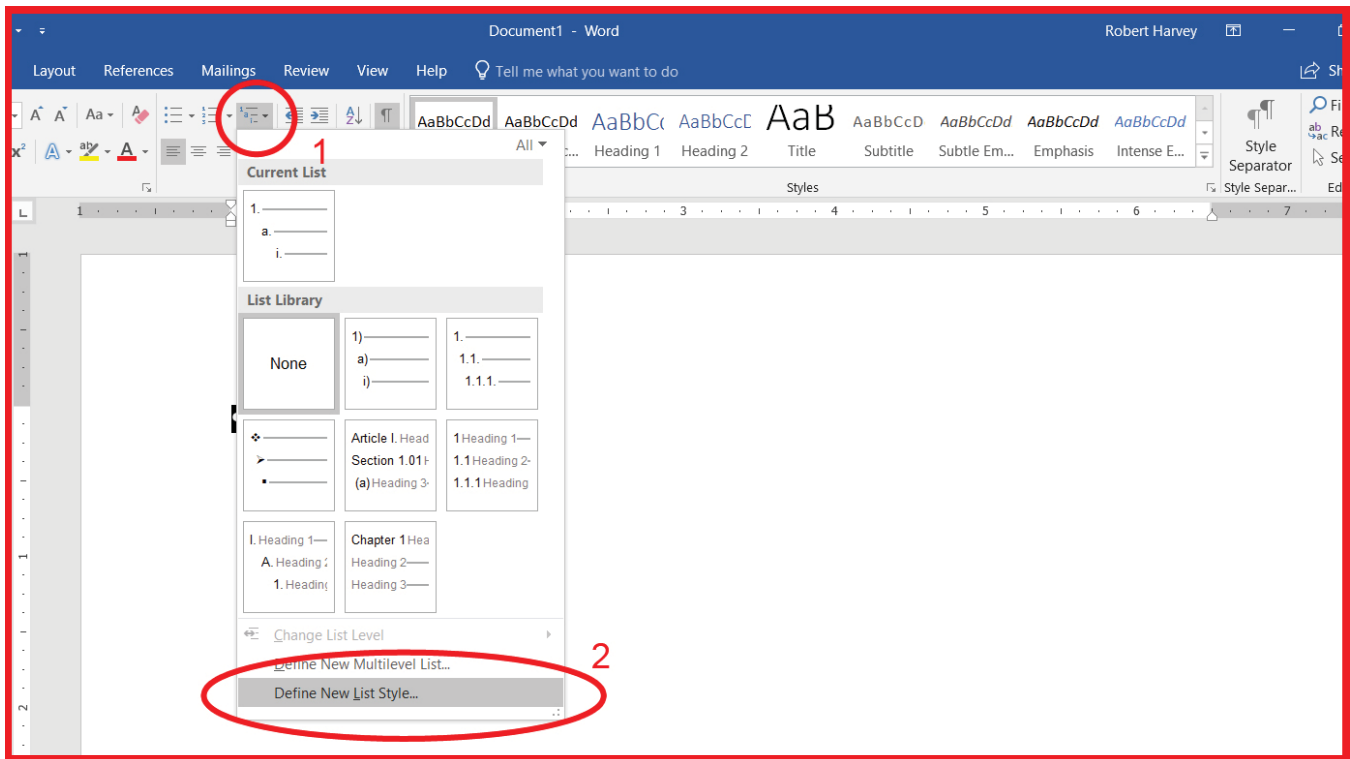
When you are done with all four levels, **!TOC1** to **!TOC4** should now appear in the Styles Pane.



At this point, you must satisfy yourself that you have successfully created four heading styles, consistently named as set forth in the screen shot above, and with the selected numbering style as None. Try applying the four heading styles to existing paragraphs of text. Make sure they look the way you want. You can go back and tinker with the details. You probably will.

VIII. CREATING THE !TOCNUMBERING LIST

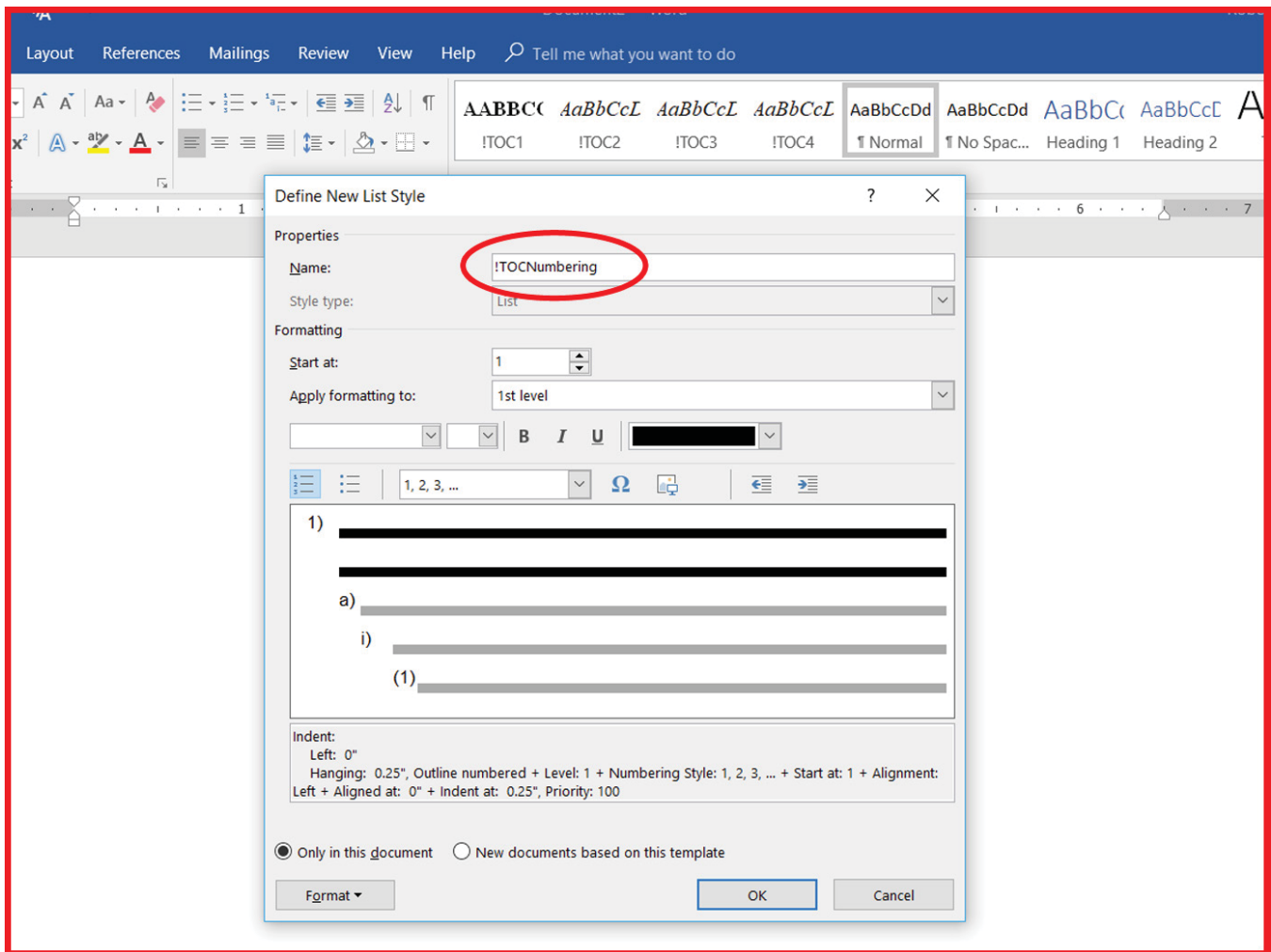
Now we will create a new style that establishes once, for the entire document, the numbering scheme that will control all heading numbers for heading text styled as **!TOC1** to **!TOC4**.



