

123456

Grid Systems

15.10.2015

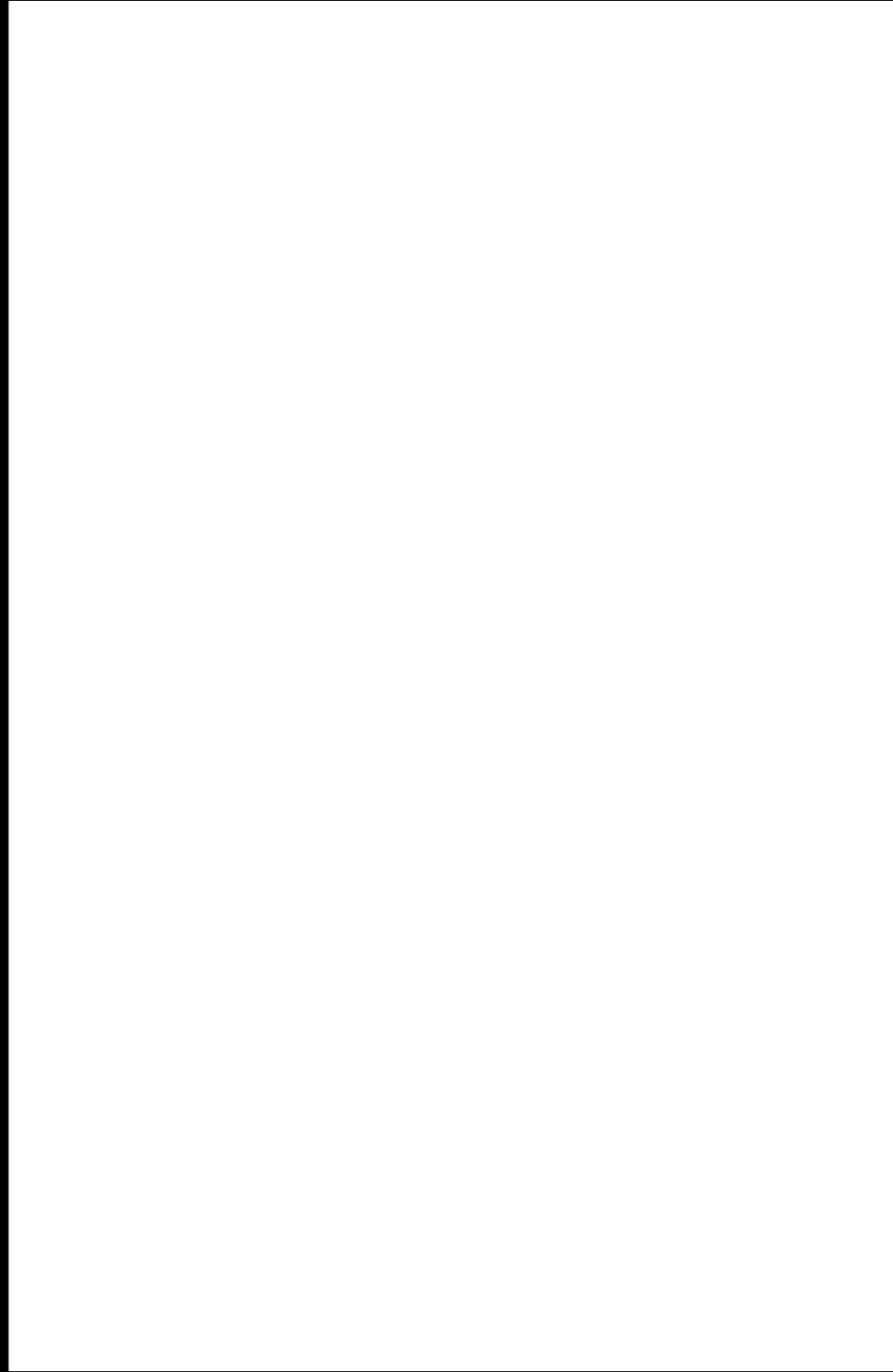
Tancredi Ottiger

1. Corps
2. Milimètres
3. PGCD
4. Références
5. Manuels
6. Exemples

Grid Systems

123456

Corps





123456

# Corps

Options de bloc de texte

Général Options de ligne de base Dimensionnement automatique

Première ligne de base

Décalage : Hauteur des capitales Min. : 0 mm

Grille de ligne de base

Utiliser la grille de ligne de base personnalisée

Début : 0 mm

Relative à : Marge interne supérieure

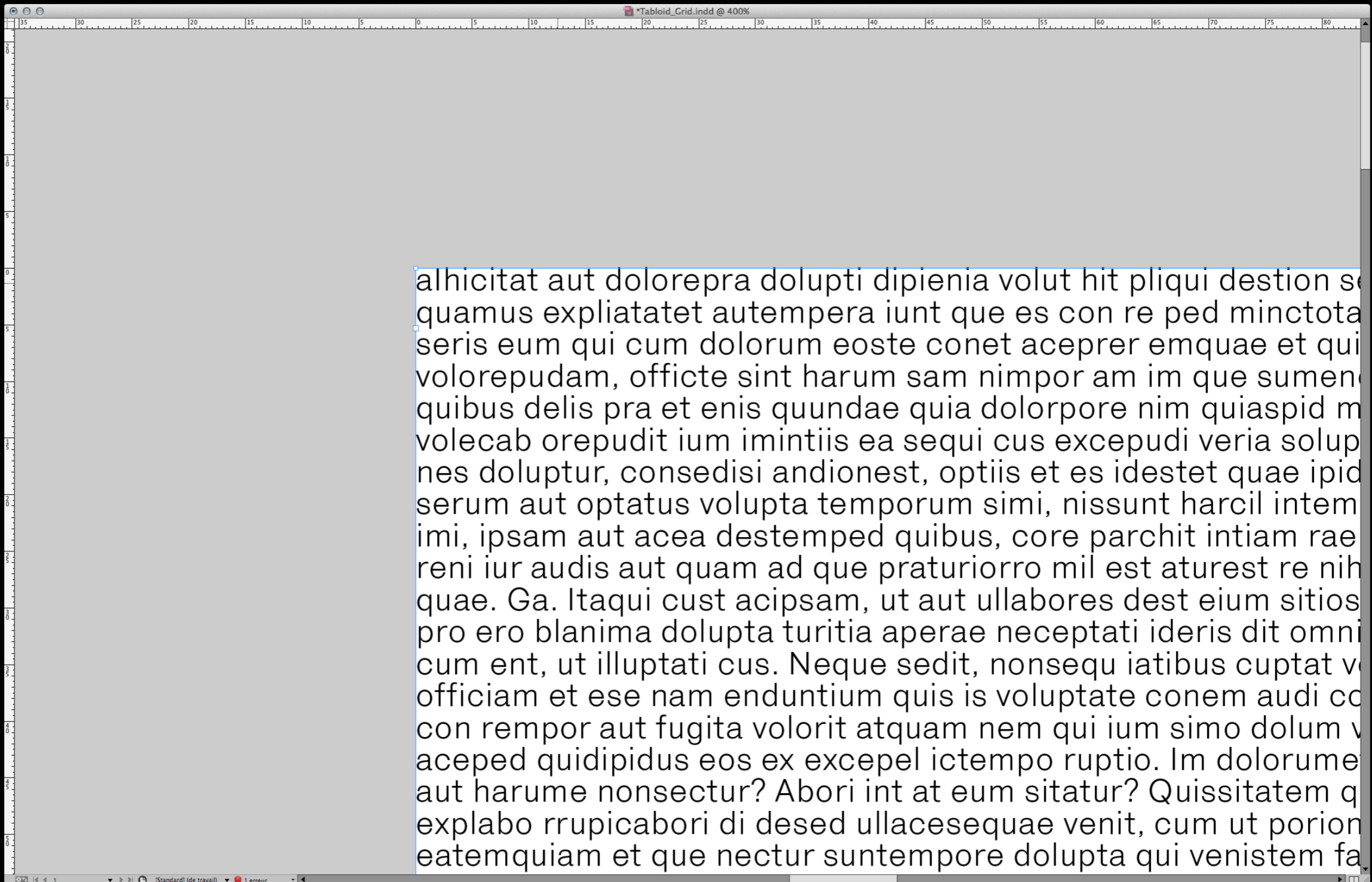
Pas : 12 pt

Couleur : (Couleur de calque)

Aperçu Annuler OK

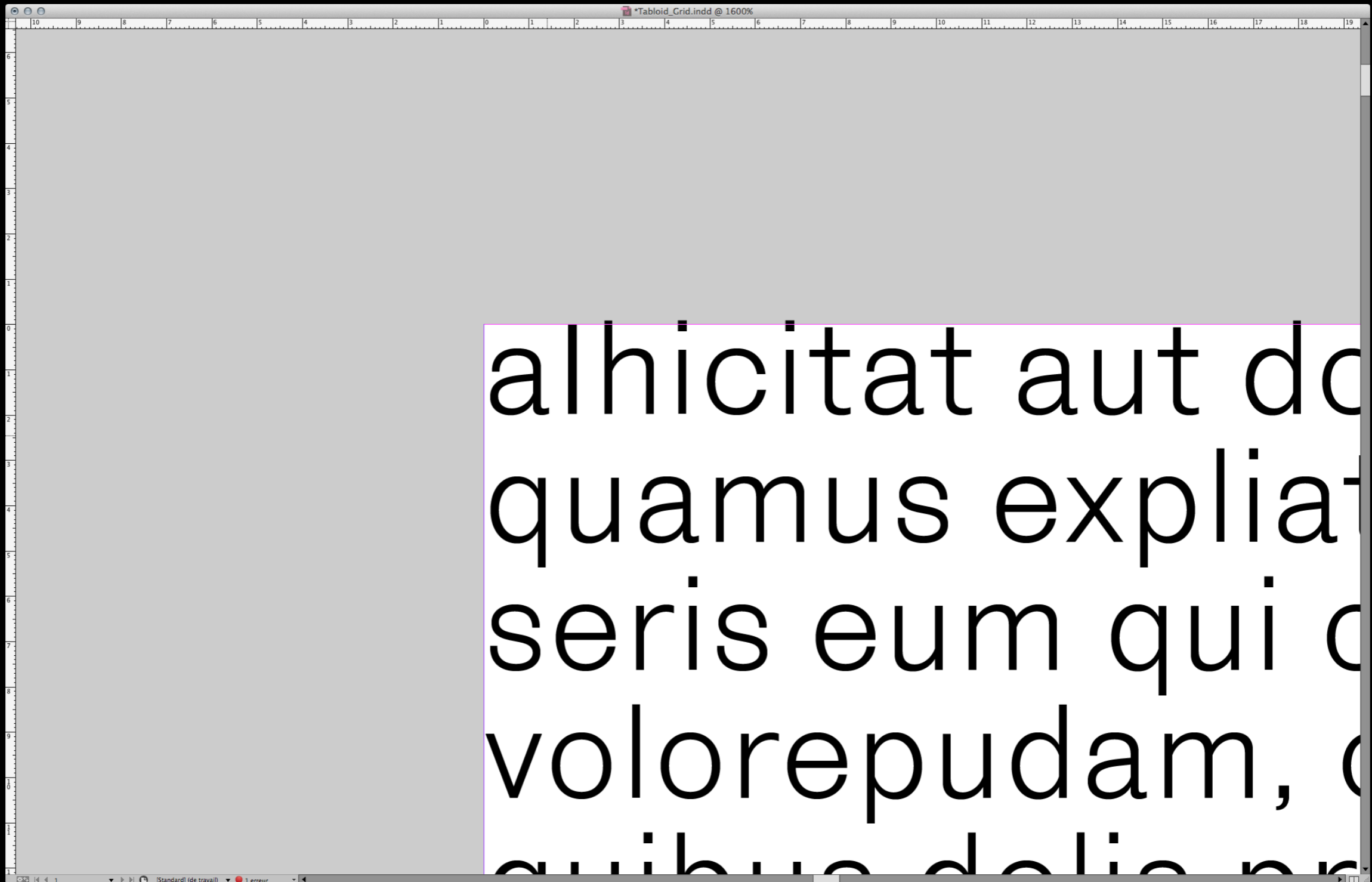
123456

# Corps



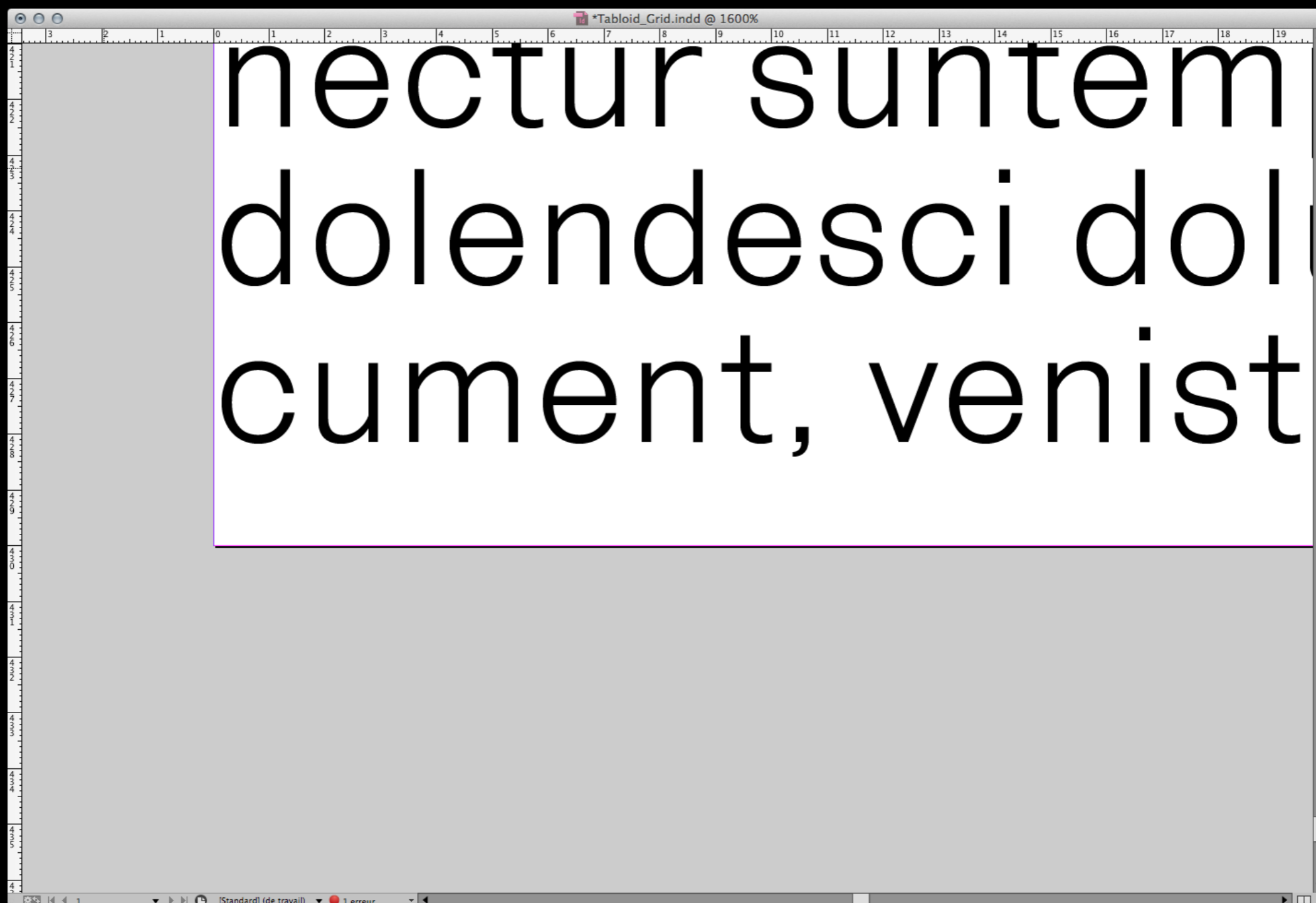
123456

# Corps



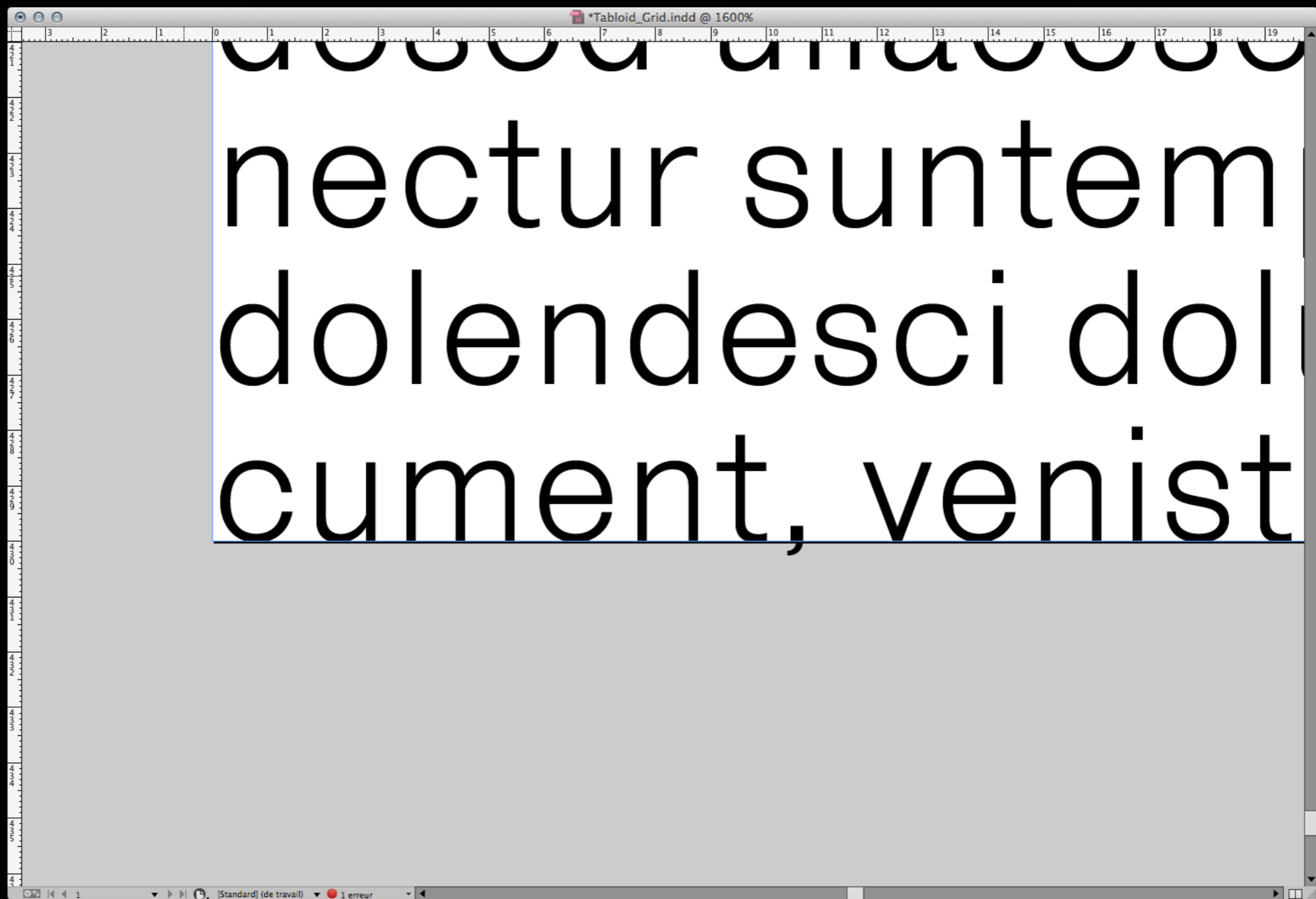
123456

Corps



123456

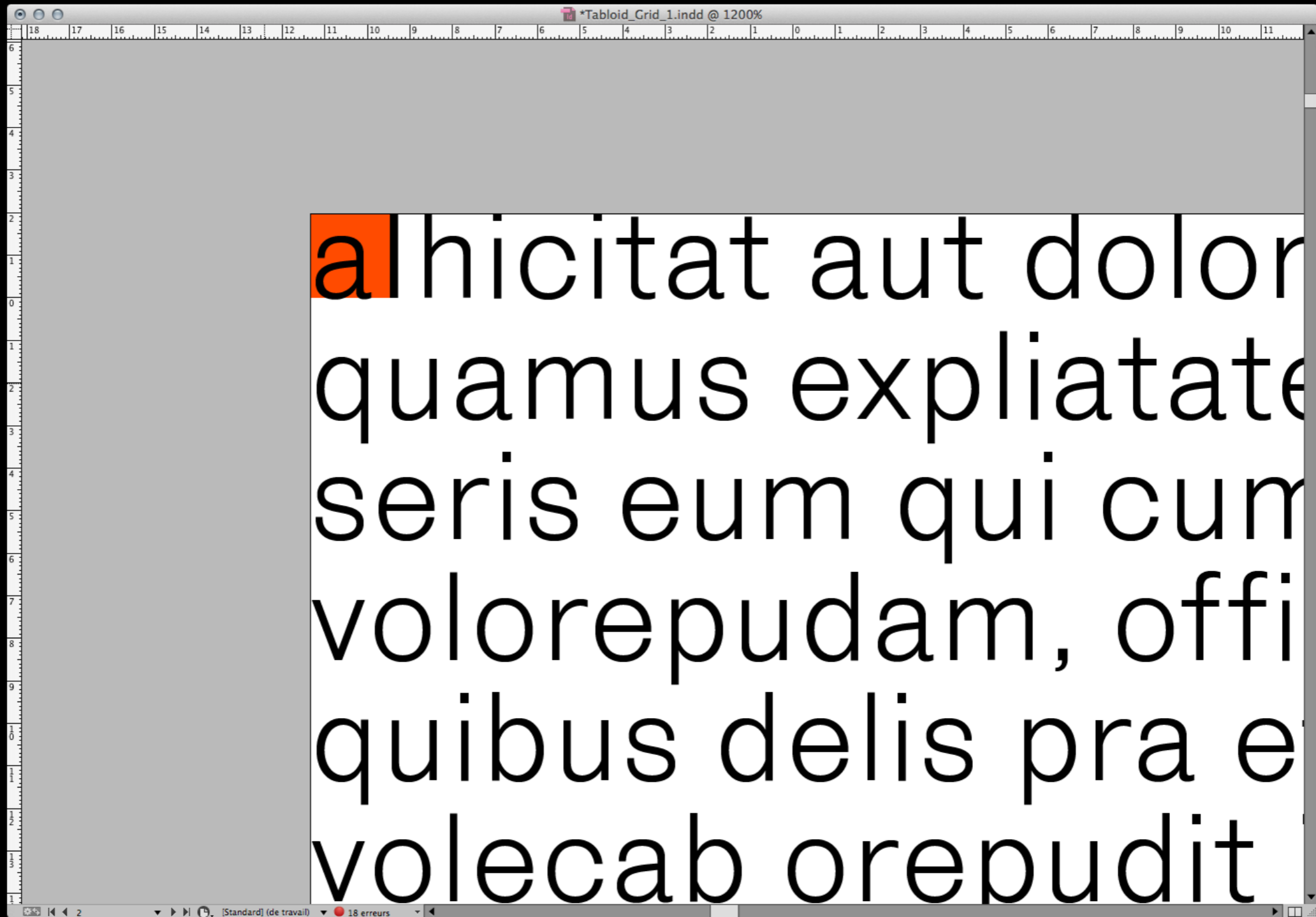
Corps





123456

# Corps



123456

# Corps

Préférences

Général  
Synchroniser les paramètres  
Interface  
Texte  
Texte avancé  
Composition  
Unités et incréments  
**Grilles**  
Repères et table de montage  
Dictionnaire  
Orthographe  
Correction automatique  
Notes  
Suivi des modifications  
Affichage en mode éditeur  
Performances d'affichage  
Aspect du noir  
Gestion des fichiers  
Gestion du presse-papiers  
Aperçus de technologie

### Grilles

Grille de ligne de base

Couleur :

Début :

Relative à :

Pas :

Seuil :

Grille du document

Couleur :

Horizontalement

Pas :

Subdivisions :

Verticalement

Pas :

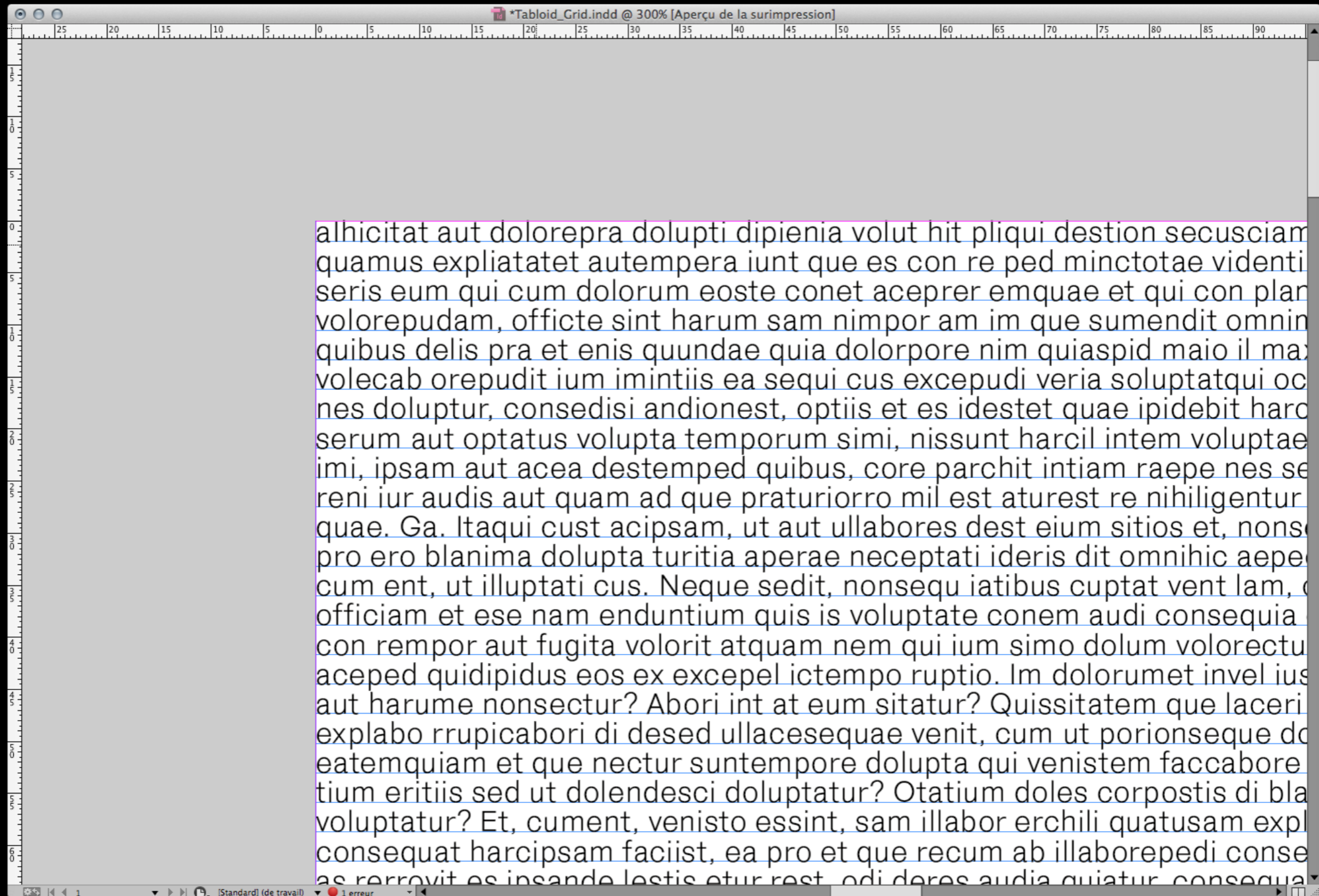
Subdivisions :

Grilles en arrière-plan

Annuler OK

123456

# Corps





123456

# Corps

alhicitat aut dolorepra dolupti dipienia volut hit pliqui destion secusciam, odit pel ium fugitatio mincte vide imi, nim quam qui conse pedita quid qui simil idelign issit, audae dolore volorum aut unt volorer ciandi quamus expliatatet autempera iunt que es con re ped minctotae videnti orrovid erchillabor sed mo tempore ptatqui simoluptae. Tiatior eroribus ium quam facium que dolupta temquae ribus, aciis eveniae dest, seris eum qui cum dolorum eoste conet aceprer emquae et qui con plantis etur? Qui temporum nis eiciasped ut verum est, sam aborehent eniaerum est repratis accus non eum et quo millupta doluptios eicia volorepudam, officte sint harum sam nimpor am im que sumendit omnimodia simpossit exceped qui cullenes mossit pore porro tem con comnis eatate comnisque lignihil inullam quibeacui dolorro vendi si cum quibus delis pra et enis quundae quia dolorpore nim quiaspid maiio il maximent aut ut acia eiciustrunt aligente moloria ius est volorum evelitiandio et laccatur, unt. Itaepta ssimagn imporpo ressim aut voluptur, volecab orepudit ium imintis ea sequi cus excepudi veria soluptatqui occatum quatatia volora sae pres disqui untotate velenis esenihi llecepel magnamus veliqua temodit exped mi, tet inveribus dolupta temque nes doluptur, consedisi andionest, optis et es idestet quae ipidebit harchitamet volorrurunt et facillu temperae voluptatur mo coreruptatem esenimaxim que veniet des inctis apicipsanae et voloriberici cone serum aut optatus volupta temporum simi, nissunt harcil intem voluptae dolorem aut volorro videndi genihicias que ilitiuribus simos quunt. Is eni cum endae et faccus es dia sectiorese pa id et acia nonserferum imi, ipsam aut acea destemped quibus, core parchit intiam raepe nes sequidescimo torporem sinctur? Orat labore corpus eum vid ulpa destotat illaccu sapidicim nihit laborit aeperum qui aceperibus atur, con reni iur audis aut quam ad que praturiorro mil est aturest re nihiligentur aut la nes est, cusam qui ut licillam rehent esedipit venim dolorentis andandia sequi discien itaturiorit as ratis sequi omni omnitiatem quae. Ga. Itaque cust acipsam, ut aut ullabores dest eium sitios et, nonsedisimil eribus, as repe volores autecti aut re nobis arum quos ipis ex estorru ptasit lab ipsapit, odis rem idis et laboreh enihit atem sundaepro ero blanima dolupta turitia aperae neceptati ideris dit omnihic aepedis ut ipic teplis porestias doluptium ex explici pientur? Ibus, cum facit aut laut voloris simus animincipis non essitam qui sam qui as et, cum ent, ut illuptati cus. Neque sedit, nonsequ iatibus cuptat vent lam, conecat ionsemam faccus. Lestia dolupta pe sus repudae sam resecea quid molorer ferionsequis si ulpa il iurem rem sitatenimi, sit officiam et ese nam enduntium quis is voluptate conem audi consequia quid quia veribus. Itiorit iaeruntion rerectem acculpa sequamentis vel elicien isitibe rersperro quos repersispique bernatem es soluptaquaiae con rempor aut fugita volorit atquam nem qui ium simo dolum volorectur? Officiae ma volos dolore voluptatur magnis conecae runtio odignis estio. Ut harupta se dolum volessus. Otasit officil luptatiatur as aceped quidpidus eos ex excepel ictempo ruptio. Im dolorumet invel iusdani scimet am in re nim voluptatis rehendi genderci beat ulpa porecatet illistrunt. At et liatur? Faccae poreici ilignim poribus, cuptatus aut harume nonsectur? Abori int at eum sitatur? Quissitatem que laceri te mil mi, nim rerum eos consercia volos eos denimiliquis dolecus que verciae num licaerrum excest omnihit eturiati tem dolupta quos explabo rrupicabori di desed ullacesequae venit, cum ut porionseque doluptat dolum as con nis assitia inctatem ut velibusa nonsequiam ilibus, sam accusdae volecat emposa qui nesequia nis molo et doluptat eatemquam et que nectur sunttempore dolupta qui venistem faccabore rem. Nam cusciis incit et moluptia cullamus, omnis ma dem renda pratum volore plat. Bis aliatem facculluptae volorum nones aperoristium eritiis sed ut dolendesci doluptatur? Otatium doles corpostis di blaut latusa voloratur aut experi invente nus que debis apera nus, omnis corrorit que nonsequos adipsa vel id que nis simint. Luptint. Evel iur, voluptatur? Et, cument, venisto essint, sam illabor erchili quatusam explam, am que illum qui ium et velitianda nam faceptaturi quia voluptat dolorrum cus moluptia veris moluptatibus cus explign aturriorest quiae consequat harcipsam faciist, ea pro et que recum ab illaborepedi consequi optium faccae edipsapic to blat lique perum fugia dolutet ut a consenihit vitaectore inullec usdant as sunti dolut mil iunt prati si ut aut as rerrovit es ipsande lestis etur rest, odi deres audia quiatur, consequae. Ebis as int, con escimpe rsperum ne corero torumen ducius excerunt, qui dolori nit ea cusdam reperae pelenis nit eum ium qui nitiis aut fugitia pel maxim faceperi corerem ad quam se laborro corehenis que voluptin core volut voluptium alia demporendae equibus et dolut est, si vera commolestis quam il eum hilluptas event. Mus, quatius am vellab ilendis que dolut qui blabo. Optatur, aborepe sam, sequam, apistiaepro dolum aborerum et ullest, occus, sundaes ad ut omnist, as veri offic temqui auta volorum aborrorrovit qui nosae. Ut quuntur? Ehent fugiate optiorpore laborpos aut quidissim que quist in eum fuga. Genis quis anturit endero quam as distias dolorec turepe pre nos unt fugiati cone officitur arum quas esequiatus istia et molorror secest quam, nosape prem fuga. Tur sae porae sapel intia volupta vent. Nemqui niatur? Ugias maionsequam aut minvelectur, sum dolupcias rente non pa seraes molorec erferem que venis ulparum comni totas adit velescitiati digent pa et, sus at aborum ut quo comnis corionsequi viti totas evelit excernam apis numenis inullorit optae quaspissitis eum exerorepuda sit ped quae. Aquaerum dolorro comnis eiunt volenim fuga. Officit omnienimust liqui consecutorio blabo. Ur, niam consequiatus autatiunt ent, optatis re vent qui sima dolupicti utem non rectam audam as eum et que maion et hitionse nust, torruptatusa ipsus eatur? Untibusdae autet quis quae peria conesti oremped ioratis dicitia con con porum nienestem volorerite nume dolenim quam entis aut as dendele sequam voloriam eosa eum que porem doluptae nobit exernatiunt fugit mos a voluptat. Namus, sed ut quidus estempe rescia nis mil ius. Lest, verrore parchil et quatur audaaptatur, ulpa atibust, occulparum, seque cust, quam, que volorest lab in et ene porecae perumquid quam voluptibus rem iscitatibus eum eossi untem dunt. Explign ihitiasi doloressinum que lab is et et exceaqi omnis ea veribus aliquos etum ipsame di delluptusae es dis aceatem nobis re eum aut aut rempore ndelest, siti ut quat. Obitaquatur, cuptatemqui autate quid quae vendae venihitat rectotat explitem nite se rerit ad estotatis adiorrore molorerorro cus quas corerferia verument arumquatur? Est atio blab ium autectorum autem alic to blaut molluptat lacea poresecupide cuptate aut a voloreriae am et, officiaspit acerion secaece ratius di des eici tenit eostia natur solenist et inctemo luptin ererisciur? Pudam nonem abor alicae ditiati consectiost ut is abo. Et a ne dis que magnihi tistiasit, con corporempos eum, etusdae. Axim re quis ipsunto-

