

# Chronicles\_of\_Amber

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```
amber_books <- chronicles_of_amber() %>%
  group_by(book) %>%
  mutate(linenumber = row_number(),
         chapter = cumsum(str_detect(text, regex("^chapter [\\divxlc]")))) %>%
  ungroup()
```

amber\_books

```
## # A tibble: 57,451 x 4
##   text                                book  linen~1 chapter
##   <chr>                             <fct>   <int>   <int>
## 1 "nine princes in amber             ~ Nine~     1       0
## 2 "the first amber pentology - corwin's story: book 1 ~ Nine~     2       0
## 3 "                                   ~ Nine~     3       0
## 4 "chapter 1                         ~ Nine~     4       1
## 5 "it was starting to end, after what seemed most of ete~ Nine~     5       1
## 6 "i attempted to wriggle my toes, succeeded. i was spra~ Nine~     6       1
## 7 "hospital bed and my legs were done up in plaster cast~ Nine~     7       1
## 8 "mine.                             ~ Nine~     8       1
## 9 "i squeezed my eyes shut, and opened them, three times~ Nine~     9       1
## 10 "the room grew steady.            ~ Nine~    10       1
## # ... with 57,441 more rows, and abbreviated variable name 1: linenumber
```

*# using tidytext to unnest each word in the book*

```
amber_tidy <- amber_books %>%
  unnest_tokens(word, text)
#amber_tidy
```

*# remove stop words "the", "a", "if", etc.*

```
data("stop_words")
```

```
amber_tidy <- amber_tidy %>%
  anti_join(stop_words, by = "word")
```

```
amber_tidy %>%
  count(word, sort = TRUE)
```

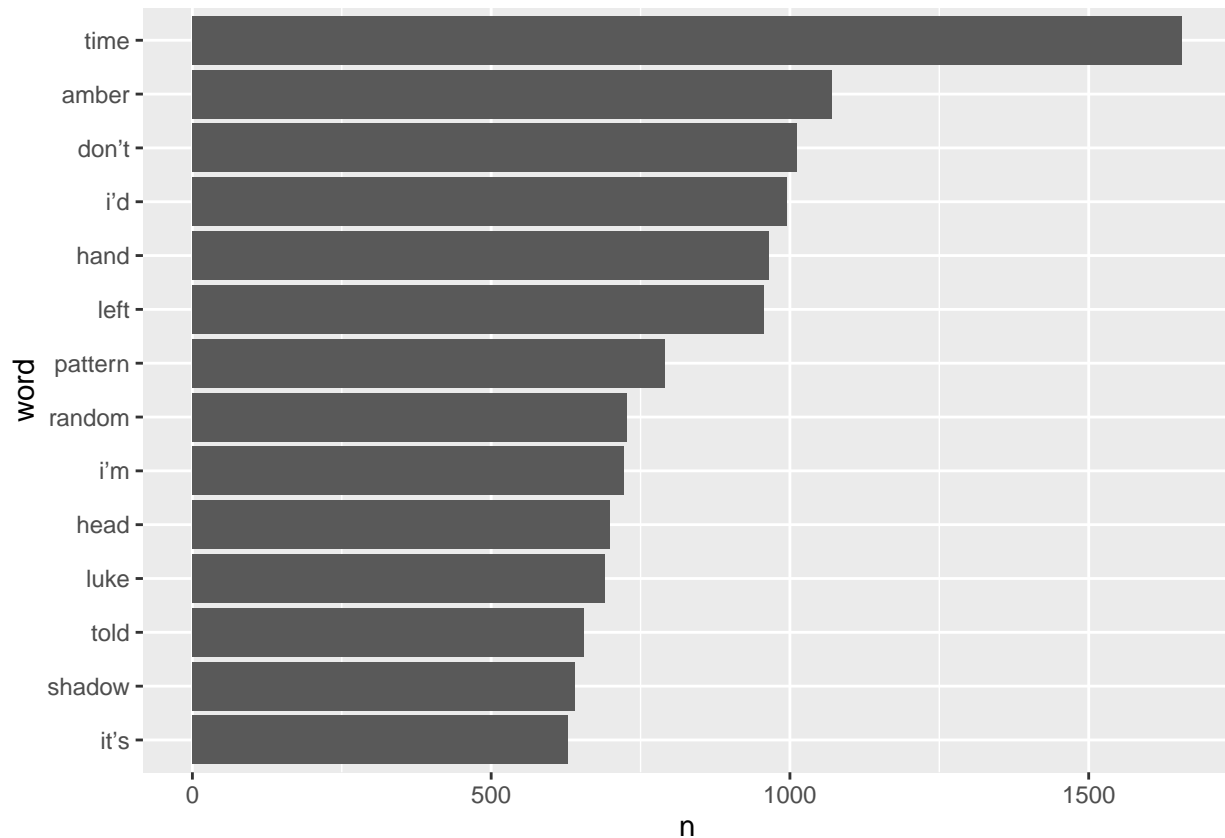
```
## # A tibble: 17,854 x 2
```

