

# Using Chivo fonts with LaTeX\*

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## Abstract

This package provides the necessary files to use the Chivo fonts with LaTeX. Chivo is a set of fourteen fonts provided by Héctor Gatti & Omnibus-Type Team under the Open Font License (OFL).

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# 1 Introduction

Chivo<sup>1</sup> is a set of fourteen fonts created by Héctor Gatti & Omnibus-Type Team and provided by Omnibus-Type under the SIL Open Font License, Version 1.1. From the web page:

“Chivo (‘goat’ in Spanish) is the first Omnibus-Type neo-grotesque typeface family. It has 7 weight variants, plus matching italics. Its solidness and balanced strokes give Chivo both elegance and practicality. Chivo Regular works perfectly in long-reading texts, while Chivo Black is ideal for headlines, banners and highlights. Developed by Héctor Gatti, this is an indispensable ally for any designer.”

The fonts were obtained from Omni-Type web page<sup>2</sup>. (v1.007, 14 fonts, 843 glyphs each).

# 2 Installation

I suggest you use MikTeX or TeXlive and wait until the fonts are distributed for your TeX installation via their package manager.

# 3 Usage

The fonts can be used with traditional (pdf)TeX engine and newer XeTeX and LuaTeX engines which can access OTF fonts directly. They are described below. In general, this bundle tries not to be smart and loads only `koptions.sty`, `mweights.sty`, `fontaxes.sty` or `fontspec.sty`, depending on the used engine. As the result, some work must be done by the user.

## 3.1 Engine independent options

A package `Chivo.sty` is provided which can be loaded in the preamble as usual:

```
\usepackage{Chivo}
```

Loading the package changes the document’s sans serif font to Chivo. The package offers some options.

The default font series is set with one of `thin`, `light`, `regular` or `medium` – `regular` is the default. It can be changed like this:

```
\usepackage [medium]{Chivo}
```

The default bold series is set with one of `bold`, `extrabold` or `black` – `bold` is the default.

The alignment and style for the figures of the document are set by the options `lining` or `oldstyle` and `proportional` or `tabular`. `lining` and

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1. Copyright © 2011–2019, Omnibus-Type (<https://www.omnibus-type.com>)  
2. <https://www.omnibus-type.com/fonts/chivo/>

proportional are the defaults. Short aliases lf, osf, prop and tab are also available. Being boolean options, following example results in proportional oldstyle figures:

```
\usepackage[lining=false,tabular=false]{Chivo}
```

**familydefault** The main font of a document can be switched to Chivo with package option **familydefault** or **familydefault=true**, e.g.:

```
\usepackage[familydefault]{Chivo}
```

**opentype | type1** If the automatic engine detection fails, it can be specified by the user with one of **opentype** or **type1**. Note that these option do not take a boolean value **true** or **false**.

**scale | scaled** The size of the Chivo fonts can be adjusted with the **scale** or **scaled** option, e.g.:

```
\usepackage[scale=0.97]{Chivo}
```

### 3.2 (pdf)LaTeX specific notes

OT1, LY1, T1 and TS1 encodings are supported. Chivo.sty does not load the respective packages, it is up to user to load them, e.g.:

```
\usepackage[T1]{fontenc}  
\usepackage{Chivo}  
\usepackage{textcomp}
```

Chivo fonts provide a rich set of figures (see table 2). With traditional engines, fontaxes.sty is loaded and the command \fontversion is available to switch between lining, oldstyle, tabular and proportional styles and alignments. For other versions the following macros are provided:

- \textsu renders its argument in superior figures. \textsu{123} produces <sup>123</sup>. The corresponding declaration is \sufigures.
- \textin renders its argument in inferior figures. \textin{123} produces <sub>123</sub>. The corresponding declaration is \infigures.
- \textnu renders its argument in numerator figures. \textnu{123} produces <sup>1</sup><sub>23</sub>. The corresponding declaration is \nufigures.
- \textde renders its argument in denominator figures. \textde{123} produces <sub>1</sub><sup>23</sup>. The corresponding declaration is \deffigures.

### 3.3 XeLaTeX and LuaLaTeX specific notes

These engines can access OTF fonts directly. The standard interface for this purpose is fontspec.sty<sup>3</sup>. Chivo.sty detects if XeLaTeX or LuaLaTeX are used and passes options given to the package to \setsansfont via \defaultfeature. Other fontspec.sty options can be set with \defaultfeature+:

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3. <https://ctan.org/pkg/fontspec>

**Table 1.** Chivo font features

aalt	Access All Alternates
case	Case-Sensitive Forms
ccmp	Glyph Composition/Decomposition
cpsp	Capital Spacing
dnom	Denominators
frac	Fractions
kern	Kerning
liga	Standard Ligatures
lnum	Lining Figures
mark	Mark Positioning
mkmk	Mark to Mark Positioning
numr	Numerators
onum	Oldstyle Figures
ordn	Ordinals
pnum	Proportional Figures
sinf	Scientific Inferiors
subs	Subscript
sups	Superscript
tnum	Tabular Figures
zero	Slashed Zero

```
\usepackage{fontspec}
\usepackage{Chivo}
\defaultfontfeatures+[Chivo]{
    Scale = MatchLowercase ,
    Color = blue
}
```

Table 1 contains a list of available font features.

