Note: For simplicity, this project uses plain TEX compiled using the LuaTEX engine.

Here is a typeset paragraph

For example, when TEX typesets a paragraph of text and breaks it into a series of lines, it considers the paragraph's text as a sequence of boxes and uses the dimensions of those character boxes to find the best linebreaks. Each line of the paragraph is itself a box (containing other boxes—e.g., characters) and the typeset paragraph lines (boxes) are stacked vertically to produce the paragraph. Eventually, the largest box of all is produced: the typeset page. Clearly, this is a very simplified picture because you also need the ability to arbitrarily position those boxes and TeX does this using so-called glue. Knuth commented (page 70 of The TeXbook) that "glue" probably should have been referred to as "spring" but the term glue was adopted early on and, pardon the pun, stuck.

Here is the same paragraph processed by a LuaTeX callback

For example, when $\Pi_{\mathbf{z}}$ typesets a paragraph of text and breaks it into a series of lines, it considers the paragraph's text as a sequence of boxes and uses the dimensions of those character boxes to find the best linebreaks. Each line of the paragraph is itself a box (containing other boxes—e.g., characters) and the typeset paragraph lines (boxes) are stacked verifically to produce the paragraph. Eventually, the largest box of all is produced: the typeset page. Clearly, this is a very simplified picture because you also need the ability to arbitrarily, position those boxes and $\Pi_{\mathbf{z}}$ does this using so-called glue. Knoth commented (page 70 of the $\Pi_{\mathbf{z}}$ that "glue" probably should have been referred to as "spring" but the term glue was adopted early on and, pardon the pun, stuck.