```
##   word      n
##   <chr>   <int>
## 1 time    1656
## 2 amber   1070
## 3 don't   1012
## 4 i'd     995
## 5 hand    965
## 6 left    956
## 7 pattern  791
## 8 random  727
## 9 i'm     722
## 10 head   699
## # ... with 17,844 more rows
```

Will need to add a few word contractions like “i’d”, “i’m”, and “it’s” to the stop\_words

```
# graph the top most used words

amber_tidy %>%
  count(word, sort = TRUE) %>%
  filter(n > 600) %>%
  mutate(word = reorder(word, n)) %>%
  ggplot(aes(word, n)) +
  geom_col() +
  coord_flip()
```



```
# amber_tidy_graph
#
# ggplot(amber_tidy, aes(word, n)) +
#   geom_col() +
#   coord_flip()
```

```
# create a custom stop words list to add to standard stop words
```

```
word = c("i'd", "i'm", "it's", "don't", "we've", "have't", "didn't", "you're", "you've", "i've", "hadn't")
```

```
lexicon = c( "custom", "custom", "custom", "custom", "custom", "custom", "custom", "custom", "custom",
```

```
data <- data.frame(word, lexicon)
custom_stop_words <- rbind(data, stop_words)
custom_stop_words
```

##	word	lexicon
## 1	i'd	custom
## 2	i'm	custom
## 3	it's	custom
## 4	don't	custom
## 5	we've	custom
## 6	have't	custom
## 7	didn't	custom
## 8	you're	custom
## 9	you've	custom
## 10	i've	custom
## 11	hadn't	custom
## 12	we've	custom
## 13	i'll	custom
## 14	he's	custom
## 15	can't	custom
## 16	wasn't	custom
## 17	what's	custom
## 18	won't	custom
## 19	we'd	custom
## 20	doesn't	custom
## 21	you'd	custom
## 22	he'd	custom
## 23	wouldn't	custom
## 24	let's	custom
## 25	there's	custom
## 26	she's	custom
## 27	she'd	custom
## 28	you'll	custom
## 29	they're	custom
## 30	we'll	custom
## 31	weren't	custom
## 32	aren't	custom
## 33	a	SMART
## 34	a's	SMART
## 35	able	SMART
## 36	about	SMART
## 37	above	SMART

## 38	according	SMART
## 39	accordingly	SMART
## 40	across	SMART
## 41	actually	SMART
## 42	after	SMART
## 43	afterwards	SMART
## 44	again	SMART
## 45	against	SMART
## 46	ain't	SMART
## 47	all	SMART
## 48	allow	SMART
## 49	allows	SMART
## 50	almost	SMART
## 51	alone	SMART
## 52	along	SMART
## 53	already	SMART
## 54	also	SMART
## 55	although	SMART
## 56	always	SMART
## 57	am	SMART
## 58	among	SMART
## 59	amongst	SMART
## 60	an	SMART
## 61	and	SMART
## 62	another	SMART
## 63	any	SMART
## 64	anybody	SMART
## 65	anyhow	SMART
## 66	anyone	SMART
## 67	anything	SMART
## 68	anyway	SMART
## 69	anyways	SMART
## 70	anywhere	SMART
## 71	apart	SMART
## 72	appear	SMART
## 73	appreciate	SMART
## 74	appropriate	SMART
## 75	are	SMART
## 76	aren't	SMART
## 77	around	SMART
## 78	as	SMART
## 79	aside	SMART
## 80	ask	SMART
## 81	asking	SMART
## 82	associated	SMART
## 83	at	SMART
## 84	available	SMART
## 85	away	SMART
## 86	awfully	SMART
## 87	b	SMART
## 88	be	SMART
## 89	became	SMART
## 90	because	SMART
## 91	become	SMART

## 92	becomes	SMART
## 93	becoming	SMART
## 94	been	SMART
## 95	before	SMART
## 96	beforehand	SMART
## 97	behind	SMART
## 98	being	SMART
## 99	believe	SMART
## 100	