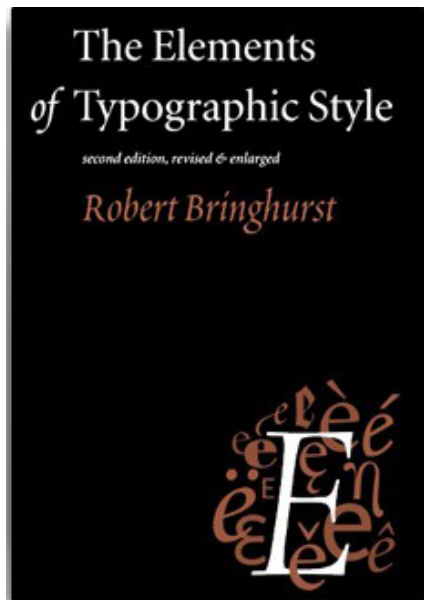


# Music of Headers

## In the beginning was the Book

In 2006, I bought a wonderful book “The Elements of Typographic Style” by Robert Bringhurst, and it became my desktop book for a long time.

One of the deep thoughts of that book: an unexpected comparison of text and music — that right working with chops, according to the author, helps to breathe life into the page layout. Here is this big quote:



« For the same reason that the tempo must not change arbitrarily in music, leading must not change arbitrarily in type.

...

Heading, subheads, block quotations, footnotes, illustrations and other intrusions into text create syncopations and variations against the base rhythm of regularly lined lines. These variations can and should add life to the page, but the main text should also return after each variation precisely on beat and in phase. This means that the total amount of vertical space consumed by each departure from main text should be an even multiple of the basic leading. If the main text runs 11/13, intrusions to the text should equal some multiple of 13 points: 26, 39, 52, 65, 78, 91, 104 and so on.

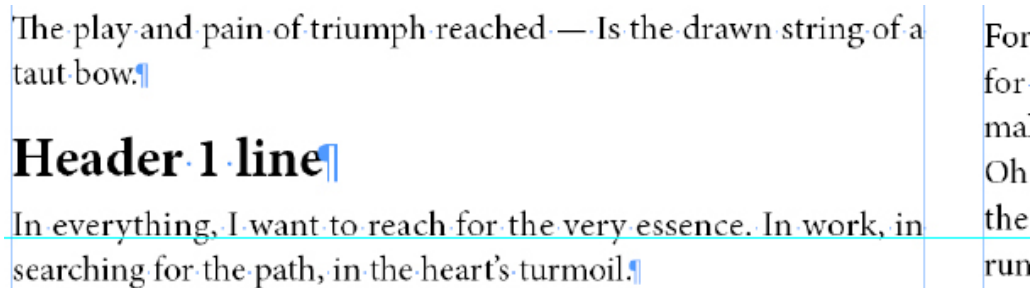
The arguments of the famous master of typography became an occasion for reflection, as a result of which this script was slowly created. This is its third release, and it is now available in English.

## Initial conditions

There are not many of them: only text should be aligned to the grid, headers — without binding. The header is always one paragraph, no matter how many lines it contains. It is assumed that the base grid of the text frame is used, not the global grid.

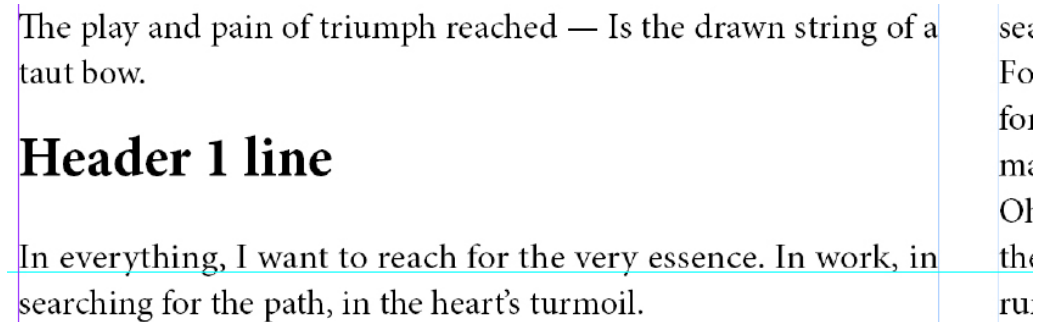
## Problem: changing the header chops

Here is a picture — text without binding to the grid, the header has top space 8 pt and bottom one 4 pt.