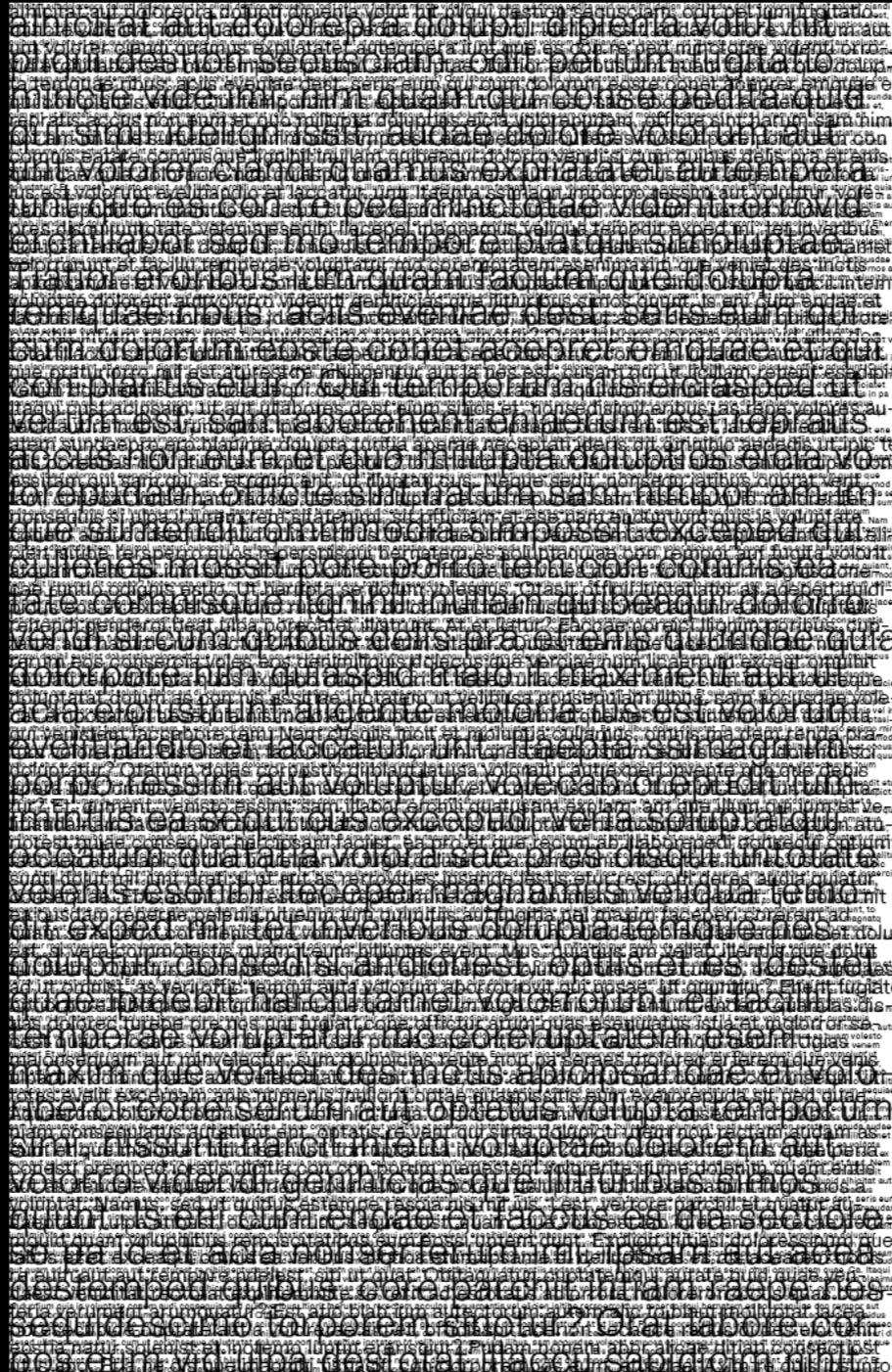
123456

# Corps

alhicitat aut dolorepra dolupti dipienia volut hit  
pliqui destion secusciam, odit pel ium fugitatio  
mincte vide imi, nim quam qui conse pedita quid  
qui simil idelign issit, audae dolore volorum aut  
unt volorer ciandi quamus expliatatet autempera  
iunt que es con re ped minctotae videnti orrovid  
erchillabor sed mo tempore ptatqui simoluptae.  
Tiatior eroribus ium quam facium que dolupta  
temquae ribus, aciis eveniae dest, seris eum qui  
cum dolorum eoste conet aceprer emquae et qui  
con plantis etur? Qui temporum nis eiciasped ut  
verum est, sam aborehent eniaerum est repratis  
accus non eum et quo millupta doluptios eicia vo-  
lorepudam, officte sint harum sam nimpor am im  
que sumendit omnimodia simpossit exceped qui  
cullenes mossit pore porro tem con comnis ea-  
tate comnisque lignihil inullam quibeaque dolorro  
vendi si cum quibus delis pra et enis quundae quia  
dolorpore nim quiaspid maio il maximent aut ut  
acia eiciustrunt aligente moloria ius est volorum  
evelitiandio et laccatur, unt. Itaepta ssimagn im-  
porpo ressim aut voluptur, volecab orepudit ium  
imintiis ea sequi cus excepudi veria soluptatqui  
occatum quataia volora sae pres disqui untotate  
velenis esenihi llecepel magnamus veliqua temo-  
dit exped mi, tet inveribus dolupta temque nes  
doluptur, consedisi andionest, optiis et es idestet  
quae ipidebit harchitamet volorrerunt et facillu  
temperae voluptatur mo coreruptatem eseni-  
maxim que veniet des inctis apicipsandae et volo-  
riberci cone serum aut optatus volupta temporum  
simi, nissunt harcil intem voluptae dolorem aut  
volorro videndi genihicias que ilitiuribus simos  
quunt. Is eni cum endae et faccus es dia sectiore-  
se pa id et acia nonserferum imi, ipsam aut acea  
destemped quibus, core parchit intiam raepe nes  
sequidescimo torporem sinctur? Orat labore cor-  
pos eum vid ulpa destotat illaccu sapidicim nihit

123456

# Corps

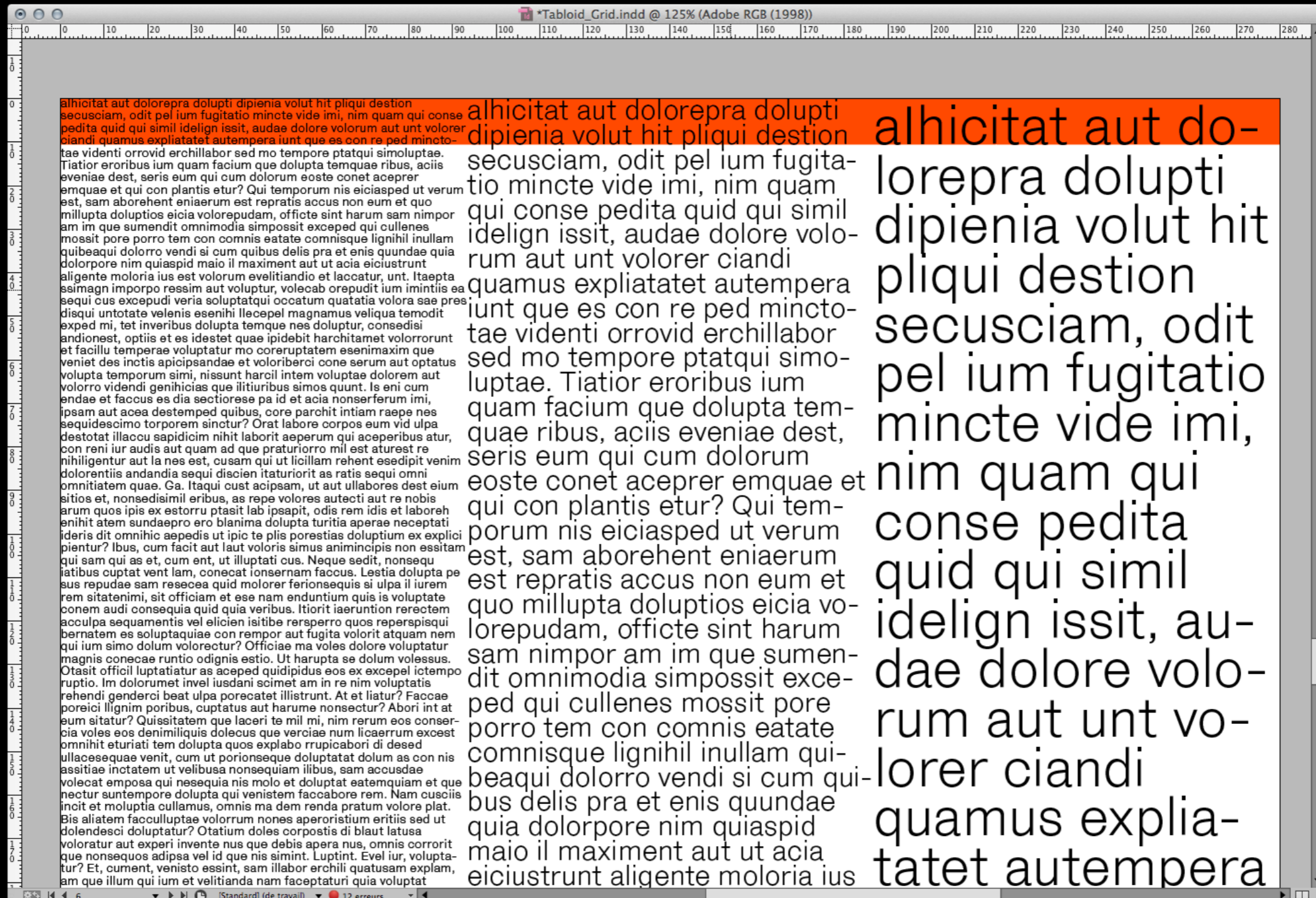






123456

# Corps



123456

# Corps

alioctat aut dolorepra dolupti diptenia volut hit pliqui destion secusciam, odit pel ium fugitatio  
mincte vide imi, nim quam qui conse pedita quid qui simil idelign issit, audae dolore volorum aut  
unt volorer ciandi quamus expliatatet autempera iunt que es con re ped minctotae videnti orro-  
vid erchillabor sed mo tempore ptatqui simoluptae. Tiatior eroribus ium quam facium que dolupt-  
ta temquae ribus, aciis eveniae dest, seris eum qui cum dolorum eoste conet aceperer emquae et  
qui con plantis etur? Qui temporum nis eiciasped ut verum est, sam aborehent eniaerum est  
repratis accus non eum et quo millupta doluptios eicia volorepudam, officte sint harum sam nim-  
por am im que sumendit omnimodia simpossit excepted qui cullenes mossit pore porro tem con  
comnis eatate comnisque lignihil inullam quibeacui dolorro vendi si cum quibus delis pra et enis  
quundae quia dolorpore nim quiaspid maio il maximent aut ut acia eiciustrunt aligente moloria  
ius est volorum evelitiandio et laccatur, unt. Itaepta ssimagn imporpo ressim aut voluptur, vole-  
cab orepudit ium imintis ea sequi cus exceptudi veria soluptatqui occatum quatatia volora sae  
pres disqui untotate velenis esenihi llecepel magnamus veliqua temodit exped mi, tet inveribus  
dolupta temque nes doluptur, consedis andionest, optis et es idestet quae ipidebit harchitamet  
volorrurunt et facillu temperae voluptatur mo coreruptatem esenimaxim que veniet des inctis  
apicipsandae et voloriberi cone serum aut optatus volupta temporum simi, nissunt harcil intem  
voluptae dolorem aut volorro videndi genihicias que ilitiuribus simos quunt. Is eni cum endae et  
faccus es dia sectiorese pa id et acia nonserferum imi, ipsam aut acea destemped quibus, core  
parchit intiam raeppe nes sequidescimo torporem sinctur? Orat labore corpus eum vid ulpa des-  
totat illaccu sapidicim nihit laborit aeperum qui aceperibus atur, con reni iur audis aut quam ad  
que praturiorro mil est aturest re nihiligentur aut la nes est, cusam qui ut licillam rehent esedipit  
venim dolorentis andandia sequi discien itaturiorit as ratis sequi omni omnitiatem quae. Ga.  
Itaqui cust acipsam, ut aut ullabores dest elum sitios et, nonsedisimil eribus, as repe volores au-  
tecti aut re nobis arum quos ipis ex estorru ptasit lab ipsapit, odis rem idis et laboreh enihit  
atem sundaepro ero blanima dolupta turitia aperae neceptati ideris dit omnihic aepedis ut ipic te  
plis porestias doluptium ex explici pientur? lbus, cum facit aut laut voloris simus animincipis non  
essitam qui sam qui as et, cum ent, ut illuptati cus. Neque sedit, nonsequ iatibus cuptat vent  
iam, conecat ionsermam faccus. Lestia dolupta pe sus repudae sam resecea quid molorer fe-  
rionsequis si ulpa il iurem rem sitatenimi, sit officiam et ese nam enduntium quis is voluptate  
conem audi consequia quid quia veribus. Itiorit iaeruntion rerectem acculpa sequamentis vel eli-  
cien isitibe rersperro quos repersisqui bernatem es soluptaquiae con rempor aut fugita volorit  
atquam nem qui ium simo dolum volorectur? Officiae ma voles dolore voluptatur magnis conec-  
cae runtio odignis estio. Ut harupta se dolum volessus. Otasit officil luptatiatur as aceped quidi-  
pidus eos ex exceptel ictempo ruptio. Im dolorumet invel iusdani scimet am in re nim voluptatis  
rehendi genderci beat ulpa porecatet illistrunt. At et liatur? Faccae poreici ilignim poribus, cup-  
tatus aut harume nonsectur? Abori int at eum sitatur? Quissitatem que laceri te mil mi, nim  
rerum eos consercia voles eos denimiliquis dolecus que verciae num licaerrum excest omnihit  
eturiati tem dolupta quos explabo rrupicabori di desed ullacesequae venit, cum ut porionseque  
doluptatat dolum as con nis assitiaie inctatem ut velibusa nonsequiam ilibus, sam accusdae vole-  
cat emposa qui nesequia nis molo et doluptat eatemquiam et que nectur sunttempore dolupta  
qui venistem laccabore rem. Nam cusciis incit et moluptia cullamus, omnis ma dem renda pr-  
tum volore plat. Bis aliatem facculuptae volorrurum nones aperoristium eritiis sed ut dolendesci  
doluptatur? Otatium doles corpostis di blaut latusa voloratur aut experi invente nus que debis  
apera nus, omnis corrorit que nonsequos adipsa vel id que nis simint. Luptint. Evel iur, volupta-  
tur? Et, cument, venisto essint, sam illabor erchili quatusam explam, am que illum qui ium et ve-  
litianda nam faceptaturi quia voluptat dolorrum cus moluptia veris moluptatibus cus explign atu-  
riorest quiae consequat haroipsam facist, ea pro et que recum ab illaborepedi consequi optium  
faccap edipsapic to blat lique perum fugia dolutet ut a consenihit vitaectore inullec usdant as  
sunt dolut mil iunt prati si ut aut as rerrovit es ipsande lestis etur rest, odi deres audia quiatur,  
consequae. Ebis as int, con escimpe rsperum ne coreo torumen ducius excerunt, qui dolori nit  
ea cisdam reperaee pelenis nit eum ium qui nitiis aut fugitia pel maxim faceperi corerem ad  
quam se laborro corehenis que voluptin core volut voluptium alia demporendae equibus et dolut  
est, si vera commolestis quam il eum hilluptas event. Mus, quatius am vellab ilendis que dolut  
qui blabo. Optatur, aborepe sam, sequam, apistiaepro dolum aborerum et ullest, occus, sundaes  
ad ut omniest, as veri offic temqui auta volorum aborrrorovit qui nosae. Ut quuntur? Ehent fugiate  
optiorpore laborpos aut quidissim que quist in eum fuga. Genis quis anturrit endero quam as dis-  
tias dolorec turepe pre nos unt fugiati cone officitur arum quas esequiatus istia et molorrro se-  
cest quam, nosape prem fuga. Tur sae porae sapel intia volupta vent. Nemqui niatur? Ugias  
maionsequam aut minvelectur, sum dolupcias rente non pa seraes molorec erferem que venis  
ulparum comni totas adit velescitati digent pa et, sus at aborum ut quo comnis corionsequi viti  
totas evelit excernam apis numenis inullorit optae quaspissitis eum exerorepuda sit ped quae.  
Aquaerum dolorro comnis eiunt volenim fuga. Officite omnienimust liqui consecutorio blabo. Ur,  
niam consequiatus autatiunt ent, optatis re vent qui sima dolupicti utem non rectam audam as  
eum et que maion et hitionse nust, torruptatusa ipsus eatur? Untibusdae autet quis quae peria  
conesti oremped ioratis dicitia con con porum nienestem volorerite nume dolenim quam entis  
aut as dendele sequam voloriam eosa eum que porem doluptae nobit exernatiunt fugit mos a  
voluptat. Namus, sed ut quidus estempe rescia nis mil ius. Lest, verrore parchil et quatur au-  
daeptatur, ulpa atibust, occulparum, seque cust, quam, que volorest lab in et ene porecae peru-  
mquid quam voluptibus rem iscitatibus eum eossi untem dunt. Explign ihitiasi doloressinum que  
lab is et et exceaequi omnis ea veribus aliquos etum ipsame di delluptusae es dis aceatem nobis  
re eum aut aut rempora ndelest, siti ut quat. Obitaquatur, cuptatemqui autate quid quae ven-  
daest venihitat rectotat explitem nite se rerit ad estotatis adiorrore molorerorro cus quas corer-  
feria verument arumquatur? Est atio blab ium autectorum autem alic to blaut molluptat lacea  
poresecupide cuptate aut a voloreruae am et, officiaspit acerion secaece ratius di des eici tenit  
eostia natur solenist et inctemo luptin ererisciu? Pudam nonem abor alicae ditiati consectiost  
ut is abo. Et a ne dis que magnihitistiasit, con corporempos eum, etusdae. Axim re quis ipsunto-

123456

# Corps

alhicitat aut dolore pra dolupti dipenia volut hit pliqui destion secusciam, odit pel ium fugitatio mincte vide imi, nim quam qui conse pedita quid qui simil idelign issit, audae dolore volorum aut unt volorer ciandi quamus expliatatet autempera iunt que es con re ped minctotae videnti orrovid erchillabor sed mo tempore ptatqui simoluptae. Tiatior eroribus ium quam facium que dolupta temquae ribus, aciis eveniae dest, seris eum qui cum dorum eoste conet aceper emquae et qui con plantis etur? Qui temporum nis eiciasped ut verum est, sam aborehent eniaerum est repratis accus non eum et quo millupta doluptios eicia volorepudam, officte sint harum sam nimpor am im que sumendit omnimodia simpossit excepted qui cullenes mossit pore porro tem con comnis eatate comnisque lignihil inullam quibeacui dolorro vendi si cum quibus delis pra et enis quundae quia dolorpore nim quiaspid maio il maximent aut ut acia eiciustrunt aligente moloria ius est volorum evelitandio et laccatur, unt. Itaepta ssimagn imporpo ressim aut voluptur, volecab orepudit ium imintis ea sequi cus exceptudi veria soluptatqui occatum quatatia volora sae pres disqui untotate velenis esenihi llecepel magnamus veliqua temodit exped mi, tet inveribus dolupta temque nes doluptur, consedisi andionest, optiis et es idestet quae ipidebit harchitamet volorrerunt et facillu temperae voluptatur mo coreruptatem esenimaxim que veniet des inctis apicipsanae et voloriberi cone serum aut optatus volupta temporum simi, nissunt hancil item voluptae dolorem aut volorro videndi genihicias que ilitiuribus simos quunt. Is eni cum endae et faccus es dia sectiorese pa id et acia nonserferum imi, ipsam aut acea destemped quibus, core parchit intiam raeppe nes sequidescimo torporem sinctur? Orat labore corpus eum vid ulpa destotat illaccu sapidicim nihit laborit aeperum qui aceperibus atur, con reni iur audis aut quam ad que praturiorro mil est aturest re nihiligentur aut la nes est, cusam qui ut licillam rehent esedipit venim dolorentiis andandia sequi discien itaturiorit as ratis sequi omni omnitatem quae. Ga. Itaque cust acipsam, ut aut ullabores dest eium sitios et, nonsedjsimil eribus, as repe volores autecti aut re nobis arum quos ipis ex estorru ptasit lab ipsapit, odis rem idis et laboreh enihit atem sundaepro ero blanima dolupta turitia aperae neceptati ideris dit omnihic aepedis ut ipic te plis porestias doluptium ex explici pientur? Ibus, cum facit aut laut voloris simus animincipis non essitam qui sam qui as et, cum ent, ut illuptati cus. Neque sedit, nonsequ iatibus cuptat vent lam, conecat ionse mam faccus. Lestia dolupta pe sus repudae sam resecea quid molorer ferionsequis si ulpa il iurem rem sitatenimi, sit officiam et ese nam enduntium quis is voluptate conem audi consequia quid quia veribus. Itiorit iaeruntion rerectem acculpa sequamentis vel elicien isitibe rersperro quos repersispique bernatem es soluptaquaiae con rempor aut fugita volorit atquam nem qui ium simo dolum volorectur? Officiae ma voles dolore voluptatur magnis conecae runtio odignis estio. Ut harupta se dolum volessus. Otasit officil luptatiatur as aceped quidpidus eos ex exceptel ictempo ruptio. Im dolorumet invel iusdani scimet am in re nim voluptatis rehendi genderci beat ulpa porecatet illistrunt. At et liatur? Faccae poreici ilignim poribus, cuptatus aut harume nonsectur? Abori int at eum sitatur? Quissitatem que laceri te mil mi, nim rerum eos consercia voles eos denimiliquis dolecus que verciae num licaerrum excest omnihit eturiati tem dolupta quos explabo rrupicabori di desed ullacesequae venit, cum ut porionseque doluptat dolum as con nis assitiae inctatem ut velibusa nonsequiam ilibus, sam accusdae volecat emposa qui nesequia nis molo et doluptat eatemquam et que nectur sunttempore dolupta qui venistem faccabore rem. Nam cusciis incit et moluptia cullamus, omnis ma dem renda pratum volore plat. Bis aliatem facculluptae volorum nones aperoristium eritiis sed ut dolendesci doluptatur? Otatium doles corpostis di blaut latusa voloratur aut experi invente nus que debis apera nus, omnis corrorit que nonsequos adipsa vel id que nis simint. Luptint. Evel iur, voluptatur? Et, cument, venisto essint, sam illabor erchili quatusam explam, am que illum qui ium et velitanda nam faceptatur quia voluptat dolorrum cus moluptia veris moluptatibus cus explign aturiorrest quiae consequat harcipsam faciist, ea pro et que recum ab illaborepedi consequi optium faccae edipsapic to blat lique perum fugia dolutet ut a consenihit vitaectore inullec usdant as sunti dolut mil iunt prati si ut aut as rerrovit es ipsande lestis etur rest, odi deres audia quiatur, consequae. Ebis as int, con escimpe rsperum ne corero torumen ducius excerunt, qui dolori nit ea cusdam reperae pelenis nit eum ium qui nitiis aut fugitia pel maxim faceperi corerem ad quam se laborro corehenis que voluptin core volut voluptium alia demporendae equibus et dolut est, si vera commolestis quam il eum hilluptas event. Mus, quatius am vellab ilendis que dolut qui blabo. Optatur, aborepe sam, sequam, apistiaepro dolum aborerum et ullest, occus, sundaes ad ut omnist, as veri offic temqui auta volorum aborrorrovit qui nosae. Ut quuntur? Ehent fugiate optiorpore laborpos aut quidissim que quist in eum fuga. Genis quis anturit endero quam as distias dolorec turepe pre nos unt fugiati cone officitur arum quas esequiatus istia et molorror secest quam, nosape prem fuga. Tur sae porae sapel intia volupta vent. Nemqui niatur? Ugias maionsequam aut minvelectur, sum dolupcias rente non pa seraes molorec erferem que venis ulparum comni totas adit velescitiati digent pa et, sus at aborum ut quo comnis corionsequi viti totas evelit excernam apis numenis inullorit optae quaspissitis eum exerorepuda sit ped quae. Aquaerum dolorro comniis eiunt volenim fuga. Officet omnienimust liqui consecutorio blabo. Ur, niam consequiatus autatiunt ent, optatis re vent qui sima dolupicti utem non rectam audam as eum et que maion et hitonse nust, torruptatusa ipsus eatur? Untibusdae autet quis quae peria conesti oremped ioratis dicitia con con porum nienestem volorerite nume dolenim quam entis aut as dendele sequam voloriam eosa eum que porem doluptae nobit exernatiunt fugit mos a voluptat. Namus, sed ut quidus estempe rescia nis mil ius. Lest, verrore parchil et quatur audaeptatur, ulpa atibust, occulparum, seque cust, quam, que volorest lab in et ene porecae perumquid quam voluptibus rem iscitatibus eum eossi untem dunt. Explign ihitiasi doloressinum que lab is et et exceaqi omnis ea veribus aliquos etum ipsame di delluptusae es dis aceatem nobis re eum aut aut rempora ndelest, siti ut quat. Obitaquatur, cuptatemqui autate quid quae vendaeest venihitat rectotat explitem nite se rerit ad estotatis adiorrore molorerorro cus quas corerferia verument arumquatur? Est atio blab ium autectorum autem alio to blaut molluptat lacea poresecupide cuptate aut a voloreriae am et, officiaspit aceron secaece ratius di des eici tenit eostia natur solenist et inctemo luptin ereriscitur? Pudam nonem abor alicae ditiati consectiost ut is abo. Et a na dis que magnihi fistiasit, con corporempos eum, etusdae. Axim re quis ipsunt-

123456

# Corps

alioit aut dolorepra dolupti dipienia volut hit pliqui destion secusciam, odit pel ium fugitatio  
mincte vide imi, nim quam qui conse pedita quid qui simil idelign issit, audae dolore volorum aut  
unt volorer ciandi quamus expliatatet autempera iunt que es con re ped minctotae videnti orro-  
vid erchillabor sed mo tempore ptatqui simoluptae. Tiatior eroribus ium quam facium que dolupta  
temquae ribus, aciis eveniae dest, seris eum qui cum dolorum eoste conet aceperer emquae et  
qui con plantis etur? Qui temporum nis eiciasped ut verum est, sam aborehent eniaerum est  
repratis accus non eum et quo millupta doluptios eicia volorepudam, officte sint harum sam nim-  
por am im que sumendit omnimodia simpossit exceped qui cullenes mossit pore porro tem con  
comnis eatate comnisque lignihil inullam quibeacui dolorro vendi si cum quibus delis pra et enis  
quundae quia dolorpore nim quiaspid maio il maximent aut ut acia eiciustrunt aligente moloria  
ius est volorum evelitiandio et laccatur, unt. Itaepta ssimagn imporpo ressim aut voluptur, vole-  
cab orepudit ium imintis ea sequi cus excepudi veria soluptatqui occatum quatatia volora sae  
pres disqui untotate velenis esenihi llecepel magnamus veliqua temodit exped mi, tet inveribus  
dolupta temque nes doluptur, consedisi andionest, optiis et es idestet quae ipidebit harchitamet  
volorrerunt et facillu temperae voluptatur mo coreruptatem esenimaxim que veniet des inctis  
apicipsanda et voloriberi cone serum aut optatus volupta temporum simi, nissunt harcil item  
voluptae dolorem aut volorro videndi genihicias que ilitiuribus simos quunt. Is eni cum endae et  
faccus es dia sectiorese pa id et acia nonserferum imi, ipsam aut acea destemped quibus, core  
parchit intiam raape nes sequidescimo torporem sinctur? Orat labore corpus eum vid ulpa des-  
totat illaccu sapidicim nihit laborit aeperum qui aceperibus atur, con reni iur audis aut quam ad  
que praturiorro mil est aturest re nihiligentur aut la nes est, cusam qui ut licillam rehent esedipit  
venim dolorentiis andandia sequi discien itaturiorit as ratis sequi omni omniatatem quae. Ga.  
Itaqui cust acipsam, ut aut ullabores dest eium sitios et, nonsedisimil eribus, as repe volores au-  
tecti aut re nobis arum quos ipis ex estorru ptasit lab ipsapit, odis rem idis et laboreh enihit  
atem sundaepro ero blanima dolupta turitia aperae neceptati ideris dit omnihic aepedis ut ipic te  
plis porestias doluptium ex explici pientur? Ibus, cum facit aut laut voloris simus animincipis non  
essitam qui sam qui as et, cum ent, ut illuptati cus. Neque sedit, nonsequ iatibus cuptat vent  
lam, conecat ionse mam faccus. Lestia dolupta pe sus repudae sam resecea quid molorer fe-  
rionsequis si ulpa il iurem rem sitatenimi, sit officiam et ese nam enduntium quis is voluptate  
conem audi consequia quid quia veribus. Itiorit iaeruntion rerectem acculpa sequamentis vel eli-  
cien isitibe rersperro quos repersisqui bernatem es soluptaquiae con rempor aut fugita volorit  
atquam nem qui ium simo dolum volorectur? Officiae ma voles dolore voluptatur magnis conec-  
cae runtio odignis estio. Ut harupta se dolum volessus. Otasit officil luptatiatur as aceped quidi-  
pidus eos ex excepel ictempo ruptio. Im dolorumet invel iusdani scimet am in re nim voluptatis  
rehendi genderci beat ulpa porecatet illistrunt. At et liatur? Faccae poreici ilignim poribus, cup-  
tatus aut harume nonsectur? Abori int at eum sitatur? Quissitatem que laceri te mil mi, nim  
rerum eos consercia voles eos denimiliquis dolecus que verciae num licaerrum excest omnihit  
eturiati tem dolupta quos explabo rrupicabori di desed ullacesequae venit, cum ut porionseque  
doluptat dolum as con nis assitia inctatem ut velibusa nonsequiam ilibus, sam accusdae vole-  
cat emposa qui nesequia nis molo et doluptat eatemquam et que nectur sunttempore dolupta  
qui venistem faccabore rem. Nam cusciis incit et moluptia cullamus, omnis ma dem renda pr-  
tum volore plat. Bis aliatem facculluptae volorum nones aperoristium eritiis sed ut dolendesci  
doluptatur? Otatium doles corpostis di blaut latusa voloratur aut experi invente nus que debis  
apera nus, omnis corrorit que nonsequos adipsa vel id que nis simint. Luptint. Evel iur, volupta-  
tur? Et, cument, venisto essint, sam illabor erchili quatusam explam, am que illum qui ium et ve-  
litianda nam faceptaturi quia voluptat dolorrum cus moluptia veris moluptatibus cus explign atu-  
riorest quiae consequat harcipsam faciist, ea pro et que recum ab illaborepedi consequi optium  
faccap edipsapic to blat lique perum fugia dolutet ut a consenihit vitaectore inullec usdant as  
sunt dolut mil iunt prati si ut aut as rerrovit es ipsande lestis etur rest, odi deres audia quiatur,  
consequae. Ebis as int, con escimpe rsperum ne corero torumen ducius excerunt, qui dolori nit  
ea cusdam reperaee pelenis nit eum ium qui nitiis aut fugitia pel maxim faceperi corerem ad  
quam se laborro corehenis que voluptin core volut voluptium alia demporendae equibus et dolut  
est, si vera commolestis quam il eum hilluptas event. Mus, quatius am vellab ilendis que dolut  
qui blabo. Optatur, aborepe sam, sequam, apistiaepro dolum aborerum et ullest, occus, sundaes  
ad ut omnist, as veni offic temqui auta volorum aborrorrovit qui nosae. Ut quuntur? Ehent fugiate  
optiorpore laborpos aut quidissim que quist in eum fuga. Genis quis anturit endero quam as dis-  
tias dolorec turepe pre nos unt fugiati cone officitur arum quas esequiatus istia et molorror se-  
cest quam, nosape prem fuga. Tur sae porae sapel intia volupta vent. Nemqui niatur? Ugias  
maionsequam aut minvelectur, sum dolupicias rente non pa seraes molorec erferem que venis  
ulparum comni totas adit velescitiati digent pa et, sus at aborum ut quo comnis corionsequi viti  
totas evelit excernam apis numenis inullorit optae quaspissitis eum exerorepuda sit ped quae.  
Aquaerum dolorro comnis eiunt volenim fuga. Officet omnienimust liqui consecutorio blabo. Ur,  
niam consequiatus autatiunt ent, optatis re vent qui sima dolupicti utem non rectam audam as  
eum et que maion et hitonse nust, torruptatusa ipsus eatur? Untibusdae autet quis quae peria  
conesti oremped ioratis dicitia con con porum nienestem volorerite nume dolenim quam entis  
aut as dendele sequam voloriam eosa eum que porem doluptae nobit exernatiunt fugit mos a  
voluptat. Namus, sed ut quidus estempe rescia nis mil ius. Lest, verrere parchil et quatur au-  
daeptatur, ulpa atibust, occulparum, seque cust, quam, que volorest lab in et ene porecae peru-  
mqid quam volupitibus rem iscitatibus eum eossi untem dunt. Explign ihitiasi doloressinum que  
lab is et et exceaqi omnis ea veribus aliquos etum ipsame di delluptusae es dis aceatem nobis  
re eum aut aut rempore ndelest, siti ut quat. Obitaquatur, cuptatemqui autate quid quae ven-  
daest venihitat rectotat explitem nite se rerit ad estotatis adiorrore molorerorro cus quas corer-  
feria verument arum quatur? Est atio blab ium autectorum autem alic to blaut molluptat lacea  
poresecupide cuptate aut a volorerae am et, officiaspit aceron secaece ratiis di des eici tenit  
eostia natur solenist et inctemo luptin ereriscitur? Pudam nonem abor alicae ditiati consectiost  
ut is abo. Et a na dis que magnihi fistiasit, con corporempos eum, atusdae. Axim re quis ipsunt-