below	SMART
## 101	beside	SMART
## 102	besides	SMART
## 103	best	SMART
## 104	better	SMART
## 105	between	SMART
## 106	beyond	SMART
## 107	both	SMART
## 108	brief	SMART
## 109	but	SMART
## 110	by	SMART
## 111	c	SMART
## 112	c'mon	SMART
## 113	c's	SMART
## 114	came	SMART
## 115	can	SMART
## 116	can't	SMART
## 117	cannot	SMART
## 118	cant	SMART
## 119	cause	SMART
## 120	causes	SMART
## 121	certain	SMART
## 122	certainly	SMART
## 123	changes	SMART
## 124	clearly	SMART
## 125	co	SMART
## 126	com	SMART
## 127	come	SMART
## 128	comes	SMART
## 129	concerning	SMART
## 130	consequently	SMART
## 131	consider	SMART
## 132	considering	SMART
## 133	contain	SMART
## 134	containing	SMART
## 135	contains	SMART
## 136	corresponding	SMART
## 137	could	SMART
## 138	couldn't	SMART
## 139	course	SMART
## 140	currently	SMART
## 141	d	SMART
## 142	definitely	SMART
## 143	described	SMART
## 144	despite	SMART
## 145	did	SMART

## 146	didn't	SMART
## 147	different	SMART
## 148	do	SMART
## 149	does	SMART
## 150	doesn't	SMART
## 151	doing	SMART
## 152	don't	SMART
## 153	done	SMART
## 154	down	SMART
## 155	downwards	SMART
## 156	during	SMART
## 157	e	SMART
## 158	each	SMART
## 159	edu	SMART
## 160	eg	SMART
## 161	eight	SMART
## 162	either	SMART
## 163	else	SMART
## 164	elsewhere	SMART
## 165	enough	SMART
## 166	entirely	SMART
## 167	especially	SMART
## 168	et	SMART
## 169	etc	SMART
## 170	even	SMART
## 171	ever	SMART
## 172	every	SMART
## 173	everybody	SMART
## 174	everyone	SMART
## 175	everything	SMART
## 176	everywhere	SMART
## 177	ex	SMART
## 178	exactly	SMART
## 179	example	SMART
## 180	except	SMART
## 181	f	SMART
## 182	far	SMART
## 183	few	SMART
## 184	fifth	SMART
## 185	first	SMART
## 186	five	SMART
## 187	followed	SMART
## 188	following	SMART
## 189	follows	SMART
## 190	for	SMART
## 191	former	SMART
## 192	formerly	SMART
## 193	forth	SMART
## 194	four	SMART
## 195	from	SMART
## 196	further	SMART
## 197	furthermore	SMART
## 198	g	SMART
## 199	get	SMART

## 200	gets	SMART
## 201	getting	SMART
## 202	given	SMART
## 203	gives	SMART
## 204	go	SMART
## 205	goes	SMART
## 206	going	SMART
## 207	gone	SMART
## 208	got	SMART
## 209	gotten	SMART
## 210	greetings	SMART
## 211	h	SMART
## 212	had	SMART
## 213	hadn't	SMART
## 214	happens	SMART
## 215	hardly	SMART
## 216	has	SMART
## 217	hasn't	SMART
## 218	have	SMART
## 219	haven't	SMART
## 220	having	SMART
## 221	he	SMART
## 222	he's	SMART
## 223	hello	SMART
## 224	help	SMART
## 225	hence	SMART
## 226	her	SMART
## 227	here	SMART
## 228	here's	SMART
## 229	hereafter	SMART
## 230	hereby	SMART
## 231	herein	SMART
## 232	hereupon	SMART
## 233	hers	SMART
## 234	herself	SMART
## 235	hi	SMART
## 236	him	SMART
## 237	himself	SMART
## 238	his	SMART
## 239	hither	SMART
## 240	hopefully	SMART
## 241	how	SMART
## 242	howbeit	SMART
## 243	however	SMART
## 244	i	SMART
## 245	i'd	SMART
## 246	i'll	SMART
## 247	i'm	SMART
## 248	i've	SMART
## 249	ie	SMART
## 250	if	SMART
## 251	ignored	SMART