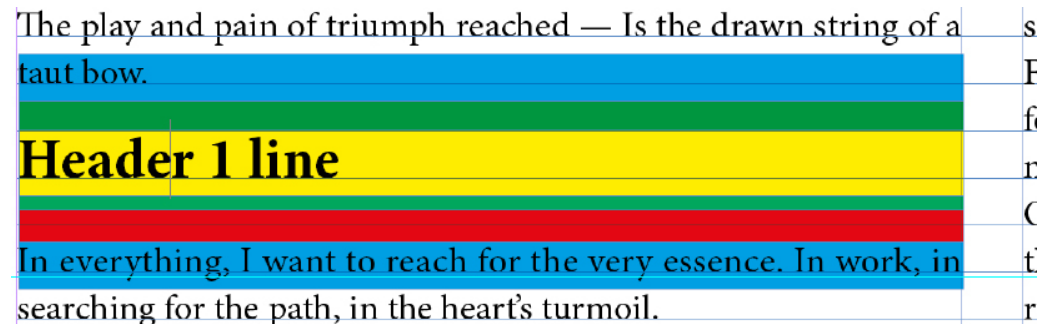


The proportions of the chops are maintained, but in the two-column it is clear that the text of the right column is higher than the text in the left. And such a mismatch of the lines of neighboring lines is the reason that the entire page looks sloppy.

What happens if to enable text alignment with the same settings? We will get this result:



Rows of adjacent columns on the same line, this is great. But it is also obvious that the proportions of the upper and lower margins are far from 8:4. Here is an explanation in color why this happens

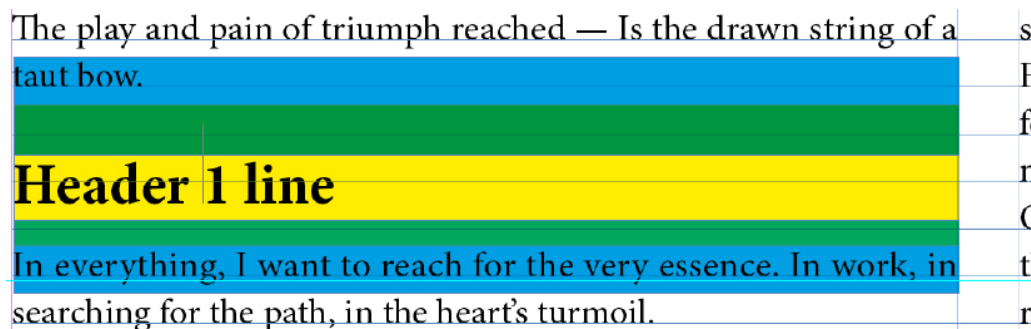


The lines of text linked to the grid are marked in blue. The yellow color is the header. It is a coincidence that it stands on the base grid line. The headers' before and after spaces are marked in green. First is 8 pt, second is 4 pt.

The upper space is always the right one, it rests on a line of text, and then the header is placed. But with the lower one everything is different. There is no line of text immediately after it, since the line is drawn to the next line of the base grid. The red color shows the space that has appeared between the bottom chunk and the line of text. The top picture shows the same header, but without the color. It's terrible — expecting to have margins in the ratio of 8:4 really get something close to 5:8.

And that's not all. When the header is of the same style, but the number of lines in it is different, then this addition marked in red will be different for different numbers of lines.

The solution seems obvious: divide this red area in the desired proportion, for example, in 8:4, and add the resulting fractions to the margins. Then the header will move down, and there will be no red area. Like this:



## Understanding — how it should be

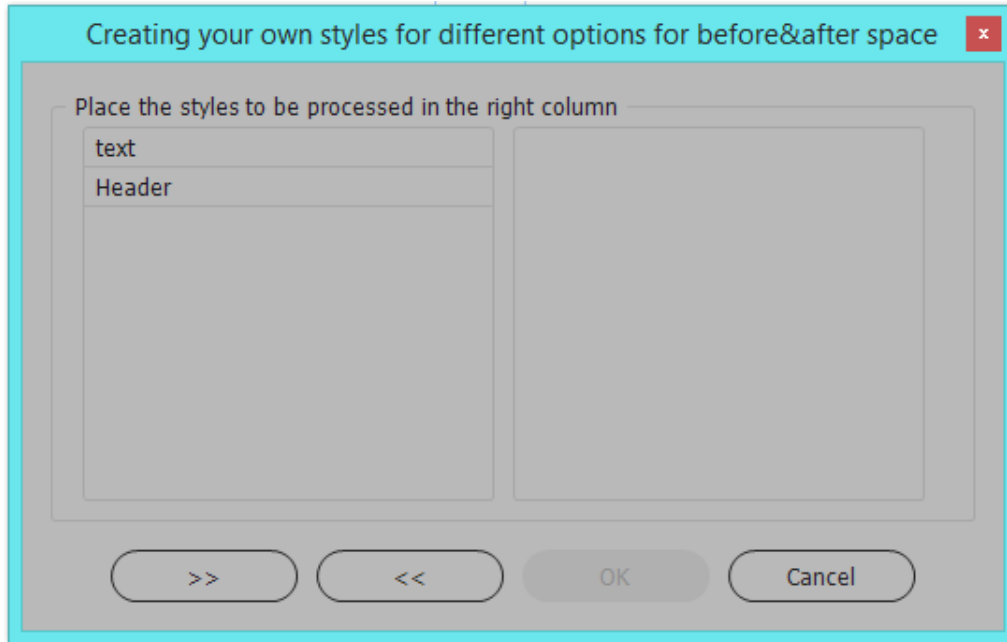
In the first versions of this script, I did this: I divided the red space and increased the green space by the received fractions. The result was flawless when the header is inside the text. But when it was at the top of the page, the harmony disappeared. I tried different solutions, in particular there was an option to uniquely determine the lower space, and recalculate the upper one. This solution is not elegant, and there were some other problems with it. I quickly abandoned it and was looking for another one.

As a result, it turned out that the best solution, both shifting the header when it is inside the strip, and preserving the harmony of the chops when the header is at the top: leave the top/bottom space unchanged, and change only one parameter of the paragraph style settings — the base line of the header.

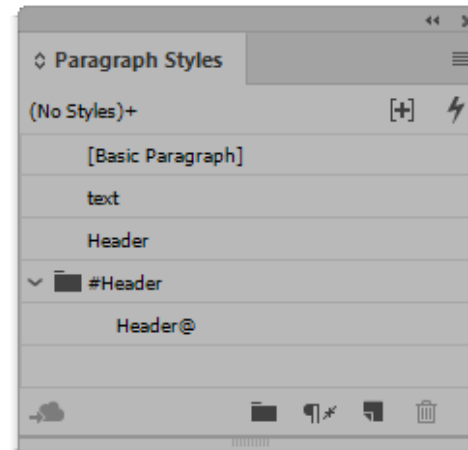
One parameter solves everything! It is enough just to calculate it and save it in paragraph-style settings. Obviously, this offset must be calculated separately for each variant of the number of rows in the header. Therefore, it is necessary to be able to make groups of headers for different numbers of rows in them.

## Header style groups

There is such a possibility in the program, this is the button **Make header style groups**. When you click on it, this window will appear:



There are two paragraph styles in the work: **text** and **Header**. You need to select the **Header** on the left and move it to the right window with the **>>** button. As soon as the style appears in the right panel, the **OK** button becomes active. After clicking on it, a group **#Header** will appear in the paragraph styles panel. There is only one paragraph style **Header@** in this group.