On the Home ribbon:

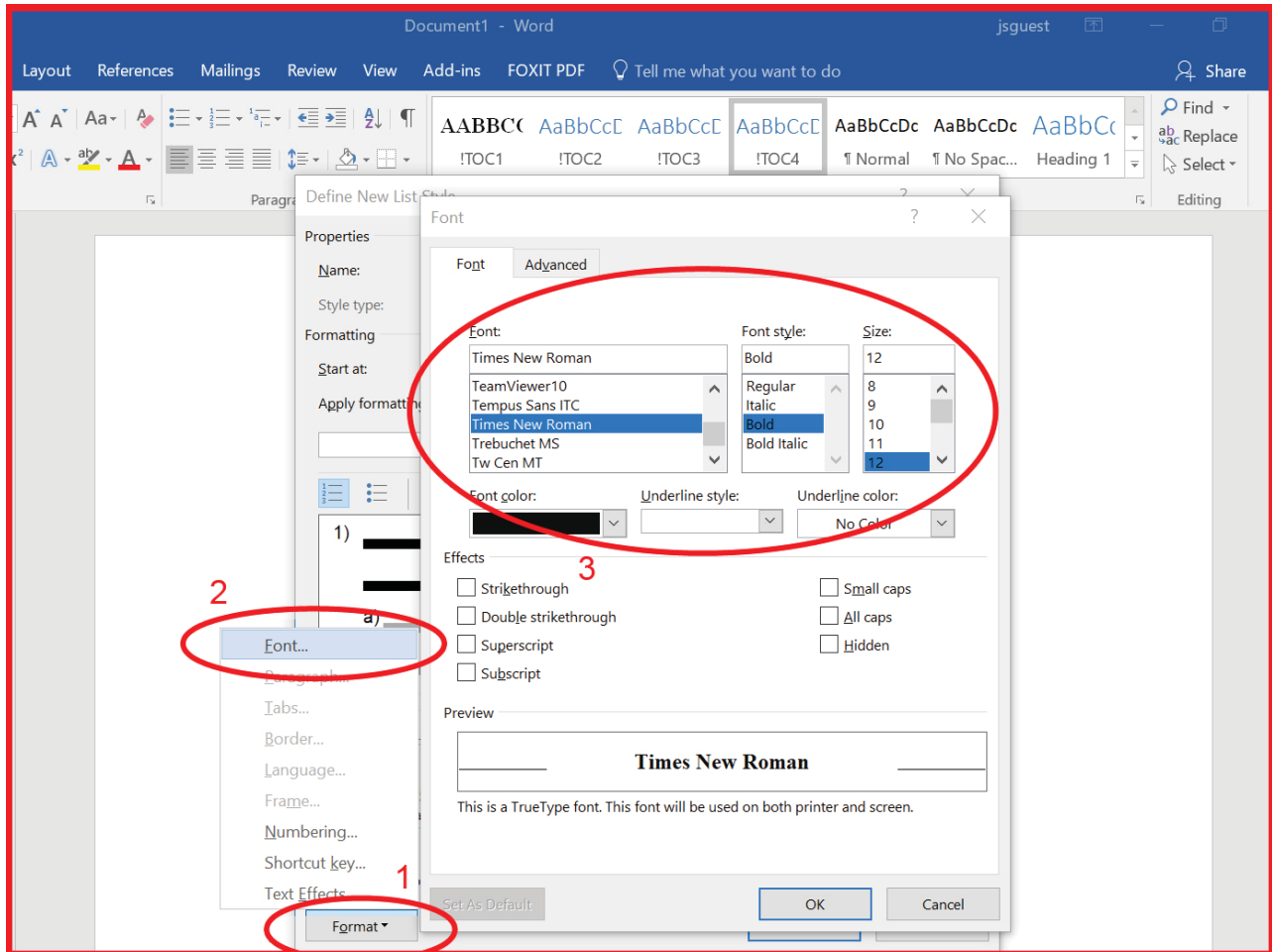
1. Click on the **Multilevel List** button.
2. Click on **Define New List Style**.

The Define New List Style Box will appear.



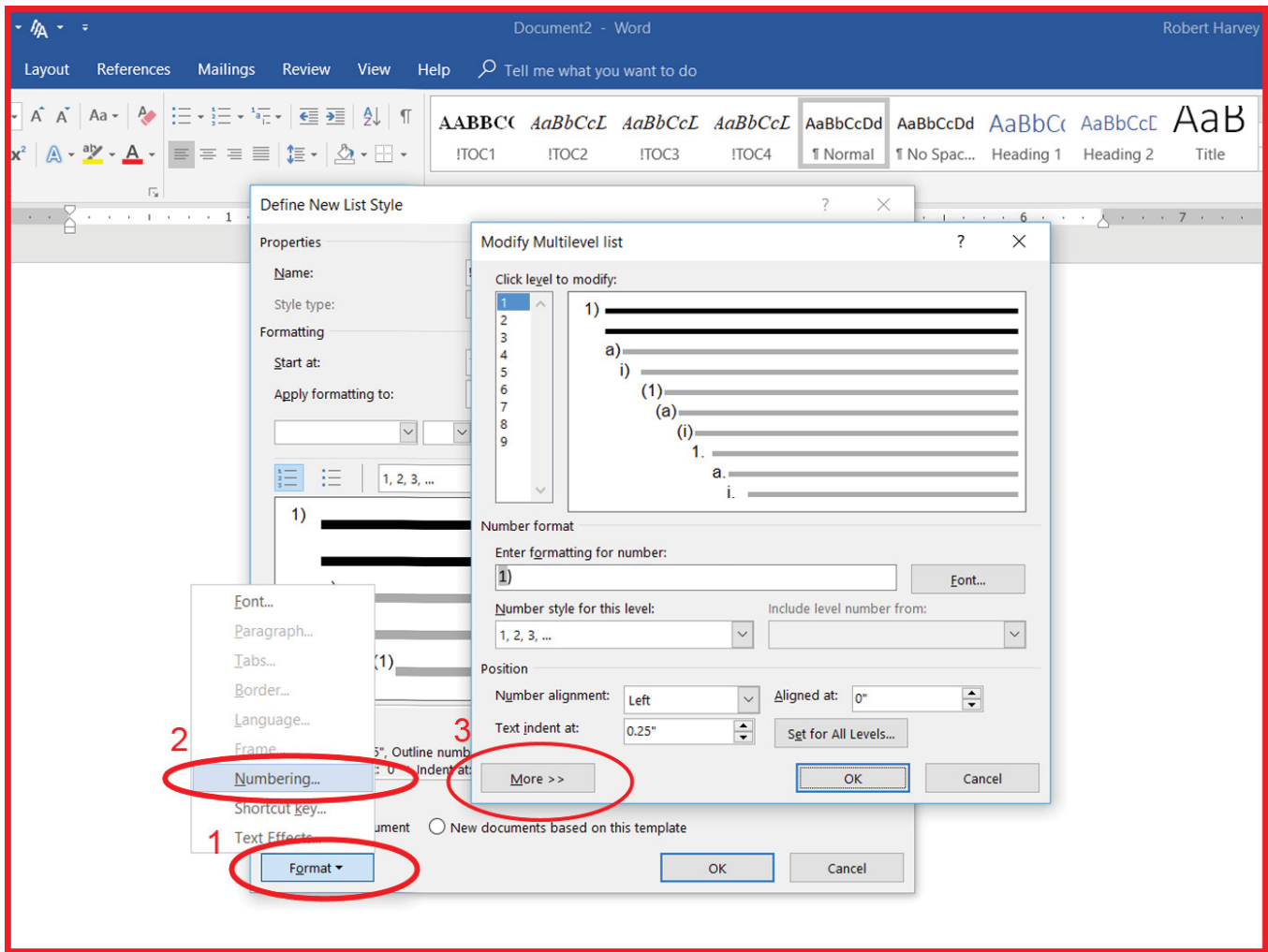
Name the new numbering style !TOCNumbering.