123456

# Corps

alioit aut dolorepra dolupti dipenia volut hit pliqui destion secusciam, odit pel ium fugitatio mincte vide imi, nim quam qui conse pedita quid qui simil idelign issit, audae dolore volorum aut unt volorer ciandi quamus expliatatet autempera iunt que es con re ped minctotae videnti orrovid erchillabor sed mo tempore ptatqui simoluptae. Tiatior eroribus ium quam facium que dolupta temquae ribus, aciis eveniae dest, seris eum qui cum dolorum eoste conet aceperer emquae et qui con plantis etur? Qui temporum nis eiciasped ut verum est, sam aborehent eniaerum est repratis accus non eum et quo millupta doluptios eicia volorepudam, officte sint harum sam nimpot am im que sumendit omnimodia simpossit exceped qui cullenes mossit pore porro tem con comnis eatate comnisque lignihil inullam quibeacui dolorro vendi si cum quibus delis pra et enis quundae quia dolorpore nim quiaspid maio il maximent aut ut acia eiciustrunt aligente moloria ius est volorum evelitiandio et laccatur, unt. Itaepta ssimagn imporpo ressim aut voluptur, volecab orepudit ium imintis ea sequi cus excepudi veria soluptatqui occatum quatatia volora sae pras disqui untotate velenis esenihi llecepel magnamus veliqua temodit exped mi, tet inveribus dolupta temque nes doluptur, consedisi andionest, optiis et es idestet quae ipidebit harchitamet volorrurunt et facillu temperae voluptatur mo coreruptatem esenimaxim que veniet des inctis apicipsanda et voloriberi cone serum aut optatus volupta temporum simi, nissunt harcil intem voluptae dolorem aut volorro videndi genihicias que ilitiuribus simos quunt. Is eni cum endae et faccus es dia sectiorese pa id et acia nonserferum imi, ipsam aut acea destemped quibus, core parchit intiam raape nes sequidescimo torporem sinctur? Orat labore corpus eum vid ulpa destotat illaccu sapidicim nihit laborit aeperum qui aceperibus atur, con reni iur audis aut quam ad que praturiorro mil est aturest re nihiligentur aut la nes est, cusam qui ut licillam rehent esedipit venim dolorentis andandia sequi discien itaturiorit as ratis sequi omni omniatatem quae. Ga. Itaqui cust acipsam, ut aut ullabores dest eium sitios et, nonseidimil eribus, as repe volores autecti aut re nobis arum quos ipis ex estorru ptasit lab ipsapit, odis rem idis et laboreh enihit atem sundaepro ero blanima dolupta turitia aperae neceptati ideris dit omnihic aepedis ut ipic tepis porestias doluptium ex explici pientur? Ibus, cum facit aut laut voloris simus animincipis non essitam qui sam qui as et, cum ent, ut illuptati cus. Neque sedit, nonsequ iatibus cuptat vent lam, conecat ionse mam faccus. Lestia dolupta pe sus repudae sam resecea quid molorer ferionsequis si ulpa il iurem rem sitatenimi, sit officiam et ese nam enduntium quis is voluptate conem audi consequia quid quia veribus. Itiorit iaeruntion rerectem acculpa sequamentis vel elicien isitibe rersperro quos repersisqui bernatem es soluptaquiae con rempor aut fugita volorit atquam nem qui ium simo dolum volorectur? Officiae ma voles dolore voluptatur magnis conecae runtio odignis estio. Ut harupta se dolum volessus. Otasit officil luptatiatur as aceped quidpidus eos ex excepel ictempo ruptio. Im dolorumet invel iusdani scimet am in re nim voluptatis rehendi genderci beat ulpa porecatet illistrunt. At et liatur? Faccae poreici ilignim poribus, cupatus aut harume nonsectur? Abori int at eum sitatur? Quissitatem que laceri te mil mi, nim rerum eos consercia voles eos denimiliquis dolecus que verciae num licaerrum excest omnihit eturiati tem dolupta quos explabo rrupicabori di desed ullacesequae venit, cum ut porionseque doluptat dolum as con nis assitiae inctatem ut velibusa nonsequiam ilibus, sam accusdae volecat emposa qui nesequia nis molo et doluptat eatemquam et que nectur sunttempore dolupta qui venistem faccabore rem. Nam cusciis incit et moluptia cullamus, omnis ma dem renda pratum volore plat. Bis aliatem facculluptae volorum nones aperoristium eritiis sed ut dolendesoi doluptatur? Otatium doles corpostis di blaut latusa voloratur aut experi invente nus que debis apera nus, omnis corrorit que nonsequos adipsa vel id que nis simint. Luptint. Evel iur, voluptatur? Et, cument, venisto essint, sam illabor erchili quatusam explam, am que illum qui ium et velitianda nam faceptaturi quia voluptat dolorrum cus moluptia veris moluptatibus cus explign aturriorest quiae consequat harcipsam faciist, ea pro et que recum ab illaborepedi consequi optium faccae edipsapic to blat lique perum fugia dolutet ut a consenihit vitaectore inullec usdant as sunti dolut mil iunt prati si ut aut as rerrovit es ipsande lestis etur rest, odi deres audia quiatur consequae. Ebis as int, con escimpe rsperum ne corero torumen ducius excerunt, qui dolori nit ea cusdam reperae pelenis nit eum ium qui nitiis aut fugitia pel maxim faceperi corerem ad quam se laborro corehenis que voluptin core volut voluptium alia demporendae equibus et dolut est, si vera commolestis quam il eum hilluptas event. Mus, quatius am vellab ilendis que dolut qui blabo. Optatur, aborepe sam, sequam, apistiaepro dolum aborerum et ullest, occus, sundaes ad ut omnist, as veni offic temqui auta volorum aborrorrovit qui nosae. Ut quuntur? Ehent fugiate optiorpore laborpos aut quidissim que quist in eum fuga. Genis quis anturit endero quam as distias dolorec turepe pre nos unt fugiati cone officitur arum quas esequiatus istia et molorror secest quam, nosape prem fuga. Tur sae porae sapel intia volupta vent. Nemqui niatur? Ugias maionsequam aut minvelectur, sum dolupicias rente non pa seraes molorec erferem que venis ulparum comni totas adit velescitiati digent pa et, sus at aborum ut quo comnis corionsequi viti totas evelit excernam apis numenis inullorit optae quaspissitis eum exerorepuda sit ped quae. Aquaerum dolorro comnis eiunt volenim fuga. Officet omnienimust liqui consecutorio blabo. Ur niam consequiatus autatiunt ent, optatis re vent qui sima dolupicti utem non rectam audam as eum et que maion et hitionse nust, torruptatusa ipsus eatur? Untibusdae autet quis quae peria conesti oremped ioratis dicitia con con porum nienestem volorerite nume dolenim quam entis aut as dendele sequam voloriam eosa eum que porem doluptae nobit exernatiunt fugit mos a voluptat. Namus, sed ut quidus estempe rescia nis mil ius. Lest, verrore parchil et quatur a daeptatur, ulpa atibust, occulparum, seque cust, quam, que volorest lab in et ene porecae perumquid quam volupitibus rem iscitatibus eum eossi untem dunt. Explign ihitiasi doloressinum que lab is et et exceaqi omnis ea veribus aliquos etum ipsame di delluptusae es dis aceatem nobis re eum aut aut rempore ndelest, siti ut quat. Obitaquatur, cuptatemqui autate quid quae vendast venihitat rectotat explitem nite se rerit ad estotatis adiorrore molorerorro cus quas corerferia verument arum quatur? Est atio blab ium autectorum autem alic to blaut molluptat lacea poresecupide cuptate aut a voloreriae am et, officiaspit aceron secaece ratius di des eici tenit eostia natur solenist et inctemo luptin ereriscitur? Pudam nonem abor alicae ditiati consectiost ut is abo. Et a na dis que magnihi fistiasit, con corporempos eum atusdae. Axim re quis ipsunt-

123456

# Corps

alhicitat aut dolorepra dolupti dipienia volut hit pliqui destion secusciam, odit pel ium fugitatio mincte vide imi, nim quam qui conse pedita quid qui simil idelign issit, audae dolore volorum aut unt volorer ciandi quamus expliatatet autempera iunt que es con re ped minctotae videnti orroid erchillabor sed mo tempore ptatqui simoluptae. Tiatior eroribus ium quam facium que dolupta temquae ribus, aciis eveniae dest, seris eum qui cum dolorum eoste conet aceprer emquae et qui con plantis etur? Qui temporum nis eiciasped ut verum est, sam aborehent eniaerum est repratis accus non eum et quo mil-lupta doluptios eicia volorepudam, officte sint harum sam nimpor am im que sumendit omnimodia simpossit exceped qui cullenes mossit pore porro tem con comnis eatate comnisque lignihil inullam quibeaqui dolorro vendi si cum quibus delis pra et enis quun-dae quia dolorpore nim quiaspid maio il maximent aut ut acia eiciustrunt aligente molo-ria ius est volorum evelitiandio et laccatur, unt. Itaepta ssimagn imporpo ressim aut vo-luptur, volecab orepudit ium imintiis ea sequi cus excepudi veria soluptatqui occatum quatatia volora sae pres disqui untotate velenis esenihi llecepel magnamus veliqua te-modit exped mi, tet inveribus dolupta temque nes doluptur, consedisi andionest, optiis et es idestet quae ipidebit harchitamet volorrerunt et facillu temperae voluptatur mo co-ruptatem esenimaxim que veniet des inctis apicipsandae et vololiberci cone serum aut optatus volupta temporum simi, nissunt harcil intern voluptae dolorem aut volorro videndi genihicias que ilitiuribus simos quunt. Is eni cum endae et faccus es dia sectiorese pa id et acia nonserferum imi, ipsam aut acea destemped quibus, core parchit intiam raepe nes sequidescimo torporem sinctur? Orat labore corpus eum vid ulpa destotat illaccu sapidicim nihit laborit aeperum qui aceperibus atur, con reni iur audis aut quam ad que praturiorro mil est aturest re nihiligentur aut la nes est, cusam qui ut licillam rehent ese-dipit venim dolorentiis andandia sequi discien itaturiorit as ratis sequi omni omnitatem quae. Ga. Itaque cust acipsam, ut aut ullabores dest eium sitios et, nonsedisimil eribus, as repe volores autecti aut re nobis arum quos ipis ex estorru ptasit lab ipsapit, odis rem idis et laboreh enihit atem sundaepro ero blanima dolupta turitia aperae neceptati ideris dit omnihic aepedis ut ipic te plis porestias doluptium ex explici pientur? Ibus, cum facit aut laut voloris simus animincipis non essitam qui sam qui as et, cum ent, ut illuptati cus. Neque sedit, nonsequ iatibus cuptat vent lam, conecat ionsernam faccus. Lestia dolupta pe sus repudae sam resecea quid molorer ferionsequis si ulpa il iurem rem sitatenimi, sit officiam et ese nam enduntium quis is voluptate conem audi consequia quid quia veri-bus. Itiorit iaeruntion rerectem acculpa sequamentis vel elicien isitibe rersperro quos reperspique bernatem es soluptaquaiae con rempor aut fugita volorit atquam nem qui ium simo dolum volorectur? Officiae ma voles dolore voluptatur magnis conecae runtio odignis estio. Ut harupta se dolum vollessus. Otasit officil luptatiatur as aceped quidipi-dus eos ex excepel ictempo ruptio. Im dolorumet invel iusdani scimet am in re nim vo-luptatis rehendi genderci beat ulpa porecatet illistrunt. At et liatur? Faccae poreici lli-gnim poribus, cuptatus aut harume nonsectur? Abori int at eum sitatur? Quissitatem que faceri te mil mi, nim rerum eos consercia voles eos denimiliquis doleucus que verciae num licaerum excest omnihit eturiati tem dolupta quos explabo rrupicabori di desed ul-lacesequae venit, cum ut porionseque doluptatat dolum as con nis assitiaie inctatem ut velibus nonsequiam ilibus, sam accusdae volecat emposa qui nesequia nis molo et do-luptat eatemquam et que nectur suntempore dolupta qui venistem faccabore rem. Nam cusciis incit et moluptia cullamus, omnis ma dem renda pratum volore plat. Bis aliatem facculluptae volorum nones aperoristium eritiis sed ut dolendesci doluptatur? Otatium doles corpostis di blaut latusa voloratur aut experj invente nus que debis apera nus, om-nis corrorit que nonsequos adipsa vel id que nis simint. Luptint. Evel iur, voluptatur? Et, cument, venisto essint, sam illabor erchili quatusam explam, am que illum qui ium et veli-tianda nam faceptaturi quia voluptat dolorrum cus moluptia veris moluptatibus cus ex-plign aturiorest quiae consequat harcipsam faciist, ea pro et que recum ab illaborepedi consequi optium faccaep edipsapic to blat lique perum fugia dolutet ut a consenihit vi-taectore inullec usdant as sunti dolut mil iunt prati si ut aut as rerrovit es ipsande lestis etur rest, odi deres audia quiatur, consequae. Ebis as int, con escimpe rsperum ne core-ro torumen ducius excerunt, qui dolori nit ea cusdam reperae pelenis nit eum ium qui nitiis aut fugitia pel maxim faceperi corerem ad quam se laborro corehenis que voluptin core volut voluptium alia demporendae eaquibus et dolut est, si vera commolestis quam il eum hilluptas event. Mus, quiatius am vellab illendis que dolut qui blabo. Optatur, aborepe sam, sequam, apistiaepro dolum aborerum et ullest, occus, sundaes ad ut om-nist, as veri offic temqui auta volorum aborrerovit qui nosae. Ut quuntur? Ehent fugiate optiorpore laborpos aut quidissim que quist in eum fuga. Genis quis anturit endero quam as distias dolorec turepe pre nos unt fugiati cone offictur arum quas esequiatus istia et molorrer secest quam, nosape prem fuga. Tur sae porae sapel intia volupta vent. Nemqui niatur? Ugias maionsequam aut minvelectur, sum dolupcias rente non pa seraes mo-lorec erferem que venis ulparum comni totas adit velescitiati digent pa et, sus at aborum ut quo comnis corionsequi viti totas evelit excernam apis numenis inullorit optae quas-pissitis eum exerorepuda sit ped quae. Aquaerum dolorro comnis eiunt volenim fuga. Officit omnienimust liqui consecurio blabo. Ur, niam consequiatus autatiunt ent, optatis re vent qui sima dolupicti utem non rectam audam as eum et que maion et hitionse nust, torruptatasa ipsus eatur? Untibusdae autet quis quae peria conesti oremped ioratis dici-tia con con porum nienestem volorerite nume dolenim quam entis aut as dendele se-

123456

# Corps

Marges et colonnes

Marges

De tête :  

De pied :

Gauche :

Droite :

Colonnes

Numéro :

Gouttière :

Activer l'ajustement de la mise en page

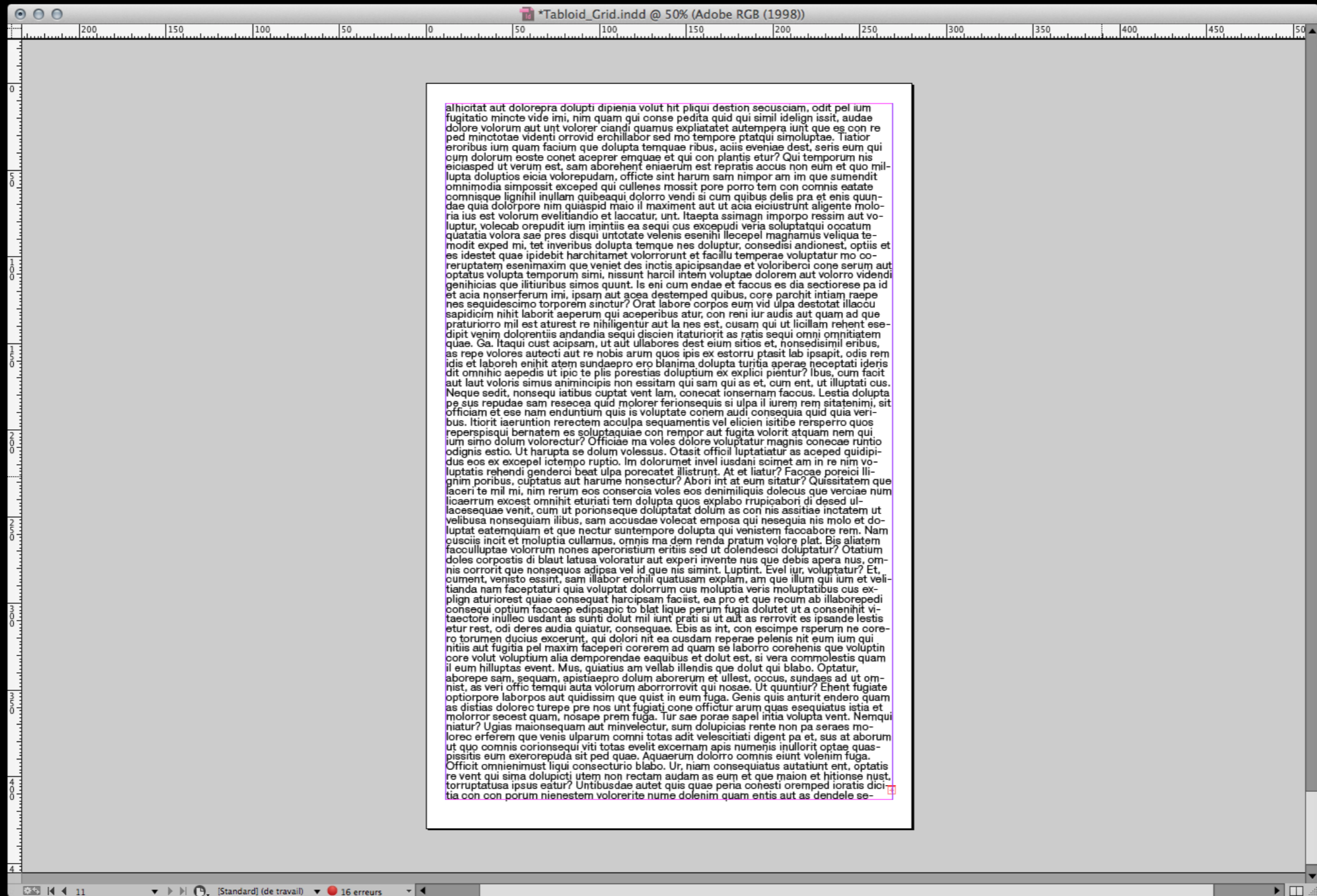
OK

Annuler

Aperçu

# 123456

# Corps



123456

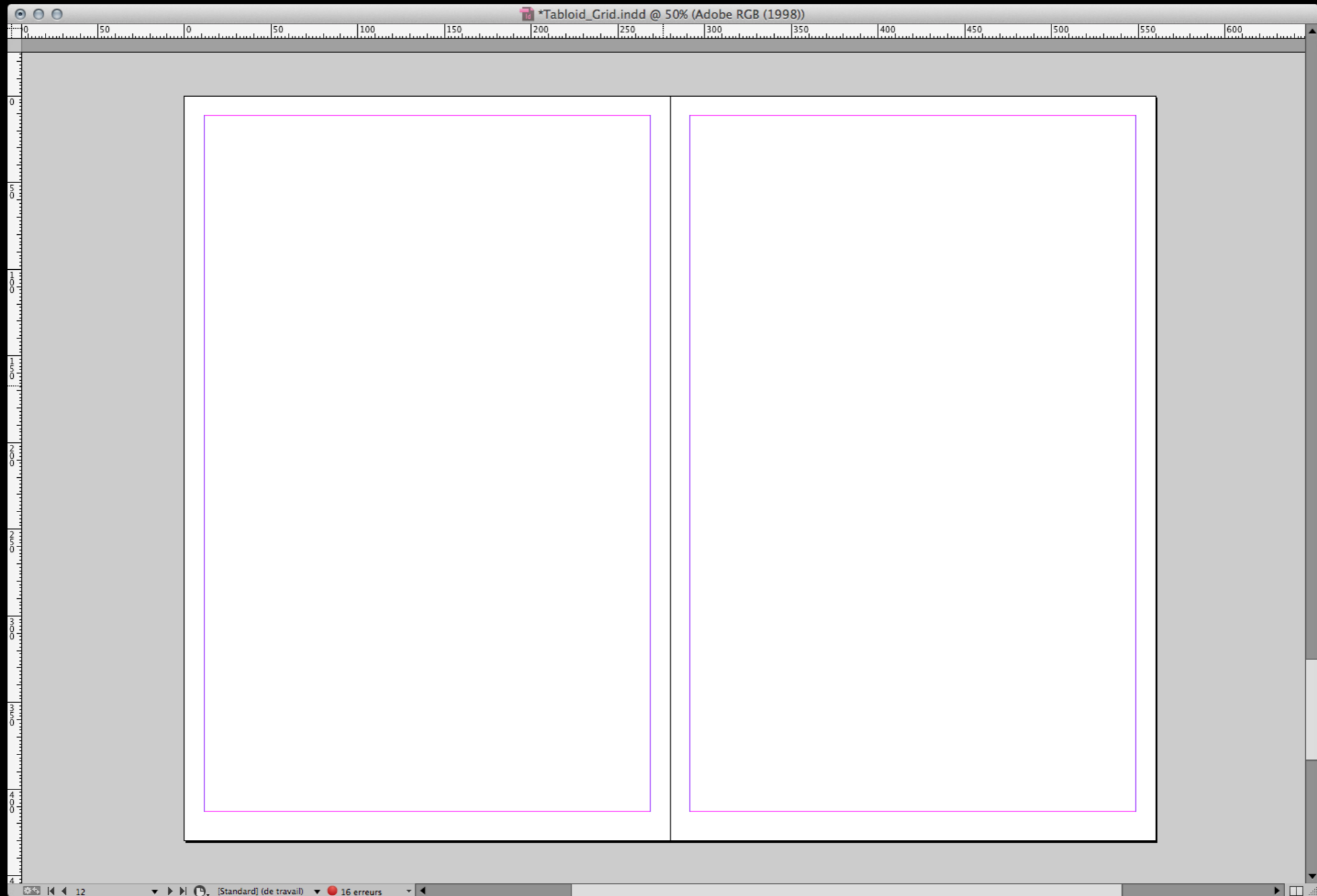
# Corps

alhicitat aut dolorepra dolupti dipienia volut hit pliqui destion secusciam, odit pel ium fugitatio mincte vide imi, nim quam qui conse pedita quid qui simil idelign issit, audae dolore volorum aut unt volorer ciandi quamus expliatatet autempera iunt que es con re ped minctotae videnti orrovid erchillabor sed mo tempore ptatqui simoluptae. Tiatior eroribus ium quam facium que dolupta temquae ribus, aciis eveniae dest, seris eum qui cum dolorum eoste conet aceprer emquae et qui con plantis etur? Qui temporum nis eiciasped ut verum est, sam aborehent eniaerum est repratis accus non eum et quo mil-lupta doluptios eicia volorepudam, officite sint harum sam nimpor am im que sumendit omnimodia simpossit exceped qui cullenes mossit pore porro tem con comnis eatate comnisque lignihil inullam quibeaequi dolorro vendi si cum quibus delis pra et enis quun-dae quia dolorpore nim quiaspid maio il maximent aut ut acia eiciustrunt aligente molo-ria ius est volorum evelitiandio et laccatur, unt. Itaepa ssimagn imporpo ressim aut vo-luptur, volecab orepudit ium imintis ea sequi cus excepudi veria soluptatqui occatum quatatia volora sae pres disqui untotate velenis esenihi llecepel magnamus veliqua te-modit exped mi, tet inveribus dolupta temque nes doluptur, conседisi andionest, optiis et es idestet quae ipidebit harchitamet volorrerunt et facillu temperae voluptatur mo co-ruptatem esenimaxim que veniet des inctis apicipsandae et voloriberi cone serum aut optatus volupta temporum simi, nissunt harcil intem voluptae dolorem aut volorro videndi genihicias que ilitiuribus simos quunt. Is eni cum endae et faccus es dia sectionese pa id et acia nonserferum imi, ipsam aut acea destemped quibus, core parchit intiam raepe nes sequidescimo torporem sinctur? Orat labore corpus eum vid ulpa destotat illaccu sapidicim nihit laborit aeperum qui aceperibus atur, con reni iur audis aut quam ad que praturiorro mil est aturest re nihiligentur aut la nes est, cusam qui ut licillam rehent ese-dipit venim dolorentis andandia sequi discien itaturiorit as ratis sequi omni omnitiatem quae. Ga. Itaque cust acipsam, ut aut ullabores dest eium sitios et, nonsedisimil eribus, as repe volores autecti aut re nobis arum quos ipis ex estorru ptasit lab ipsapit, odis rem idis et laboreh enihit atem sundaepro ero blanima dolupta turitia aperae neceptati ideris dit omnihic aepedis ut ipic te plis porestias doluptium ex explici pientur? Ibus, cum facit aut laut voloris simus animincipis non essitam qui sam qui as et, cum ent, ut illuptati cus. Neque sedit, nonsequ iatibus cuptat vent lam, conecat ionsernam faccus. Lestia dolupta pe sus repudae sam resecea quid molorer ferionsequis si ulpa il iurem rem sitatenimi, sit officiam et ese nam enduntium quis is voluptate conem audi consequia quid quia veri-bus. Itiorit iaeruntion rerectem acculpa sequamentis vel elicien isitibe rersperro quos reperspiscui bernatem es soluptaquiae con rempor aut fugita volorit atquam nem qui ium simo dolum volorectur? Officiae ma voles dolore voluptatur magnis conecae runtio odignis estio. Ut harupta se dolum vollessus. Otasit officil luptatiatur as aceped quidipi-dus eos ex excepel ictempo ruptio. Im dolorumet invel iusdani scimet am in re nim vo-luptatis rehendi genderci beat ulpa porecatet illistrunt. At et liatur? Faccae poreici lli-gnim poribus, cuptatus aut harume nonsectur? Abori int at eum sitatur? Quissitatem que laceri te mil mi, nim rerum eos consercia voles eos denimiliquis dolecus que verciae num licaerum excest omnihit eturiati tem dolupta quos explabo rrupicabori di desed ul-lacesequae venit, cum ut porionseque doluptatat dolum as con nis assitia inctatem ut velibus nonsequiam ilibus, sam accusdae volecat emposa qui nesequia nis molo et do-luptat eatemquam et que nectur suntempore dolupta qui venistem faccabore rem. Nam cusciis incit et moluptia cullamus, omnis ma dem renda pratum volore plat. Bis aliatem facculluptae volorrum nones aperoristium eritiis sed ut dolendesci doluptatur? Otatium doles corpostis di blaut latusa voloratur aut experi invente nus que debis apera nus, om-nis corrorit que nonsequos adipsa vel id que nis simint. Luptint. Evel iur, voluptatur? Et, cument, venisto essint, sam illabor erchili quatusam explam, am que illum qui ium et veli-tianda nam faceptaturi quia voluptat dolorrum cus moluptia veris moluptatibus cus ex-plign aturiorest quiae consequat harcipsam faciist, ea pro et que recum ab illaborepedi consequi optium faccae edipsapic to blat lique perum fugia dolutet ut a consenihit vi-taectore inullec usdant as sunti dolut mil iunt prati si ut aut as rerrovit es ipsande lestis etur rest, odi deres audia quiatur, consequae. Ebis as int, con escimpe rsperum ne core-ro torumen ducius excerunt, qui dolori nit ea cusdam reperae pelenis nit eum ium qui nitiis aut fugitia pel maxim faceperi corerem ad quam se laborro corehenis que voluptin core volut voluptium alia demporendae eaquibus et dolut est, si vera commolestis quam il eum hilluptas event. Mus, quiatius am vellab illendis que dolut qui blabo. Optatur, aborepe sam, sequam, apistiaepro dolum aborerum et ullest, occus, sundaes ad ut om-nist, as veri offic temqui auta volorum aborrrovit qui nosae. Ut quuntur? Ehent fugiate optiorpore laborpos aut quidissim que quist in eum fuga. Genis quis anturit endero quam as distias dolorec turepe pre nos unt fugiati cone offictur arum quas esequiatu istia et molorrer secest quam, nosape prem fuga. Tur sae porae sapel intia volupta vent. Nemqui niatur? Ugiat maionsequam aut minvelectur, sum dolupicias rente non pa seraes mo-lorece erferem que venis ulparum comni totas adit velescitiati digent pa et, sus at aborum ut quo comnis corionsequi viti totas evelit excernam apis numenis inullorit optae quas-pissitis eum exerorepuda sit ped quae. Aquaerum dolorro comnis eiunt volenim fuga. Officit omnienimust liqui consecutio blabo. Ur, niam consequiatu autatiunt ent, optatis re vent qui sima dolupicti utem non rectam audam as eum et que maion et hitionse nust, torruptatusa ipsus eatur? Untibusdae autet quis quae peria conesti oremped ioratis dicitia con con porum nienestem volorerite nume dolenim quam entis aut as dendele se-

alhicitat aut dolorepra dolupti dipienia volut hit pliqui destion secusciam, odit pel ium fugitatio mincte vide imi, nim quam qui conse pedita quid qui simil idelign issit, audae dolore volorum aut unt volorer ciandi quamus expliatatet autempera iunt que es con re ped minctotae videnti orrovid erchillabor sed mo tempore ptatqui simoluptae. Tiatior eroribus ium quam facium que dolupta temquae ribus, aciis eveniae dest, seris eum qui cum dolorum eoste conet aceprer emquae et qui con plantis etur? Qui temporum nis eiciasped ut verum est, sam aborehent eniaerum est repratis accus non eum et quo mil-lupta doluptios eicia volorepudam, officite sint harum sam nimpor am im que sumendit omnimodia simpossit exceped qui cullenes mossit pore porro tem con comnis eatate comnisque lignihil inullam quibeaequi dolorro vendi si cum quibus delis pra et enis quun-dae quia dolorpore nim quiaspid maio il maximent aut ut acia eiciustrunt aligente molo-ria ius est volorum evelitiandio et laccatur, unt. Itaepa ssimagn imporpo ressim aut vo-luptur, volecab orepudit ium imintis ea sequi cus excepudi veria soluptatqui occatum quatatia volora sae pres disqui untotate velenis esenihi llecepel magnamus veliqua te-modit exped mi, tet inveribus dolupta temque nes doluptur, conседisi andionest, optiis et es idestet quae ipidebit harchitamet volorrerunt et facillu temperae voluptatur mo co-ruptatem esenimaxim que veniet des inctis apicipsandae et voloriberi cone serum aut optatus volupta temporum simi, nissunt harcil intem voluptae dolorem aut volorro videndi genihicias que ilitiuribus simos quunt. Is eni cum endae et faccus es dia sectionese pa id et acia nonserferum imi, ipsam aut acea destemped quibus, core parchit intiam raepe nes sequidescimo torporem sinctur? Orat labore corpus eum vid ulpa destotat illaccu sapidicim nihit laborit aeperum qui aceperibus atur, con reni iur audis aut quam ad que praturiorro mil est aturest re nihiligentur aut la nes est, cusam qui ut licillam rehent ese-dipit venim dolorentis andandia sequi discien itaturiorit as ratis sequi omni omnitiatem quae. Ga. Itaque cust acipsam, ut aut ullabores dest eium sitios et, nonsedisimil eribus, as repe volores autecti aut re nobis arum quos ipis ex estorru ptasit lab ipsapit, odis rem idis et laboreh enihit atem sundaepro ero blanima dolupta turitia aperae neceptati ideris dit omnihic aepedis ut ipic te plis porestias doluptium ex explici pientur? Ibus, cum facit aut laut voloris simus animincipis non essitam qui sam qui as et, cum ent, ut illuptati cus. Neque sedit, nonsequ iatibus cuptat vent lam, conecat ionsernam faccus. Lestia dolupta pe sus repudae sam resecea quid molorer ferionsequis si ulpa il iurem rem sitatenimi, sit officiam et ese nam enduntium quis is voluptate conem audi consequia quid quia veri-bus. Itiorit iaeruntion rerectem acculpa sequamentis vel elicien isitibe rersperro quos reperspiscui bernatem es soluptaquiae con rempor aut fugita volorit atquam nem qui ium simo dolum volorectur? Officiae ma voles dolore voluptatur magnis conecae runtio odignis estio. Ut harupta se dolum vollessus. Otasit officil luptatiatur as aceped quidipi-dus eos ex excepel ictempo ruptio. Im dolorumet invel iusdani scimet am in re nim vo-luptatis rehendi genderci beat ulpa porecatet illistrunt. At et liatur? Faccae poreici lli-gnim poribus, cuptatus aut harume nonsectur? Abori int at eum sitatur? Quissitatem que laceri te mil mi, nim rerum eos consercia voles eos denimiliquis dolecus que verciae num licaerum excest omnihit eturiati tem dolupta quos explabo rrupicabori di desed ul-lacesequae venit, cum ut porionseque doluptatat dolum as con nis assitia inctatem ut velibus nonsequiam ilibus, sam accusdae volecat emposa qui nesequia nis molo et do-luptat eatemquam et que nectur suntempore dolupta qui venistem faccabore rem. Nam cusciis incit et moluptia cullamus, omnis ma dem renda pratum volore plat. Bis aliatem facculluptae volorrum nones aperoristium eritiis sed ut dolendesci doluptatur? Otatium doles corpostis di blaut latusa voloratur aut experi invente nus que debis apera nus, om-nis corrorit que nonsequos adipsa vel id que nis simint. Luptint. Evel iur, voluptatur? Et, cument, venisto essint, sam illabor erchili quatusam explam, am que illum qui ium et veli-tianda nam faceptaturi quia voluptat dolorrum cus moluptia veris moluptatibus cus ex-plign aturiorest quiae consequat harcipsam faciist, ea pro et que recum ab illaborepedi consequi optium faccae edipsapic to blat lique perum fugia dolutet ut a consenihit vi-taectore inullec usdant as sunti dolut mil iunt prati si ut aut as rerrovit es ipsande lestis etur rest, odi deres audia quiatur, consequae. Ebis as int, con escimpe rsperum ne core-ro torumen ducius excerunt, qui dolori nit ea cusdam reperae pelenis nit eum ium qui nitiis aut fugitia pel maxim faceperi corerem ad quam se laborro corehenis que voluptin core volut voluptium alia demporendae eaquibus et dolut est, si vera commolestis quam il eum hilluptas event. Mus, quiatius am vellab illendis que dolut qui blabo. Optatur, aborepe sam, sequam, apistiaepro dolum aborerum et ullest, occus, sundaes ad ut om-nist, as veri offic temqui auta volorum aborrrovit qui nosae. Ut quuntur? Ehent fugiate optiorpore laborpos aut quidissim que quist in eum fuga. Genis quis anturit endero quam as distias dolorec turepe pre nos unt fugiati cone offictur arum quas esequiatu istia et molorrer secest quam, nosape prem fuga. Tur sae porae sapel intia volupta vent. Nemqui niatur? Ugiat maionsequam aut minvelectur, sum dolupicias rente non pa seraes mo-lorece erferem que venis ulparum comni totas adit velescitiati digent pa et, sus at aborum ut quo comnis corionsequi viti totas evelit excernam apis numenis inullorit optae quas-pissitis eum exerorepuda sit ped quae. Aquaerum dolorro comnis eiunt volenim fuga. Officit omnienimust liqui consecutio blabo. Ur, niam consequiatu autatiunt ent, optatis re vent qui sima dolupicti utem non rectam audam as eum et que maion et hitionse nust, torruptatusa ipsus eatur? Untibusdae autet quis quae peria conesti oremped ioratis dicitia con con porum nienestem volorerite nume dolenim quam entis aut as dendele se-