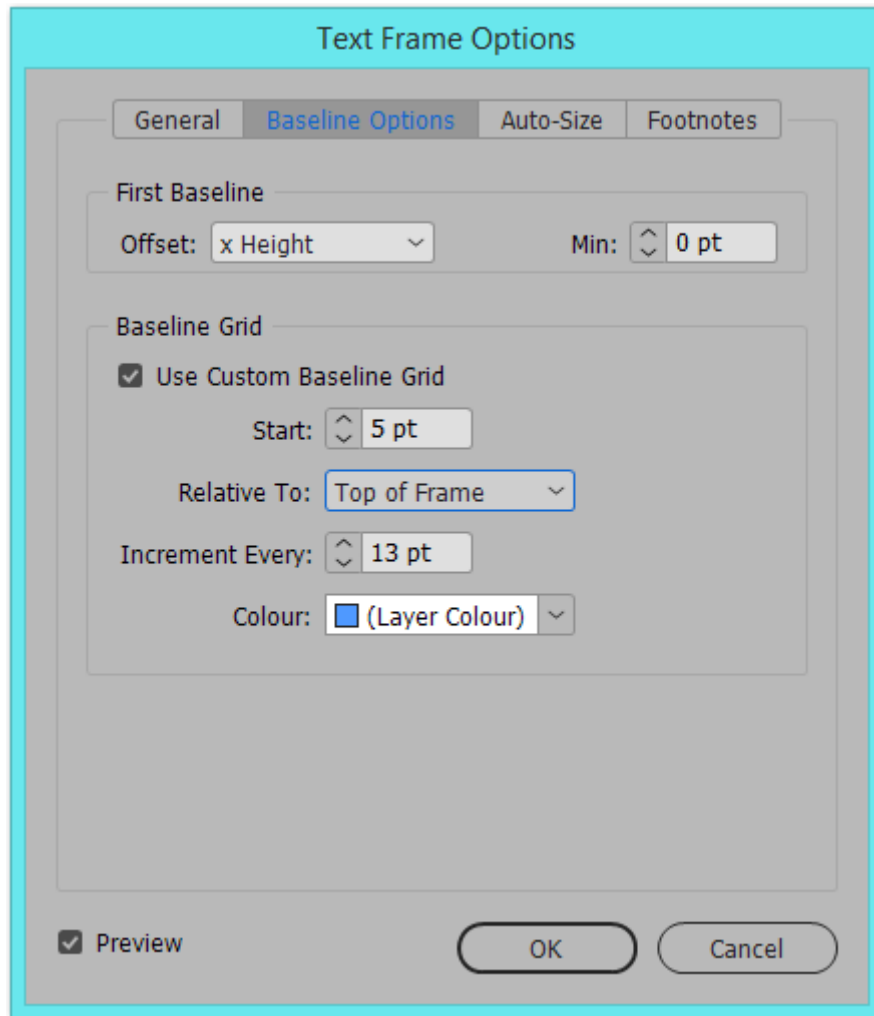
If you open this window again now, it will have the **#Header** group on the right, and there will be no **Header** style on the left.

## About align to the base grid

The InDesign inherited from its predecessors the work with the grid in the document space, and added its own option — setting the grid in a text frame. First mode—it is **Preferences**, panel **Grids**. The second option, which is much more convenient, is to configure the grid at the level of the text frame: **Object > Text Frame Options... (Ctrl+B) > Baseline options**.

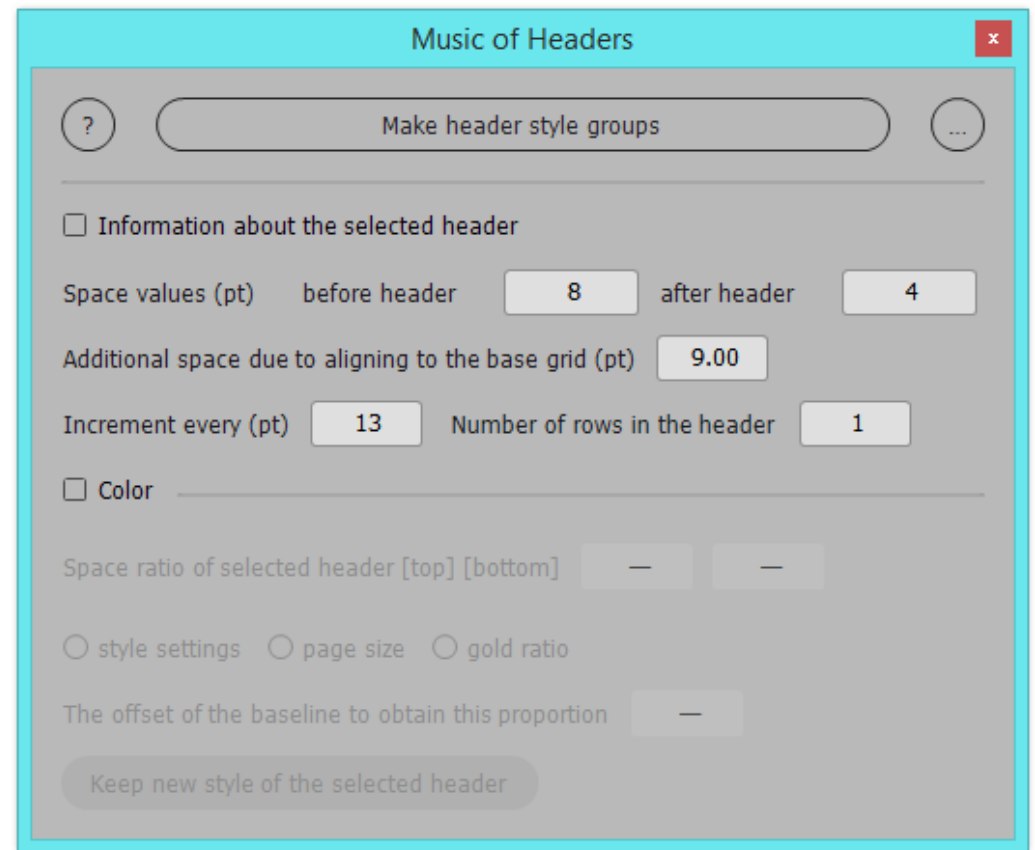
Here need to set checkbox **Use Custom Baseline Grid** and set **Increment Every** as leading of main text. I always choose **Baseline Grid Relative To: Top of Frame, First Baseline Offset: xHeight**. For the duration of the program,