You'll probably save some time and missteps if you choose the basic font for **!TOCNumbering** now, and make any necessary adjustments later as you create each level.



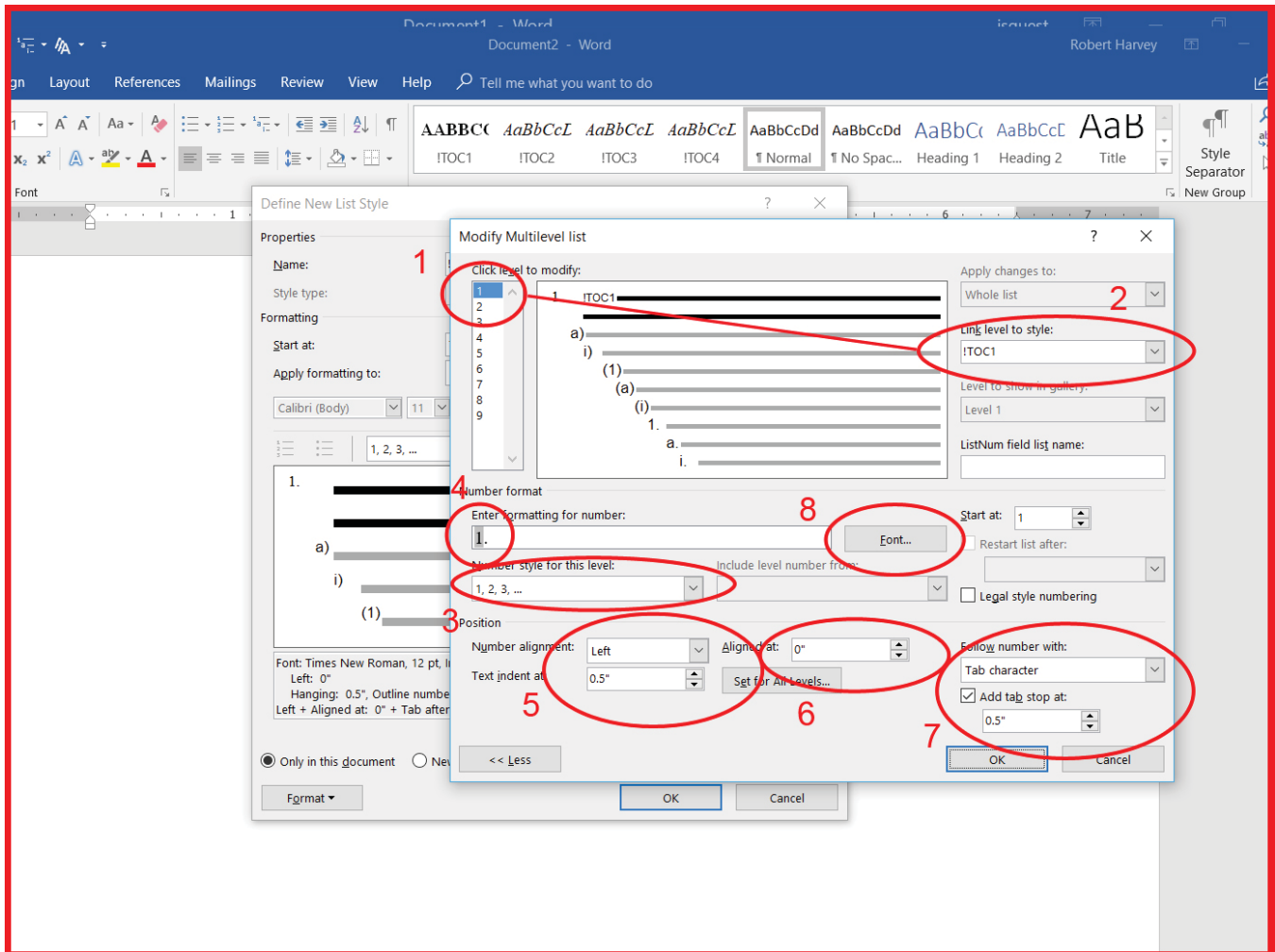
1. Click on **Format**.
2. Click on **Font**.
3. Set the default formatting for the heading numbers any way you like. Again, this is not fundamental to the working of failproof numbering, and you will have a chance to adjust the font later for each level.

Open the extended version of the Format/Numbering dialog box.



1. Click on **Format**.
2. Click on **Numbering**.
3. Click on **More >>**.

The following window will appear. This window is the heart of our entire automatic numbering system, where you will take the most important steps to set it up. Here you will format the heading numbers, choose the font, set the indentation and any following tab that will govern the **ITOC1** style, and then each of the three subordinate levels of heading. (Yes this window refers to a “Multilevel list,” but it’s not the same Multilevel list that appears in the Home ribbon.)