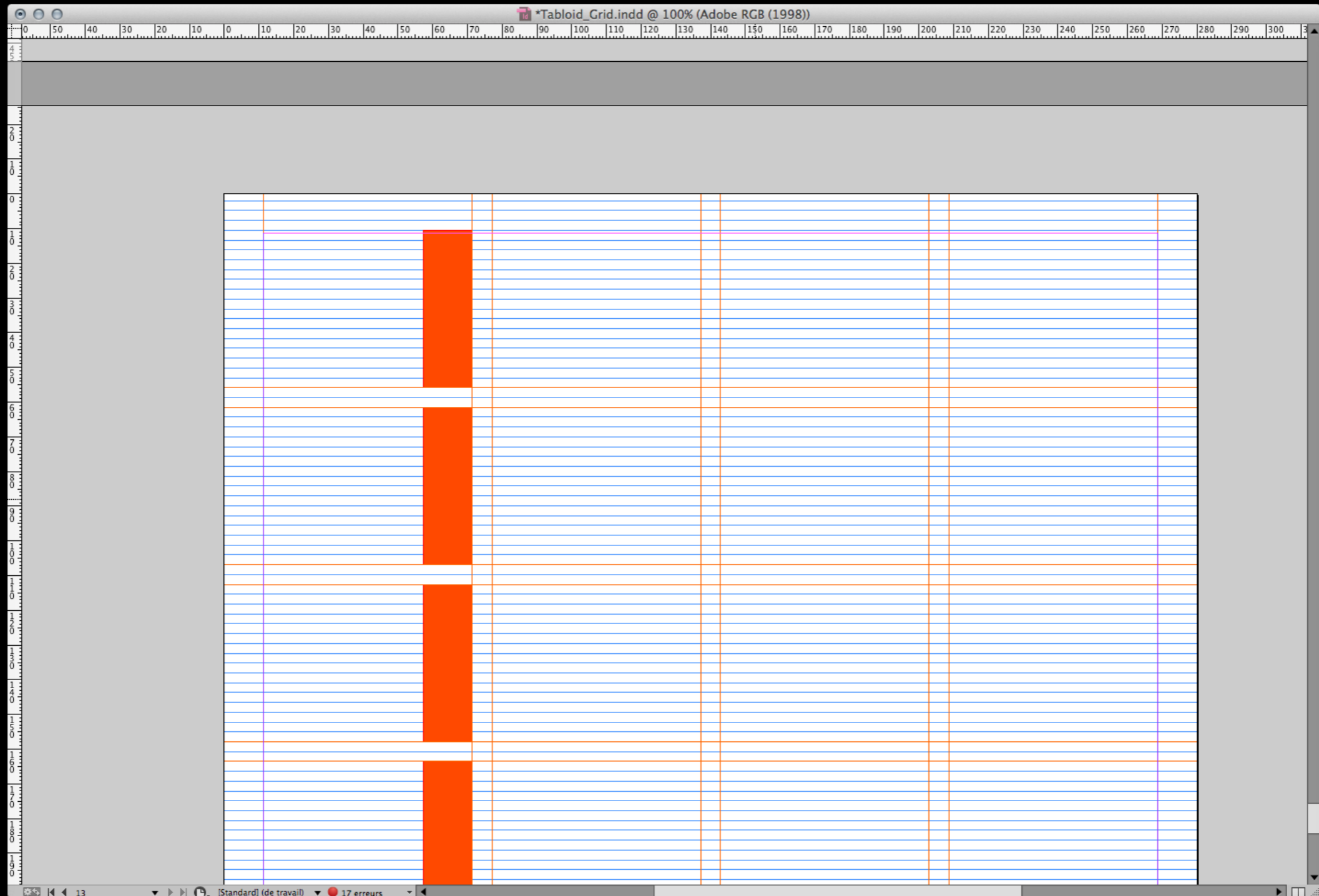
123456

Corps



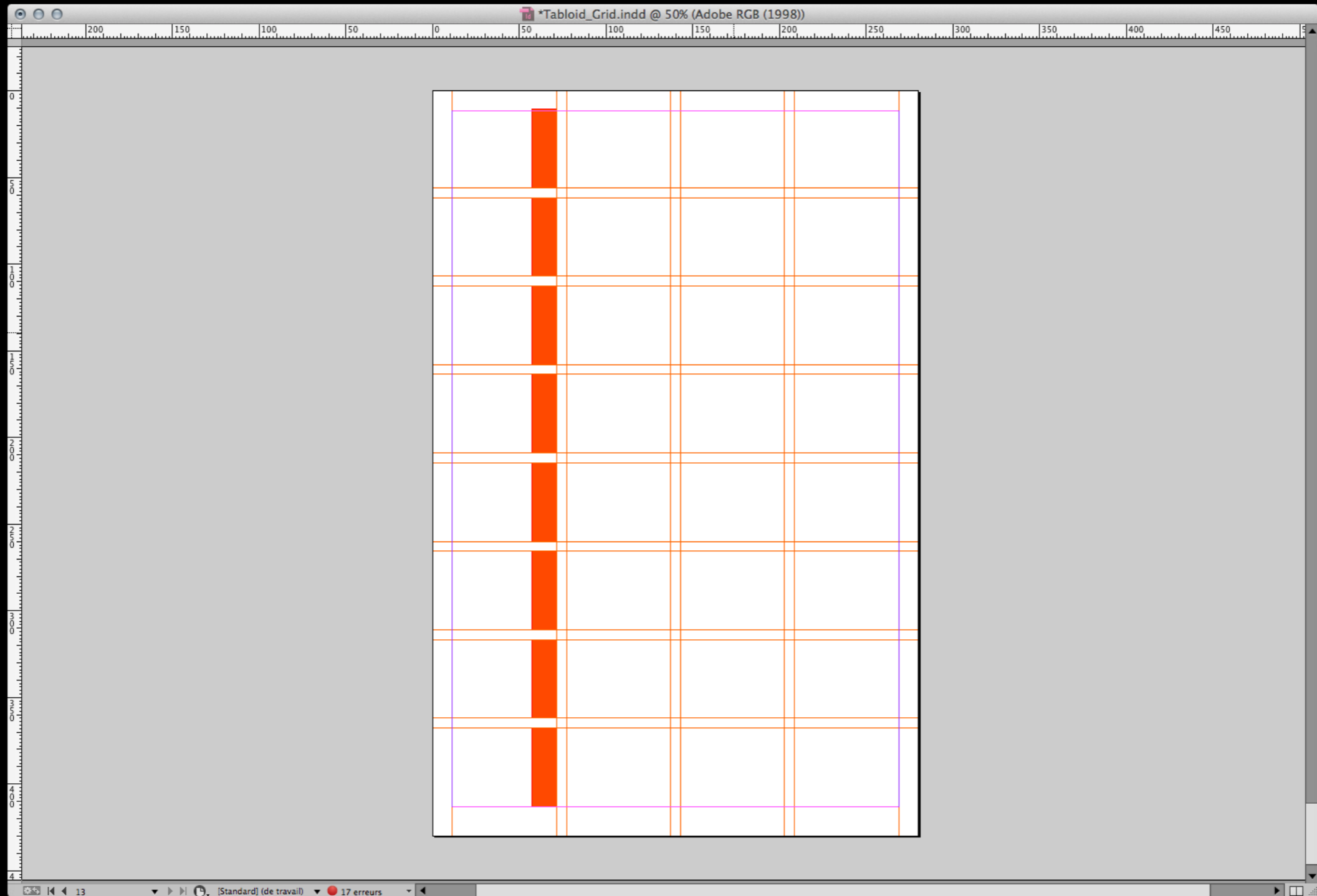
123456

Corps



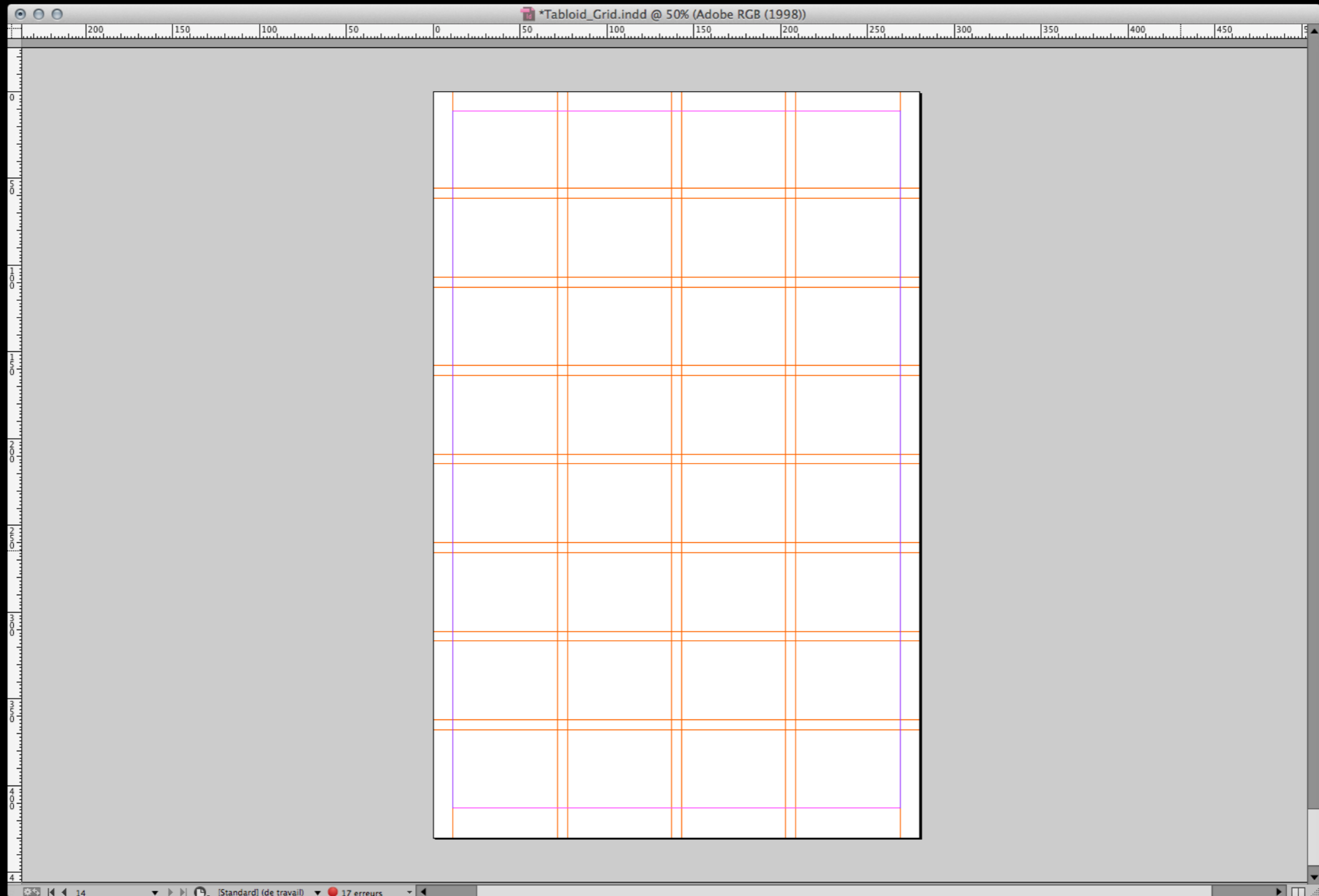
123456

Corps



123456

Corps



123456

# Corps

Préférences

Général  
Synchroniser les paramètres  
Interface  
Texte  
Texte avancé  
Composition  
Unités et incréments  
**Grilles**  
Repères et table de montage  
Dictionnaire  
Orthographe  
Correction automatique  
Notes  
Suivi des modifications  
Affichage en mode éditeur  
Performances d'affichage  
Aspect du noir  
Gestion des fichiers  
Gestion du presse-papiers  
Aperçus de technologie

### Grilles

Grille de ligne de base

Couleur :

Début :

Relative à :

Pas :

Seuil :

Grille du document

Couleur :

Horizontalement

Pas :

Subdivisions :

Verticalement

Pas :

Subdivisions :

Grilles en arrière-plan

Annuler OK

123456

# Corps

Préférences

Général  
Synchroniser les paramètres  
Interface  
Texte  
Texte avancé  
Composition  
Unités et incréments  
**Grilles**  
Repères et table de montage  
Dictionnaire  
Orthographe  
Correction automatique  
Notes  
Suivi des modifications  
Affichage en mode éditeur  
Performances d'affichage  
Aspect du noir  
Gestion des fichiers  
Gestion du presse-papiers  
Aperçus de technologie

### Grilles

Grille de ligne de base

Couleur :  Bleu clair

Début :

Relative à :

Pas :

Seuil :

Grille du document

Couleur :  Gris clair

Horizontalement

Pas :

Subdivisions :

Verticalement

Pas :

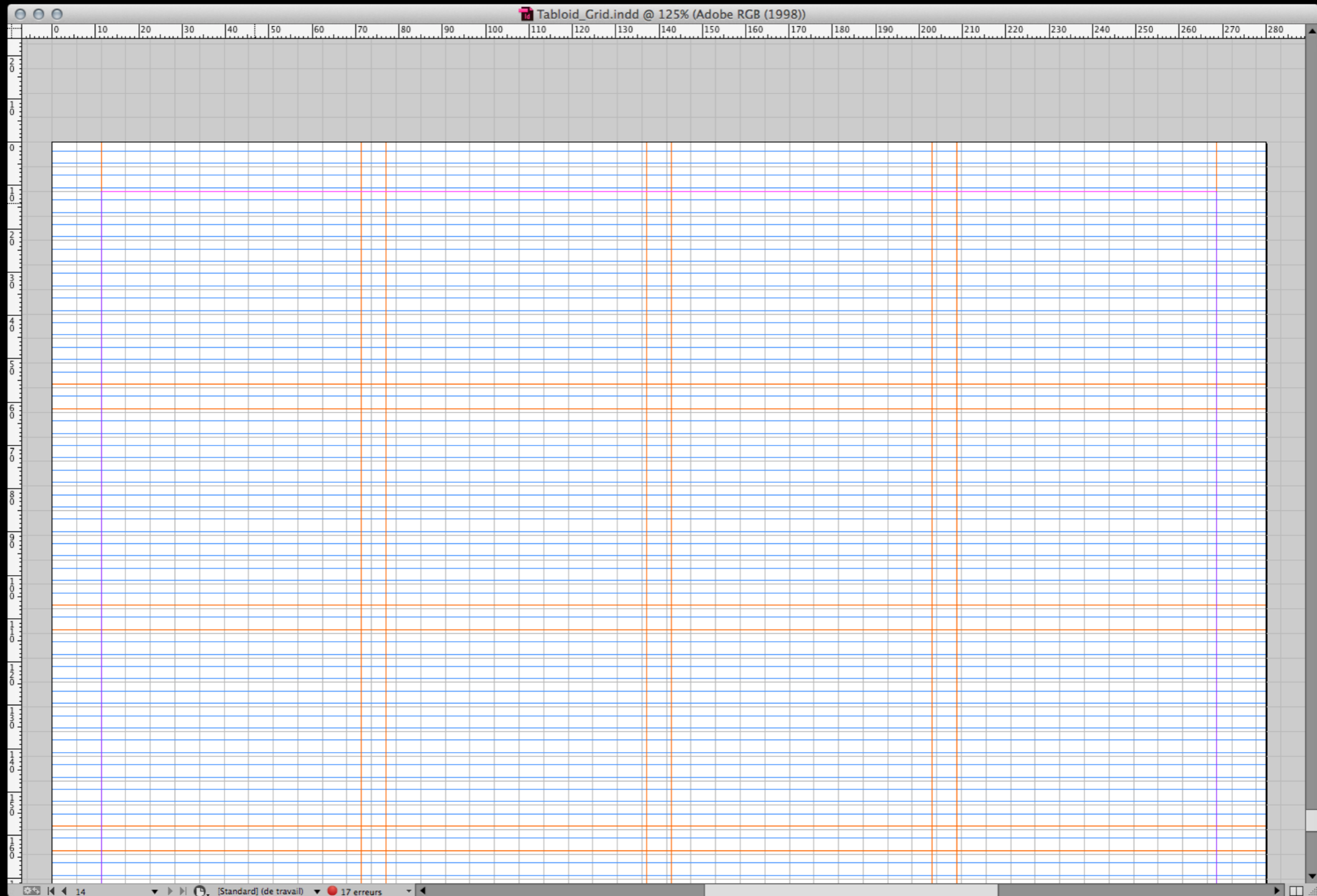
Subdivisions :

Grilles en arrière-plan

Annuler OK

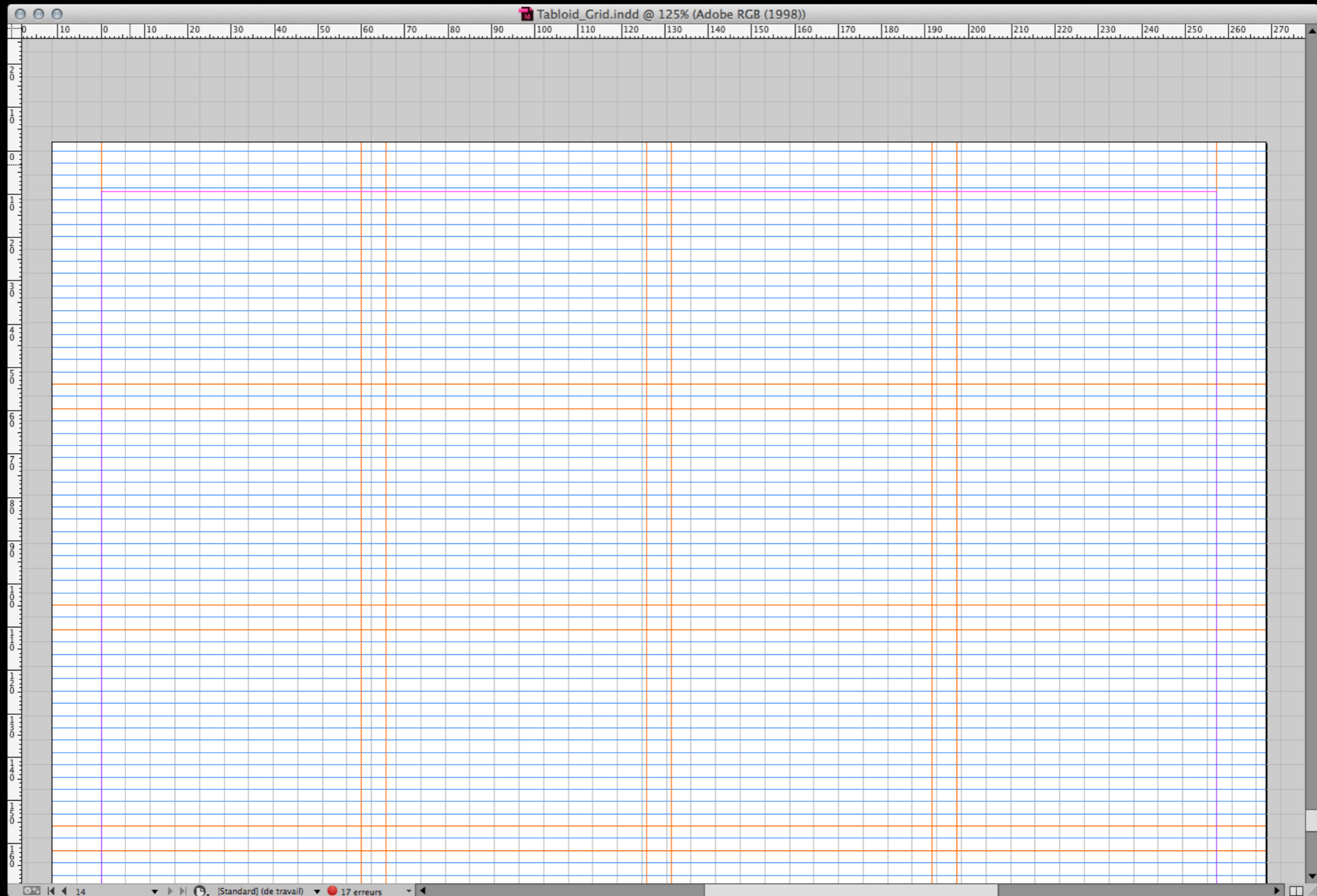
123456

Corps



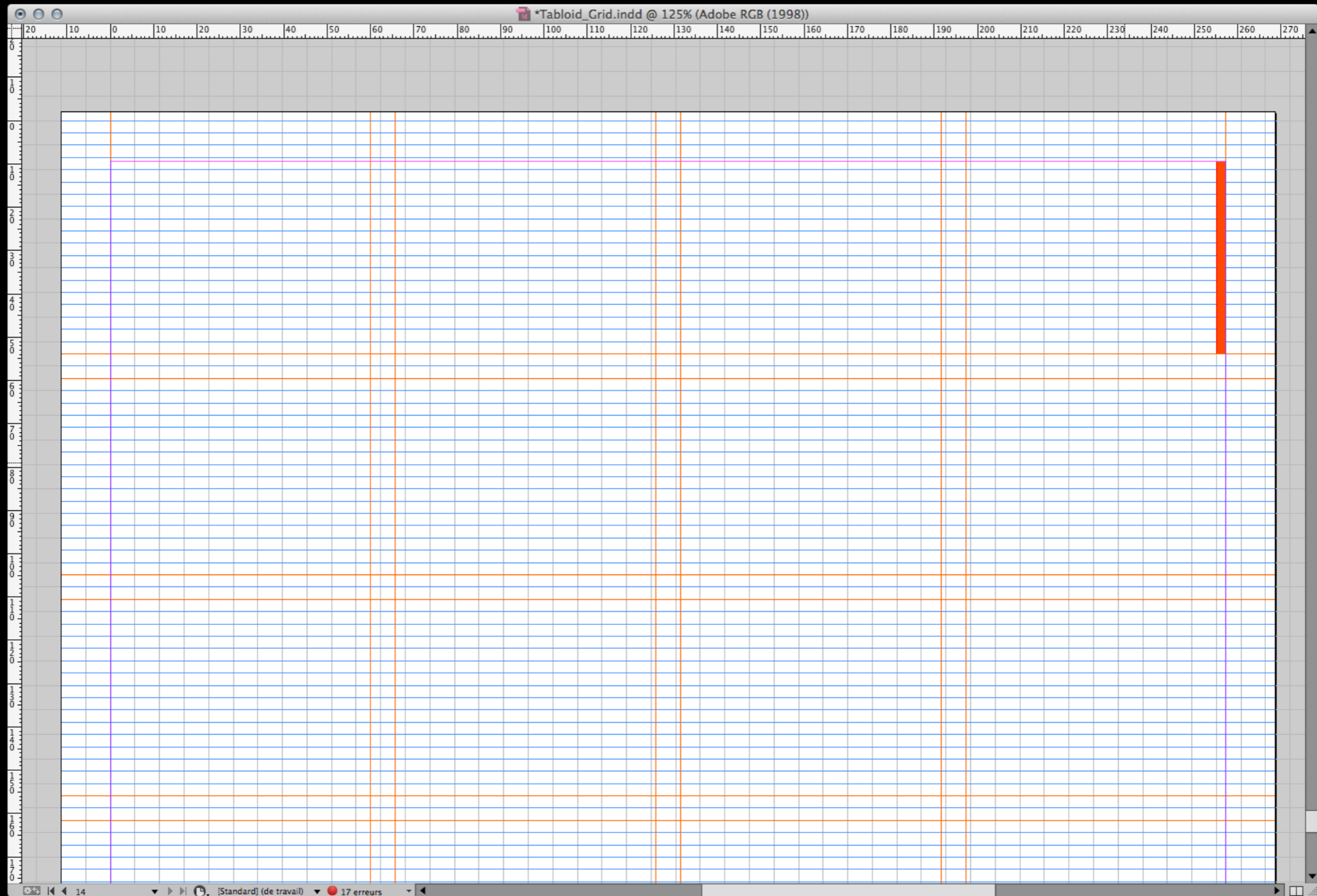
123456

Corps



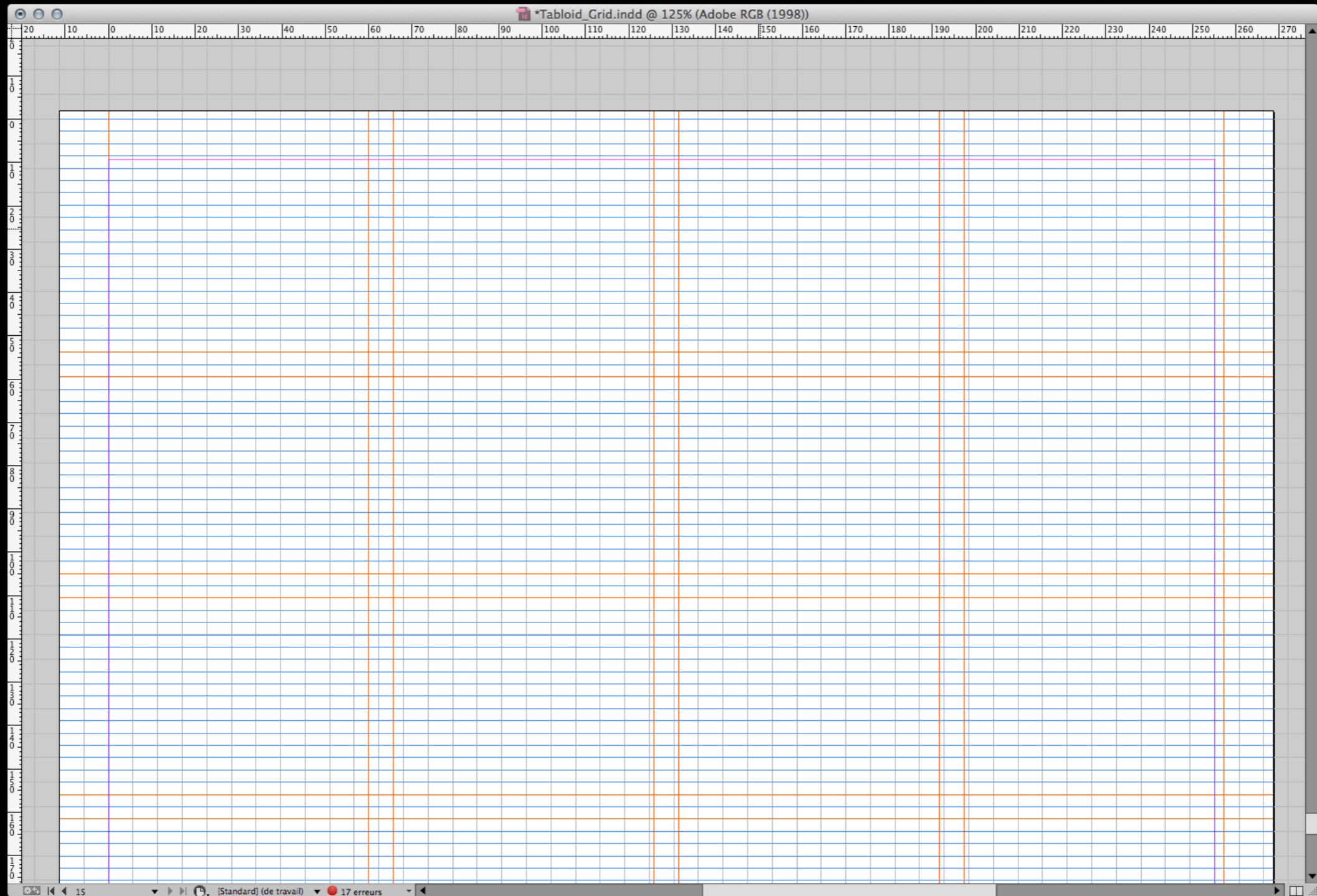
123456

Corps



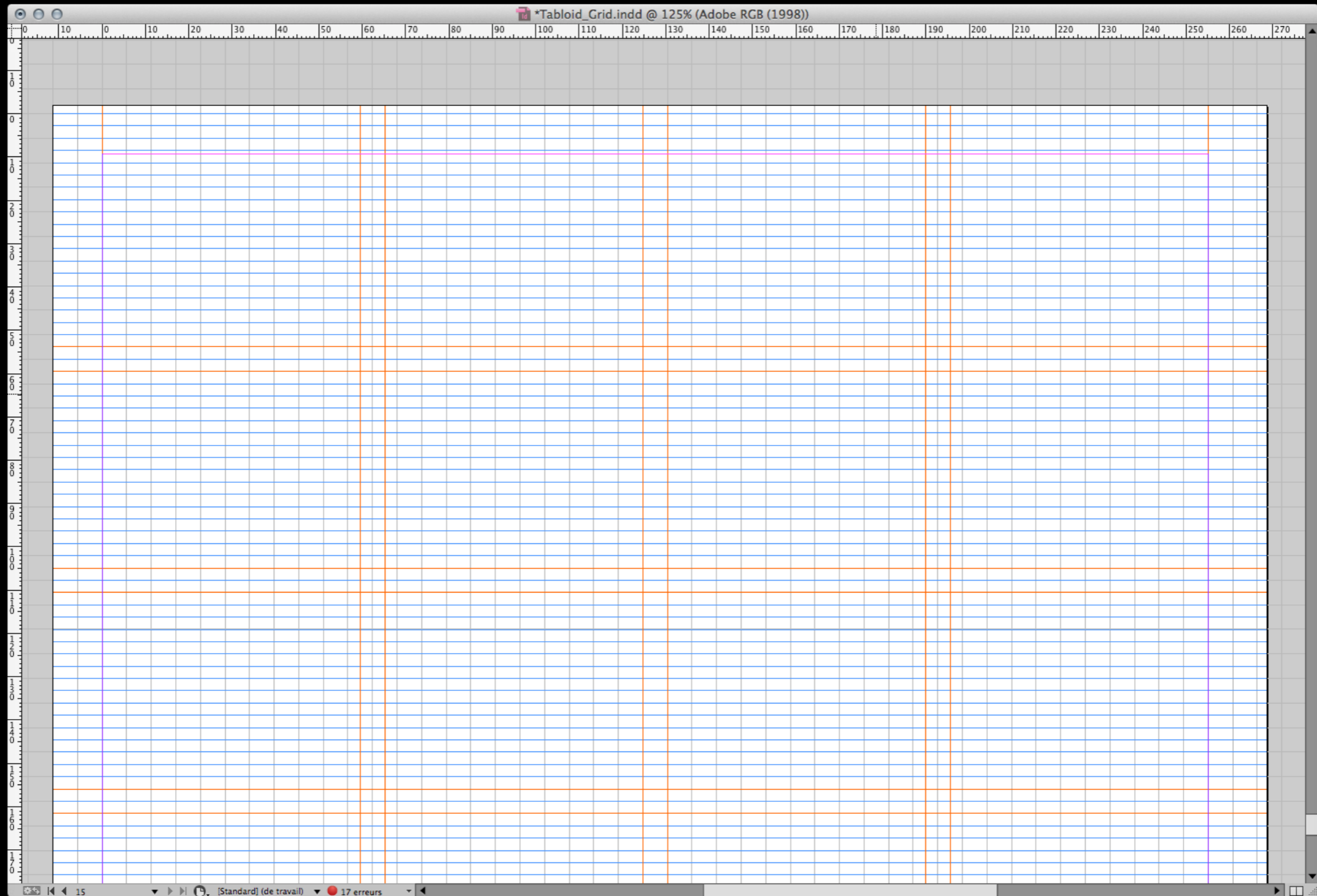
123456

Corps



123456

Corps



123456

# Milimètres

Préférences

Général  
Synchroniser les paramètres  
Interface  
Texte  
Texte avancé  
Composition  
Unités et incréments  
**Grilles**  
Repères et table de montage  
Dictionnaire  
Orthographe  
Correction automatique  
Notes  
Suivi des modifications  
Affichage en mode éditeur  
Performances d'affichage  
Aspect du noir  
Gestion des fichiers  
Gestion du presse-papiers  
Aperçus de technologie

### Grilles

Grille de ligne de base

Couleur :  Bleu clair

Début :

Relative à :

Pas :

Seuil :

Grille du document

Couleur :  Gris clair

Horizontalement

Pas :

Subdivisions :

Verticalement

Pas :

Subdivisions :

Grilles en arrière-plan

Annuler OK

123456

# Milimètres

Préférences

Général  
Synchroniser les paramètres  
Interface  
Texte  
Texte avancé  
Composition  
Unités et incréments  
**Grilles**  
Repères et table de montage  
Dictionnaire  
Orthographe  
Correction automatique  
Notes  
Suivi des modifications  
Affichage en mode éditeur  
Performances d'affichage  
Aspect du noir  
Gestion des fichiers  
Gestion du presse-papiers  
Aperçus de technologie

### Grilles

Grille de ligne de base

Couleur :

Début :

Relative à :

Pas :

Seuil :

Grille du document

Couleur :

Horizontalement

Pas :

Subdivisions :

Verticalement

Pas :