## 252	immediate	SMART
## 253	in	SMART

## 254	inasmuch	SMART
## 255	inc	SMART
## 256	indeed	SMART
## 257	indicate	SMART
## 258	indicated	SMART
## 259	indicates	SMART
## 260	inner	SMART
## 261	insofar	SMART
## 262	instead	SMART
## 263	into	SMART
## 264	inward	SMART
## 265	is	SMART
## 266	isn't	SMART
## 267	it	SMART
## 268	it'd	SMART
## 269	it'll	SMART
## 270	it's	SMART
## 271	its	SMART
## 272	itself	SMART
## 273	j	SMART
## 274	just	SMART
## 275	k	SMART
## 276	keep	SMART
## 277	keeps	SMART
## 278	kept	SMART
## 279	know	SMART
## 280	knows	SMART
## 281	known	SMART
## 282	l	SMART
## 283	last	SMART
## 284	lately	SMART
## 285	later	SMART
## 286	latter	SMART
## 287	latterly	SMART
## 288	least	SMART
## 289	less	SMART
## 290	lest	SMART
## 291	let	SMART
## 292	let's	SMART
## 293	like	SMART
## 294	liked	SMART
## 295	likely	SMART
## 296	little	SMART
## 297	look	SMART
## 298	looking	SMART
## 299	looks	SMART
## 300	ltd	SMART
## 301	m	SMART
## 302	mainly	SMART
## 303	many	SMART
## 304	may	SMART
## 305	maybe	SMART
## 306	me	SMART
## 307	mean	SMART



## 308	meanwhile	SMART
## 309	merely	SMART
## 310	might	SMART
## 311	more	SMART
## 312	moreover	SMART
## 313	most	SMART
## 314	mostly	SMART
## 315	much	SMART
## 316	must	SMART
## 317	my	SMART
## 318	myself	SMART
## 319	n	SMART
## 320	name	SMART
## 321	namely	SMART
## 322	nd	SMART
## 323	near	SMART
## 324	nearly	SMART
## 325	necessary	SMART
## 326	need	SMART
## 327	needs	SMART
## 328	neither	SMART
## 329	never	SMART
## 330	nevertheless	SMART
## 331	new	SMART
## 332	next	SMART
## 333	nine	SMART
## 334	no	SMART
## 335	nobody	SMART
## 336	non	SMART
## 337	none	SMART
## 338	noone	SMART
## 339	nor	SMART
## 340	normally	SMART
## 341	not	SMART
## 342	nothing	SMART
## 343	novel	SMART
## 344	now	SMART
## 345	nowhere	SMART
## 346	o	SMART
## 347	obviously	SMART
## 348	of	SMART
## 349	off	SMART
## 350	often	SMART
## 351	oh	SMART
## 352	ok	SMART
## 353	okay	SMART
## 354	old	SMART
## 355	on	SMART
## 356	once	SMART
## 357	one	SMART
## 358	ones	SMART
## 359	only	SMART
## 360	onto	SMART
## 361	or	SMART

## 362	other	SMART
## 363	others	SMART
## 364	otherwise	SMART
## 365	ought	SMART
## 366	our	SMART
## 367	ours	SMART
## 368	ourselves	SMART
## 369	out	SMART
## 370	outside	SMART
## 371	over	SMART
## 372	overall	SMART
## 373	own	SMART
## 374	p	SMART
## 375	particular	SMART
## 376	particularly	SMART
## 377	per	SMART
## 378	perhaps	SMART
## 379	placed	SMART
## 380	please	SMART
## 381	plus	SMART
## 382	possible	SMART
## 383	presumably	SMART
## 384	probably	SMART
## 385	provides	SMART
## 386	q	SMART
## 387	que	SMART
## 388	quite	SMART
## 389	qv	SMART
## 390	r	SMART
## 391	rather	SMART
## 392	rd	SMART
## 393	re	SMART
## 394	really	SMART
## 395	reasonably	SMART
## 396	regarding	SMART
## 397	regardless	SMART
## 398	regards	SMART
## 399	relatively	SMART
## 400	respectively	SMART
## 401	right	SMART
## 402	s	SMART
## 403	said	SMART
## 404	same	SMART
## 405	saw	SMART
## 406	say	SMART
## 407	