the vertical dimensions are measured in points, and it is necessary to choose such **Baseline Grid Start** value that the lowercase letters of the first line touch the upper border of the frame.



## The header is decorated in the usual style

Let's run the **HarmonySpaceTop&BottomHeader.jsx**. Only the checkbox **Information about the selected header** is available. Put the cursor in the header, and click on this checkbox. The information about header will be displayed:



The name of the paragraph style used for the selected header is saved in tooltip for this checkbox.

Values of before/after spaces, **Increment every** it is equal leading. An **Additional space due to the basegrid** — it is red colored space, what is shown on page 2.

You can see the color design as it is on page 2 and 3 by clicking on the **Color** checkbox.

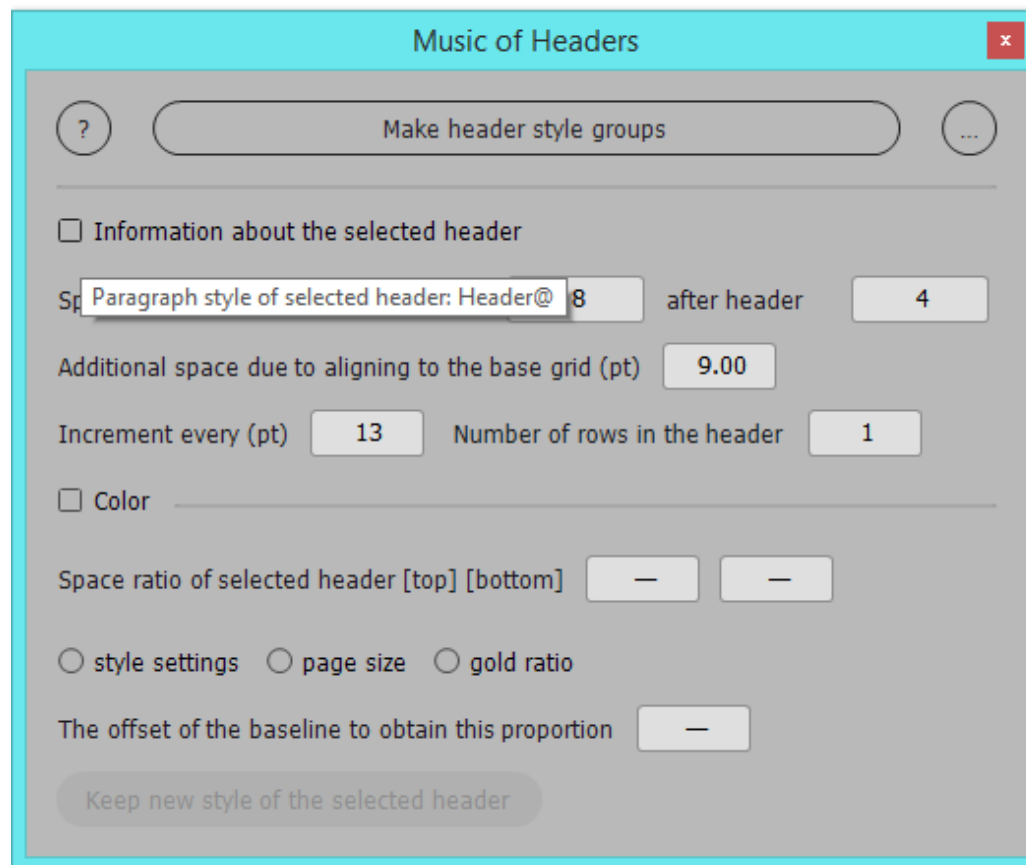
## The style from the header group is used