LaTeX font selection macros like \fontseries work with these engines as well.

## 4 OT1 encoding font table

	‘0	‘1	‘2	‘3	‘4	‘5	‘6	‘7	
‘00x	o	Δ <sub>1</sub>	₂	₃	₄	₅	₆	₇	~0x
‘01x	s	₉	Ω <sub>10</sub>	₁₁	fi <sub>₁₂</sub>	fl <sub>₁₃</sub>	₁₄	₁₅	
‘02x	l <sub>₁₆</sub>	J <sub>₁₇</sub>	‘ <sub>₁₈</sub>	‘ <sub>₁₉</sub>	‘ <sub>₂₀</sub>	‘ <sub>₂₁</sub>	‘ <sub>₂₂</sub>	‘ <sub>₂₃</sub>	~1x
‘03x	ₚ <sub>₂₄</sub>	β <sub>₂₅</sub>	ꝝ <sub>₂₆</sub>	œ <sub>₂₇</sub>	ø <sub>₂₈</sub>	Æ <sub>₂₉</sub>	Œ <sub>₃₀</sub>	Ø <sub>₃₁</sub>	
‘04x	₃₂	! <sub>₃₃</sub>	” <sub>₃₄</sub>	# <sub>₃₅</sub>	\$ <sub>₃₆</sub>	% <sub>₃₇</sub>	& <sub>₃₈</sub>	’ <sub>₃₉</sub>	~2x
‘05x	( <sub>₄₀</sub>	) <sub>₄₁</sub>	* <sub>₄₂</sub>	+ <sub>₄₃</sub>	, <sub>₄₄</sub>	- <sub>₄₅</sub>	. <sub>₄₆</sub>	/ <sub>₄₇</sub>	
‘06x	0 <sub>₄₈</sub>	1 <sub>₄₉</sub>	2 <sub>₅₀</sub>	3 <sub>₅₁</sub>	4 <sub>₅₂</sub>	5 <sub>₅₃</sub>	6 <sub>₅₄</sub>	7 <sub>₅₅</sub>	~3x
‘07x	8 <sub>₅₆</sub>	9 <sub>₅₇</sub>	: <sub>₅₈</sub>	; <sub>₅₉</sub>	j <sub>₆₀</sub>	= <sub>₆₁</sub>	ż <sub>₆₂</sub>	? <sub>₆₃</sub>	
‘10x	@ <sub>₆₄</sub>	A <sub>₆₅</sub>	B <sub>₆₆</sub>	C <sub>₆₇</sub>	D <sub>₆₸</sub>	E <sub>₆₹</sub>	F <sub>₇₀</sub>	G <sub>₇₁</sub>	~4x
‘11x	H <sub>₇₂</sub>	I <sub>₇₃</sub>	J <sub>₇₄</sub>	K <sub>₇₅</sub>	L <sub>₇₆</sub>	M <sub>₇₷</sub>	N <sub>₇₸</sub>	O <sub>₇₹</sub>	
‘12x	P <sub>₈₀</sub>	Q <sub>₈₁</sub>	R <sub>₈₂</sub>	S <sub>₈₃</sub>	T <sub>₈₴</sub>	U <sub>₈₵</sub>	V <sub>₈₶</sub>	W <sub>₈₷</sub>	~5x
‘13x	X <sub>₈₸</sub>	Y <sub>₈₹</sub>	Z <sub>₈₺</sub>	[ <sub>₉₁</sub>	“ <sub>₉₂</sub>	] <sub>₉₳</sub>	^ <sub>₉₴</sub>	· <sub>₉₵</sub>	
‘14x	‘ <sub>₉₶</sub>	a <sub>₉₷</sub>	b <sub>₉₸</sub>	c <sub>₉₹</sub>	d <sub>₁₀₀</sub>	e <sub>₁₀₁</sub>	f <sub>₁₀₂</sub>	g <sub>₁₀₃</sub>	~6x
‘15x	h <sub>₁₀₄</sub>	i <sub>₁₀₅</sub>	j <sub>₁₀₆</sub>	k <sub>₁₀₇</sub>	l <sub>₁₀₈</sub>	m <sub>₁₀₉</sub>	n <sub>₁₁₀</sub>	o <sub>₁₁₁</sub>	
‘16x	p <sub>₁₁₂</sub>	q <sub>₁₁₃</sub>	r <sub>₁₁₄</sub>	s <sub>₁₁₅</sub>	t <sub>₁₁₆</sub>	u <sub>₁₁₇</sub>	v <sub>₁₁₈</sub>	w <sub>₁₁₉</sub>	~7x
‘17x	x <sub>₁₂₀</sub>	y <sub>₁₂₁</sub>	z <sub>₁₂₂</sub>	— <sub>₁₂₃</sub>	— <sub>₁₂₄</sub>	” <sub>₁₂₅</sub>	~ <sub>₁₂₆</sub>	.. <sub>₁₂₇</sub>	
‘20x	ff <sub>₁₂₈</sub>	ffi <sub>₁₂₉</sub>	ffl <sub>₁₃₀</sub>	₁₃₁	₁₃₂	₁₃₃	₁₃₄	₁₃₅	~8x
‘21x	₁₃₆	₁₃₇	ł <sub>₁₃₈</sub>	₁₃ₙ	₁₄₀	₁₄₁	₁₄₂	₁₄₃	
‘24x	₁₆₀	₁₆₁	₁₆₂	₁₆₃	₁₆₄	₁₆₅	₁₆₆	₁₆₷	~Ax
‘25x	₁₆₸	₁₆₹	ſ <sub>₁₇₀</sub>	₁₇₁	₁₇₂	₁₇₃	₁₇₄	₁₇₅	
	~8	~9	~A	~B	~C	~D	~E	~F	