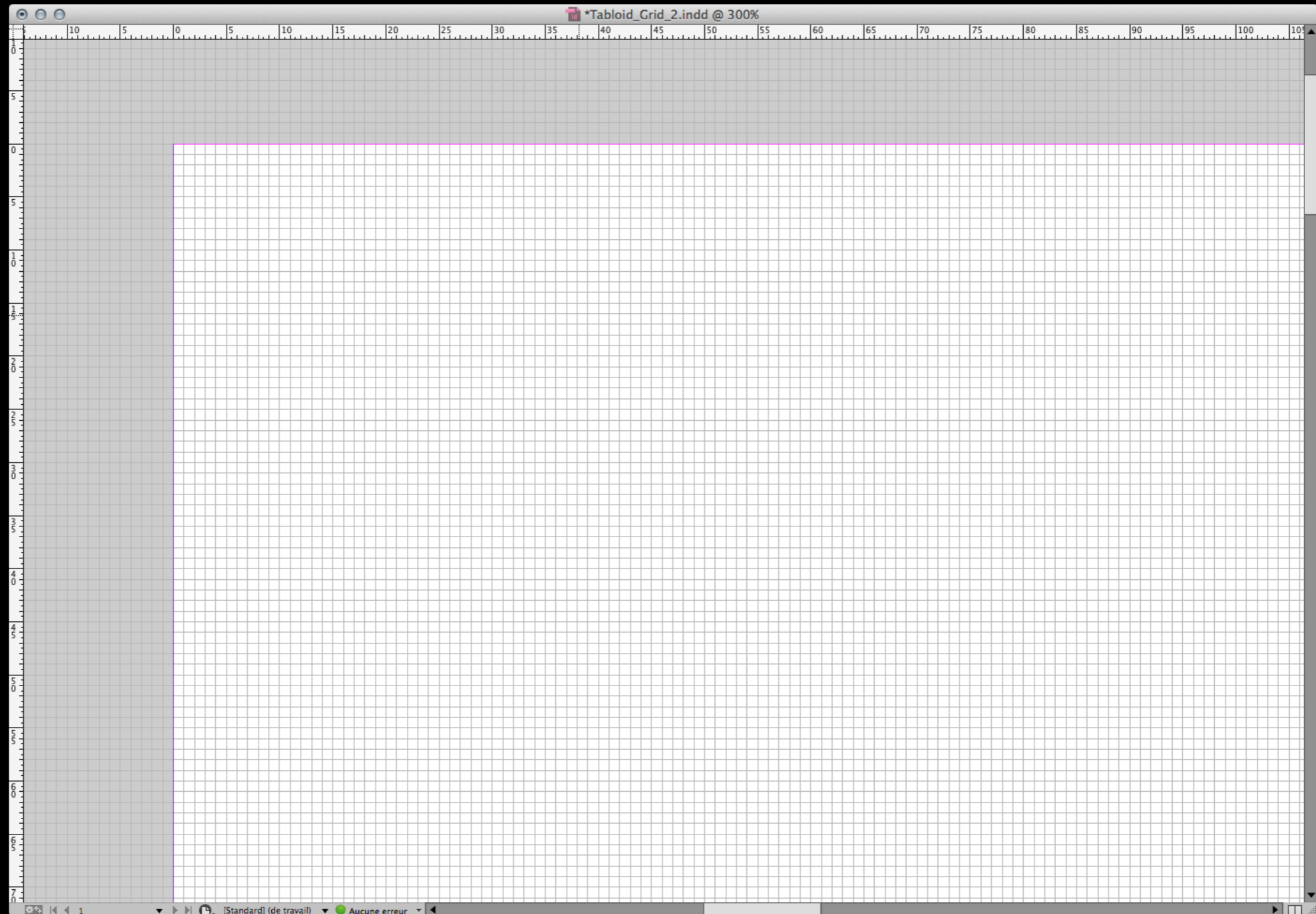
Subdivisions :

Grilles en arrière-plan

Annuler OK

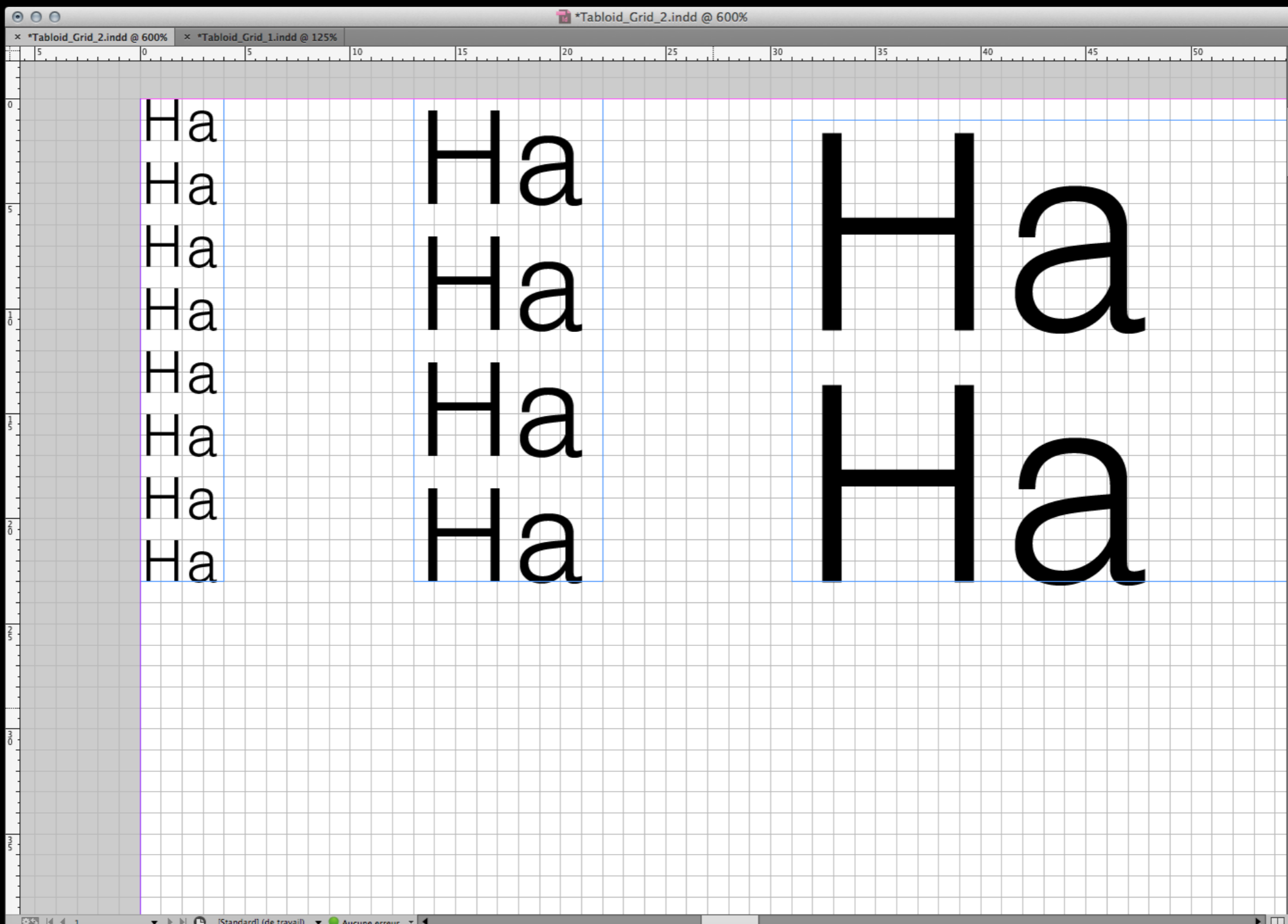
123456

Milimètres



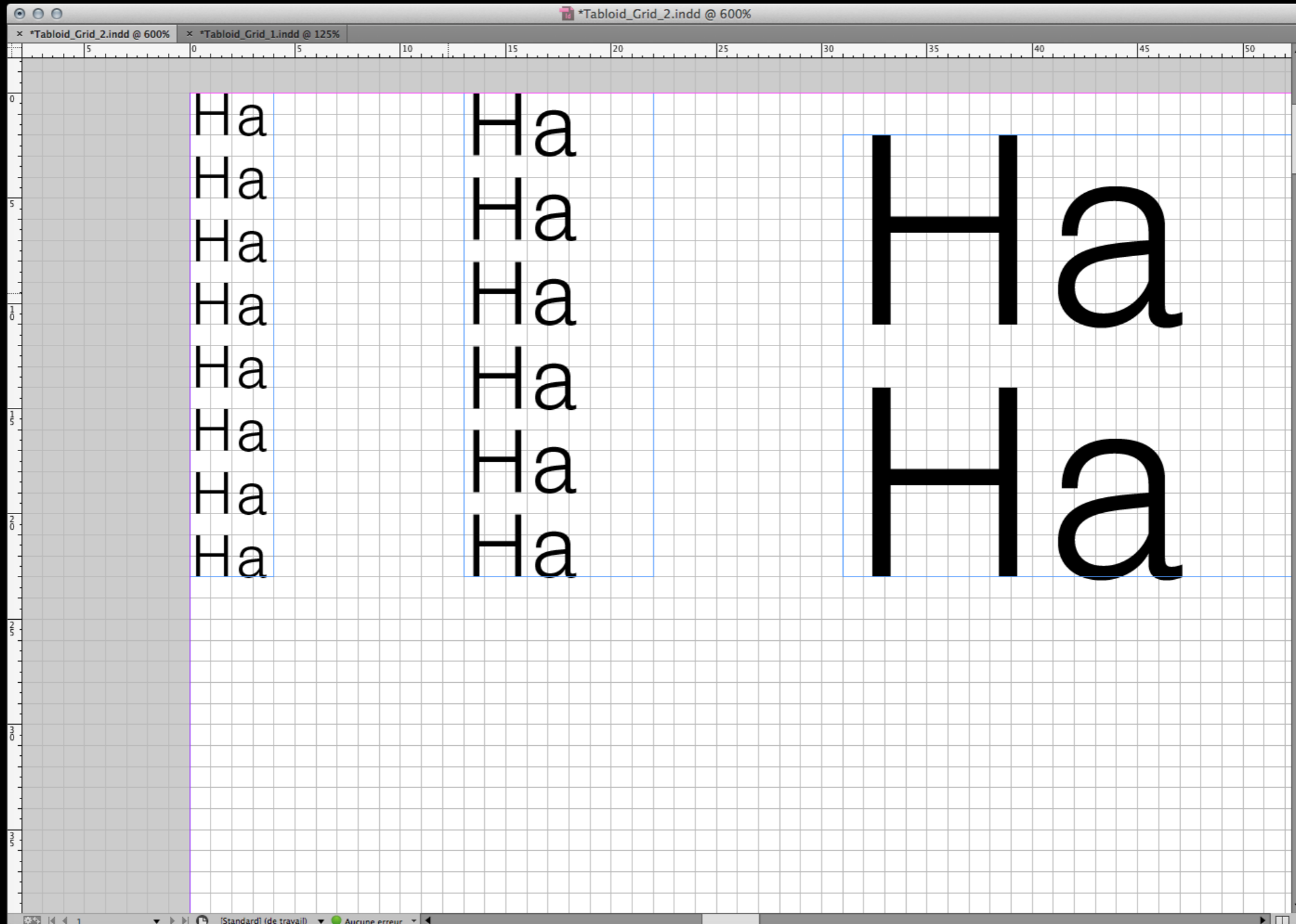
123456

Milimètres



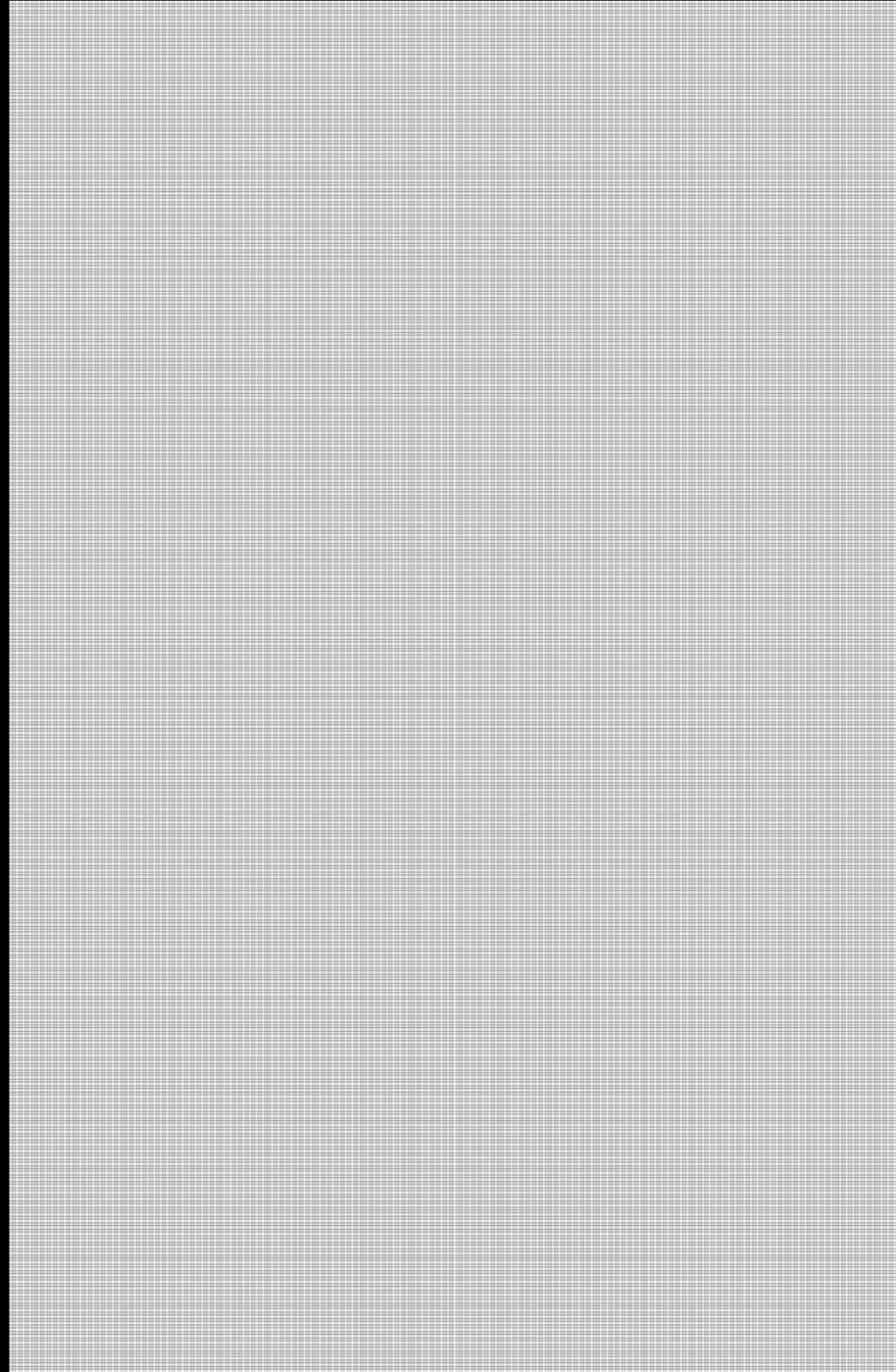
123456

Milimètres



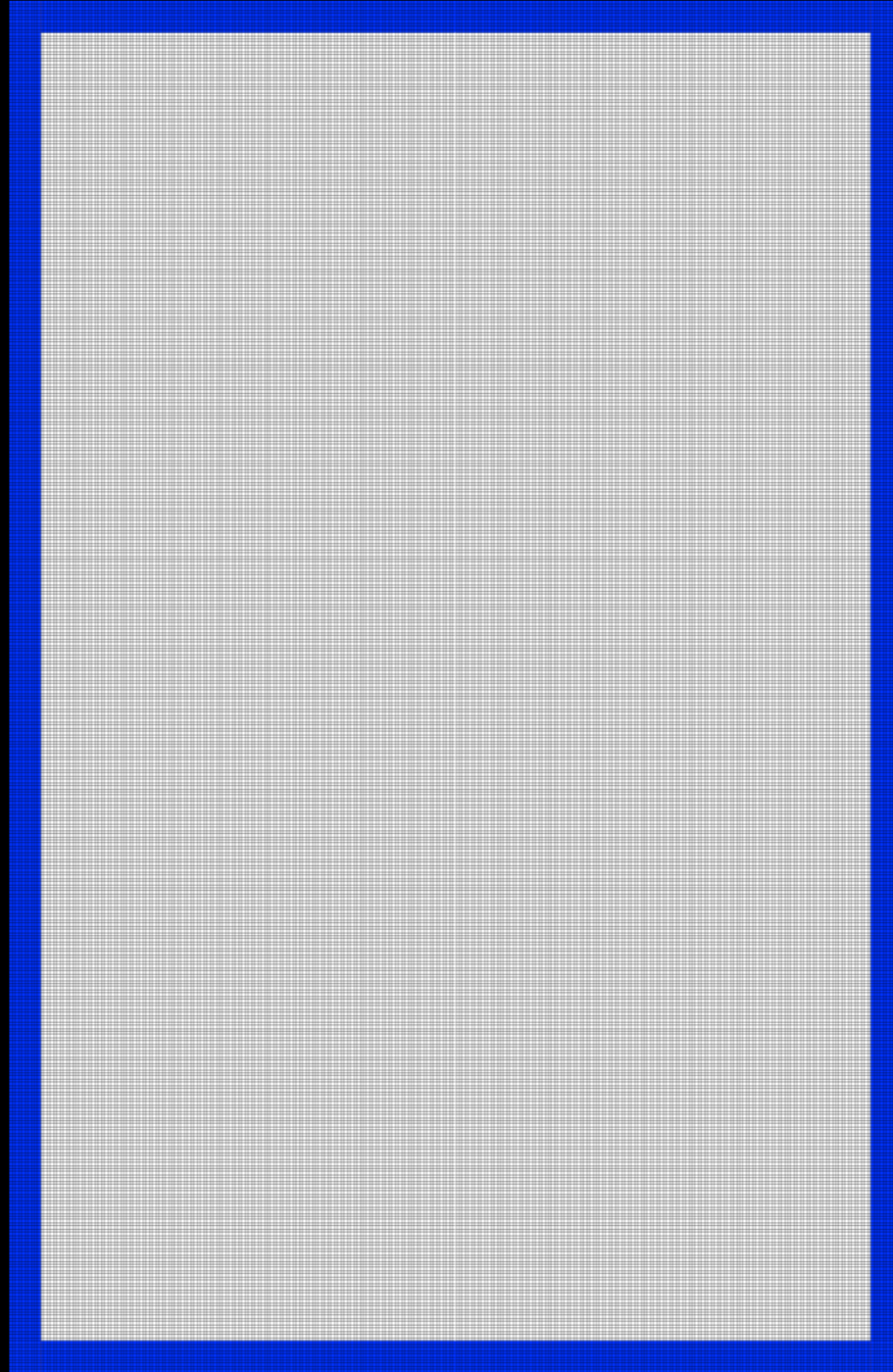
123456

Milimètres



123456

Milimètres



123456

# Milimètres

Marges et colonnes

Marges

De tête :

De pied :

Gauche :

Droite :

Colonnes

Numéro :

Gouttière :