saying	SMART
## 408	says	SMART
## 409	second	SMART
## 410	secondly	SMART
## 411	see	SMART
## 412	seeing	SMART
## 413	seem	SMART
## 414	seemed	SMART
## 415	seeming	SMART

## 416	seems	SMART
## 417	seen	SMART
## 418	self	SMART
## 419	selves	SMART
## 420	sensible	SMART
## 421	sent	SMART
## 422	serious	SMART
## 423	seriously	SMART
## 424	seven	SMART
## 425	several	SMART
## 426	shall	SMART
## 427	she	SMART
## 428	should	SMART
## 429	shouldn't	SMART
## 430	since	SMART
## 431	six	SMART
## 432	so	SMART
## 433	some	SMART
## 434	somebody	SMART
## 435	somehow	SMART
## 436	someone	SMART
## 437	something	SMART
## 438	sometime	SMART
## 439	sometimes	SMART
## 440	somewhat	SMART
## 441	somewhere	SMART
## 442	soon	SMART
## 443	sorry	SMART
## 444	specified	SMART
## 445	specify	SMART
## 446	specifying	SMART
## 447	still	SMART
## 448	sub	SMART
## 449	such	SMART
## 450	sup	SMART
## 451	sure	SMART
## 452	t	SMART
## 453	t's	SMART
## 454	take	SMART
## 455	taken	SMART
## 456	tell	SMART
## 457	tends	SMART
## 458	th	SMART
## 459	than	SMART
## 460	thank	SMART
## 461	thanks	SMART
## 462	thanx	SMART
## 463	that	SMART
## 464	that's	SMART
## 465	thats	SMART
## 466	the	SMART
## 467	their	SMART
## 468	theirs	SMART
## 469	them	SMART

## 470	themselves	SMART
## 471	then	SMART
## 472	thence	SMART
## 473	there	SMART
## 474	there's	SMART
## 475	thereafter	SMART
## 476	thereby	SMART
## 477	therefore	SMART
## 478	therein	SMART
## 479	theres	SMART
## 480	thereupon	SMART
## 481	these	SMART
## 482	they	SMART
## 483	they'd	SMART
## 484	they'll	SMART
## 485	they're	SMART
## 486	they've	SMART
## 487	think	SMART
## 488	third	SMART
## 489	this	SMART
## 490	thorough	SMART
## 491	thoroughly	SMART
## 492	those	SMART
## 493	though	SMART
## 494	three	SMART
## 495	through	SMART
## 496	throughout	SMART
## 497	thru	SMART
## 498	thus	SMART
## 499	to	SMART
## 500	together	SMART
## 501	too	SMART
## 502	took	SMART
## 503	toward	SMART
## 504	towards	SMART
## 505	tried	SMART
## 506	tries	SMART
## 507	truly	SMART
## 508	try	SMART
## 509	trying	SMART
## 510	twice	SMART
## 511	two	SMART
## 512	u	SMART
## 513	un	SMART
## 514	under	SMART
## 515	unfortunately	SMART
## 516	unless	SMART
## 517	unlikely	SMART
## 518	until	SMART
## 519	unto	SMART
## 520	up	SMART
## 521	upon	SMART
## 522	us	SMART
## 523	use	SMART

## 524	used	SMART
## 525	useful	SMART
## 526	uses	SMART
## 527	using	SMART
## 528	usually	SMART
## 529	uucp	SMART
## 530	v	SMART
## 531	value	SMART
## 532	various	SMART
## 533	very	SMART
## 534	via	SMART
## 535	viz	SMART
## 536	vs	SMART
## 537	w	SMART
## 538	want	SMART
## 539	wants	SMART
## 540	was	SMART
## 541	wasn't	SMART
## 542	way	SMART
## 543	we	SMART
## 544	we'd	SMART
## 545	we'll	SMART
## 546	we're	SMART
## 547	we've	SMART
## 548	welcome	SMART
## 549	well	SMART
## 550	went	SMART
## 551	were	SMART
## 552	weren't	SMART
## 553	what	SMART
## 554	what's	SMART
## 555	whatever	SMART
## 556	when	SMART
## 557	whence	SMART
## 558	whenever	SMART
## 559	where	