## 5 LY1 encoding font table

	‘0	‘1	‘2	‘3	‘4	‘5	‘6	‘7	
‘00x	ff <sub>0</sub>	€ <sub>1</sub>	ffi <sub>2</sub>	ffl <sub>3</sub>	/ <sub>4</sub>	· <sub>5</sub>	” <sub>6</sub>	„ <sub>7</sub>	~0x
‘01x	„ <sub>8</sub>	„ <sub>9</sub>	„ <sub>10</sub>	„ <sub>11</sub>	fi <sub>12</sub>	fl <sub>13</sub>	„ <sub>14</sub>	„ <sub>15</sub>	
‘02x	„ <sub>16</sub>	J <sub>17</sub>	„ <sub>18</sub>	„ <sub>19</sub>	„ <sub>20</sub>	„ <sub>21</sub>	„ <sub>22</sub>	„ <sub>23</sub>	~1x
‘03x	„ <sub>24</sub>	ß <sub>25</sub>	æ <sub>26</sub>	œ <sub>27</sub>	ø <sub>28</sub>	Æ <sub>29</sub>	Œ <sub>30</sub>	Ø <sub>31</sub>	
‘04x	„ <sub>32</sub>	! <sub>33</sub>	“ <sub>34</sub>	# <sub>35</sub>	\$ <sub>36</sub>	% <sub>37</sub>	£ <sub>38</sub>	’ <sub>39</sub>	~2x
‘05x	( <sub>40</sub>	) <sub>41</sub>	* <sub>42</sub>	+ <sub>43</sub>	, <sub>44</sub>	- <sub>45</sub>	. <sub>46</sub>	/ <sub>47</sub>	
‘06x	0 <sub>48</sub>	1 <sub>49</sub>	2 <sub>50</sub>	3 <sub>51</sub>	4 <sub>52</sub>	5 <sub>53</sub>	6 <sub>54</sub>	7 <sub>55</sub>	~3x
‘07x	8 <sub>56</sub>	9 <sub>57</sub>	: <sub>58</sub>	; <sub>59</sub>	< <sub>60</sub>	= <sub>61</sub>	> <sub>62</sub>	? <sub>63</sub>	
‘10x	@ <sub>64</sub>	A <sub>65</sub>	B <sub>66</sub>	C <sub>67</sub>	D <sub>68</sub>	E <sub>69</sub>	F <sub>70</sub>	G <sub>71</sub>	~4x
‘11x	H <sub>72</sub>	I <sub>73</sub>	J <sub>74</sub>	K <sub>75</sub>	L <sub>76</sub>	M <sub>77</sub>	N <sub>78</sub>	O <sub>79</sub>	
‘12x	P <sub>80</sub>	Q <sub>81</sub>	R <sub>82</sub>	S <sub>83</sub>	T <sub>84</sub>	U <sub>85</sub>	V <sub>86</sub>	W <sub>87</sub>	~5x
‘13x	X <sub>88</sub>	Y <sub>89</sub>	Z <sub>90</sub>	[ <sub>91</sub>	\ <sub>92</sub>	] <sub>93</sub>	^ <sub>94</sub>	_ <sub>95</sub>	
‘14x	‘ <sub>96</sub>	a <sub>97</sub>	b <sub>98</sub>	c <sub>99</sub>	d <sub>100</sub>	e <sub>101</sub>	f <sub>102</sub>	g <sub>103</sub>	~6x
‘15x	h <sub>104</sub>	i <sub>105</sub>	j <sub>106</sub>	k <sub>107</sub>	l <sub>108</sub>	m <sub>109</sub>	n <sub>110</sub>	o <sub>111</sub>	
‘16x	p <sub>112</sub>	q <sub>113</sub>	r <sub>114</sub>	s <sub>115</sub>	t <sub>116</sub>	u <sub>117</sub>	v <sub>118</sub>	w <sub>119</sub>	~7x
‘17x	x <sub>120</sub>	y <sub>121</sub>	z <sub>122</sub>	{ <sub>123</sub>	<sub>124</sub>	} <sub>125</sub>	~ <sub>126</sub>	.. <sub>127</sub>	