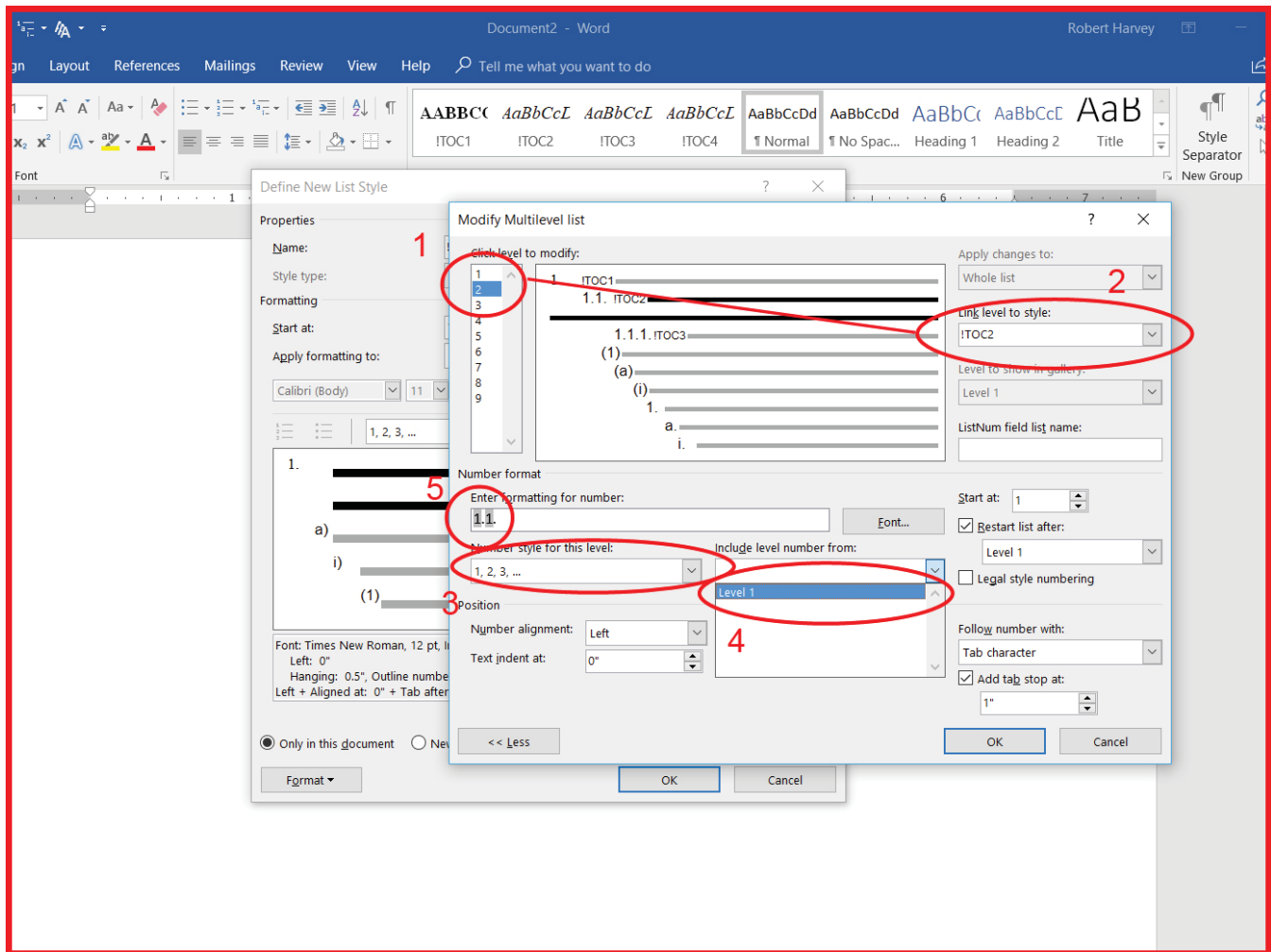


1. The most important thing is the two linked highlights at the top. Select **level 1**.
2. Link it to **ITOC1**, using the dropdown menu.
3. Number style for this level: JSPLLC’s style is Arabic numerals.
4. This is where you can add a prefix like “Section” or a trailing period.
5. This shows the JSPLLC style. You can do what you like.
6. Ditto.
7. Ditto.
8. Clicking on the Font button will lead you to the standard font selections.

IX. !TOCNUMBERING FOR !TOC2

This part looks very much like what you did for !TOC1, just incrementally adjusted for the link to !TOC2, and the changes in indentations and tabs.

The rest of the work in this window for styles !TOC2 to !TOC4 is essentially the same—with one extra, but important, step. That extra step will let you set up legal style numbering (1., 1.1., 1.1.1, 1.1.1.1.), if that's what you want. It's what we want.



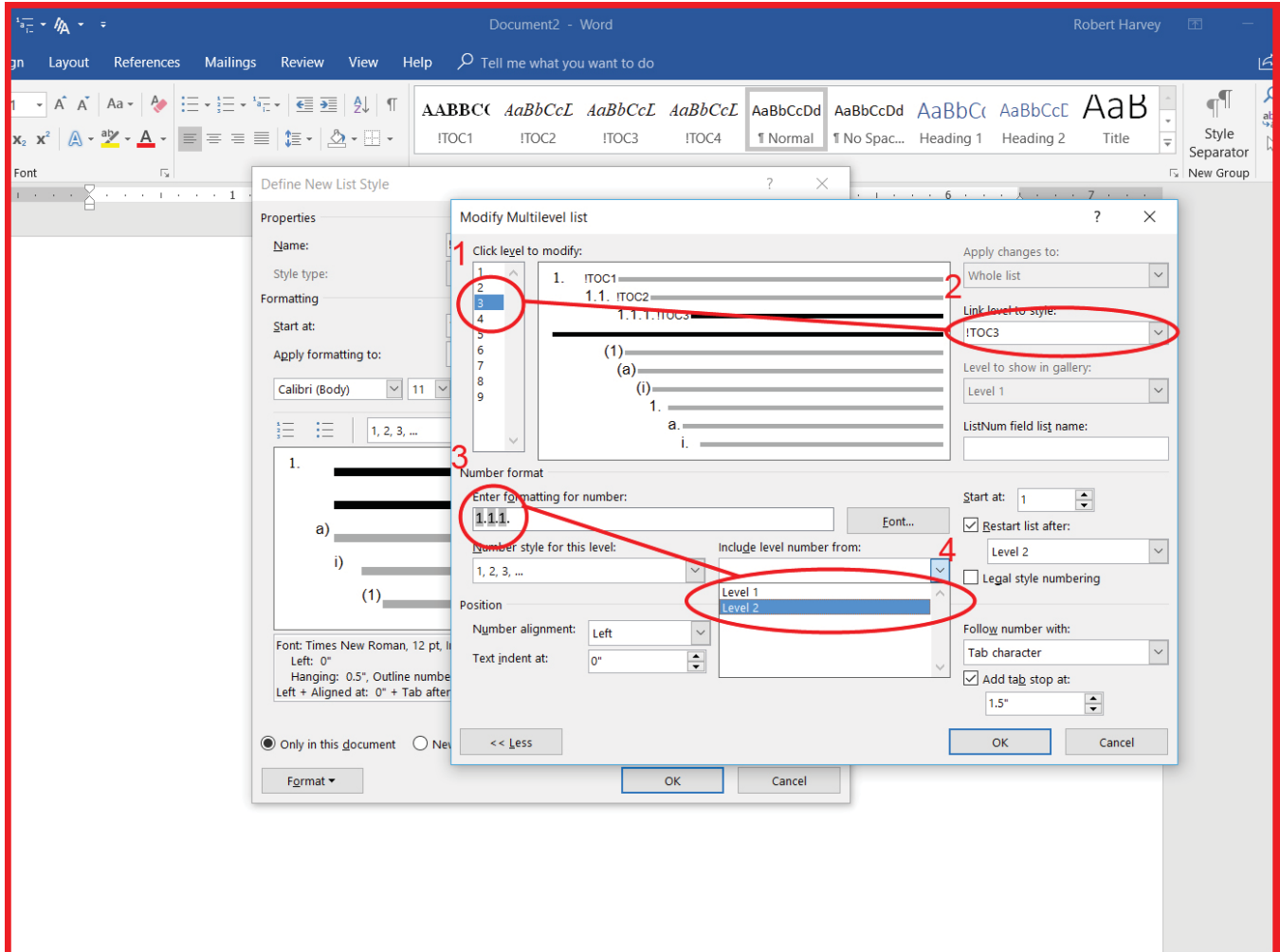
Working within the same dialog box:

1. Change to level 2.
2. Working as before, link level 2 to style !TOC2.
3. As before, select the Number style for this level.
4. Include level number from: **Level 1**.
5. If you want to add something like “Subsection” or a trailing period, this is where to do it. We like trailing periods.