SMART
## 560	where's	SMART
## 561	whereafter	SMART
## 562	whereas	SMART
## 563	whereby	SMART
## 564	wherein	SMART
## 565	whereupon	SMART
## 566	wherever	SMART
## 567	whether	SMART
## 568	which	SMART
## 569	while	SMART
## 570	whither	SMART
## 571	who	SMART
## 572	who's	SMART
## 573	whoever	SMART
## 574	whole	SMART
## 575	whom	SMART
## 576	whose	SMART
## 577	why	SMART

## 578	will	SMART
## 579	willing	SMART
## 580	wish	SMART
## 581	with	SMART
## 582	within	SMART
## 583	without	SMART
## 584	won't	SMART
## 585	wonder	SMART
## 586	would	SMART
## 587	would	SMART
## 588	wouldn't	SMART
## 589	x	SMART
## 590	y	SMART
## 591	yes	SMART
## 592	yet	SMART
## 593	you	SMART
## 594	you'd	SMART
## 595	you'll	SMART
## 596	you're	SMART
## 597	you've	SMART
## 598	your	SMART
## 599	yours	SMART
## 600	yourself	SMART
## 601	yourselves	SMART
## 602	z	SMART
## 603	zero	SMART
## 604	i snowball	
## 605	me snowball	
## 606	my snowball	
## 607	myself snowball	
## 608	we snowball	
## 609	our snowball	
## 610	ours snowball	
## 611	ourselves snowball	
## 612	you snowball	
## 613	your snowball	
## 614	yours snowball	
## 615	yourself snowball	
## 616	yourselves snowball	
## 617	he snowball	
## 618	him snowball	
## 619	his snowball	
## 620	himself snowball	
## 621	she snowball	
## 622	her snowball	
## 623	hers snowball	
## 624	herself snowball	
## 625	it snowball	
## 626	its snowball	
## 627	itself snowball	
## 628	they snowball	
## 629	them snowball	
## 630	their snowball	
## 631	theirs snowball	

## 632       themselves snowball  
## 633           what snowball  
## 634       which snowball  
## 635           who snowball  
## 636       whom snowball  
## 637       this snowball  
## 638       that snowball  
## 639       these snowball  
## 640       those snowball  
## 641           am snowball  
## 642           is snowball  
## 643           are snowball  
## 644           was snowball  
## 645           were snowball  
## 646           be snowball  
## 647       been snowball  
## 648       being snowball  
## 649       have snowball  
## 650       has snowball  
## 651       had snowball  
## 652       having snowball  
## 653           do snowball  
## 654       does snowball  
## 655           did snowball  
## 656       doing snowball  
## 657       would snowball  
## 658       should snowball  
## 659       could snowball  
## 660       ought snowball  
## 661           i'm snowball  
## 662       you're snowball  
## 663           he's snowball  
## 664           she's snowball  
## 665           it's snowball  
## 666       we're snowball  
## 667       they're snowball  
## 668           i've snowball  
## 669       you've snowball  
## 670       we've snowball  
## 671       they've snowball  
## 672           i'd snowball  
## 673       you'd snowball  
## 674           he'd snowball  
## 675           she'd snowball  
## 676           we'd snowball  
## 677       they'd snowball  
## 678           i'll