‘20x	ł <sub>128</sub>	‘ <sub>129</sub>	, <sub>130</sub>	f <sub>131</sub>	„ <sub>132</sub>	... <sub>133</sub>	† <sub>134</sub>	‡ <sub>135</sub>	~8x
‘21x	^ <sub>136</sub>	% <sub>00</sub> <sub>137</sub>	š <sub>138</sub>	‘ <sub>139</sub>	œ <sub>140</sub>	ž <sub>141</sub>	ʌ <sub>142</sub>	— <sub>143</sub>	
‘22x	† <sub>144</sub>	‘ <sub>145</sub>	’ <sub>146</sub>	“ <sub>147</sub>	” <sub>148</sub>	• <sub>149</sub>	— <sub>150</sub>	— <sub>151</sub>	~9x
‘23x	~ <sub>152</sub>	TM <sub>153</sub>	ſ <sub>154</sub>	> <sub>155</sub>	œ <sub>156</sub>	ž <sub>157</sub>	~ <sub>158</sub>	ÿ <sub>159</sub>	
‘24x	„ <sub>160</sub>	j <sub>161</sub>	ç <sub>162</sub>	ƒ <sub>163</sub>	¤ <sub>164</sub>	¥ <sub>165</sub>	‘ <sub>166</sub>	§ <sub>167</sub>	~Ax
‘25x	.. <sub>168</sub>	© <sub>169</sub>	ª <sub>170</sub>	« <sub>171</sub>	¬ <sub>172</sub>	- <sub>173</sub>	(R) <sub>174</sub>	- <sub>175</sub>	
‘26x	º <sub>176</sub>	± <sub>177</sub>	² <sub>178</sub>	³ <sub>179</sub>	’ <sub>180</sub>	µ <sub>181</sub>	¶ <sub>182</sub>	· <sub>183</sub>	~Bx
‘27x	„ <sub>184</sub>	¹ <sub>185</sub>	º <sub>186</sub>	» <sub>187</sub>	¼ <sub>188</sub>	½ <sub>189</sub>	¾ <sub>190</sub>	¸ <sub>191</sub>	
‘30x	À <sub>192</sub>	Á <sub>193</sub>	Â <sub>194</sub>	Ã <sub>195</sub>	Ä <sub>196</sub>	Å <sub>197</sub>	Æ <sub>198</sub>	Ç <sub>199</sub>	~Cx
‘31x	È <sub>200</sub>	É <sub>201</sub>	Ê <sub>202</sub>	Ë <sub>203</sub>	Ì <sub>204</sub>	Í <sub>205</sub>	Î <sub>206</sub>	Ï <sub>207</sub>	
‘32x	Ð <sub>208</sub>	Ñ <sub>209</sub>	Ò <sub>210</sub>	Ó <sub>211</sub>	Ô <sub>212</sub>	Õ <sub>213</sub>	Ö <sub>214</sub>	× <sub>215</sub>	~Dx
‘33x	Ø <sub>216</sub>	Ù <sub>217</sub>	Ú <sub>218</sub>	Û <sub>219</sub>	Ü <sub>220</sub>	Ý <sub>221</sub>	Þ <sub>222</sub>	ß <sub>223</sub>	
‘34x	à <sub>224</sub>	á <sub>225</sub>	â <sub>226</sub>	ã <sub>227</sub>	ä <sub>228</sub>	å <sub>229</sub>	æ <sub>230</sub>	ç <sub>231</sub>	~Ex
‘35x	è <sub>232</sub>	é <sub>233</sub>	ê <sub>234</sub>	ë <sub>235</sub>	ì <sub>236</sub>	í <sub>237</sub>	î <sub>238</sub>	ï <sub>239</sub>	
‘36x	ð <sub>240</sub>	ñ <sub>241</sub>	ò <sub>242</sub>	ó <sub>243</sub>	ô <sub>244</sub>	õ <sub>245</sub>	ö <sub>246</sub>	÷ <sub>247</sub>	~Fx
‘37x	ø <sub>248</sub>	ù <sub>249</sub>	ú <sub>250</sub>	û <sub>251</sub>	ü <sub>252</sub>	ý <sub>253</sub>	þ <sub>254</sub>	ÿ <sub>255</sub>	
	~8	~9	~A	~B	~C	~D	~E	~F	