X. !TOC3 AND !TOC4

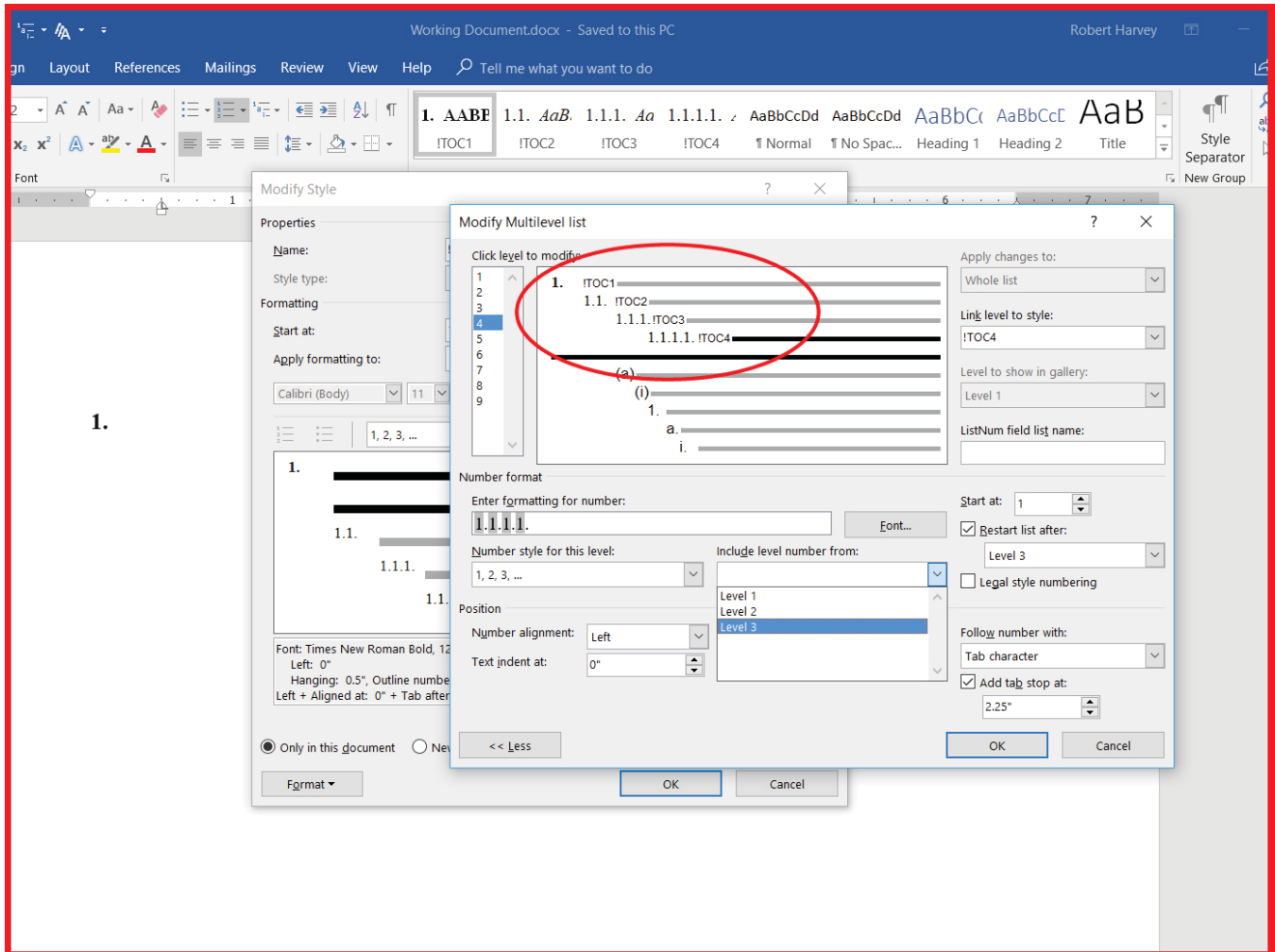
!TOC3 and !TOC4 work pretty much like !TOC2, just one level down in each case. We will spare you most of the highlighting, and just show you the results.

For !TOC3:



1. Link the third level numbering ...
2. ... !TOC3.
3. Enter the formatting for the third level heading ...
4. ... to include the first and second levels.

When you finish setting up **!TOC2** to **!TOC4**, the results should look like this:



You repeat the same process four times, for **!TOC1** to **!TOC4**. When you finish, you should see each level of the **!TOCNumbering** style linked to the four styles of **!TOC1** to **!TOC4**. And that's basically it.

You will probably want to go back and tweak your fonts and tabs and periods and other things. No one does it right the first time. To edit **!TOCNumbering**, click on Home/Multilevel List (Step 1 under Section 8) and look for **!TOCNumbering**. Hover the cursor to see the names of the styles, or just click on the icon that shows the !TOC styles. Then edit as you wish.

XI. THE TAKEAWAY

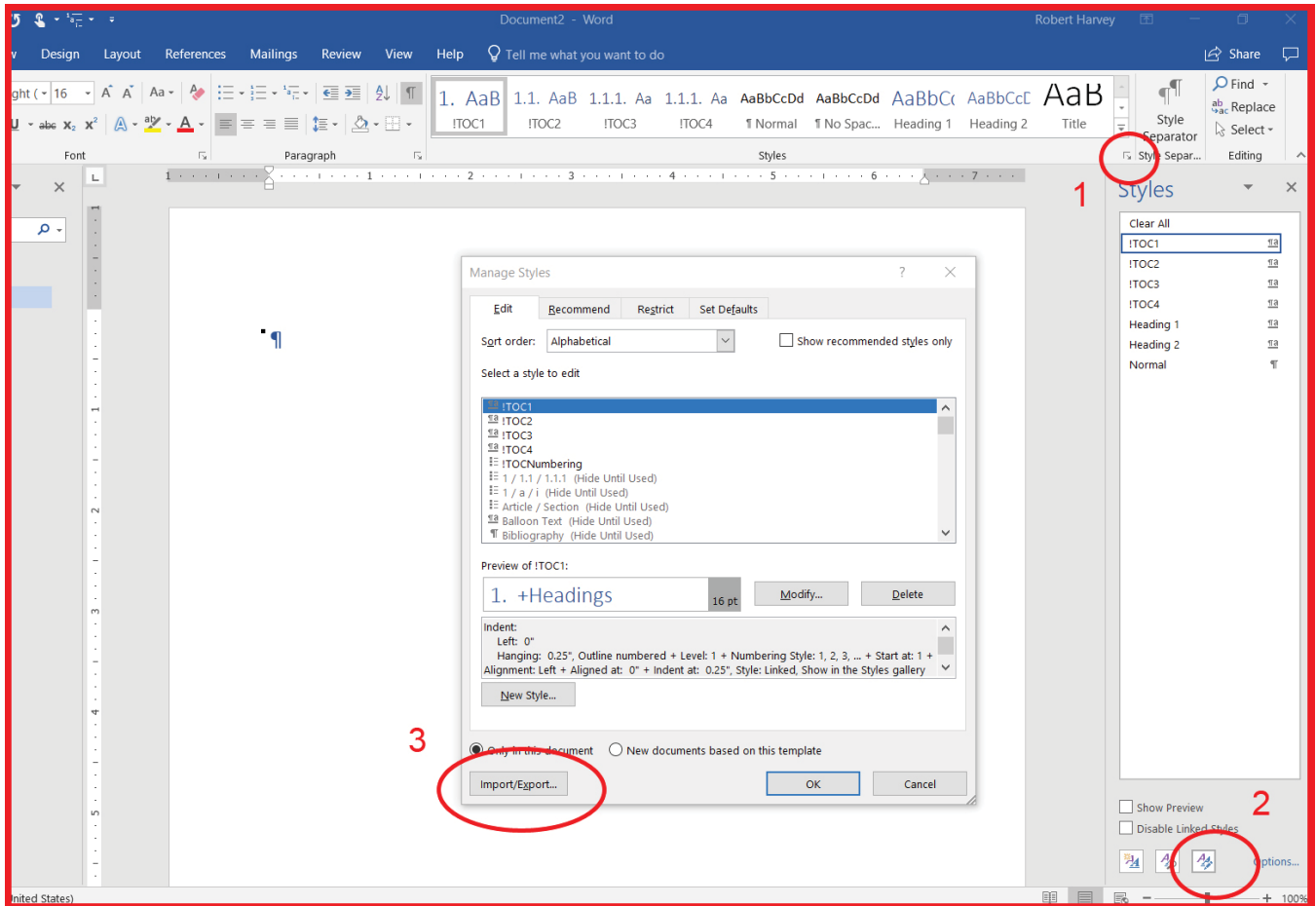
After you set up our automatic numbering system, never use any other numbering style or system again on headings, including **!TOCNumbering**. Use only **!TOC1** to **!TOC4**. Doing anything else will only bring you grief and lousy documents stained with bitter tears, mostly around 4 a.m.