snowball  
## 679       you'll snowball  
## 680           he'll snowball  
## 681           she'll snowball  
## 682           we'll snowball  
## 683       they'll snowball  
## 684           isn't snowball  
## 685       aren't snowball

## 686           wasn't snowball  
## 687           weren't snowball  
## 688           hasn't snowball  
## 689           haven't snowball  
## 690           hadn't snowball  
## 691           doesn't snowball  
## 692           don't snowball  
## 693           didn't snowball  
## 694           won't snowball  
## 695           wouldn't snowball  
## 696           shan't snowball  
## 697          shouldn't snowball  
## 698           can't snowball  
## 699           cannot snowball  
## 700          couldn't snowball  
## 701           mustn't snowball  
## 702           let's snowball  
## 703           that's snowball  
## 704           who's snowball  
## 705           what's snowball  
## 706           here's snowball  
## 707          there's snowball  
## 708           when's snowball  
## 709          where's snowball  
## 710           why's snowball  
## 711           how's snowball  
## 712           a snowball  
## 713           an snowball  
## 714           the snowball  
## 715           and snowball  
## 716           but snowball  
## 717           if snowball  
## 718           or snowball  
## 719          because snowball  
## 720           as snowball  
## 721           until snowball  
## 722           while snowball  
## 723           of snowball  
## 724           at snowball  
## 725           by snowball  
## 726           for snowball  
## 727           with snowball  
## 728           about snowball  
## 729          against snowball  
## 730          between snowball  
## 731           into snowball  
## 732          through snowball  
## 733           during snowball  
## 734           before snowball  
## 735           after snowball  
## 736           above snowball  
## 737           below snowball  
## 738           to snowball  
## 739           from snowball



## 740	up	snowball
## 741	down	snowball
## 742	in	snowball
## 743	out	snowball
## 744	on	snowball
## 745	off	snowball
## 746	over	snowball
## 747	under	snowball
## 748	again	snowball
## 749	further	snowball
## 750	then	snowball
## 751	once	snowball
## 752	here	snowball
## 753	there	snowball
## 754	when	snowball
## 755	where	snowball
## 756	why	snowball
## 757	how	snowball
## 758	all	snowball
## 759	any	snowball
## 760	both	snowball
## 761	each	snowball
## 762	few	snowball
## 763	more	snowball
## 764	most	snowball
## 765	other	snowball
## 766	some	snowball
## 767	such	snowball
## 768	no	snowball
## 769	nor	snowball
## 770	not	snowball
## 771	only	snowball
## 772	own	snowball
## 773	same	snowball
## 774	so	snowball
## 775	than	snowball
## 776	too	snowball
## 777	very	snowball
## 778	a	onix
## 779	about	onix
## 780	above	onix
## 781	across	onix
## 782	after	onix