## 6 T1 encoding font table

	‘0	‘1	‘2	‘3	‘4	‘5	‘6	‘7	
‘00x	`_o	'_1	^_2	~_3	“_4	”_5	°_6	ˇ_7	~0x
‘01x	ˇ_8	‐_9	·_10	,_11	„_12	,_13	‘_14	›_15	
‘02x	“_16	”_17	„_18	‘‘_19	»_20	—_21	—_22	23	~1x
‘03x	ff_24	I_25	J_26	ffi_27	fi_28	fl_29	ffl_30	31	
‘04x	32	!_33	"_34	#_35	\$_36	%_37	£_38	’_39	~2x
‘05x	(_40	)_41	*_42	+_43	,_44	-_45	._46	/_47	
‘06x	0_48	1_49	2_50	3_51	4_52	5_53	6_54	7_55	~3x
‘07x	8_56	9_57	:_58	;_59	<_60	=_61	>_62	?_63	
‘10x	@_64	A_65	B_66	C_67	D_68	E_69	F_70	G_71	~4x
‘11x	H_72	I_73	J_74	K_75	L_76	M_77	N_78	O_79	
‘12x	P_80	Q_81	R_82	S_83	T_84	U_85	V_86	W_87	~5x
‘13x	X_88	Y_89	Z_90	[_91	\_92	]_93	Λ_94	—_95	
‘14x	‘_96	a_97	b_98	c_99	d_100	e_101	f_102	g_103	~6x
‘15x	h_104	i_105	j_106	k_107	l_108	m_109	n_110	o_111	
‘16x	p_112	q_113	r_114	s_115	t_116	u_117	v_118	w_119	~7x
‘17x	x_120	y_121	z_122	{_123	_124	}_125	~_126	—_127	
‘20x	Ā_128	Ā_129	Ć_130	Ć_131	Đ_132	Ě_133	Ę_134	Ğ_135	~8x
‘21x	Ł_136	Ł_137	Ł_138	Ń_139	Ń_140	Ń_141	Ő_142	Ŕ_143	
‘22x	Ř_144	Ś_145	Ś_146	Ş_147	Ť_148	Ť_149	Ű_150	Ӯ_151	~9x
‘23x	Ỳ_152	Ž_153	Ž_154	Ž_155	IJ_156	İ_157	đ_158	§_159	
‘24x	ă_160	ă_161	ć_162	ć_163	đ_164	ě_165	ę_166	gó_167	~Ax
‘25x	í_168	í_169	ł_170	ń_171	ň_172	ŋ_173	ő_174	ŕ_175	
‘26x	ř_176	ś_177	š_178	ş_179	ť_180	ť_181	ű_182	ӱ_183	~Bx
‘27x	ỳ_184	ž_185	ž_186	ž_187	ij_188	j_189	đ_190	đ_191	
‘30x	À_192	Á_193	Â_194	Ã_195	Ä_196	Å_197	Æ_198	Ç_199	~Cx
‘31x	È_200	É_201	Ê_202	Ë_203	Ì_204	Í_205	Î_206	Ï_207	
‘32x	Ð_208	Ñ_209	Ò_210	Ó_211	Ô_212	Õ_213	Ö_214	Œ_215	~Dx
‘33x	Ø_216	Ù_217	Ú_218	Û_219	Ü_220	Ý_221	þ_222	ss_223	
‘34x	à_224	á_225	â_226	ã_227	ä_228	å_229	æ_230	ç_231	~Ex
‘35x	è_232	é_233	ê_234	ë_235	ì_236	í_237	î_238	ï_239	
‘36x	ð_240	ñ_241	ò_242	ó_243	ô_244	õ_245	ö_246	œ_247	~Fx
‘37x	ø_248	ù_249	ú_250	û_251	ü_252	ý_253	þ_254	þ_255	
	~8	~9	~A	~B	~C	~D	~E	~F	