XII. YOU'RE STILL NOT FINISHED

You'll probably want to tinker with Working Document until you are absolutely sure that the !TOC styles look the way you want, including numbers, indents, fonts, and tabs. Experiment a bit until you are satisfied.

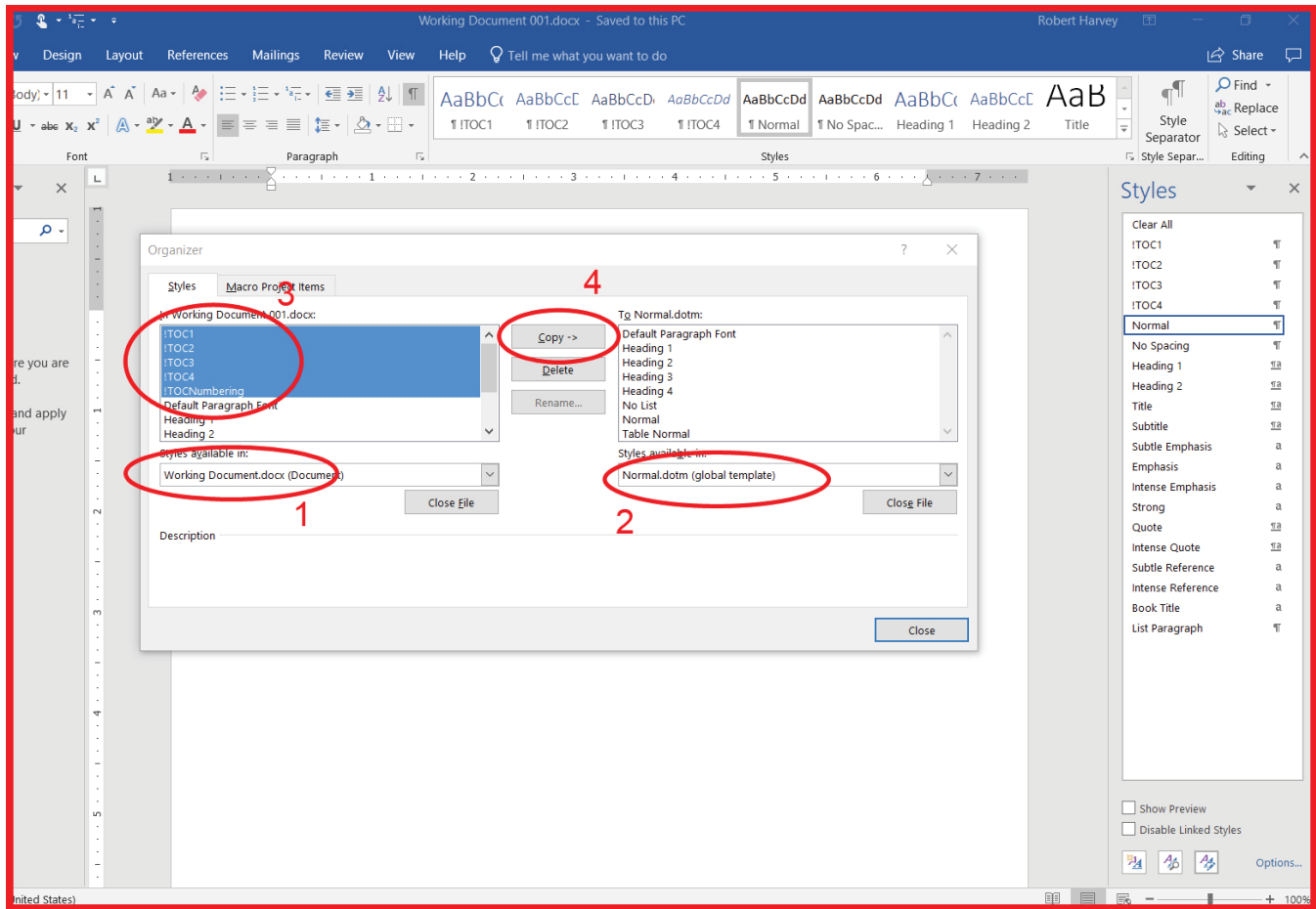
At some point, Working Document will be perfect. But you still need to improve your Normal Template, so all future documents you create from that template will have the benefit of painless automatic section numbering. You would certainly never want to set up automatic section numbering from scratch every time you need it! To update your Normal Template with our great new !TOC styles, you need to copy them from Working Document into your Normal Template. Microsoft Word offers many ways to do that. Here's one.

In Working Document, go to the Styles Organizer:



1. If the Styles Pane is not already open, click on the **little arrow** in the lower right corner of the Styles Gallery.
2. Click on the **Styles Manager** button at the bottom of the Styles Pane.
3. In the **Manage Styles** window, click on **Import/Export**.

The Styles Organizer window will open.



1. A list of the styles in Working Document will appear on the left, including the !TOC styles.
2. The name of the Normal Template file ("Normal.dotm") will appear by default in the right window.
3. Highlight the five !TOC styles in the left window.
4. The Copy button turns into Copy >>. Click on the **Copy>>** button to copy all five !TOC styles from Working Document to the Normal Template.