Activer l'ajustement de la mise en page

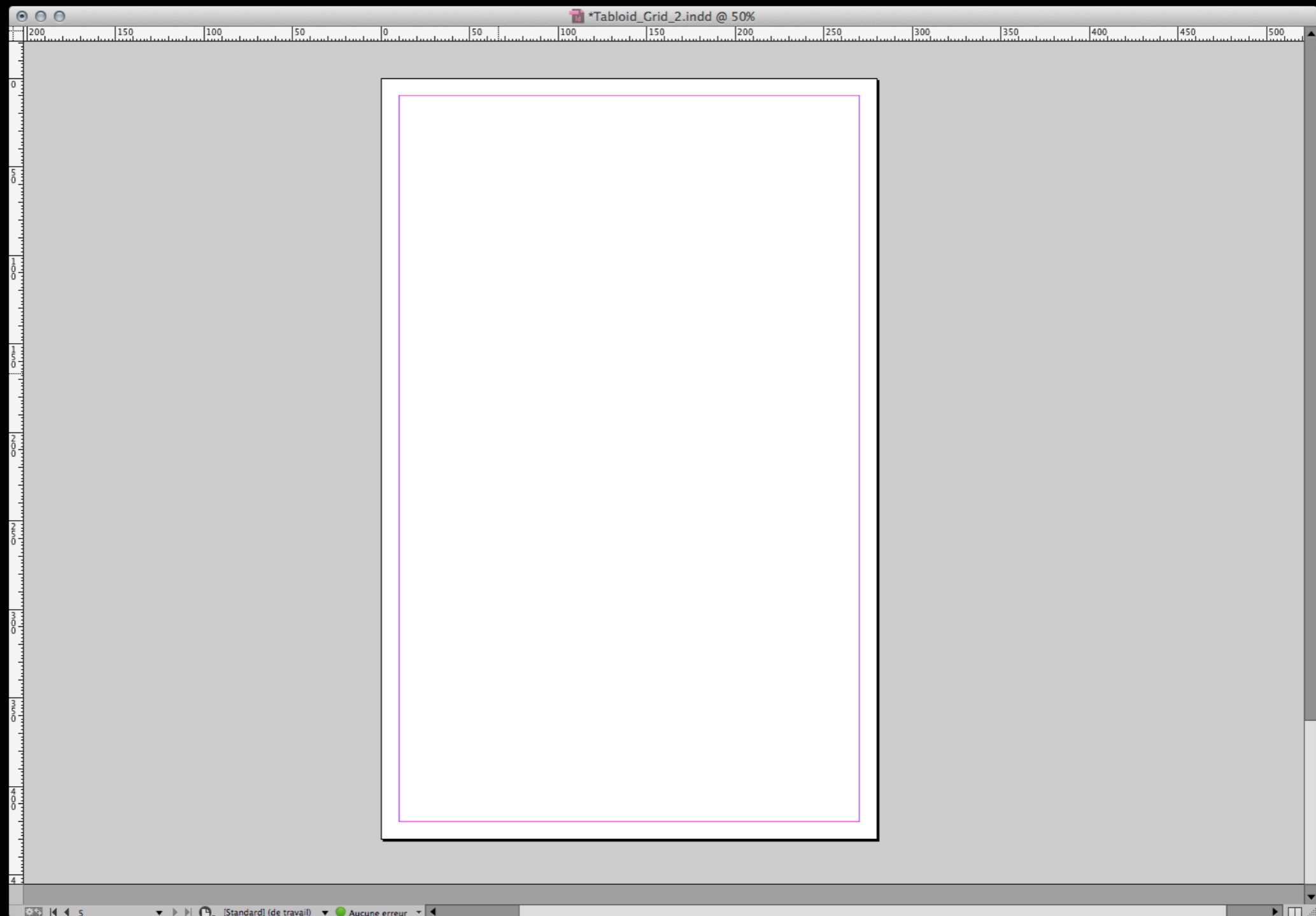
OK

Annuler

Aperçu

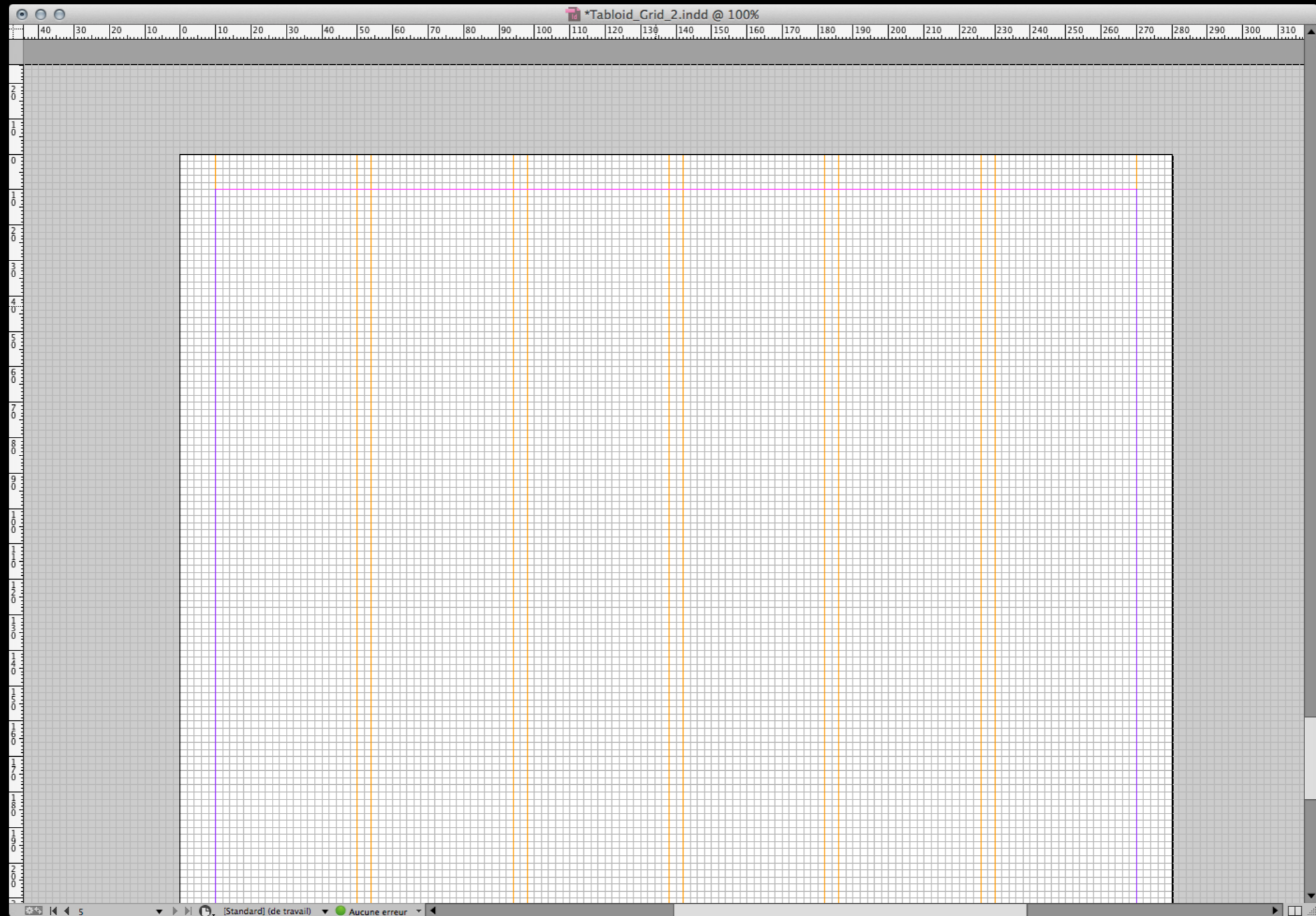
123456

Milimètres



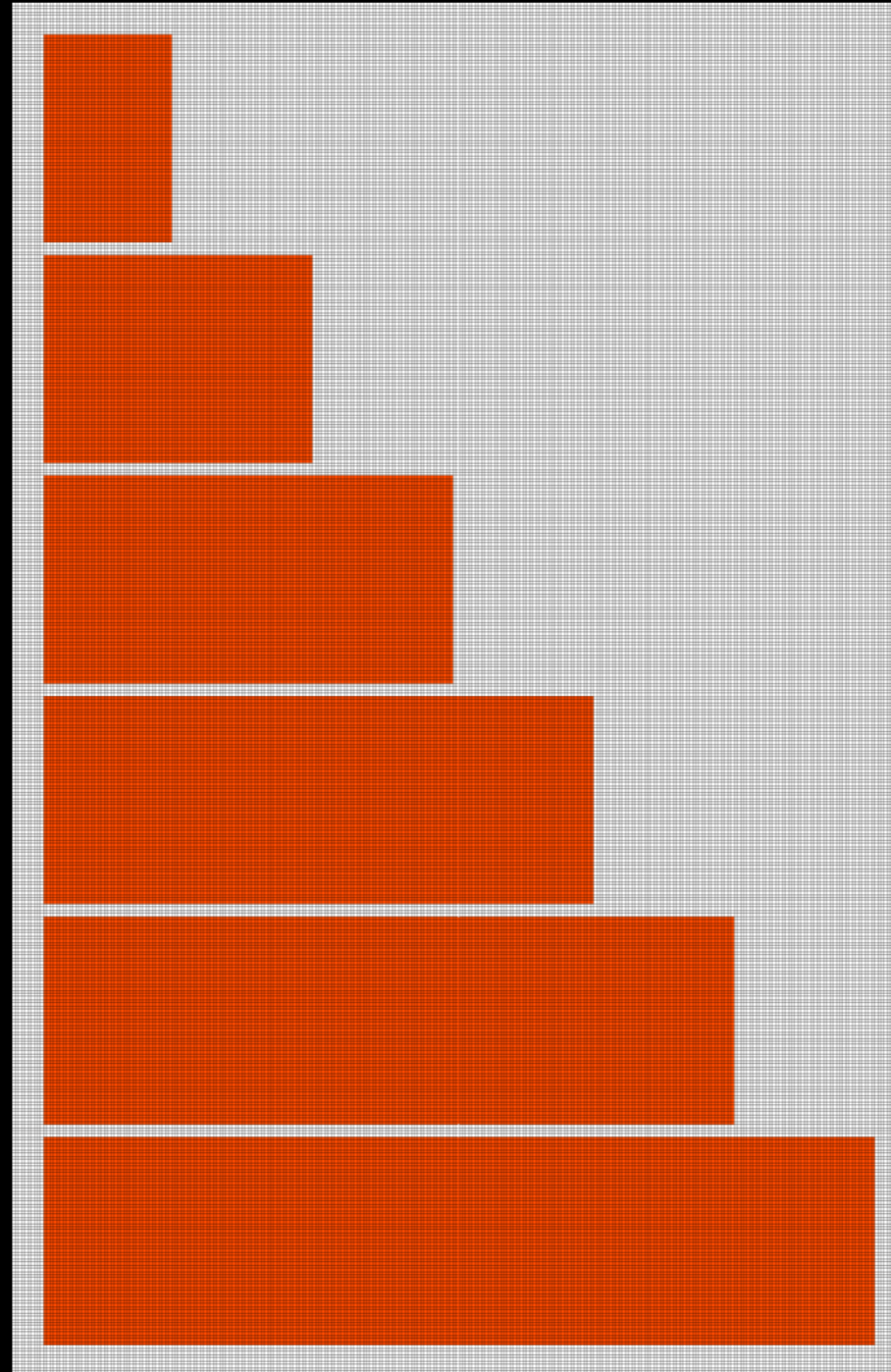
123456

Milimètres



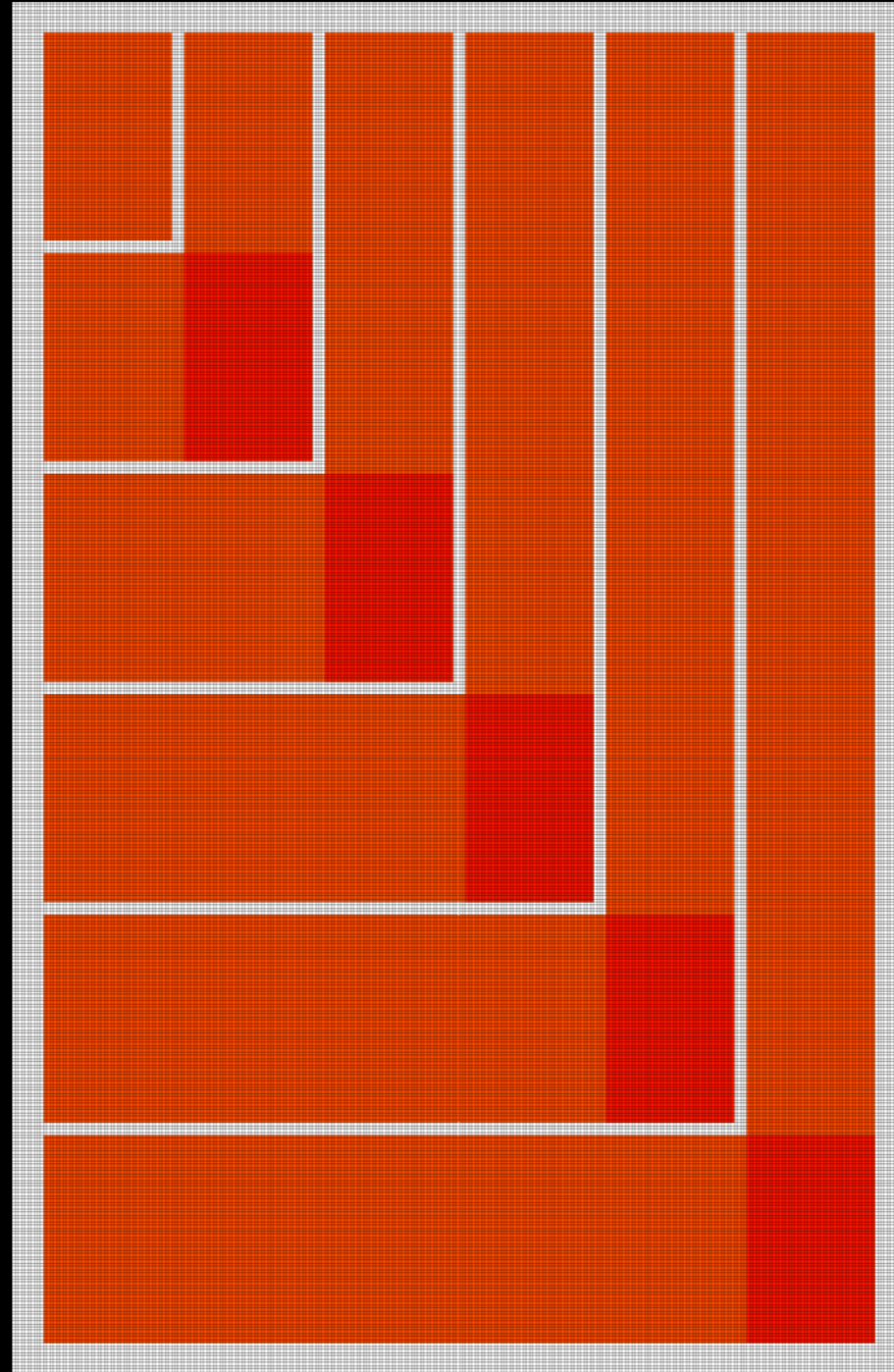
123456

Milimètres



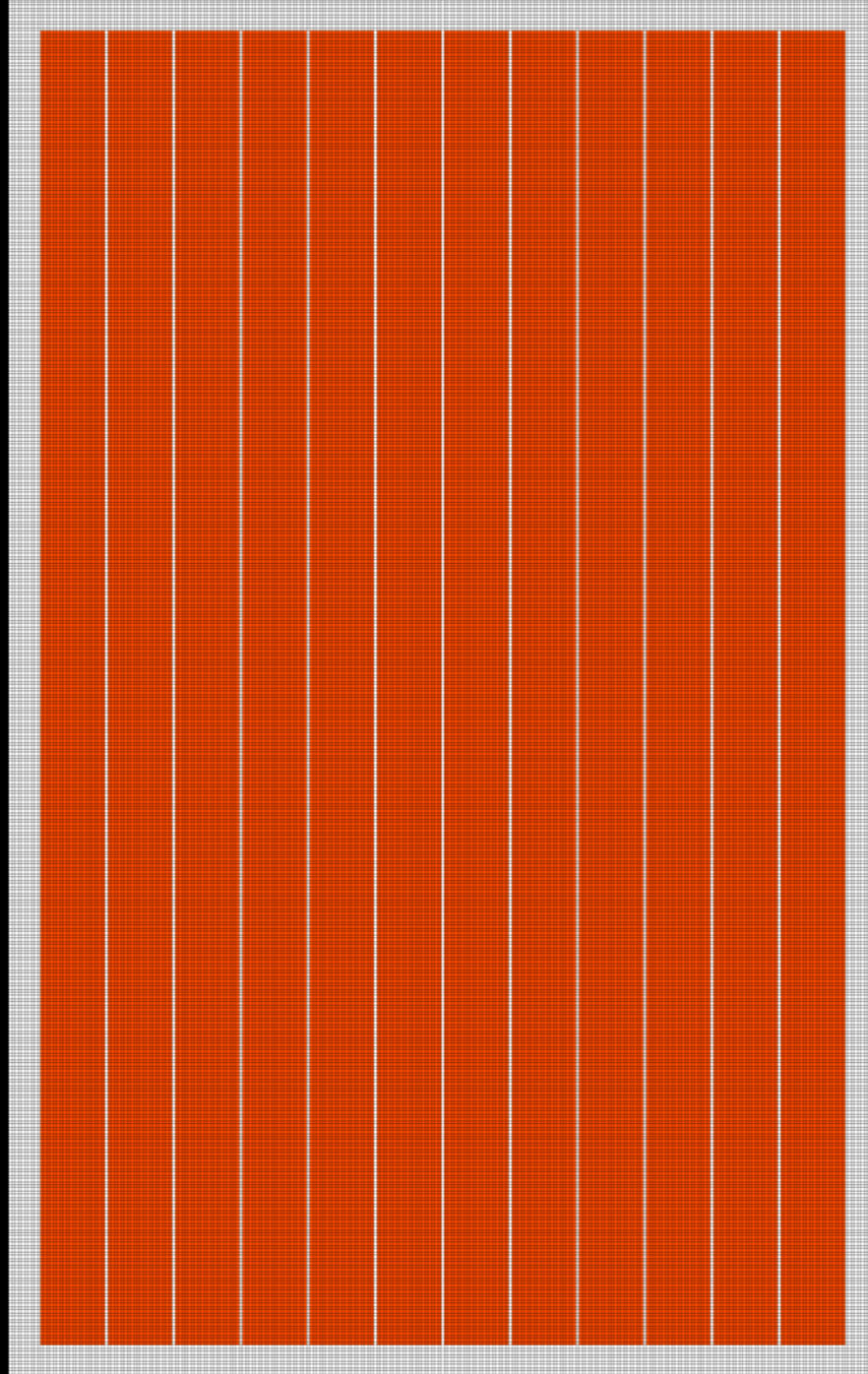
123456

Milimètres



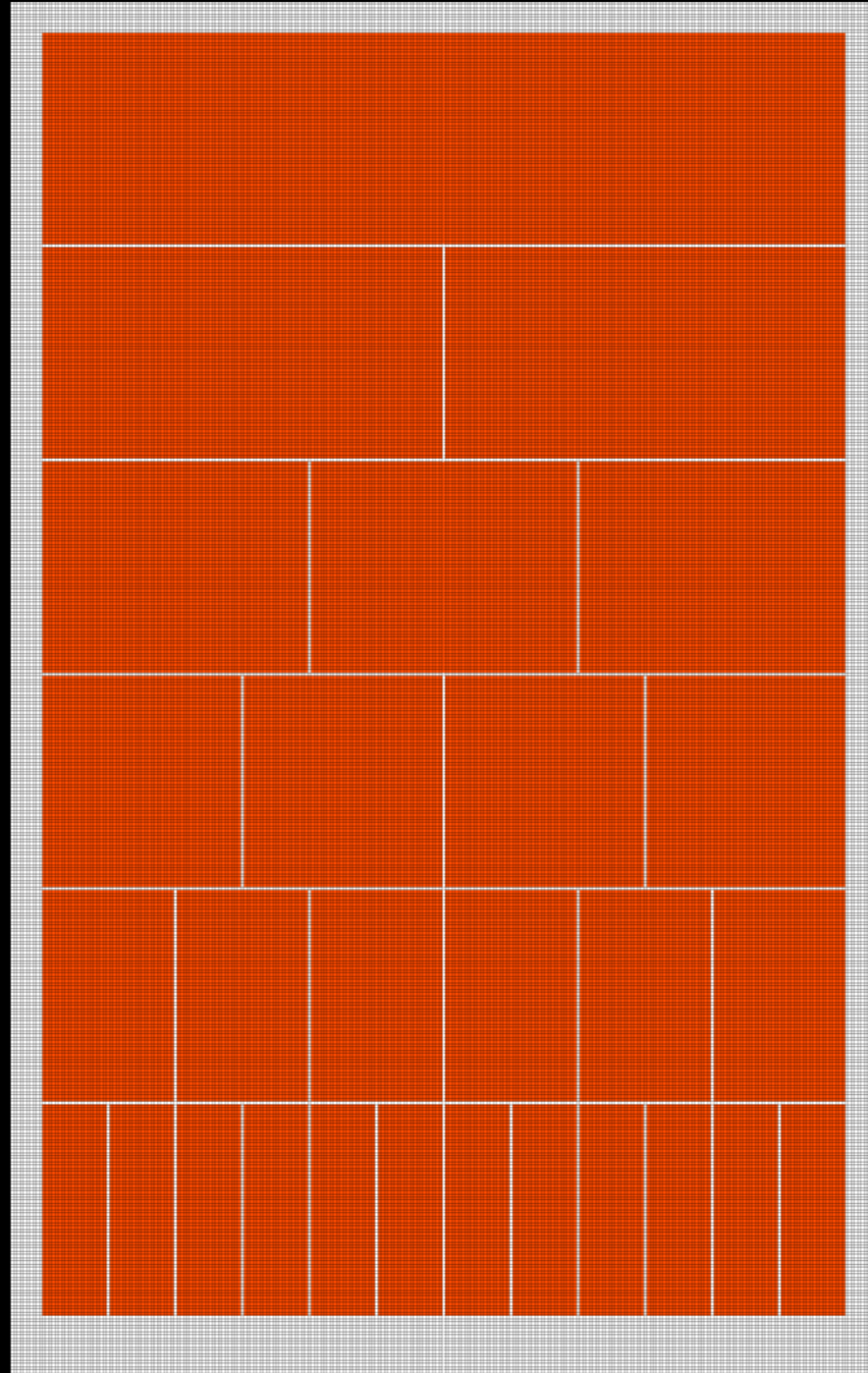
123456

Milimètres



123456

Milimètres



# 123456


# PGCD

calculateur, Calcul du pgcd par l'algorithme d'Euclide

à chaque fois vous consultez ces sites ou naviguez d'une page à une autre.

### Calcul du PGCD de deux entiers par l'algorithme d'Euclide.

297      210




**Algorithme d'Euclide**

$297 = 210 \times 1 + 87$   
 $210 = 87 \times 2 + 36$   
 $87 = 36 \times 2 + 15$   
 $36 = 15 \times 2 + 6$   
 $15 = 6 \times 2 + 3$   
 $6 = 3 \times 2 + 0$

Le pgcd est 3

### Liens

**Qui est Euclide?**



[Sur Wikipedia...](#)

**Le pgcd c'est quoi?**

[Leçon d'arithmétique en troisième.](#)

### Tweets

[Wouf @wouf](#) [spreadshirt.fr/affiliate/1246...](#) 8h

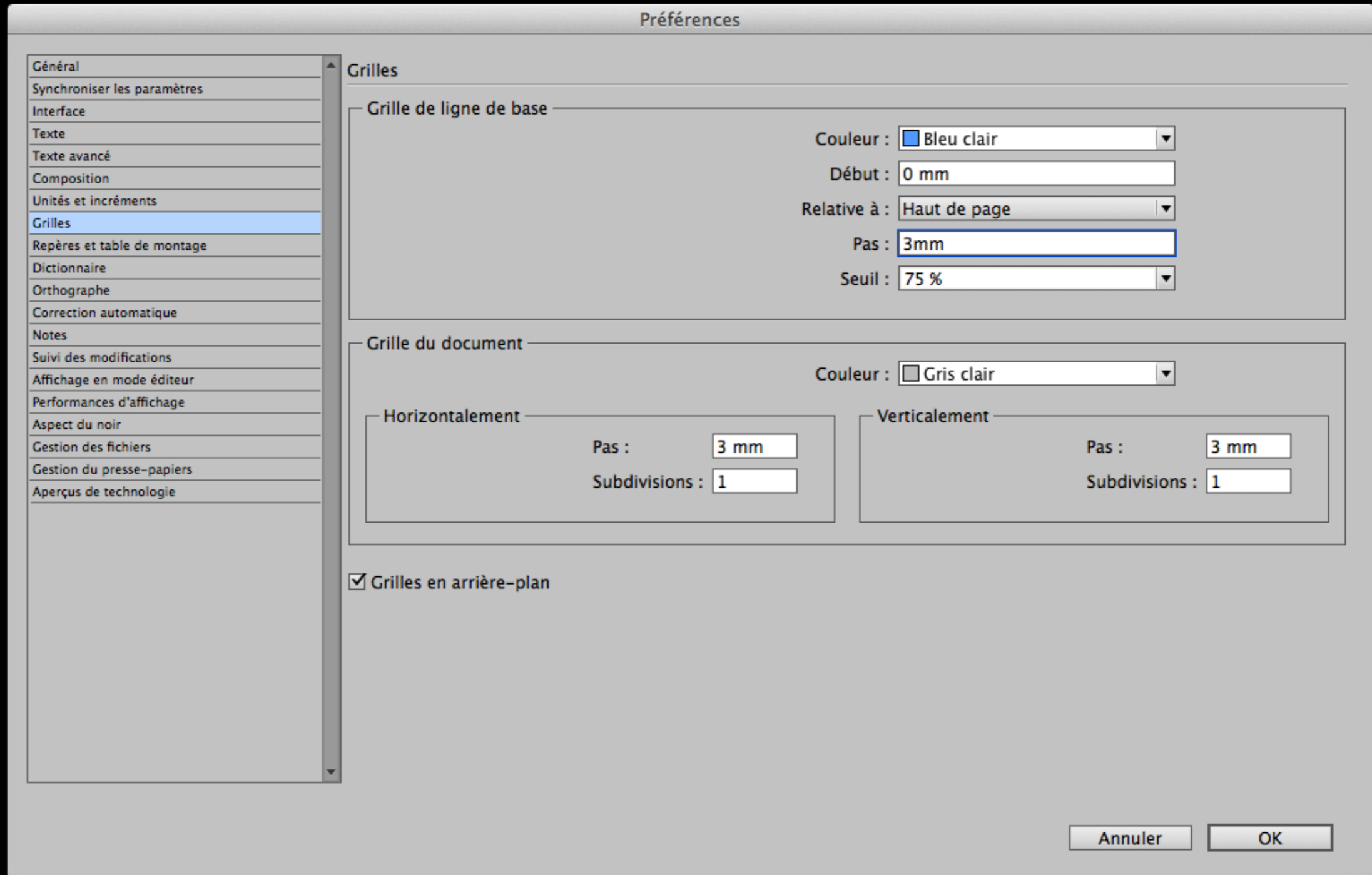
### NEWS

**Bonne rentrée à tous !**

Les échecs vous plaisent ?

123456

PGCD



THE INS NYC MARATHON NEWS

TOP 10

# OUR TOP RANKING

HIS HIDDEN SECRETS  
HIS DAILY TRAINING

HIS TECHNICAL SKILLS

149 MILES A WEEK

240 KILOMETERS

7/7 TRAINING

THE SECRETS OF THE KENYANS FOR MARATHONS BAREFOOT? TRAINING? DOPING? SO WHAT? GENETICS?

HOW GEOFFREY MUTAI TRAINED HARD FOR HIS N.Y.C. INCREDIBLE RUN

THE PRICES THE BRANDS THE GOOD THE BAD



HOW TO LEARN RUNNING

ALL RUNNERS MADE MISTAKES

HOW TO AVOID THEM

HOW TO PROGRESS BETTER

# 10 MAJOR MISTAKES THE WOW!

NEW YORK'S FINEST MARATHON NEWS

RUN FAST RUN FAR

THEY GO BANANAS

THEY TRIED CORRUPTION

THEY CAME OUT FROM NOWHERE

THEY KNEW AND THEY FAILED TO

# THEY TRIED TO CHEAT!

SHE TRIED TO LOOSE IT ROSE HUIZ SCANDAL IN 1980 AT BM



BUSTED!

# 20 TIPS TO KNOW IF YOU ARE A RUNNER OR A JOGGER

LAST PAGE

N.Y.C. MARATHON LEADER MARRY WITTENBERG TELLS US HOW HAPPY SHE IS

INTERVIEW

IS THAT TRUE OR WRONG? RUNNER'S HIGH FIVE RUNNERS TELLS US

GRAPHICS

# CHEAP SHOES THAT WILL MAKE YOU RUN LIKE A PRO

SPECIAL

# THE TRUE STORY OF EL CABALLO BLANCO

**SHOCKING!**

Micha True went off alone on a Tuesday morning to run through the rugged trails of the Gila Wilderness, and now it was already Saturday and he had not been seen again. The search for him, once hopeful, was turning desperate. Weather shifted the fear. The missing man was wearing only shorts, a T-shirt and running shoes. It was late March. Daytimes were warm, but the cold seeped through the spruce forest in the depth of night, the temperatures cutting into the 20s.

For three days, rescue teams had fanned out for 50 yards on each side of the marked trails. Riders on horseback ventured through the gnarly brush, pushing past the failed branches of pinyon-juniper and ponderosa pine. An airplane and a helicopter circled in the sky, their pilots squinting above the ridges, woodlands, river canyons and meadows.

"We're in the middle of nowhere, and this guy could be anywhere," Tom Bemis, the rescue coordinator appointed by the state police, said gloomily. He was sitting in a command center, marking lines on a map that covered 200,000 acres. Some 150 trained volunteers were at his disposal, and dozens of others were there too, arrived from all over the country, eager and anxious, asking to enlist in the search.

**MICHAEL TRUE, BORN MICHAEL HICKMAN, TOOK HIS NEW NAME FROM THE BIBLE AND A BELOVED COMPANION, TRUE DOG.**

"Coming out of the woodwork," Bemis said wryly. Not only did Micha True have loyal friends, but he also had a devoted following. At age 58, he was a mythic figure, known by the nickname Caballo Blanco, or White Horse. He was a famous ultramarathoner, competing in races two, three or four times as long as marathons. The day he vanished, he said he was going on a 12-mile jaunt, for him as routine as a lap around a high school track.

But True's mythic renown owed less to his ability to run than to his capacity to inspire. He was a free spirit who survived on cornmeal, beans and wild dreams, aloof to the allure of money and possessions. He lived in the remote Copper Canyons of northern Mexico to be near the reclusive Tarahumara Indians, reputed to be the greatest natural runners in the world.

His story was exuberantly molded into legend in the 2009 best-seller "Born to Run" by Christopher McDougall. Caballo Blanco, however private and self-effacing, was suddenly delivered to the world as a prophet, "the lone wanderer of the High Sierras." To many, he represented the road not taken, a purer path, away from career, away from capitalism, away from the clock.

McDougall, himself a runner, was one of the dozens who had hurried to southwestern New Mexico to join the search, as had the actor Peter Sarsgaard, who was about to direct a movie based on the book. In just a few days, the Gila Wilderness had become a lodestone to a who's who of ultramarathoners, athletes with loose limbs, lanky bodies and now a shared sense of dread.

**Wethead TO KEEP HIMSELF IN POCKET MONEY, TRUE — STILL MICHAEL HICKMAN — OFTEN CHOSE UNUSUAL LABOR FOR A PEACEABLE SOUL: PRIZEFIGHTING.**

"We're thinking he could be lying out there hurt, unable to get help," said the ultramarathoner Luis Escobar, who had driven all night from California.

Several of these athletes were impatient with the authorities' methodical search. The main footpaths had been scoured, but they wanted to venture onto the smaller elk trails and into the pockets and crannies of the cliffs.

Bemis, the rescue coordinator, was mildly annoyed: "This is a wilderness, not a walk in the park, and some of them might get lost. Then we'll be looking for them, too."

Among the most restless was Ray Molina, who led mountain bike tours through the Copper Canyons and was one of True's closest friends.

Random Ray, some people called him. A nonstop talker, he was also a pack rat, collecting old bicycles, antique toys, marbles and bleached bones. Skeletal remains jounced about in his car.

Molina, 44, had not learned of the disappearance until Friday. He rushed to the Gila in his beat-up 1979 Mercedes with two friends, Jessica Haines and Dean Bannon. They were agreeable to joining the organized search. But by 10 on Saturday morning, they were among a handful yet to be assigned to a team.

The hall with this, Molina concluded. He and his friends lightened their backpacks of unnecessary gear and went off on their own, simply walking a short distance down the access road, crossing the Gila River and scurrying into the nearest arroyo. This strategy, while not entirely random, was hardly well conceived. They were assisted only by a folded-up map and their own instincts and whims. They rambled and they ran and they climbed. They called out, "Caballo!"

THE NAME MICHAEL TRUE was a confection, the first part plucked from the Bible, the second an homage to True Dog, a beloved mutt. Michael Randall Hickman was his given name, and he was raised in Northern California, the second of four

children. His father was a Marine gunnery sergeant who later became a deputy sheriff and an insurance salesman.

ETHEL elder Hickmans were conservative Roman Catholics, but Mike's devotions were to the counterculture of the late '60s and early '70s. His blond hair hung past his shoulders. Marjuna fluted through his hair. So did mysticism. His reading appetites ranged from Hemingway to French philosophy.

He wandered the country, "just to see what happens," he recalled later. His looks were fetching. One friend described him as "a lean Greek god in beachcomber garb." Hickman lived for 10 months in a cave in Hawaii, shaking papayas from trees on Maui and running along island trails. He fell in love with a rich girl, he said, "whose eyes sparkled blue like the sky." When she dumped him, it scuffed his heart.

To keep himself in pocket money, Hickman often chose unusual labor for a peaceable soul, prizefighting. A middleweight, he called himself the Gypsy Cowboy. His record in the ring, according to boxer.com, was 9-11. He was knocked out nine times, although some of those defeats were dives taken for an easy payday, he said. Whoever the opponent, he tried to restrain his fists, inflicting "only the physical damage to get the job done, no more."

Neill Woelk, a former sportswriter, remembers seeing him — his name now Micha True — in 1982, winning a fight on an undercard in Denver's Rainbow Theater. The boxer was nearing 30 at the time. "He didn't look anything like a fighter, but he might be one of the best pure athletes I ever saw." Woelk said, adding, "He didn't have arms; he had cables."

**IN MARCH 2010, TRUE RAN THE COPPER CANYON ULTRA MARATHON IN MEXICO.**

By then, True had moved to Boulder, Colo., at the base of the eastern slope of the Rockies. The city listed hard to the left. Sometimes with sarcasm, sometimes with affection, it was referred to as the People's Republic of Boulder. At the same time, it was becoming the nation's high-altitude capital for high-endurance training.

To earn a living, the prizefighter was now a self-employed furniture mover, hauling people's belongings in a rat-trap pickup. He lived without electricity in a spare one-room cabin off Magnolia Road. He shared an outhouse.

Running had become his overwhelming passion, maybe even his addiction. He was a mountain runner, a different breed from folks who showed up by the thousands to run a breezy 10K. He preferred races with fewer people and wide-open terrain, less concerned with his times than the surrounding scenery.

He would get up early to run, then do a moving job, then run again. He was logging about 170 miles a week. Dan Bowers was a frequent companion. He recalled, "After we'd run, we'd eat a big meal, enough to bust a rib, and then Micha would look at me and say, 'You want to do another 10?'"

True's pattern was to remain in Boulder for six months, then, with winter coming, head south to the Guatemalan highlands, running the lush trails around Lake Atitlan. Villagers grew used to the sight of the loping gingo. He was a 5-footer with a long mane and big teeth. Children surrounded him when he stopped to buy bananas and tortillas. They named him El Caballo Blanco.

The White Horse was winning ultramarathons in those days, like the 50-mile between Cheyenne and Laramie on the back roads of Wyoming. He was serious about competition, interested in re-engineering his body to get more out of his lungs and legs, pushing the boundaries of stamina.

**TARAHUMARA RUNNERS BECAME PART OF TRUE'S COPPER CANYON ULTRA MARATHON. SOME OF THEM COMPETED IN THEIR TRADITIONAL CLOTHING, INCLUDING WOMEN IN SKIRTS.**

Injuries began to slow him as he closed in on 40, but he eventually viewed these annoyances as a liberation. He started to care less about piling on the megamileage and more about finding challenging trails. Running was an exploration, inside and out, endorphins feeding his cerebral bliss.

He did still run the occasional race. In 1993, he entered one of his favorites, the Leadville Trail 100, a punishing 100-mile push through the icy streams and boulder-clogged slopes of the Rockies. The very up-and-down of it was a killer, the altitude as high as 12,600 feet. Runners generally needed 18 to 30 hours to finish.

That year, a promoter brought along a handful of peasants from Chihuahua, Mexico. They were short. Some looked like grandfathers. They wore blousy shirts and tunics, to the starting line, and on their feet were sandals they themselves had just made from old tires fished from the Leadville dump.

When the race began, these odd interlopers immediately fell to the rear and stayed there for 40 miles. Then they started steadily moving up, passing others, barely winced by the arduous climbs. The first two of them finished about an hour ahead of anyone else. The winner was 55 years old. These were the Tarahumara. True's disappearance might have been something to shrug off at first. He sometimes liked to

get lost in the wild, allowing only curiosity to steer his feet, bushwhacking his way through dense terrain. Gerónimo, the Apache warrior, had used the Gila as a refuge, and he was one of True's boyhood heroes. But the runner knew the geography here too well to get hopelessly turned around, and besides, he had left behind his beloved sidekick Guadalupe, a stray he had rescued from a Mexican river. At times, True retreated from humans, even from civilization itself. But he would never abandon his dog.

**TRUE ORGANIZED HIS FIRST ULTRA-MARATHON IN THE COPPER CANYON IN 2003. BY THIS YEAR, THE RACE HAD GROWN TO MORE THAN 600 RUNNERS.**

Ray Molina understood True's penchants and habits. "There's a good chance he's nowhere near a trail," Molina said. He and his two friends looked elsewhere, climbing a ridge toward the Gila high country. The ascent was time-consuming, very steep in parts, the footing unreliable.

Hours later, all they had for their efforts was frustration. They wanted to avoid the beaten path but kept finding the tracks of other searchers and even met up with a few, including two on horseback and another pair with dogs.

Studying his map, Molina was intrigued by a squiggly blue line indicating a stream called Little Creek. He was in the sway of two hunches. One was that an injured man might head for water. The other was that this meandering creek emptied out of the canyon only a mile or so from the lodge where True had been staying. His friend might have used this stream as a shortcut.

## IN MARCH 2010, TRUE RAN THE COPPER CANYON ULTRA MARATHON IN MEXICO.

"Has anyone been down that creek?" Molina kept asking. The horsemen had ridden through the canyon a little ways but stopped. They knew the area well and warned Molina that the passage got pretty rough.

"Go ahead, try it," one joked. "We'll come looking for you tomorrow."

It was already late afternoon, and Molina wondered if it was wise to chance this hike so close to dark. But he, Jessica Haines and Dean Bannon enjoyed egging each other on. Molina had known Bannon since the third grade. Unsettled between them were decades of debate about who was gutsier.

**TRUE AND MARIA WALTON WERE A COUPLE FOR ABOUT TWO YEARS. HIS FRIENDS GENERALLY AGREED THAT WALTON WAS AN INFUSION OF LOVE.**

The creek was ankle deep in some spots, knee high in others, and about as wide as an automobile. They walked slowly because it was hard to do otherwise. The banks were narrow. The three would move over land on one side until they met an impassable thicket or an overhang from the steep canyon wall. Then they would look for the best spot to leap across the water.

They repeated this zigzag enough times to realize they may as well slosh through the creek itself. The bed was gravel and sand, but there were submerged rocks everywhere. It would have been easy to turn an ankle.

Haines, 33, works in the engine room of a ferry in Alaska. However dour the purpose of this trek, she was pleased to be in a place of such extraordinary beauty. The millennium had intricately sculptured the canyon, and the clear stream that ran through it moved in a musical trickle. She could hear a gentle whoosh above as breezes traipsed through the treetops.

Haines was the first to spot a footprint, its outline in the mud beside the creek. They had been told True was wearing shoes with a pattern of triangles on the tread. But this print was faint and partly washed away. They paused. They had already sloshed through Little Creek for 45 minutes, and the sun was getting low. If they went much farther, they could be stuck for the night.

Still, they persisted, and 10 minutes later they found more footprints, and a few minutes after that, more again. These were better defined, and triangles were part of the design. They compared the length with their own shoes, measuring with a stick. True wore a size 11. These were about the right size. They were trotting, and each began finding more tracks. They shouted back and forth. "Here's one, and here's another!" Soon they were seeing so many they no longer bothered to call out.

# MICHAEL TRUE AMERICAN ULTRARUNNER FROM COLORADO

## NOV. 10, 1953—MAR. 27, 2012

**TRUE CUT THE LONG BLIND HAIR THAT HELPED EARN THE NICKNAME CABALLO BLANCO BUT CONTINUED TO RUN, OFTEN WITH A STRAY DOG.**

MICHAEL TRUE HAD BECOME obsessed with the Tarahumara. What did they know about running that others did not? Were they some sort of superhumans? Tarahumara was the Spanish name. They called themselves the Raramuri, loosely translated as the running people. They had retreated into the massive canyons of the Sierra Madre centuries ago to escape the conquistadors.

Generation after generation, they traversed the mountains and ravines along light footpaths. Freakish endurance was required to cover the immense distances. Some chasms in the land were deeper than the Grand Canyon.

To better understand these people, True readjusted the rhythms of his life in 1994, alternating between Boulder and the Copper Canyons, still a furniture mover for half the year but a student of the Raramuri for the rest. He built a tiny home at the bottom of a canyon in the town of Batopilas, carrying rocks from the river valley to use as a foundation and erecting walls with cement and adobe.

"The man called horse," as he sometimes referred to himself in written musings, was rapturous with the adventure. He described getting lost in his new surroundings, scaling a rock-faced mountain, water bottle in his teeth, buzzards overhead, "crawling on his belly like a reptile" while "pulling himself upward by grasping at plants." The canyons were stupendous, with alpine forests in the high altitudes and subtropical jungle on the valley floor.

He was careful not to intrude on the Raramuri. Relationships developed over time. The impoverished tribe believed in karma, their word for sharing what they could spare. They sometimes left him tortillas and pinole, a porridge of crushed corn and water. He reciprocated in kind.

Like the Raramuri, True now ran in sandals, delighting in the simple act of self-propulsion, bounding along the undulating trails like a Neolithic hunter. He called it "moving meditation." His motto was "run free," and he did.

**TRUE SPENT ABOUT HALF THE YEAR IN MEXICO AND BUILT A HOUSE IN BATOPILAS. HE CARRIED ROCKS FROM THE RIVER VALLEY USE AS A FOUNDATION.**

Running was essential to the human experience, he had decided. Most people undervalued its importance. Running was not merely a sound cardiovascular choice in a fitness craze; it was an ancient art, part of mankind's genetic imprint. Humans had survived across geological time because they could chase animals. To advertise it, True ran from canyon to canyon, handing out flyers and spouting enthusiasm. He hoped for a large turnout, but come race day only seven runners showed up. True finished fifth, ahead of two thirsty Raramuri who allowed themselves to be diverted by a spectator with beer.

The event wasn't all he had wanted, but it was a start. It became an annual ultramarathon race, and in 2006, True had an exciting brainstorm. He would entice American ultramarathoners to the Raramuri's home turf. Highest on his wish list was Scott Jurek, the greatest of them all.

**SOME OF THE TARAHUMARA, WHO CALL THEMSELVES RARAMURI, ARRIVING FOR THIS YEAR'S COPPER CANYON ULTRA MARATHON.**

Organizing such a thing was difficult for a man living without a phone or electricity. True journeyed to the town of Creel, where there was a computer to borrow and a dial-up connection. He reached out through cyberspace.

As it turned out, Jurek was a metaphysical soul mate, another man who considered running a cherished legacy from primitive times. To him, racing the legendary Raramuri in their own canyons sounded awesome.

Getting there, on the other hand, was no simple matter. Once across the border, it involved a relay of bus rides — the vehicles hugging the road through narrow switchbacks — and True was not much help with logistical advice. Seven Americans showed up, uncertain what to expect, and although they found the landscape breathtaking, the course itself was a brutal and twisting 47 miles of forbidding climbs and frightening descents of his running habits.

Caballo Blanco gave each of his visitors the nickname of a spirit animal — the deer, the bear, the young wolf, the snow hawk — and the race was held on a glorious Sunday. Crowds congregated in the town of Urique, where the race started and ended. Avid spectators risked their pesos with wagers.

First to finish was Arnulfo Quimare, the swiftest of the Raramuri, and then came Jurek, six minutes behind. Though unused to defeat, the American acknowledged the winner with a gracious bow. The race is vividly described in "Born to Run." McDougall, the author, not only witnessed it but also ran in it. He had his own abiding interest in the Raramuri — and he had previously met the curious American called Caballo Blanco who lived among them.

Earlier, McDougall had an idea to write a book about four ultramarathoners. But heided in the Copper Canyons pushed him toward an entirely different project. Here was a hidden tribe of superathletes who had "mastered the secret of happiness" and lived "as benignly as bodhisattvas." Here was an American dwelling among them, a "mysterious loner with a fake name."

AT ONE POINT, the canyon around Little Creek gets even narrower, and at the same time becomes straighter. Molina, Haines and Bannon had been in the stream for 30 minutes when they saw something ahead that was blood red, a color out of harmony amid the shades of greens and browns.

"Do you see that?" Molina asked. He rushed ahead while Haines hesitated. She thought it could be a dead animal, and in Alaska she had been taught to be cautious when coming upon a fresh kill. Molina was not so heedful. He soon recognized that the patch of red was a shirt with limbs on either side. A surge of emotions pulsed through him. His first thought was that his old friend was alive if hurt.

But once nearer the body he knew instantly it was a corpse. True was lying face up, his eyes glossy, his jaw open. Flies were busy. The others also forced themselves to look. True's body was reclining on an outcropping of small rocks and boulders. His legs were in 10 inches of water, and his arms were against his chest, the right one down, the left one up. One of his shoes was off, and nearby was a plastic water bottle, two-thirds empty.

It appeared that True had taken a bad tumble at some point. There were abrasions on his legs and the backs of his arms. The middle finger of his left hand was bent and purplish. It looked to be broken. Oh, man, Molina said softly, and he realized he was weeping. The task now was to get the word out, but they had no radio. Nor did they know exactly where they were. They had no GPS device. They discussed what to do. Perhaps someone should stay with the body while the others went back. But that seemed too spooky to contemplate further: out there, in the dark, alone with the body. Mountain lions were mentioned.

No one broke through the brush until all of a sudden images crept into their minds. Molina wondered if they should place rocks on the body to keep animals from dragging it off — either that or cover it up with reeds and branches. But they decided this too was unwise. They shouldn't contaminate the scene. The medical examiner would want things untouched. So they turned back toward where they had entered the canyon. And this time they ran as fast as the wind.

**STERLING NOREN, A FILMMAKER FROM SEATTLE, SHOT A DOCUMENTARY ABOUT TRUE AND SPENT THREE WEEKS WITH HIM THIS YEAR.**

"BORN TO RUN" BEGINS with McDougall, its author, going to Mexico's Copper Canyons, which he calls "a kind of shorebound Bermuda Triangle known for swallowing the misfits and desperadoes who stray inside." He hopes to find the "phantom" Caballo Blanco, who seems to be "a ghost among ghosts." For a while, some of True's friends in Boulder were particularly fond of quoting that passage. He had been a well-known fixture in the city for 25 years. Now when he would stop in at the Trident Cafe or the Mountain Sun Pub and Brewery, they would generally feign surprise, shocked by the presence of the phantom.

Becoming the central character in a best-selling book is a monumental life-changer, especially if it happens unwittingly to a man who made a sacrament of living simply. A thousand conflicting feelings eddied in his head.

True told people the book contained exaggerations and inaccuracies. For one, the Tarahumara lived no such idyllic life. Then, he broke down the significance, praising and thanking McDougall; then he alleged more flaws.

The book was flattering, surely. But that itself was a source of unease. True did not see himself as anywhere near so eccentric and amazing. He oftentimes felt two forces were in a tug of war for his identity: Was he the person inside his own skin or the person inside the pages of "Born to Run"?

Most of the book's significance rested in its assertion that cushioned running shoes were a hazard to the human foot. But what made "Born to Run" a superb read was the story line in Mexico. Many readers wanted to meet the celebrated Caballo Blanco, and they seemed to expect a guru or a shaman or at-least-footed saint. "I feel like I always have to live up to the expectations of the book," True complained. But fame was enjoyable as well. True may never have wanted the world to beat a path to his door, but now he encouraged people to follow him on Facebook, the network that he used to hate because of his privacy attempts.

He spent hours online tending to his messages, either at the Boulder public library or in the municipal building in his home town of Urique, Mexico.

**THE TARAHUMARA MAKE THEIR SANDALS OF OLD TIRES AND LEATHER LACES. THE CLOTH IS TO STANCH BLEEDING RUN.**

Within months of the book's publication, two Facebook friends became love interests. One was Kati Bell, a runner who worked in corporate marketing. "I told him: 'You're a celebrity now. You can make money out of this,'" Bell said. That was an intriguing notion, though not for his own sake but for the Raramuri. The Copper Canyon Ultra Marathon was beginning to fulfill his grand vision. The number of participants was multiplying. There were cash prizes for the winners, and every finisher received 500 pounds of corn. True was not only reviving the running culture but also feeding the hungry.

The race needed infusions of cash to sustain itself, and he agreed to a small number of personal appearances. Bell said, although he was appalled when she suggested they hold dinners and charge \$100 a head. "Let people donate whatever they want," he insisted.