## 7 TS1 encoding font table

	'0	'1	'2	'3	'4	'5	'6	'7	
'00x	0	1	2	3	4	5	6	7	"0x
'01x	8	9	10	, 11	, 12	, 13	14	15	
'02x	16	17	" 18	19	20	— 21	— 22	23	"1x
'03x	24	25	26	27	28	29	30	31	
'04x	„ 32	33	34	35	\$ 36	37	38	‘ 39	"2x
'05x	40	41	* 42	43	, 44	45	, 46	/ 47	
'06x	48	49	50	51	52	53	54	55	"3x
'07x	56	57	58	59	⟨ 60	— 61	⟩ 62	63	
'12x	80	81	82	83	84	85	86	Ω 87	"5x
'13x	88	89	90	91	92	93	94	95	
'20x	128	129	130	131	† 132	‡ 133	134	% 0 135	"8x
'21x	• 136	°C 137	138	139	f 140	∅ 141	₩ 142	143	
'22x	144	145	£ 146	147	? 148	đ 149	đ 150	TM 151	"9x
'23x	152	153	154	No 155	156	e 157	158	159	
'24x	160	161	¢ 162	ƒ 163	¤ 164	¥ 165	ƒ 166	§ 167	"Ax
'25x	168	© 169	a 170	171	¬ 172	173	(R) 174	175	
'26x	◦ 176	± 177	² 178	³ 179	¹ 180	µ 181	¶ 182	· 183	"Bx
'27x	184	¹ 185	º 186	√ 187	¹/₂ 188	¹/₂ 189	¾ 190	€ 191	
'32x	208	209	210	211	212	213	× 214	215	"Dx
'33x	216	217	218	219	220	221	222	223	
'36x	240	241	242	243	244	245	÷ 246	247	"Fx
'37x	248	249	250	fl 251	l 252	fi 253	i 254	f 255	
	"8	"9	"A	"B	"C	"D	"E	"F	

## 8 Text samples

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### Figures

**Table 2.** Figure styles and alignments

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## 9 Implementation

Font support files are generated by `autoinst`, invoked with:

```
autoinst          \
  --encoding=OT1,T1,LY1 \
  --ts1             \
  --sanserif        \
  --nosmallcaps    \
  --noswash         \
  --notitling       \
  --inferiors=subs \
  --fractions       \
  --noornaments     \
  --ligatures       \
  --verbose          \
Chivo-* .otf
```

We don't use the `Chivo.sty` generated by `autoinst` and use our version instead.

### 9.1 Chivo.sty

```
1 (*package)
```

Require the packages `ifxetex.sty` and `ifluatex.sty`:

```
2 \RequirePackage{ifxetex}
3 \RequirePackage{ifluatex}
```

First, we need a switch to know which engine is used:

```
4 \newif\ifChivo@otf
5 \ifxetex                         % we are in XeTeX
6   \Chivo@otftrue
7 \else
8   \ifluatex                       % we are in LuaTeX
9     \Chivo@otftrue
10 \else
11   \Chivo@otffalse
12 \fi
13 \fi
```

Load the packages we rely on: `fontspec.sty`<sup>4</sup> for LuaTeX and XeTeX, or `mweights.sty`<sup>5</sup> and `fontaxes.sty`<sup>6</sup> for (pdf)LaTeX:

```
14 \ifChivo@otf
15   \RequirePackage{fontspec}
16 \else
17   \RequirePackage{mweights}
18   \RequirePackage{fontaxes}
19 \fi
```

We use `kvoptions`<sup>7</sup> for key handling:

---

4. <https://www.ctan.org/pkg/fontspec>  
5. <https://www.ctan.org/pkg/mweights>  
6. <https://www.ctan.org/pkg/fontaxes>  
7. <https://www.ctan.org/pkg/kvoptions>

```

20 \RequirePackage{kvoptions}

Setup the keyval options:
21 \SetupKeyvalOptions{%
22   family = Chivo ,
23   prefix = Chivo@
24 }

The basic strategy for font and figure version related keys is to declare them as boolean options.
25 \DeclareBoolOption{thin}
26 \DeclareBoolOption{light}
27 \DeclareBoolOption{regular}
28 \DeclareBoolOption{medium}
29 \DeclareBoolOption{bold}
30 \DeclareBoolOption{extrabold}
31 \DeclareBoolOption{black}
32 \DeclareBoolOption{lining}
33 \DeclareComplementaryOption{oldstyle}{lining}
34 \DeclareBoolOption{tabular}
35 \DeclareComplementaryOption{proportional}{tabular}

Alias keys are defined as boolean keys as well:
36 \DeclareBoolOption{lf}
37 \DeclareComplementaryOption{osf}{lf}
38 \DeclareBoolOption{tab}
39 \DeclareComplementaryOption{prop}{tab}

scale and scaled keys are special: With (pdf)LaTeX, scale is a string option, scaled is an alias and sets \Chivo@scale which is defined by the scale key. With XeLaTeX and LuaLaTeX, they set the macro \Chivo@otf@scale which is later used in \defaultfontfeatures.
40 \ifChivo@otf
41   \newcommand*\Chivo@otf@scale{}
42   \define@key{Chivo}{scale}[1.0]{%
43     \def\Chivo@otf@scale{\#1}%
44   }
45   \define@key{Chivo}{scaled}[1.0]{%
46     \def\Chivo@otf@scale{\#1}%
47   }
48 \else
49   \DeclareStringOption[1.0]{scale}
50   \define@key{Chivo}{scaled}[1.0]{%
51     \renewcommand*\Chivo@scale{\#1}%
52   }
53 \fi

familydefault switches the default font to Chivo:
54 \DeclareBoolOption{familydefault}

The next 2 are for users where the automatic engine detection might fail:
55 \DeclareVoidOption{opentype}{\Chivo@otftrue}
56 \DeclareVoidOption{type1}{\Chivo@otffalse}

Execute the default options and process the rest.
57 \setkeys{Chivo}{regular,bold,lining,proportional}