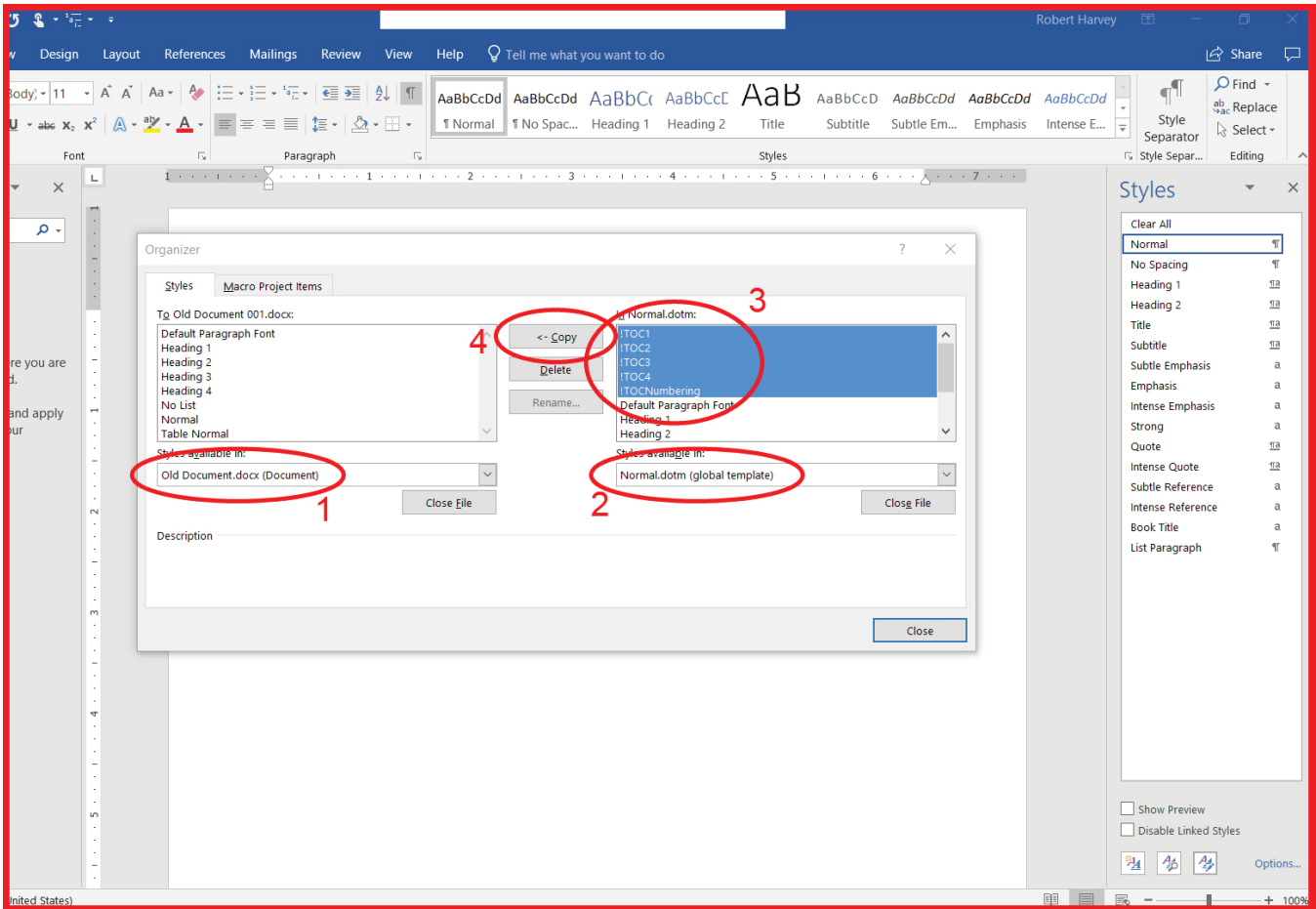
Once you finish those steps, Working Document has done its job. You can retire it. The moment you exit Working Document, the changes to Normal Template will become permanent. From this time forward, any new documents you create using the Normal Template will have the !TOC styles and painless automatic section numbering automatically built into the foundation of the document. We recommend you store a copy of Normal Template in a safe place in case you somehow damage it. This happens.

XIII. UPDATING EXISTING DOCUMENTS

You probably have hundreds of old documents with clunky (or worse) section numbering. You may want to update them to use our great new automatic section numbering system. To do that, you first need to take essentially the same steps you did to copy the !TOC styles from Working document to the Normal Template. Here is one of many possible ways to do that.

Open the old document to be updated (“Old Document”). Using the same clicks as above, go to the Style Organizer dialog box.

This time, it should look something like this:



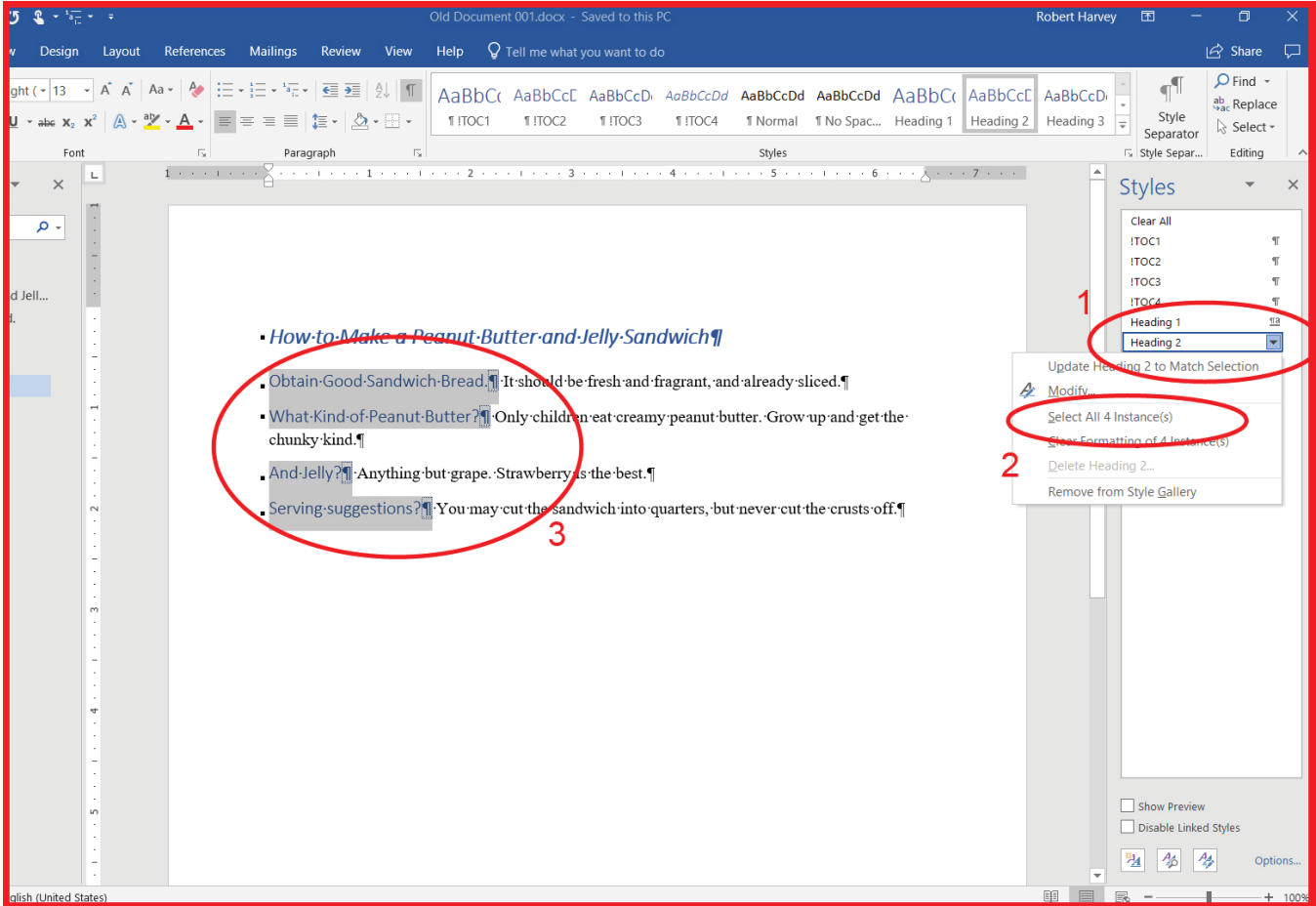
1. Old Document is on the left.
2. The collection of styles in the Normal Template, now proudly including all five !TOC styles, appears on the right.
3. Highlight the five !TOC styles in the right window ...
4. ... and when Copy turns into << **Copy**, click on it.