True proved to be an amiable and amusing speaker. He needed no notes to tell his stories, although a few beers helped. He was shaving his head now, a look that made his face all the more striking, the large ears and lips, the protruding chin, the deep crease in his forehead.

Audiences were reliably friendly, run over well before he uttered word one. True would smile at them even in midjeremiad. "Long after we're gone, long after greed blows everything up, the Raramuri are still going to be subsisting," he said. "They know how to survive, they know how to endure."

A nonprofit group, Norawas de Raramuri, was set up to handle donations. Every dollar would benefit the Raramuri, as True demanded. But were others willing to demonstrate the same selflessness? True was certain of his own integrity but deeply suspicious of everyone else's.

What was McDougall doing with the profits from the book, True wanted to know. And what about Ted McDonald, Barefoot Ted, another memorable character from "Born to Run"? He had started a company that made minimalist sandals modeled after the huaraches worn by the Raramuri.

**BAREFOOT TED OFTEN FOUND TRUE IRRITATING. "I GIVE BACK EVERY YEAR TO THE COPPER CANYON, BUT CABALLO EQUATED ANY BUSINESS WITH EVIL," HE SAID. "HE DID GREAT THINGS DOWN THERE, BUT YOU ENDED UP LOVING HIM AND NOT QUITE LINKING HIM. I TOLD MCDUGALL, YOU'VE BROUGHT INTO BEING A NEW FRANKENSTEIN."**

Running is not supposed to be about getting people to buy stuff, True wrote in an e-mail to friends. "Running should be free, man, and the Raramuri are being used to sell lots of stuff. What do they get out of it?"

True could indeed be prickly and sharp-elbowed as well as warmhearted. His mantra for running was: easy, light and smooth. But off the trails he was an easily frazzled man living a newly frizzling life. The "whole notoriety thing," as he called it, was useful for raising funds, but he was afraid of looking like a sellout at the same time. To him, honesty was everything. He worried: Am I pretending to be something I'm not? Am I unfairly benefiting from someone else's book? But he continued with the public speaking gigs, usually at running stores.

Scott Leese, another of True's cyber pals, was an "executive coach" in California who "specialized in the rapid transformation of people." He too was smitten with the Caballo Blanco portrayed in the book and wanted him to reach a wider audience. Last year, Leese became his reticent friend's agent. "Though Micha hates that word because it really screams 'establishment,'" Leese's new client was often a headache. He despised anything corporate. He refused to consider endorsements. But finally, last summer, he agreed to attend an event hosted by Saucony, the shoe company, going on a trail run with some of its retailers and speaking at a dinner in Utah.

Then, in the fall, True consented to a trip to Sweden. Denmark and the book's significance rested in its assertion that cushioned running shoes were a hazard to the human foot. But what made "Born to Run" a superb read was the story line in Mexico. Many readers wanted to meet the celebrated Caballo Blanco, and they seemed to expect a guru or a shaman or at-least-footed saint. "I feel like I always have to live up to the expectations of the book," True complained. But fame was enjoyable as well. True may never have wanted the world to beat a path to his door, but now he encouraged people to follow him on Facebook, the network that he used to hate because of his privacy attempts.

All the while, the runner found reasons to bellyache. "Very high maintenance," Leese said. But when the trip ended, True regarded it as a success. The "whole notoriety thing," as he called it, was useful for raising funds, but he was afraid of looking like a sellout at the same time. To him, honesty was everything. He worried: Am I pretending to be something I'm not?

Friday  
A.M 1h50 run  
**100% climb**  
Climb the mountain  
90-100%  
w/VO2max

The 32-year-old from Kenya returns to the Big Apple this weekend as the reigning ING New York City champion, having run an eye-popping 2:05:06 here in 2011. In that race, Mutai hit the halfway mark in a swift 1:03:17 before dropping a previously unheard of 1:01:49 split for his final 13.1 miles to put away the field in quick fashion. He didn't just break Tesfaye Jifar's 10-year-old course record of 2:07:43 that day—he obliterated it. So how is he feeling heading into this year's race?

"I feel OK," Mutai said at Friday's pre-race press conference. "I've come prepared. To compare my shape from year to year is not so easy." While it might not be easy, it's hard to believe that Mutai won't be on his "A" game come Sunday morning. Despite dropping out of the London Marathon in April due to a hamstring injury, Mutai has had a solid 2013 racing campaign. He broke 59 minutes for the first time at the RAK Half Marathon in February, running 58:58 to finish third, and had back-to-back sub-28 minute 10K efforts on the roads this past June. His own race results aside, his two main training partners—Kenyan Kipsang and Dennis Kimetto—have lit up the roads this fall, which gives Mutai the confidence that he's ready to compete with anyone in the world. Kipsang ran 2:03:23 to break the marathon world record at Berlin in September while Kimetto shattered the Chicago Marathon course record by 53 seconds with a 2:03:45 clocking last month.

"Everyone is in good shape," Mutai said of his training group, which is based outside of Eldoret, Kenya. "We are the same. We are training together. When Kimetto got his personal best, I was feeling like it was me. For me, I'm feeling comfortable—more comfortable than the last time I was here."

A deep field of past champions and course record holders, as well as winners and course-record holders from other major marathons such as London, Boston, Chicago and the Olympic Games, will try to make it anything but comfortable for Mutai on Sunday morning. Looking to take Mutai's title from him will be reigning Olympic and world champion Stephen Kiprotich of Uganda, who is making his New York City Marathon debut, along with Ethiopian Tesfaye Kebede, who has wins in Paris, Fukuoka (twice), London (twice) and Chicago—as well as a 2:04:38 personal best—to his credit. Kenyan Stanley Biwott is just getting his feet wet in the marathon, has a 2:05:12 clocking to his credit, and ran 59:36 to win the Rock 'n' Roll Philadelphia Half Marathon in Philadelphia. In short: it won't be a stroll through Central Park for Mutai.

Unlike many other major marathons, New York doesn't enlist the assistance of pacemakers to produce fast times. Competition is the name of the game on the undulating point-to-point course, a setup that plays to Mutai's preferences and suits his reactive racing style well.

"When I run up and down hills, I enjoy it more than on a flat course," Mutai admitted. "The first half is not easy and here we don't have pacemakers. In the first half you need to go with the group, the next half marathon I can do myself."

The incredibly soft-spoken Mutai, who also has major marathon wins at Berlin (2:04:15 in 2012) and Boston (2:03:02 in 2012) under his belt, said he isn't fazed by the pressure his past performances have brought onto him. Despite his high winning percentage, and recording previously unheard of times on two of the more technical marathon courses in the world, Mutai chooses to simply focus on himself. "The pressure is always going to be there," Mutai explained. "I am looking forward to running my race. I cannot change the pressure. All I can do is run my race." His two training partners, world record holder Wilson Kipsang and Dennis Kimetto have already run to history by winning the Berlin and Chicago races in sub-2:04 within the last month. Kipsang set the scorching 2:03:23 world record in Germany whilst Kimetto obliterated the Chicago course standard with a scintillating 2:03:45 a fortnight ago in only his third race over the ultimate distance.

"So far, it's been a good year for our camp and management since Kipsang and Kimetto have gone out there and run unbelievable times and won so convincingly."

"We have trained together for three months and I believe I'm also in the kind of shape they are in so it motivates me to go and give my best." Mutai, who won the New York race the last time it was held in 2011 in a course record of 2:05:06, said at their camp in Kagung'etum, deep in the Kenyan Rift Valley.

Mutai, 32, is no stranger to the sub-2:04 territory, having pounded the clock to return the scarcely believable 2:03:02 at the 2011 Boston Marathon that due to course elevation drop considerations, was not eligible to be a world record.

However, he is focused more on emulating his training partners in delivering victory to give his management team, Volare Sport, their fourth World Marathon Majors (WMM) victory of the year as opposed to chasing the timer.

Kimetto (2:06:50) also won the February Tokyo Marathon that was included in the WMM roster this season to give Volare athletes three out of six races of the elite circuit.

"First, breaking the New York course record in 2011 was very hard. There are no pacemakers there meaning it all depends on how you go as an individual."

"Secondly, the course is very hilly and sometimes the weather is so devastating like last year when we got there but they had to cancel the race so, I cannot guarantee that I will deliver a quick time."

"If the conditions allow, then I will aim to run as fast as I can but the most important thing is to listen to your body and push it carefully," he explained.

Speaking while sat outside the modest camp they share with Kipsang and Kimetto among other athletes, Mutai hailed the meteoric rise of the latter who was a peasant farmer only three years ago.

"When I saw Dennis win, I felt so happy since his victory was for us all. I assisted him to start his career and sponsored him to local races since if he did well there, then it meant he had the capability to run well abroad."

"I then introduced him to my manager (Gerard Van Der Veen) who organised races for him abroad and having seen what he did in Chicago, then I'm confident he will bring the world record in future," he stressed as he pointed to the tiny adjacent rooms Kipsang and Kimetto lodge in when in camp.

"Here, we encourage young athletes to race clean since there is no drug that can make you perform better other than the terrain you see around here."

"It is all about training harder and harder in these hills and valleys that are in places like here or iten, staying focused and when you make it, avoiding the kind of lifestyle that will finish your strength."

"The secret is simple, train, train and train more."

In New York that was cancelled last year due to super storm Sandy, Mutai will go head to head against the obdurate challenge of Uganda's Stephan Kiprotich, the Olympics and world champion who has made it his mission to supplant the favoured Kenyans off their perch.

Among others in the men's elite field are compatriots Wesley Korir, the 2012 Boston titleholder and the legislator for Cherangany constituency in the Kenyan parliament as well as last year's Paris winner, Stephen Biwott.

Friday  
P.M  
**2h00 easy run**

When I run up and down hills, I enjoy it more than on a flat course," Mutai admitted. "The first half is not easy and here we don't have pacemakers. In the first half you need to go with the group, the next half marathon I can do myself."

Saturday  
Intervals  
20x2min @ 5min

An intriguing, but ultimately unsuccessful world record attempt has seen Geoffrey Mutai win the 2012 Berlin Marathon in 2:04:15. In one of the more amazing (or peculiar) finishes in a marathon, Mutai and Dennis Kimetto passed through the Brandenburg Gate locked together, but a sprint never came. Either both were too shattered from chasing the world record, or they'd agreed on a finishing order (they are training partners, Mutai the senior man), but the final 2.2km were incredibly slow relative to what went before and the record, which seemed on at 35km, fell away and was ultimately missed by a fairly large margin.

In the aftermath of the race, there's been a good deal of discussion about the finish. As mentioned, Mutai and Kimetto hit the Brandenburg Gate locked together, Mutai slightly ahead, as they had been for pretty much 42km. Over the final 200m, that did not change, and there seemed to be no attempt to change that from Kimetto, and no attempt from Mutai to seal the win with any kind of sprint. A few commentators have remarked at their surprise at the lack of a sprint, and I must confess it was an anti-climactic finish for a head-to-head race, leading me to side with those saying it was "pre-planned."

If that is the case, it would continue a theme started in the London Olympic Games where athletes were getting into trouble as much for NOT wanting to win as for cheating in order to win. We often talk about doping undermining our chance to watch a "genuine race", and one can argue that this is the same, and a shame for the integrity of the concept of a "race". Then again, these athletes are professionals, and given the "hierarchy" that would see Mutai above Kimetto as training partner, perhaps they are entitled to "share the pie" as they see fit. Feel free to voice your thoughts in the discussion below. Here are some thoughts from our friends at Letsrun.com

Patrick Makau's world record therefore survived it's first really big challenge, and it illustrates once again just how challenging the world record is, because Mutai had it in his sights, and perhaps hindsight will show that a small error in pacing after 30km, when he surged aggressively for a 14:18 five-kilometer split, cost him over the final 5km, where the pace dropped significantly.

The story is best told by the graph below, which is full of detail, but hopefully tells of how Mutai controlled the race from the start, and managed to wind the pace up progressively so that each five kilometer segment was faster than the one before. Until the final 5km segment, that is, where you can see the "cost" of the surge as the pace dropped.

Up to that point, it was a remarkable illustration of negative pacing, and is the kind of thing you might occasionally see in a tactical track race, let alone a world record lasting over two hours. Briefly, the graph compares Mutai's 2012 race to that of Patrick Makau, the man who set the record one year ago. It shows, from top to bottom: The five kilometer segments for both athletes, with Makau's in red and Mutai's in blue. The difference between the five-kilometer splits in purple. Positive means Mutai was slower, negative means he was faster than Makau for the comparable split from 2011. The blue line and red line show the race splits for Mutai and Makau respectively. The text on the graphs shows the cumulative time difference between the two men as Mutai's race unfolded.

Firstly, the AVERAGE pace needed to run the world record is 2:55.8. That translates to a 14:39/5km. Notice how Mutai did not hit that pace until the second half of the race. In fact, he was actually quite a lot slower than the overall average, with his splits for the first 10km projecting a time outside 2:05. So the first half was conservative—82%.

Interestingly, I've since received some feedback that the pace car that drives the route with the elite athletes, displaying the kilometer splits was responsible for this conservative start, because it "froze" with a kilometer time of 2:50 within the first few kilometers of the race. Mutai, assuming he was basing his pace on that information, would have consciously held back for fear of maintaining that kind of pace, and the consequence of that is that he went through the half about 35 seconds slower than had been requested.

Once Mutai realized that the pace was too slow (he needed a 61:25 second half), he pressed on, and the second began in a sensationally aggressive fashion, and was fast, at least until the end.

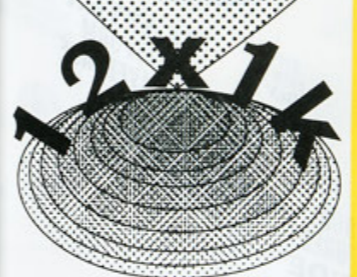
His second half ended up being 62:05, so on paper, an even race, but of course it's skewed by the very fast surge and the very slow finish.

Speaking of the finish, at 35km, the world record was definitely on. Makau's comparable time may have been 14 seconds faster, but Makau finished fairly slowly last year too—14:59 for the last 5km. Had Mutai maintained even a 14:40 pace from 30km onwards, the record was his. However, he slowed significantly. The final 2.2km were run at 3:09/km. The result was that a virtual gap of 8 seconds at 40km became 36 seconds by the finish line. Mutai was absolutely spent over the final 2.2km, and this is probably the outcome of the 14:18 surge.

Until the final 7km, the slope of that line is just incredible—yes, the start was conservative, but it was ramped up as the race developed, culminating with Mutai's big surge between 30 and 35km, when the pace-setters dropped out. There, a 2:43 and a 2:52 kilometer put him right back in the frame for that record. It's easy to see in hindsight, but that was too fast—a slightly more conservative pace would still have kept that line heading in the right direction, and Mutai MAY have had more in the tank from 35 to 40km, and certainly a sub-2:04 would have been achieved. These things are never precise, of course, but given how beautifully controlled the pace was, that surge was just too big. And to emphasize the precision, we're talking 2 to 3 seconds per kilometer here! Those are the margins.

Look at the cumulative time gaps between Mutai and Makau—the conservative start for Mutai meant that from the gun, Makau was "ahead" in their virtual race. It was 22 seconds after 5km, and the gap got larger and larger, so that by 20km, Makau would have been about 200m ahead, with a margin of 33 seconds. But Mutai's race, as mentioned above, was based on getting quicker and quicker, and so he began to erode that margin. 21 seconds at 25km, then it got larger again—that's because Makau used the 25-30km segment last year to surge and break Geberselassie's challenge.

P.M Speed Workout  
30 min warm-up  
12x1k



The virtual gap grew to 34 seconds at 30km, but Mutai had his own surge still to use. That happened from 30km to 35km, and suddenly, the record was back on because the difference was now down to only 14 seconds. With 2.2km to go, Mutai had Makau in "his virtual sights". But then, as pointed out above, Mutai blew and the record fell away.

Ultimately, Mutai's performance today showed just how difficult it will be to get this record. There is still a margin for "error" in terms of pacing, but it's now tiny. Today, the start was probably a touch slow, but the big difference came after 35km, when the pace told. Similarly, for Makau last year, his big surge probably meant that the final time was not quite optimal—there is a margin for error. But in the heat of a marathon, it's small enough that surges and decisions that are slightly fast are costly. This is why it's so premature to talk about a sub-2-hour marathon, or even a sub-2:02. Those performances require perfection—the small margin of error for a 2:03 is almost non-existent for a 2:02. Weather-wise, it has to be perfect (the sunshine may have added time to Mutai's performance today, for example, just slightly warm by the finish), pace-setting must be perfect, the athlete probably requires some 'company', and of course their condition must be absolutely perfect on the day.

Mutai, and Berlin, were not quite 100% today.

MAKAU VS MUTAI THE BATTLE OF TWO GIANTS

**GEOFFREY MUTAI**

- 10,000 METRES 27:27.79
- NAIROBI 26 JUN 2010
- TO KILOMETRES 27:19
- BOSTON 26 JUN 2011
- 15 KILOMETRES 42:15
- RAS AL KHA 15 FEB 2013
- 20 KILOMETRES 56:05
- DUBAI 3 MAR 2013
- HALF MARATHON 58:58
- RAS AL KHA 15 FEB 2013
- 25 KILOMETRES 1:13:38
- BERLIN 30 SEP 2012
- 30 KILOMETRES 1:28:11
- NEW TOWN 3 MAY 2013

**PATRICK MAKAU**

- 3000 METRES 7:54.50
- 10 KILOMETRES 27:27
- BERLIN 01 APR 2007
- 15 KILOMETRES 41:30
- RAS AL KHA 20 FEB 2009
- 20 KILOMETRES 56:13
- UDINE 14 OCT 2007
- HALF MARATHON 58:52
- RAS AL KHA 20 FEB 2009
- 25 KILOMETRES 1:13:18
- BERLIN 25 SEP 2011

**RUNNING TIPS TO RUN LIKE A PRO**

Athletic shoe is a generic name for the footwear primarily designed for sports or other forms of physical exercise but in recent years has come to be used for casual everyday activities.

They are also known as trainers (British English), sandshoes, gym boots or joggers (Australian English) and Geordie English in the UK, running shoes, runners or gutties (Canadian English).

# THESE FIVE SHOES WILL MAKE YOU RUN

## THE RAVENNA EFFECT

RUNNER'S WORLD® NAMED THE RAVENNA 4® "THE BEST BUY"

A WHOLE LOT OF SWAGGER

NOT TOO NEUTRAL AND NOT TOO SUPPORT

A BIT MORE FLEX

FAST COLORS DESIGN

MIDFOOT CAPTURE THAN AVERAGE

PLUSH TONGUE AND COLLAR

LITTLE MORE CUSHION

BUILT FOR THE MILD OVERPRONATOR

BALANCE OF FEATURES AND RIDE

A SADDLE THAT ENVELOPS THE FOOT

AN ADJUSTABLE BAND DESIGN

FLATTER PLATFORM THAN AVERAGE

NOT EVEN UGLY

**01**

**Brooks Ravenna4**

The Ravenna 4 proves that you don't need an oversized, ugly, and expensive shoe in order to get excellent stability. At just 11.1 ounces, the fourth edition of the Ravenna delivers an excellent balance of cushioning and pronation control, at a wallet-friendly price—though it will cost you \$10 more than last year's model. While the midsole and outsole are said to remain unchanged,

testing at the RW Shoe Lab revealed that the forefoot is noticeably more flexible in this update. The shoe's upper saw subtle tweaks to improve midfoot wrap and adapter. "The fit of the Ravenna 4 is very similar to the Brooks Adrenaline," says Nicholas Stanko, of East Lansing. This is partly because the band that wraps the midfoot has some added elasticity.

Percentile Rankings

PROFILE: **91.2**  
FOREFOOT: **96.3**  
STABILITY: **66.9**

WEIGHT: **99**  
HEEL: **84.5**  
STIFFNESS: **95.9**  
PRICE: **110\$**



The presence of endorphins would presumably mitigate pain sensation by negatively regulating pain-carrying signals from nociceptive neurons in the spinal cord.

The British English term "trainer" derives from "training shoe." There is evidence that this usage of "trainer" originated as a genericised trademark for a make of training shoe made by Gola.

Plimsolls (British English) are indoor athletic shoes, and are also called sneakers in American English and daps in Welsh English. The modern athletic shoe began with the plimsolls.

GREATLY IMPROVED FLEXIBILITY.



GROOVES EXTENDING DEEPER



7.3 MM BALL OF YOUR FOOT TO THE GROUND



NIKE RUNNING QUALITY



6 MM BALL OF YOUR FOOT TO THE GROUND



BROOKS STAGNANT RUN



SUBTLE TWEAKS STRONGER



KEEP YOUR FEET SAFE



7.3 MM BALL OF YOUR FOOT TO THE GROUND



FLATTER PLATFORM THAN AVERAGE



SOFT SHOE CONTOUR



MOLDS THE FEET



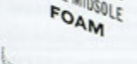
PROTECT YOU FROM THE ROAD



MADE FOR EXTREME HEEL STRIKER



UPGRADE IN THE MIDSOLE FOAM



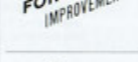
HIGH QUALITY MATERIAL



HEEL-TO-TOE OFFSET AND FLEXIBILITY



STABILITY FOR RUNNERS IMPROVEMENTS



KNITTED UPPER WORK



ONE-PIECE CONSTRUCTION WORK



ULTRA PLUSH GEL NIMBUS



LIGHTER MATERIALS NO SLIPPERY



LIGHT WEIGHT CUSHIONED



FOURTH VERSION UPGRADED



**02 Saucony Mirage**

Offering a touch of stability for runners who need it, the Mirage joins the Kinvara and Virrata in a lightweight collection Saucony has dubbed its Natural Series. The shoe saw significant improvements from the previous version, starting with grooves extending much deeper into the forefoot midsole, resulting in great improved flexibility.

PROFILE: **81.2**  
FOREFOOT: **68**  
STABILITY: **85**  
WEIGHT: **69.6**  
HEEL: **84.5**  
STIFFNESS: **35.9**  
PRICE: **110\$**



**03 Nike Flyknit Lunar+**

"Unequivocally, the best shoe I've ever worn," says one runner, a sentiment echoed by many other testers. What makes the Flyknit Lunar+ worthy of such praise? Well, it all starts, most obviously, with the knitted upper. Time and again, testers told us that this seamless, one-piece construction method works, that the shoe is soft and molds to the contours.

PROFILE: **83**  
FOREFOOT: **88**  
STABILITY: **35**  
WEIGHT: **63.6**  
HEEL: **84.5**  
STIFFNESS: **37**  
PRICE: **100\$**



**04 Brooks PureConnect**

This little brother to the ultra-plush Gel-Nimbus measures up in nearly every way. It sits almost as high off the ground, boasting plenty of foam underfoot to protect you from the road. "The cushioning is good, but not overboard," says Melissa Congleton, of East Lansing, Michigan, who admits to being an extreme heel-striker.

PROFILE: **56**  
FOREFOOT: **90**  
STABILITY: **85**  
WEIGHT: **95**  
HEEL: **89**  
STIFFNESS: **50**  
PRICE: **130\$**



**05 Altra The Torin**

"Don't mess it up!" That's generally the plea of runners who have fallen in love with a particular shoe. Kinvara faithful, rejoice. The fourth version of this lightweight, cushioned trainer remain mostly unchanged, though subtle tweaks make this already solid shoe even stronger. First, the shoe gets an upgrade in midsole foam; lighter and higher-quality material results in slightly softer cushioning.

PROFILE: **93**  
FOREFOOT: **90**  
STABILITY: **40**  
WEIGHT: **77**  
HEEL: **66.4**  
STIFFNESS: **40**  
PRICE: **140\$**

INTERVIEW+TRANSCRIPTION

Under Wittenberg's leadership, the NYRR has helped develop new initiatives.

**THEY DESERVE TO DO IT. OUR TEAM AT NEW YORK ROAD RUNNERS, THIS IS A DAY THAT HAS A LOT TO FEEL GOOD ABOUT, AND THEY ARE THE ONES WHO SHOULD BE STANDING ESPECIALLY TALL AND BE CONGRATULATED. IN THIS ROOM, IT'S ALWAYS RISKY. WE HAVE 160 PEOPLE. SO IT'S EVERY SINGLE ONE OF THE FULL-TIME AND THE 700 PART-TIMERS THAT I WANT TO THANK, BUT I DO WANT TO CALL OUT A COUPLE. WE HANDLED 50,000 PEOPLE YESTERDAY, HAD EVERYTHING WE NEEDED FOR THEM, AND I'VE NEVER SEEN THE OPERATION GO SO WELL. I WANT TO CONGRATULATE PETER CIACCIA, WHO HEADS OUR EVENT TEAM. HE'S THE TECHNICAL DIRECTOR OF THIS RACE. PETER IS ONE OF THOSE GUYS WHERE, IF SOMETHING WENT WRONG, EVERYBODY WOULD KNOW ABOUT IT, AND LUCKILY YOU DON'T BECAUSE HIS TEAM DO I THINK ARE THE BEST AT WHAT THEY DO. THEY DO AN INCREDIBLE, INCREDIBLE JOB. SO I WANT TO CONGRATULATE PETER AND HIS TEAM. HE'S RESPONSIBLE FOR A LOT MORE THAN LOGISTICS. HE'S A HUGE PART OF THE VISION OF THIS EVENT AND WHAT WE DO YEAR ROUND IN EVENTS AT NEW YORK ROAD RUNNERS. I WANT TO THANK BOB LAUFER AND DOREEN FOR THEIR EFFORTS IN RECRUITING AMAZING PRO ATHLETE FIELDS IN THE WHEELCHAIR DIVISION AND CONSTANTLY HELPING US ELEVATE THE GAME THERE. DAVID AND SAM ARE JUST UNBELIEVABLE WITH PRO ATHLETES AND RECRUITING AND NURTURING OUR RELATIONSHIPS WITH THEM AND HELPING ENSURE THAT WE'RE ALWAYS CONNECTING OUR BEST EFFORTS IN THE WORLD WITH WHAT THIS IS ALL ABOUT AND BRINGING PEOPLE HERE WHO WILL GIVE US GREAT RACES AND REPRESENT THE BEST OF OUR SPORT. I JUST WANT TO CONGRATULATE THEM AS WELL. I FINALLY WANT TO JUST THANK EACH OF THE AREA HEADS THAT HAVE DEEP TEAMS BELOW THEM. RONNIE TUCKER ON COMMUNICATIONS, CHRIS WITH HIS TEAM, DOES AN AMAZING JOB ON THE PR TEAM. MIKE, WE HAD 145,000 PEOPLE USE THE TCS APP YESTERDAY, AND IT WORKED REALLY, REALLY WELL. AND THE LIST GOES ON. TO THE ENTIRE TEAM, IT'S REALLY HATS OFF TO ALL OF THEM TODAY. BUT IT'S A CITY THAT SHOULD BE PROUD OF ITSELF TODAY. THAT'S WHAT MAKES IT THE RACE AND ATHLETES THAT I HOPE ARE FLYING HIGH BASED ON THEIR SUCCESS FROM THE FRONT OF THE PACK TO THE BACK OF THE PACK.**

**THANK YOU.**

The World Marathon Majors Series and several community programs introduced running to underprivileged children.

- 6 nov. 13. @nyrrmaryruns—6:07 AM  
@arumwithaview congrats 2 u. Join u in appreciation of every city, state & fed. support & all New Yorkers who make it the marathon
- 6 nov. 13. @arumwithaview—8:27 AM  
Meant to do this sooner: thank you @nyrrmaryruns, @nyrr staff, volunteers, city/state/fed workers, etc. for an amazing #NYNYCM!
- 6 nov. 13. @nyrrmaryruns—9:37 AM  
@Bart - always honored to host you. We are happy when we see that many smiles lining the course and at the finish line!
- 6 nov. 13. @bartyasso—9:50 AM  
Mary @nyrrmaryruns I have two words for you, your entire staff @nyrr and the thousands of volunteers. BE PROUD @nyrrmarathon Sunday was epic.
- 6 nov. 13. @nyrrmaryruns—9:00 AM  
@bartyasso so sorry I missed you at the finish!
- 6 nov. 13. @bartyasso—10:00 AM  
@nyrrmaryruns I was so slow on Sunday (I think you were having dinner when I arrived at the finish line)
- 6 nov. 13. @nyrrmaryruns—8:00 AM  
@oiselle\_sally @CTurlington congrats u 2! We were honored to host you!! Way to run & support!
- 6 nov. 13. @oiselle\_sally—7:56 AM  
@nyrrmaryruns @CTurlington like a BOSS, you put on a 5-star race Mary Thank you!!
- 6 nov. 13. @nyrrmaryruns—5:44 AM  
@chrisweiller @nyrrmarathon @ithacacollege @nyrr we'll have to find a Canisius grad to even out that shot...
- 6 nov. 13. @chrisweiller—4:44 AM  
Go BOMBERS! A post @nyrrmarathon moment w/ fellow @ithacacollege grad Steve Meyer & @NYRR CEO @nyrrmaryruns pic.twitter.com/13b6TJzRf
- 6 nov. 13. @nyrrmaryruns—6:45 AM  
@bartyasso never! Had our youth benefit then back to the finish. No dinner necessary when our runners fuel us!
- 6 nov. 13. @bartyasso—6:51 AM  
@nyrrmaryruns I had a rough day I see out there over 6 hours. Last I heard the film will be out in January @sascory @runnersworld
- 6 nov. 13. @nyrrmaryruns—6:55 AM  
@bartyasso I thought so too re the crowds. Good for u. Way harder to hang in there on a tough day.
- 6 nov. 13. @bartyasso—6:55 AM  
@nyrrmaryruns The crowds were massive and the vibe was just amazing.
- 6 nov. 13. @nyrrmaryruns—8:55 AM  
@rgr929 @NewRoRunners thx to u all for cheering. Hope to see you next year!
- 6 nov. 13. @rgr929—9:20 AM  
@nyrrmaryruns Had a great time being a spectator and hope to be healthy to run next year. #NYNYCM @NewRoRunners pic.twitter.com/ly0pdyvY
- 6 nov. 13. @nyrrmaryruns—6:03 AM  
@runmeb\_Meb - you have become one of us in NYC & at NYRR. Our honor. I shared with all the vols how you couldn't stop with all their support.
- 6 nov. 13. @runmeb—6:57 AM  
@nyrrmaryruns thank you Mary for your leadership!
- 6 nov. 13. @nyrrmaryruns—6:44 AM  
@MomsGottaRun Jen! Was so good to talk to you Monday. Congrats again, you became an inspiring force for our team & city!
- 6 nov. 13. @runmeb—6:33 AM  
Is there any other opportunity for runners to get their medals engraved? @nyrrmaryruns @nyrr #NYNYCM
- 6 nov. 13. @nyrrmaryruns—6:22 AM  
@weskorir Wesley, U inspire. Love your commitment to your community. Thx for running with us!
- 6 nov. 13. @runmeb—6:25 AM  
Back to parliament soon: thanks to @nyrrmaryruns @dmeville and all the volunteers that made my first @NYNYCM Marathon fun, you guys rock!
- 6 nov. 13. @nyrrmaryruns—6:32 AM  
@dherick congrats! & thx!
- 6 nov. 13. @dherick—6:25 AM  
Thank you @nyrr\_jen @dmeville\_jen @nyrrmaryruns & @nyrr volunteers for an amazing experience & the honor of running the pro field @gratful
- 6 nov. 13. @nyrrmaryruns—6:32 AM  
@JonMarcMcD congrats jonmarc!
- 6 nov. 13. @dherick—6:25 AM  
A huge shout out to @nyrrmaryruns and @nyrr for a flawless #nyrrcm marathon. It was an incredible experience

An article in the New York Times stated that Wittenberg "has transformed the New York City Marathon."

NYRR also provides financial support for the USA Distance Project, which is composed of training groups.

She was the oldest of seven children, and played softball, baseball and basketball—sports that her father coached.

# CONGRATULATIONS TO ALL THE WINNERS...

Congratulations to all the winners. It must be an amazing feeling today. A lot of just being there as a spectator yesterday, a lot of people were talking about Boston, and I wanted to see from a runner's point of view if there was ever some sort of concern with security. It seemed like it was amazing yesterday and went off without a hitch, but did that ever cross your mind? Was it ever a concern?

**MARCEL MARCEL** ran in Boston, and then I headed over to London six days later, and then I ran Chicago a couple of weeks ago. There was no concern for security, especially here in New York. I mean, they stepped up the game, and the security was everywhere. But from an athlete, there wasn't a concern. New York was really just about a good closure, and especially after everything that happened this year. So I think people were excited to come out. I don't think that people were worried. It turned out to be a fabulous day yesterday.

I wanted to both of you ask the question, how much did the wind bother you yesterday? I experienced it myself as I ran also. It bothered me a lot.

**MARCEL MARCEL** First of all, for me, or for us as an athlete, it was the toughest win for me yesterday. Of course, I try even to lead or to push it. I tried to continue in the front, but no one was coming. Everyone was waiting me to lead. When I go back, everyone is waiting. So it was all the wind, it was facing me because no one was allowing each other to come to lead. So the wind was tough. I tried to go, but after your step, you lose your step again. It was tough. Actually, I've never won a race as tough as this.

**MARCEL MARCEL** Afterwards the athletes were all talking together about it. Geoffrey was talking about how you feel the wind on the bridge, and then for the wheelers, it's just to another level. Tatyana or Marcel, I don't know if you want to comment on the wind from your perspective.

**MARCEL MARCEL** Well, for me, the wind, headwind was actually an advantage for me, being a little bit bigger and stronger. So I really tried to hit that first climb as hard as I could. I ended up dropping the entire pack. But the wind did have a factor, especially on the first bridge, because it kept shaking our front wheel, and at one point it just picked up our entire chair and shifted it over, which can affect your time, it can affect your stroke. So you have to go a little bit slower just and forth on the bridge. But for me, I try to use that as a huge advantage and use the power that I have to run in the wind. I dropped the pack because of it.

**MARCEL MARCEL** For me, I can see it was a tough race of all the marathons that I've run because those two ladies took it fast, and after crossing 30 kilometers, I started thinking I have to move because they're about to reach close to the finish line, but then we are not together.

But I was having a feeling that I'm strong enough and I trained well. So I must fight and leave them. So they are going to win, but near the finishing line, I keep up with them. But I have to fight the wind until the last minute.

**MARCEL MARCEL** I think for me the wind was also a very big factor. We were a pack of five athletes. We changed the lead so we could have a good drafting. And I think it would be very difficult to go away for one athlete. So an athlete tried to go away, just the other athletes work together and catch them. So it was very difficult with the wind, also with the wind from the side with the wheels, they moved a little bit. So it was really difficult. Finally, the time for us, 1:40, is really slow. I think it's because of the wind.