```

```

58 \ProcessKeyvalOptions{Chivo}
    Process the alias keys and set the real one with \kvsetkeys:
59 \ifChivo@lf
60   \kvsetkeys{Chivo}{lining=true}
61 \else
62   \kvsetkeys{Chivo}{lining=false}
63 \fi
64 \ifChivo@tab
65   \kvsetkeys{Chivo}{tabular=true}
66 \else
67   \kvsetkeys{Chivo}{tabular=false}
68 \fi

    We need some macros to store the figure alignment and style and font
definitions:
69 \newcommand*\Chivo@figurestyle{}
70 \newcommand*\Chivo@figurealign{}
71 \newcommand*\Chivo@otf@regular{}
72 \newcommand*\Chivo@otf@italic{}
73 \newcommand*\Chivo@otf@bold{}
74 \newcommand*\Chivo@otf@bolditalic{}

    Definition for thin, light, regular and medium keys for all engines:
75 \ifChivo@regular
76   \ifChivo@otf
77     \def\Chivo@otf@regular{Regular}
78     \def\Chivo@otf@italic{Italic}
79   \else
80     \def\mdseries@sf{m}
81   \fi
82 \fi
83 \ifChivo@medium
84   \ifChivo@otf
85     \def\Chivo@otf@regular{Medium}
86     \def\Chivo@otf@italic{MediumItalic}
87   \else
88     \def\mdseries@sf{sb}
89   \fi
90 \fi
91 \ifChivo@light
92   \ifChivo@otf
93     \def\Chivo@otf@regular{Light}
94     \def\Chivo@otf@italic{LightItalic}
95   \else
96     \def\mdseries@sf{l}
97   \fi
98 \fi
99 \ifChivo@thin
100   \ifChivo@otf
101     \def\Chivo@otf@regular{Thin}
102     \def\Chivo@otf@italic{ThinItalic}
103   \else
104     \def\mdseries@sf{el}

```

```

105  \fi
106 \fi
      Definition for bold, extrabold and black keys for all engines:
107 \ifChivo@bold
108   \ifChivo@otf
109     \def\Chivo@otf@bold{Bold}
110     \def\Chivo@otf@bolditalic{BoldItalic}
111   \else
112     \def\bfseries@sf{b}
113   \fi
114 \fi
115 \ifChivo@extrabold
116   \ifChivo@otf
117     \def\Chivo@otf@bold{ExtraBold}
118     \def\Chivo@otf@bolditalic{ExtraBoldItalic}
119   \else
120     \def\bfseries@sf{eb}
121   \fi
122 \fi
123 \ifChivo@black
124   \ifChivo@otf
125     \def\Chivo@otf@bold{Black}
126     \def\Chivo@otf@bolditalic{BlackItalic}
127   \else
128     \def\bfseries@sf{ub}
129   \fi
130 \fi
      Definition for figure styles for all engines:
131 \ifChivo@lining
132   \ifChivo@otf
133     \def\Chivo@figurestyle{Lining}
134   \else
135     \def\Chivo@figurestyle{LF}
136   \fi
137 \else
138   \ifChivo@otf
139     \def\Chivo@figurestyle{OldStyle}
140   \else
141     \def\Chivo@figurestyle{OsF}
142   \fi
143 \fi
      Definition for figure alignments for all engines:
144 \ifChivo@tabular
145   \ifChivo@otf
146     \def\Chivo@figurealign{Monospaced}
147   \else
148     \def\Chivo@figurealign{T}
149   \fi
150 \else
151   \ifChivo@otf
152     \def\Chivo@figurealign{Proportional}