The five !TOC styles will now all appear in the Old Document window. This means they will be available whenever you edit Old Document. You can now begin the process of updating Old Document to use our new automatic numbering system. No two documents will be alike, but Microsoft Word offers two basic techniques for that task.

We assume (hope) someone has typed Style Separators between each heading and any text that is supposed to follow in the same paragraph. You can see the Style Separators as ¶ symbols in the illustrations below.

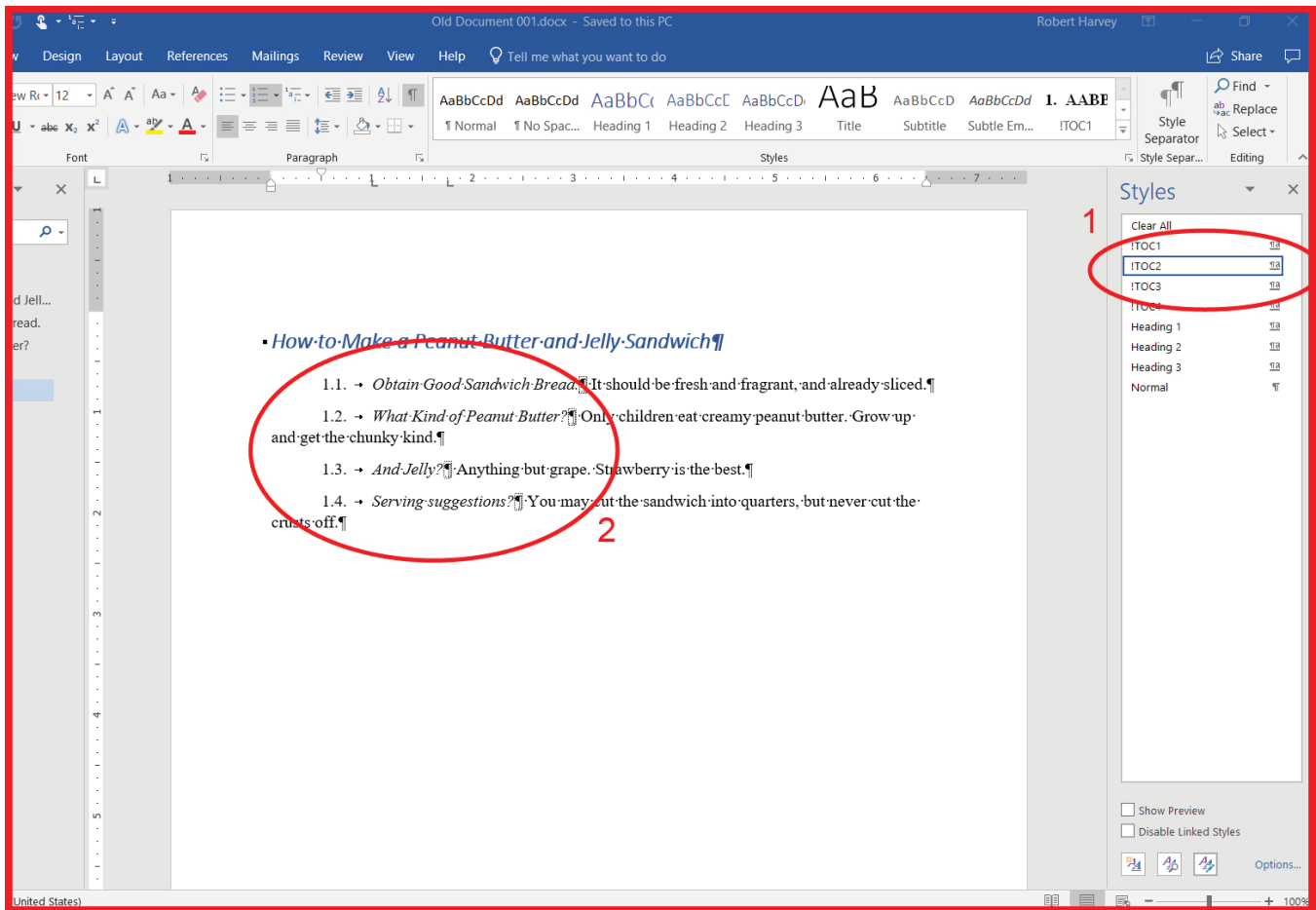
First, click on each old heading, and click on the corresponding new !TOC heading in the Styles Gallery or the Styles Pane. In a long document this can be a slow slog. To speed it up you can in a single process replace all instances of a given style with some other, better, style. Here's how:

In Old Document, open the Styles Pane as shown above. You can see that the old headings are followed by Style Separators, indicated by the ¶ pilcrow/paragraph symbol.



1. RIGHT click on the style to be updated (in this case, Microsoft Word's standard Heading 2).
2. Click on **Select all X Instance(s)**.
3. That will select and highlight all instances of Heading 2.

Then, back in the Styles Pane ...



1. ... click on **ITOC2**, which is the new better style you want to use in place of every occurrence of Heading 2.
2. All highlighted instances of Heading 2 will change to **ITOC2**.

Of course, Old Document will still need some adjustment—often a lot of adjustment. It’s a good project for an administrative assistant or a word processing department rather than an attorney.

XIV. THE BIG FINALE

There isn’t one, really.

Our system for automatic section numbering just works so much better than the tools that Microsoft Word provides in the first instance that it makes us both a little bitter that no one ever forced us to figure out this system earlier. Or perhaps because the built-in numbering stinks so grievously.

Our system does have one quirk: each section heading must consist of both numbering and text. If, for a particular section, you want to use just section numbering with no heading text, then you need to add a blank space as the (fake) text of your heading, before you apply the !TOC style and the Style Separator.

We tried to develop a similar system for footnote numbering to achieve similar flexibility, reliability, and grace, but Microsoft Word has a bug in its default footnote numbering style that makes that strategy impossible. If anyone from Microsoft wants to find out what the bug is, they can contact us. In the meantime, we have to live with the default footnote numbering system of Microsoft Word without improving it. 🦋