When you apply the paragraph style of the group for this header, and click on the **Information about the selected header** checkbox again, the window view will change (the picture on the right).

The tooltip shows the name of the style from the group, and three options for calculating the chops are available:

- by the proportions of paragraph style top/bottom spaces;
- proportional to the size of the page;
- according to the proportion of the golden ratio.

Selecting any radio button will change the position of the header, the values of the current ratio will be displayed in the field of **Space ratio of selected header**.



You can use the **Color** checkbox to display the calculation results in color. And in fact, nothing will change in the paragraph style settings except for the shift of the baseline. The current value of this shift for the selected radio button option is displayed in the field **The offset of the baseline to obtain this proportion**.

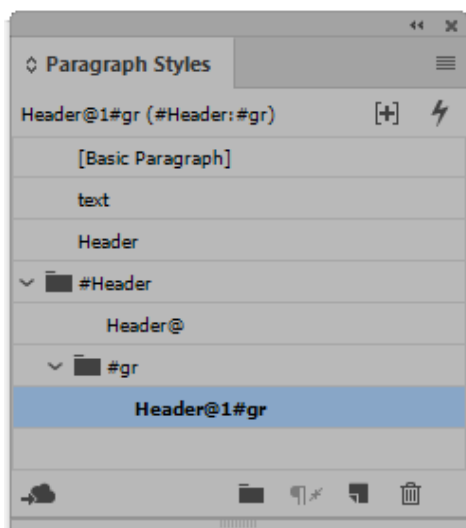
As a radiobutton is selected, button **Keep new style of the selected header** become active.



Now you need to save these values and apply them to similar headers with the same number of lines.

## Let's change top/bottom spaces for headers

After the header design option is selected, you need to click on the **Keep new style of the selected header** button. As a result, a group will be created in the style group, the name of which reflects the selected radio button, and a new paragraph style will be saved in this group.



In this example, the **Header** style for single-line headers was processed by the **golden ratio** radiobutton. A **#gr** style group has been created, and a style named **Header@1#gr** is placed in it.

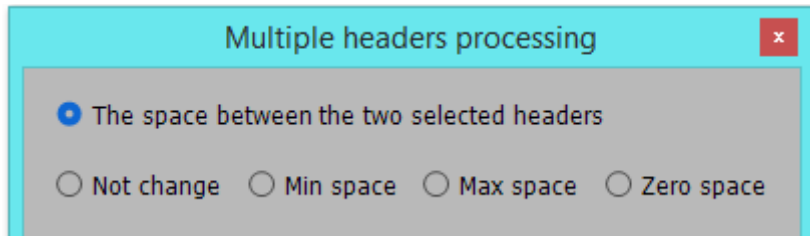
Other variants of such groups are: **#st** for proportions from the style and **#pg** — proportions according to the page size.

## Multiple headers one after the other

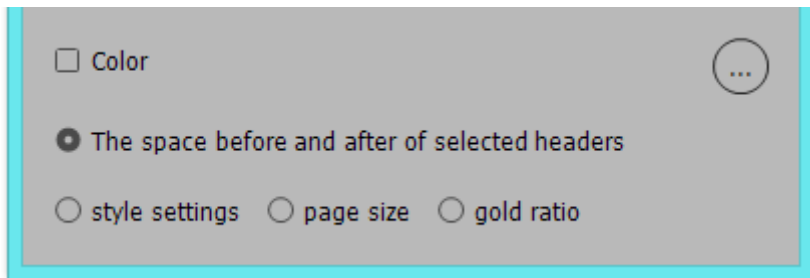
Everything explained in detail above is for the case when there is only one header in the text stream. But there are often cases when two headers go one after the other. If the epigraph is made without binding to the base grid, then for this script it will also be considered a header.