```

```

153 \else
154   \def\Chivo@figurealign{}
155 \fi
156 \fi

  Standard setup for fontaxes.sty. This is only relevant for (pdf)TeX:
157 \ifChivo@otf \else
158   \fa@naming@exception{figures}{{superior}{proportional}}{Sup}
159   \fa@naming@exception{figures}{{superior}{tabular}}{Sup}
160   \def\sufi{figures}{\@nomath\sufi{figures}}
161   \fontfigurestyle{superior}\selectfont
162   \DeclareTextFontCommand{\textsu}{\sufi{figures}}
163   \let\textsuperior\textsu
164
165   \fa@naming@exception{figures}{{inferior}{proportional}}{Inf}
166   \fa@naming@exception{figures}{{inferior}{tabular}}{Inf}
167   \def\infi{figures}{\@nomath\infi{figures}}
168   \fontfigurestyle{inferior}\selectfont
169   \DeclareTextFontCommand{\textin}{\infi{figures}}
170   \let\textinferior\textin
171
172   \fa@naming@exception{figures}{{numerators}{proportional}}{Numr}
173   \fa@naming@exception{figures}{{numerators}{tabular}}{Numr}
174   \def\nu{figures}{\@nomath\nu{figures}}
175   \fontfigurestyle{numerators}\selectfont
176   \DeclareTextFontCommand{\textnu}{\nu{figures}}
177   \let\textnumerator\textnu
178
179   \fa@naming@exception{figures}{{denominators}{proportional}}{Dnom}
180   \fa@naming@exception{figures}{{denominators}{tabular}}{Dnom}
181   \def\de{figures}{\@nomath\de{figures}}
182   \fontfigurestyle{denominators}\selectfont
183   \DeclareTextFontCommand{\textde}{\de{figures}}
184   \let\textdenominator\textde
185 \fi

```

For XeTeX/LuaTeX, we define the font features depending on the given package options:

```

186 \ifChivo@otf
187   \defaultfontfeatures[Chivo]{%
188     Extension      = .otf
189     Ligatures      = {TeX,Common}
190     Scale          = \Chivo@otf@scale
191     UprightFont    = *-\Chivo@otf@regular
192     ItalicFont     = *-\Chivo@otf@italic
193     BoldFont       = *-\Chivo@otf@bold
194     BoldItalicFont = *-\Chivo@otf@bolditalic
195     FontFace       = {el}{n}{*-Thin}
196     FontFace       = {el}{it}{*-ThinItalic}
197     FontFace       = {l}{n}{*-Light}
198     FontFace       = {l}{it}{*-LightItalic}
199     FontFace       = {m}{n}{*-Regular}
200     FontFace       = {m}{it}{*-Italic}
201   }

```

```

201     FontFace      = {sb}{n}{*-Medium}          ,
202     FontFace      = {sb}{it}{*-MediumItalic}    ,
203     FontFace      = {b}{n}{*-Bold}             ,
204     FontFace      = {b}{it}{*-BoldItalic}       ,
205     FontFace      = {eb}{n}{*-ExtraBold}        ,
206     FontFace      = {eb}{it}{*-ExtraBoldItalic} ,
207     FontFace      = {ub}{n}{*-Black}            ,
208     FontFace      = {ub}{it}{*-BlackItalic}      ,
209     Numbers       = {\Chivo@figurestyle,\Chivo@figurealign}
210 }
211 \fi

Switch the sans serif font to Chivo. With fontspec, we delay the \setsansfont until AtBeginDocument so that user can provide additional features with \defaultfontfeatures+.

212 \ifChivo@otf
213   \AtBeginDocument{%
214     \setsansfont{Chivo}%
215   }
216 \else
217   \renewcommand*\sfdefault{%
218     Chivo-\Chivo@figurealign\Chivo@figurestyle
219   }
220 \fi

Switch the default font if the respective key is given:

221 \ifChivo@familydefault
222   \ifChivo@otf
223     \AtBeginDocument{%
224       \setmainfont{Chivo}%
225     }
226   \else
227     \renewcommand*\familydefault{\sfdefault}
228     \ifChivo@regular \else
229       \edef\seriesdefault{\mdseries@sf}
230     \fi
231     \ifChivo@bold \else
232       \edef\bfdefault{\bfseries@sf}
233     \fi
234   \fi
235 \fi
236 </package>

```

## Change History

v1.0		Rewrite major part of the code supporting 14 fonts.
	General: Initial version .....	<a href="#">1</a>
v2.0		Harmonize the usage of package options over different TeX engines .....
	General: Add the 'scaled' key as requested by FMI .....	<a href="#">1</a>

Update OTF fonts to version  
1.007 now consisting of 14  
fonts, 843 glyphs each . . . . . 1

Use NFSS scheme for fonts  
mapping . . . . . 1