**PRISCACH**, for your race, it was a very different competition. You're three minutes behind at halfway. Usually, in a race, you're worried about how to beat the competitors that are right next to you. In this case, you had to worry about a competitor that was far in the distance. How did your mind handle that competition?

**PRISCACH** After a certain point, I decided that I must go and catch her because there is not much left and they are very fast. So I was really prepared mentally for this race, and also I have trained well. When I was coming, I was coming for the win.

Also a question to Priscach, was it a little bit of a revenge for 2011 when Mary Keitany ran, and she was completely out of sight of the two Ethiopians, and now you caught two Ethiopians before the finish.

**PRISCACH** I think it was a great achievement for me because I ran past the two Ethiopians because I was testing myself. Also, from 35 to the finishing line, I know myself that I am strong and I'm moving because the way I'm training myself. I trained to run the last part well.

Geoffrey and Priscach, it's been about 24 hours since you won. What have you done, and how have you celebrated?

**PRISCACH** I think I have not yet. I'm still so happy, and I know I will go out and celebrate. I'm still fixing my pain. After pain, I know I will.

**MARY KEITANY** A note of appreciation to all the athletes. Last night we had a youth benefit supporting our youth programs, where we had lots of people come out for a night of champions celebrating our champions, all the runners, and raising money for our youth programs, and it really was extraordinary to have these guys there. All the runners were and all the people that were there just really were so excited about all of you. I just want to say thank you because that made a difference to us and our efforts with our youth programs. Priscach, you were asked how you've been celebrating. I don't know if there was anything in addition to the youth benefit and four of us were at the New York Stock Exchange. Did you do anything to celebrate?

**MARY KEITANY** I went to the event that we did yesterday, and I am very happy. That's a date I will not forget for the rest of my life.

**MARY KEITANY** Did either of you do anything else? We kept them pretty busy. You're sort of on through Monday night if you do the race. Did you do the Today show?

**TATYANA MCFADDEN** I was on it, but I didn't do it. Just ate a lot of candy because I missed Halloween. I tried to be as good as possible, then candy, candy, candy.

**MARY KEITANY** We have something in common. What kind of candy did you eat?

**TATYANA MCFADDEN** Sour X-Tremes to M&Ms and all sorts. That was a good celebration for me.

**MARY KEITANY** Did you get that as a gift?

**TATYANA MCFADDEN** My family brought it because I was so sad I missed Halloween because I love to sit and watch scary movies and eat as much candy as I can.

Priscach, with your win, you also took the World Marathon Majors crown. Notably, your last two races, a big win in London and a big win in New York. Was it special to win here rather than winning the title with a third or fourth place? But you won it with a big win. Can you tell us how those two victories plus your World Marathon Major title means to you?

**PRISCACH** To win a World Major title, it means a lot to me because it's a great achievement also, and also it gives me encouragement also to train well. And also ensures that I can also run the fastest race and improve my time in the future.

**MARY KEITANY** That was a real highlight. In fact, I'll take a quick moment. So we had Priscach winning the World Marathon Majors title. That, I think, added a lot of drama to both races having the titles come down to yesterday. And we also wanted to celebrate Tatyana's winning the grand slam. So as a little bit of surprise, Tatyana, we wanted actually to share a special gift with you. Would you like to read the inscription, Mr. Walker? You should present it. That would be very nice.

**MARY KEITANY** We didn't get it inscribed. We didn't want to jinx her in any way. But it will say our good friends at Tiffany obviously helped us quickly to choose and present today this award. It will say, quote, Grand slam, achievement in wheelchair racing presented to Tatyana McFadden by New York Road Runners ING New York City Marathon 2013. That's what it will look like when it comes back.

**TATYANA MCFADDEN** Thank you. That's beautiful.

Geoffrey, are you looking ahead to the World Marathon Majors title next year? Is that one of your goals?

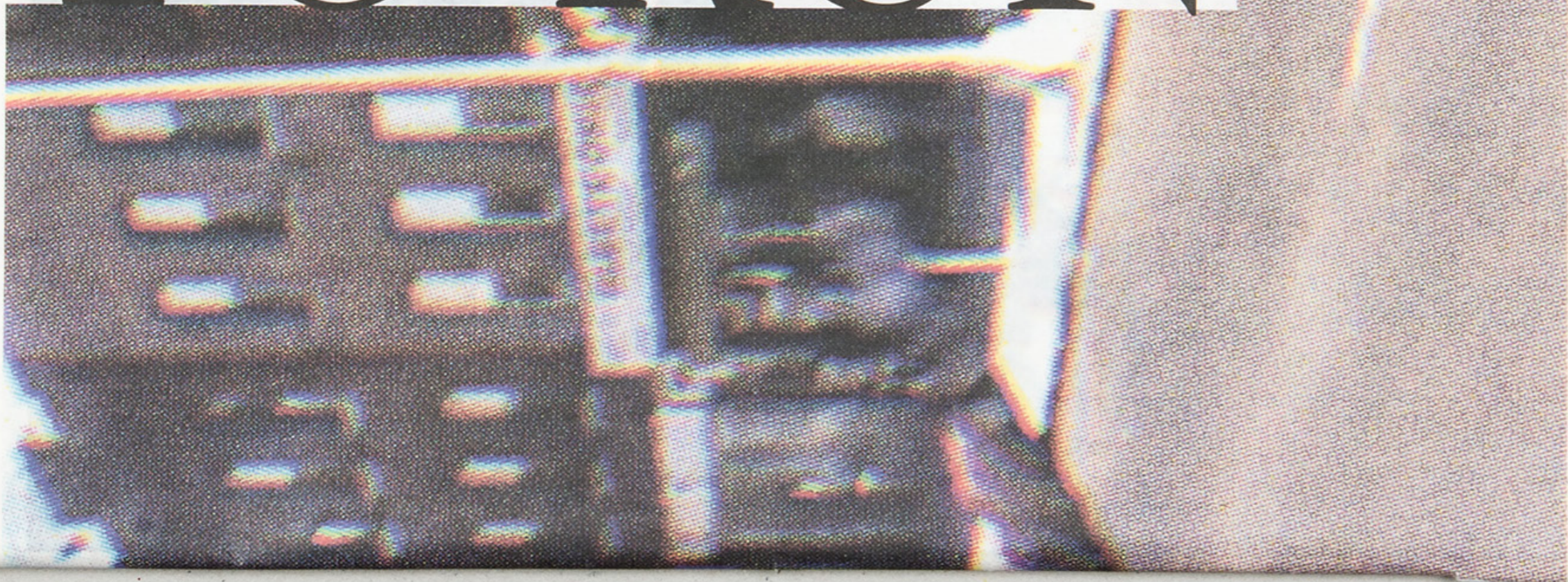
**GEORGE WALKER** Actually, for me, I look forward in my career, but you know in my mind, I don't struggle to win the major. It's the only thing I will look forward to. I will achieve many.

FIRST ISSUE WITH RUNNERS HIGH

ING NEW YORK CITY MARATHON

DECEMBER 2013

# WIRED TO RUN





2. About the high 2.7. Brain Scans

Getting the high, an article by Sarah Fild, for the New York Times Magazine, March 26, 2006. Dr. Boecker and his colleagues recruited 20 marathon runners and a similar number of nonathletes and are studying the perception of pain after a run, and whether there are related changes in brain scans. He is also having the subjects walk to see whether the effects are because of the real intensity of the recommended three exercise...

1. Ranking 1.8. Women's Age

The New York City Marathon is the world's largest with over 50,000 starters in 2013. It began in 1970 with a group of runners in Central Park and was held every year since but with the exception of 2011, when the race was cancelled due to Hurricane Sandy. The course starts in Staten Island and passes through all five boroughs of the city. Runner's World and Running Times has full coverage here. The 2013 New York City Marathon men's race very much looks like one that's been especially worth the wait.

6. Wired to run 6.3. Results

Wired to run: the exercise-induced endocannabinoid with implications for the runner's high, a test by David A. Reardon, Adam Foster, Gregory Gershenman, and Alexandre Sailer. Recent work has supported a strong role for endocannabinoid signaling in the rewards associated with endurance exercise (Dietrich and McDaniel, 2004). The two recognized eCBs, anandamide (AEA) and 2-arachidonylglycerol are endogenous ligands for the CB1 cannabinoid receptors. This study is based on the previous test.

5. Interview 5.4. On the bridge

Wired News Conference, an interview transcribed by NYC Marathon, November 4, 2013. The test is also available in full version on the NYC Marathon website: http://www.nyccmarathon.org/News-Conference/Interviews/2013-after-the-run.pdf. This interview was recorded just after the run with Mary Wittenberg, Geoffrey Mutai, Phil Jepson, Maric Hug and Tatyana Mikhelina.

4. Wittenberg 4.5. Recruiting

Mary Wittenberg (born Robertson) is the President and Chief Executive Officer of New York Road Runners (NYRR). As leader of the organization, she oversees the New York Marathon and several other races, events, many programs that have drawn over 300,000 participants. Under Wittenberg's leadership, the NYRR has helped develop new initiatives such as the World Marathon Major Series and many community programs that have introduced running to underprivileged children.

3. Endorphins 3.6. Anandamide

Increased beta-endorphin levels in cerebrospinal fluid after acupuncture for recurrent pain, written by Christel Jones K. McLaughlin, L. Tomlin, Besser G. Reed, L. Wan, H. 1992. A study found that a runner's high might be caused by the endocannabinoid, anandamide. The authors suggest that the body produces a kind of anandamide to deal with prolonged stress and pain from strenuous exercise, similar to the original theory involving endorphins.

3. Endorphins 3.7. Disorders

Getting the high, an article by Sarah Fild, for the New York Times Magazine, March 26, 2006. Annie might question that, she loves to run, but wonders why. But her husband tells her that her face when she is running is really blissful. So maybe even she will soon be able to get a real intense runner's high.

2. About the high 2.8. Conclusion

Endorphins are known to play a big role in depersonalization issues. The opioid antagonist naloxone and naltrexone have both been proven to be successful in treating depersonalization. To quote one of the 2001 intensive studies, in three of 14 patients, depersonalization symptoms disappeared when patients showed improvement.

1. Ranking 1.9. Finishers

The New York City Marathon is the world's largest marathon, with over 50,000 starters in 2013. It began in 1970 with a group of runners in Central Park and was held every year since but with the exception of 2011, when the race was cancelled due to Hurricane Sandy. The course starts in Staten Island and passes through all five boroughs of the city. Runner's World and Running Times has full coverage here. The 2013 New York City Marathon men's race very much looks like one that's been especially worth the wait.

6. Wired to run 6.4. Discussion

Wired to run: the exercise-induced endocannabinoid with implications for the runner's high, a test by David A. Reardon, Adam Foster, Gregory Gershenman, and Alexandre Sailer. This is the first study to show that there is inter-specific variation in neuroanatomical signaling following exercise and that this variation may explain differences in habitual locomotion. In humans, increased eCB signaling following exercise is significantly correlated with a significant improvement of PA.

5. Interview 5.5. A tough race

Wired News Conference, an interview transcribed by NYC Marathon, November 4, 2013. The test is also available in full version on the NYC Marathon website: http://www.nyccmarathon.org/News-Conference/Interviews/2013-after-the-run.pdf. This interview was recorded just after the run with Mary Wittenberg, Geoffrey Mutai, Phil Jepson, Maric Hug and Tatyana Mikhelina.

4. Wittenberg 4.6. Area heads

Mary Wittenberg (born Robertson) is the President and Chief Executive Officer of New York Road Runners (NYRR). As leader of the organization, she oversees the New York Marathon and several other races, events, many programs that have drawn over 300,000 participants. Under Wittenberg's leadership, the NYRR has helped develop new initiatives such as the World Marathon Major Series and many community programs that have introduced running to underprivileged children.

2.7. Dr. Boecker and his colleagues have recruited 20 marathon runners and a similar number of nonathletes and are studying the perception of pain after a run, and whether there are related changes in brain scans. He is also having the subjects walk to see whether the effects are because of the intensity of the exercise.

4.5. I want to thank Bob Lauffer and Doreen for their efforts in recruiting amazing pro athletes fields in the wheelchair division and constantly helping us elevate the game there. David and Sam are just unbelievable with pro athletes and recruiting and nurturing our relationships with them and helping ensure that we're always connecting our best efforts in the world with what this is all about and bringing people here who will give us great races and represent the best of our sport. I just want to congratulate them as well.

Table with 3 columns: Women's Age Group, Rank, and Name. Lists names like Amanda Eastman, Katie Stuch, Stefanie Braun, etc.

3.6. Anandamide Previous research on the role of endorphins, in producing a runner's high, included trying to understand the mechanisms at work; that data seemed to demonstrate that the high comes from completing a physical challenge rather than as a result of exertion. [13] Studies cast doubt on the relationship between endorphins and the runner's high for several reasons: When an endorphin (mu-opioid) receptor antagonist was infused (e.g., naloxone) or ingested (naltrexone), the same changes in mood state occurred as when the person exercised with no blocker. A 2003 study found that a runner's high might be caused by the endocannabinoid, anandamide. The authors suggest that the body produces anandamide to deal with stress from strenuous exercise, similar to the original theory involving endorphins. However, this study did not report the cognitive effects of a runner's high; which seems to suggest that anandamide release may not be significantly related to runner's high. Neurotransmitter, Anandamide which has a structure similar to that of tetrahydrocannabinol, is the active constituent of cannabis. [14]

6.3. However, to date, no studies have examined the possibility that other cursorial mammals receive these same neurobiological rewards. This study tests the hypothesis that high levels of aerobic activity in humans and other cursorial mammals lead to neurotransmitter signaling associated with central and peripheral rewards. Additionally, we explore the possibility that inter-specific variation in exercise-induced rewards may play a role in the non-cursorial behaviors of some taxa. Experimental research into these rewards is often hampered by the overall concept of the runner's high (see Dietrich and McDaniel, 2004), as it is often equated with generalized euphoric sensations in the popular press. Dietrich and McDaniel suggested a definition more amenable to hypothesis testing, where the runner's high is a change in any of the following observable phenomena: pain sensation, anxiolysis, sedation or feelings of well being (Dietrich and McDaniel, 2004). This definition includes quantifiable outcomes, allowing researchers to explore the neurobiological mechanisms that may be responsible for the runner's high. Recent work has supported a strong role for endocannabinoid (eCB) signaling in the rewards associated with endurance exercise (Dietrich and McDaniel, 2004). The two recognized eCBs, anandamide (AEA) and 2-arachidonylglycerol (2-AG), are endogenous ligands.



NEW YORK CITY MARATHON FIRST ISSUE: THE RUNNER'S HIGH

5.4. MW: Afterwards the athletes were all talking about about it. Geoffrey was talking about how you had the wind on the bridge, and then for the whole time, it's just so much better. Tennessee Man: I don't know if you want to comment on the wind from your perspective. MW: Well, for me, the wind, basically was actually an advantage for me, being a little bit higher and stronger. So I really tried to let that be kind of a boost. I think of dropping the center pack. But the wind did have a factor, especially on the first bridge, because it kept shaking our front wheel, and as you go past it, you're not sure where and whether it will, which can affect your time. It can affect your stroke. So you have to go a little bit slower just to keep your stroke steady and steady as it's moving back and forth on the bridge. But for me, I try to see that as a huge advantage and use the power that I have from the wind. I dropped the pack because of it. For me, I can see it was a tough race of all the marathons that I've run because those two before, all day, and what coming. 30 kilometers, I started thinking I have to move because they're about to reach the end of the race. But then we are not together. That I was having a feeling that I was strong enough around it. So I must fight and know that they are going to win.

3.7. Depersonalization disorder Endorphins are known to play a role in depersonalization disorder. The opioid antagonists naloxone and naltrexone have both been proven to be successful in treating depersonalization. [17] [18] To quote a 2001 naloxone study, in three of 14 patients, depersonalization symptoms disappeared entirely and seven patients showed a marked improvement. The therapeutic effect of naloxone provides evidence for the role of the endogenous opioid system in the pathogenesis of depersonalization. In 2003, clinical researchers reported that profound relaxation in a float tank triggers the production of endorphins. [19] This explains the pain relief experienced during float sessions. [20]. In 1999, clinical researchers reported that inserting acupuncture needles into specific body points triggers the production of endorphins. [21] In another study, [22] higher levels of endorphins were found in cerebrospinal fluid after patients underwent acupuncture. [23] In addition, naloxone appeared to block acupuncture's pain-relieving effects. The same changes in mood state occurred as when the person exercised with no blocker.

5.5. MW: Afterwards the athletes were all talking about about it. Geoffrey was talking about how you had the wind on the bridge, and then for the whole time, it's just so much better. Tennessee Man: I don't know if you want to comment on the wind from your perspective. MW: Well, for me, the wind, basically was actually an advantage for me, being a little bit higher and stronger. So I really tried to let that be kind of a boost. I think of dropping the center pack. But the wind did have a factor, especially on the first bridge, because it kept shaking our front wheel, and as you go past it, you're not sure where and whether it will, which can affect your time. It can affect your stroke. So you have to go a little bit slower just to keep your stroke steady and steady as it's moving back and forth on the bridge. But for me, I try to see that as a huge advantage and use the power that I have from the wind. For me, I can see it was a tough race of all the marathons that I've run because those two before, all day, and what coming. 30 kilometers, I started thinking I have to move because they're about to reach the end of the race. But then we are not together. That I was having a feeling that I was strong enough and around it. So I must fight and know that they are going to win. I think I was really strong, I kept up with them. But I have to fight the wind and the last minute. MW: I think for me the wind was also a very big factor. We were a pack of five athletes. We changed the lead as we would have a good drafting. And I think it was very difficult to go on for some athletes. So we athletes need to go on, just the other athletes work together and steady them. So it was very difficult with the wind, also with the wind from the side with the wheels, they would a little bit. So it was really difficult. Really, the time from 1:40, it's really slow. I think it's slow.

2.8. The nonathletes can help investigators assess whether untrained people experience the same effects. Maybe one reason some people love intense exercise and others do not is that some respond with a runner's high or changed pain perception. Annie might question that. She loves to run, but wonders why. But her husband tells her that the look on her face when she is running is just blissful. So maybe even she will soon be able to get a real intense runner's high.

Table with 3 columns: Starters, Finishers, and Numbers of started and finished count only runners with collected times for the corresponding year. Lists statistics for 2012, 2013, and 2014.

6.4. The two eCBs (AEA and 2-AG) are released both centrally and peripherally in an activity-dependent manner to modulate the release of classical neurotransmitters (Piomelli, 2003). As a key example, eCBs released within the mesolimbic dopamine system lead to overall activation of dopamine neurons by relieving the influence of inhibitory, CB1-expressing GABAergic terminals onto those neurons (Lupica and Riegel, 2005). This leads to enhanced dopamine release in target areas, such as the nucleus accumbens (NAc), a major brain area involved in behavioral reward (Cheer et al., 2007).

Discussion This is the first study to show that there is inter-specific variation in neuroanatomical signaling following exercise and that this variation may explain differences in habitual locomotor behaviors among mammals. In humans and dogs, but not ferrets, running activates the eCB system, which likely improves aerobic exercise performance and encourages a high frequency of aerobic activity in these cursorial taxa. In humans, increased eCB signaling following exercise is significantly correlated with improved PA, confirming the role of eCBs in generating positive psychological effects. eCB signaling does not increase following intensity activity in humans and dogs, suggesting that these rewards are not simply triggered by locomotion but are tied to higher exercise intensities. In fact, eCB levels decreased in dogs following the 30 min walking trial. This result suggests that dogs may not have any specific affective response to walking under these experimental conditions. In ferrets, a taxon that does not generally engage in cursorial activity (see King and Powell, 2007), and is not morphologically adapted to endurance exercise behaviors (Lennox, 1871), exercise does not result in an increase in eCB signaling. This inter-specific variation shows that eCB signaling plays a functional role in the aerobic behaviors of cursorial mammals. Changes in anandamide (AEA) concentrations before and after treadmill exercise. The exercise levels are shown in white; post-exercise levels are shown in black. (A) Plasma AEA levels before and after running for 30 min at a moderate number of 0.75 (B) Plasma AEA levels before and after walking for 30 min at a walking pace. (C) Plasma AEA levels before and after walking for 30 min at a walking pace. Error bars are s.e.m. eCBs can and cursorial mammals by improving high-intensity eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is reported that endocannabinoid signaling is involved in the regulation of eCBs leads to a decrease in the synaptic release of classical neurotransmitters (Piomelli, 2003) and produces psychological effects similar to those described by runners in this study (Chapman and DiMatteo, 1989; Diaz, 1997; Pomeroy, 2005). It is



# 1. Ranking

## 1.11. Top Runners

The New York City Marathon is the world's largest marathon, with over 50,000 starters in 2013. It began in 1970 with a group of runners in Central Park and was held every year since but with the exception of 2012, when the race was cancelled due to Hurricane Sandy. The course starts in Staten Island and passes through all five boroughs of the city. Runner's World and Running Times has full coverage here. The 2013 New York City Marathon men's race very much looks like one that's been especially worth the wait.

Rank	Time	Name	Country	Race	Place	Race Date
1	2:09:02	Muti, Geoffrey	KEN	Boston	1	4/18/11
2	2:09:04	Musko, Moses	KEN	Boston	1	4/18/11
3	2:09:22	Wilson Kipang	KEN	Berlin	1	9/28/13
4	2:09:38	Makau, Patrick	KEN	Berlin	1	9/28/11
5	2:09:42	Wilson Kipang	KEN	Chicago	1	10/13/13
6	2:09:43	Kimetto, Dennis	KEN	Chicago	1	10/13/13
7	2:09:52	Mutai, Emmanuel	KEN	Chicago	1	10/13/13
8	2:09:58	Gebreselasse, Haile	ETH	Berlin	1	9/28/08
9	2:04:08	Kiprop, Eliud	KEN	Berlin	1	9/28/12
10	2:04:15	Mutai, Geoffrey	KEN	Berlin	1	9/30/12
11	2:04:16	Kimetto, Dennis	KEN	Berlin	1	9/30/12
12	2:04:22	Abraham, Benard	ETH	Dubai	1	1/27/12
13	2:04:26	Gebreselasse, Haile	ETH	Berlin	1	9/30/07
14	2:04:27	Keit, Kiprop	ETH	Boat	1	4/5/09
15	2:04:37	James Kipang	KEN	Boat	1	4/5/09
16	2:04:38	Kabada, Tsegay	ETH	Chicago	1	10/13/12
17	2:04:40	Mutai, Emmanuel	KEN	London	1	4/12/11
18	2:04:44	Wilson Kipang	KEN	London	1	4/22/12
19	2:04:45	Keit, Kiprop	ETH	Dubai	1	1/26/12
20	2:04:48	Tsegay, Tsegay	ETH	Boat	1	4/15/12
21	2:04:48	Makau, Patrick	KEN	Dubai	1	4/15/12
22	2:04:48	Shereza, Bahau	ETH	Dubai	1	1/26/13
23	2:04:49	Tob, Tsegay	ETH	Dubai	1	1/26/13
24	2:04:50	Felke, Gert	ETH	Boat	1	4/15/12
25	2:04:50	Saito, Choji	ETH	Dubai	1	1/27/12
26	2:04:52	Shumi, Endeshaw	ETH	Dubai	1	1/26/13
27	2:04:52	Lissa, Feyisa	ETH	Chicago	1	10/13/12
28	2:04:53	Koch, Bernard	KEN	Dubai	1	1/18/08
29	2:04:53	Gebreselasse, Haile	ETH	Dubai	1	4/18/11
30	2:04:53	Gebreselasse, Haile	ETH	London	1	1/27/12
31	2:04:54	Gemeli, Mehre	ETH	Dubai	1	1/27/12
32	2:04:55	Tegat, Paul	KEN	Berlin	1	9/28/02
33	2:04:55	Mutai, Geoffrey	KEN	Boat	1	4/11/10
34	2:04:56	Kuni, Samoy	KEN	Berlin	1	9/28/08
35	2:04:56	Musa, Jonathan	KEN	Dubai	1	1/27/12
36	2:04:57	Wilson Kipang	KEN	Frankfurt	1	10/31/10
37	2:04:58	Kid, Ryan	USA	Boat	1	4/18/11
38	2:05:02	Musko, Moses	KEN	Boat	1	4/15/12
39	2:05:04	Kiprot, Albert	KEN	Boat	1	4/5/09
40	2:05:06	Mutai, Geoffrey	KEN	New York	1	11/8/11
41	2:05:08	Mutai, Samuel	KEN	Berlin	1	9/28/13
42	2:05:10	Mutai, Geoffrey	KEN	London	1	4/24/09
43	2:05:10	Mutai, Geoffrey	KEN	Berlin	2	9/28/10
44	2:05:10	Tola, Tadesse	ETH	Dubai	3	1/27/12
45	2:05:12	Blawit, Stanley	KEN	Paris	1	4/15/12
46	2:05:13	Kiprot, Vincent	KEN	Boat	3	4/11/10
47	2:05:19	Lal, Martin	KEN	London	1	4/13/08
48	2:05:16	Mutai, Lary	KEN	Frankfurt	2	10/28/11
49	2:05:18	Samoy, Kiprot	ETH	Chicago	3	10/13/13
50	2:05:18	Kabada, Tsegay	ETH	Fukuoka	1	3/4/09
51	2:05:19	Kabada, Tsegay	ETH	London	1	4/25/10
52	2:05:20	Kabada, Tsegay	ETH	London	2	4/28/09
53	2:05:23	Lissa, Feyisa	ETH	Boat	4	4/11/10
54	2:05:23	Lissa, Feyisa	ETH	Boat	4	4/11/10
55	2:05:24	Mutai, Samuel	KEN	London	1	4/13/08
56	2:05:25	Mutai, Samuel	ETH	Berlin	3	9/28/10
57	2:05:25	Mutai, Samuel	ETH	Frankfurt	3	10/30/11
58	2:05:27	Chelso, Wilson	KEN	Boat	1	4/15/11
59	2:05:27	Kiprot, Tiphun	ETH	Chicago	3	10/13/12
60	2:05:28	Gemeli, Mehre	ETH	Dubai	1	4/15/08
61	2:05:29	Kiprot, Eliud	ETH	Hamburg	1	4/13/13
62	2:05:30	Gourot, Abderrahim	MAR	London	3	4/13/08
63	2:05:32	Kiprot, Vincent	KEN	Boat	2	4/13/11
64	2:05:32	Chelso, Wilson	KEN	Amst	1	10/28/12
65	2:05:34	James Kipang	KEN	Berlin	2	9/28/08
66	2:05:37	Luyasa, Wilson	KEN	Seoul	1	3/18/12
67	2:05:37	Musko, Moses	KEN	Chicago	1	10/13/11
68	2:05:38	Khamouchi, Khalid	USA	London	1	4/14/02
69	2:05:38	Kiprot, Tiphun	ETH	Boat	1	4/14/02
70	2:05:39	Kiprot, Eliud	KEN	Prague	1	5/8/10
71	2:05:41	Chelso, Wilson	KEN	Amst	1	10/27/12
72	2:05:41	Dadi, Yami	ETH	Dubai	6	1/27/12
73	2:05:41	Mutai, Samuel	KEN	Chicago	1	10/13/09
74	2:05:42	Khamouchi, Khalid	MAR	Chicago	1	10/24/09
75	2:05:42	Shumi, Endeshaw	ETH	Dubai	7	1/27/12
76	2:05:42	Chimka, Debesse	ETH	Dubai	8	1/27/12
77	2:05:44	Felke, Gert	ETH	Amst	1	10/13/10
78	2:05:45	Lal, Martin	KEN	London	2	4/12/11
79	2:05:45	Makau, Patrick	KEN	London	3	4/12/11
80	2:05:48	Chimka, Debesse	ETH	Boat	1	10/13/12
81	2:05:47	Kiprot, Vincent	KEN	Paris	1	4/5/09
82	2:05:48	Chelso, Lary	KEN	Boat	1	10/13/12
83	2:05:48	Tegat, Paul	KEN	London	2	10/13/12
84	2:05:48	Kipang, Wilson	KEN	Boat	1	4/13/08
85	2:05:50	Rubi, Evans	KEN	Chicago	1	10/13/03
86	2:05:50	James Kipang	KEN	Seoul	1	11/4/12
87	2:05:52	Robert Kipang	KEN	Boat	1	4/13/08
88	2:05:53	Chelso, Wilson	KEN	Amst	1	10/13/11
89	2:05:54	Kiprot, Vincent	KEN	Chicago	4	10/13/11
90	2:05:54	Gebreselasse, Haile	ETH	Berlin	1	9/24/06
91	2:05:56	Khamouchi, Khalid	USA	Chicago	1	10/13/02
92	2:05:56	Shumi, Abdulluh Dawid	ETH	Hamburg	1	4/28/12
93	2:05:58	James Kipang	KEN	Seoul	1	3/18/12
94	2:06:02	Kabada, Tsegay	ETH	London	1	4/21/13
95	2:06:04	Gourot, Abderrahim	MAR	Chicago	2	10/11/09
96	2:06:05	de Cripe, Renato	ITA	Berlin	1	9/20/06
97	2:06:05	Kuni, Samoy	KEN	Amst	2	10/14/11
98	2:06:06	Girma, Berhanu	ETH	Amst	1	10/20/13
99	2:06:07	Nbema, Eru	KEN	Amst	2	10/16/11

# Ranking

## 1.11. Top Runners

The New York City Marathon is the world's largest marathon, with over 50,000 starters in 2013. It began in 1970 with a group of runners in Central Park and was held every year since but with the exception of 2012, when the race was cancelled due to Hurricane Sandy. The course starts in Staten Island and passes through all five boroughs of the city. Runner's World and Running Times has full coverage here. The 2013 New York City Marathon men's race very much looks like one that's been especially worth the wait.

# Ranking

## 1.11. Top Runners

The New York City Marathon is the world's largest marathon, with over 50,000 starters in 2013. It began in 1970 with a group of runners in Central Park and was held every year since but with the exception of 2012, when the race was cancelled due to Hurricane Sandy. The course starts in Staten Island and passes through all five boroughs of the city. Runner's World and Running Times has full coverage here. The 2013 New York City Marathon men's race very much looks like one that's been especially worth the wait.

# Ranking

## 1.11. Top Runners

The New York City Marathon is the world's largest marathon, with over 50,000 starters in 2013. It began in 1970 with a group of runners in Central Park and was held every year since but with the exception of 2012, when the race was cancelled due to Hurricane Sandy. The course starts in Staten Island and passes through all five boroughs of the city. Runner's World and Running Times has full coverage here. The 2013 New York City Marathon men's race very much looks like one that's been especially worth the wait.



123456

Manuels

# Gas for my



## Manuel et quelques trucs de mise en page pour InDesign CS6

v.1.0.2 – 2013

Définition de paramètres par défaut	4
Définition de la langue du document	4
Fonds perdus	5
Les Gabarits	8
Flux de texte principal	8
Folio	9
Section	9
Modifier les marges et colonnes d'un document	12
Créer des repères	12
Livre	13
Grille de ligne de base	14
Fichier Word	18
Conversion des styles	18
Fichiers Pdf	19
Images	19
Style de caractère	22
Style de paragraphe	22
Article	23
Justification, principe de bases	26
Justification, réglages du fichier	27
Drapeau, principe de bases	28
Drapeau, outils	28
Chiffres	29
Tabulation	32
Étendue de colonnes (Span)	33
Scinder la colonne (Split)	33
Objets ancrés	34
Habillage de texte	35
Table des matières	38
Créer des styles de tables des matières	38
Références croisées	39
Style suivant	40
GREP	41
Liste de méta-caractères GREP	42
Raccourci	44
Checklists	46

# 123456

# Manuels

The screenshot shows a web browser window with the URL <https://indesignsecrets.com/pasting-formatted-text-into-indesign.php>. The page features the InDesignSecrets logo and navigation menu. The main content area displays an article by David Blatner from September 20, 2007. The article text discusses the issue of losing formatting when copying text from other applications into InDesign and provides a solution using the 'When Pasting Text...' preference. A sidebar on the right contains a sign-up form for the 'Tip of the Week' and a 'Current Podcast' section for 'InDesignSecrets Podcast 226' dated September 30, 2015.

Pasting Formatted Text Into InDesign | InDesignSecrets

username password login help

**InDesignSecrets**  
The world's #1 resource for all things InDesign

Articles Magazine Events Resources Watch & Listen Shop Forums **Membership** Search

Beginner's Corner Mailbag Answers Text

## Pasting Formatted Text Into InDesign

by: David Blatner | September 20, 2007

Tweet 0 Share 0 40 Comments Share This

MD wrote:

I've just been hired to turn my online newspaper into print so I'm learning InDesign, but when I cut and paste anything into InDesign from NVU or Outlook Express, I lose all formatting and end up having to reformat everything. Any way around this?

By default, InDesign strips out all the formatting from incoming text when you copy and paste it from any another application. By contrast, if you copy and paste from one InDesign document into another, it maintains the formatting... unless you use Edit > Paste without Formatting. That's a great feature when you need to strip away unwanted styles.

Fortunately, there's also a way to *maintain* formatting when you paste it from some other applications. Open the Preferences dialog box (Command/Ctrl-K) and look for the When Pasting Text... option. In CS3, it's in the Clipboard Handling pane of the Preferences dialog box. In CS2 it's in the Type pane of the dialog box. Change this from Text to All Information.

However, note that I said "some" applications. It doesn't work with all applications. For example, it doesn't seem to capture text formatting from Firefox on the Mac, but it works fine when copying from Safari.

And, of course, it's only going to copy local "hard" formatting from other applications; you'd be best off replacing that formatting with paragraph and character styles once the text is inside InDesign.

Bio Latest Posts

**SIGN UP FOR THE INDESIGN TIP OF THE WEEK**

Email... GO

**CURRENT PODCAST**

InDesignSecrets Podcast 226

September 30, 2015 · 3:50 pm

- News:
  - InDesign Tips at Adobe MAX 2015
  - Our latest new InDesign titles at Lynda.com
  - Gearing up for the InDesign Conference and the Photoshop Conference!
- Interview with Erica Gamet
- Publish Online feature: Pros, Cons, and more
- Ranting about the CC App
- Obscure InDesign Feature of the Week: Show Content Offset

Past Episodes Subscribe

123456

# Manuels



Josef Müller-Brockmann

# Grid systems

in graphic design

A visual communication manual  
for graphic designers,  
typographers and  
three dimensional designers

# Raster systeme

für die  
visuelle Gestaltung

Ein Handbuch für  
Grafiker, Typografen und  
Ausstellungsgestalter

Niggli

123456

Examples