And then there is such a design problem: usually each of the headers has indents at the top and bottom. So when the headings are one after the other, what about these indents? InDesign does not offer any options, and the distance between two consecutive headers will be equal to the sum of the margins at the bottom and at the top. In the well-known Ventura Publisher program, for such a case, it was possible to choose the larger of the indents as the distance between the titles.

In the script **HeadersSpacing.jsx** for working with multiple headers, a similar option is implemented for selecting chops between two headers.



The same script controls the proportion of chops above and below the selected headers, the choice of the proportion option is available when the radiobutton **The space before and after of selected headers** is active:



**Color** checkbox will show the distributed space, this program does not provide for displaying the problem area in red, the script shows an option for recalculating margins.

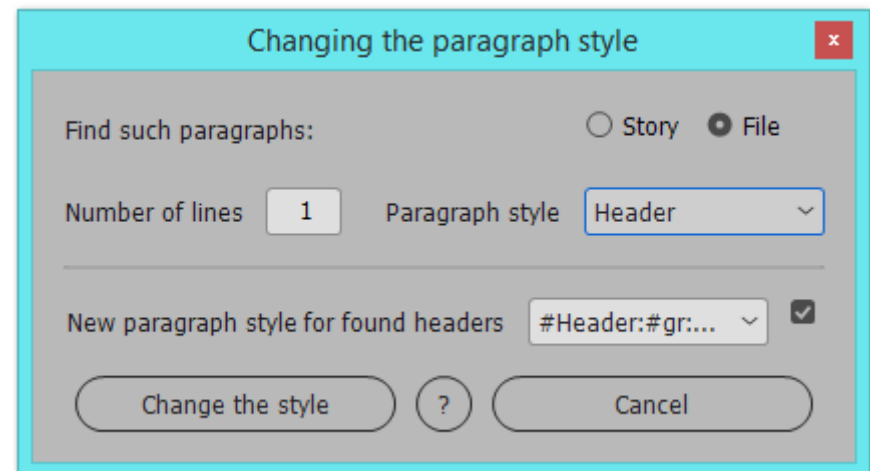
## Search for headers with a certain number of lines

So, we have a group of headings, and in them there are options for a different number of lines, a different method for calculating the shift of the baseline of the header — ac-

ording to the paragraph style settings, according to the page size, according to the golden ratio.

Now the task is to find the headers designed with the original paragraph style, for example, **Header**, and, depending on the number of lines in them, design them with one of these prepared paragraph styles. How to find headers with a certain number of lines?

This task is solved by the **SpecialChangeParaStyle.jsx**. The required paragraph style is determined, the number of consecutive lines decorated with this style, and the paragraph style for the new design of the found lines. Only such cases are taken into account when there is a text aligned to the base grid before and after the sample.





The clarification *the number of consecutive lines decorated with this style* is not accidental: to preserve the proportions found, the height of the title in three lines and the height of three consecutive single-line titles should be the same if they are decorated with the same paragraph style.

Therefore, the program should not only change the paragraph style, but also check the number of paragraphs found, and if there are several of them, then make zero all internal upper and lower indents. And the script does this successfully.

## **Transferring the created styles to another file**

This question may appear if we have a Book in our work, and these groups of styles are only in one file.

The script **Collect Groups&Styles.jsx** is for transfer a group of paragraph styles to another file. The order of work is as follows: the user creates a text frame on the desktop, assigns a paragraph style to its cursor, on the basis of which a group of styles was created, and after running this script, all styles from this group will be in this frame.

Now it is enough to transfer this frame to another document, and both the group and its styles will appear there.

This procedure should be repeated for each style on the basis of which the group was created.

## **Result**

After many years of searching, a program has been written that allows you to always have top/bottom spaces of the right proportion in the headers in the text aligned on the grid, and not such as will happen by chance. Yes, the absolute values of paragraph margins for one-, two -, three-line headings will not match. But their proportions will be preserved, the design rhythm of the text lines will be kept. The music of the text headers will be flawless. How it should be according to the book “The Elements of Typographic Style” by Robert Bringhurst.

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