## 783	again	onix
## 784	against	onix
## 785	all	onix
## 786	almost	onix
## 787	alone	onix
## 788	along	onix
## 789	already	onix
## 790	also	onix
## 791	although	onix
## 792	always	onix
## 793	among	onix

## 794	an	onix
## 795	and	onix
## 796	another	onix
## 797	any	onix
## 798	anybody	onix
## 799	anyone	onix
## 800	anything	onix
## 801	anywhere	onix
## 802	are	onix
## 803	area	onix
## 804	areas	onix
## 805	around	onix
## 806	as	onix
## 807	ask	onix
## 808	asked	onix
## 809	asking	onix
## 810	asks	onix
## 811	at	onix
## 812	away	onix
## 813	back	onix
## 814	backed	onix
## 815	backing	onix
## 816	backs	onix
## 817	be	onix
## 818	became	onix
## 819	because	onix
## 820	become	onix
## 821	becomes	onix
## 822	been	onix
## 823	before	onix
## 824	began	onix
## 825	behind	onix
## 826	being	onix
## 827	beings	onix
## 828	best	onix
## 829	better	onix
## 830	between	onix
## 831	big	onix
## 832	both	onix
## 833	but	onix
## 834	by	onix
## 835	came	onix
## 836	can	onix
## 837	cannot	onix
## 838	case	onix
## 839	cases	onix
## 840	certain	onix
## 841	certainly	onix
## 842	clear	onix
## 843	clearly	onix
## 844	come	onix
## 845	could	onix
## 846	did	onix
## 847	differ	onix

## 848	different	onix
## 849	differently	onix
## 850	do	onix
## 851	does	onix
## 852	done	onix
## 853	down	onix
## 854	down	onix
## 855	downed	onix
## 856	downing	onix
## 857	downs	onix
## 858	during	onix
## 859	each	onix
## 860	early	onix
## 861	either	onix
## 862	end	onix
## 863	ended	onix
## 864	ending	onix
## 865	ends	onix
## 866	enough	onix
## 867	even	onix
## 868	evenly	onix
## 869	ever	onix
## 870	every	onix
## 871	everybody	onix
## 872	everyone	onix
## 873	everything	onix
## 874	everywhere	onix
## 875	face	onix
## 876	faces	onix
## 877	fact	onix
## 878	facts	onix
## 879	far	onix
## 880	felt	onix
## 881	few	onix
## 882	find	onix
## 883	finds	onix
## 884	first	onix
## 885	for	onix
## 886	four	onix
## 887	from	onix
## 888	full	onix
## 889	fully	onix
## 890	further	onix
## 891	furthered	onix
## 892	furthering	onix
## 893	furtherers	onix
## 894	gave	onix
## 895	general	onix
## 896	generally	onix
## 897	get	onix
## 898	gets	onix
## 899	give	onix
## 900	given	onix
## 901	gives	onix

## 902	go	onix
## 903	going	onix
## 904	good	onix
## 905	goods	onix
## 906	got	onix
## 907	great	onix
## 908	greater	onix
## 909	greatest	onix
## 910	group	onix
## 911	grouped	onix
## 912	grouping	onix
## 913	groups	onix
## 914	had	onix
## 915	has	onix
## 916	have	onix
## 917	having	onix
## 918	he	onix
## 919	her	onix
## 920	here	onix
## 921	herself	onix
## 922	high	onix
## 923	high	onix
## 924	high	onix
## 925	higher	onix
## 926	highest	onix
## 927	him	onix
## 928	himself	onix
## 929	his	onix
## 930	how	onix
## 931	however	onix
## 932	i	onix
## 933	if	onix
## 934	important	onix
## 935	in	onix
## 936	interest	onix
## 937	interested	onix
## 938	interesting	onix
## 939	interests	onix
## 940	into	onix
## 941	is	onix
## 942	it	onix
## 943	its	onix
## 944	itself	onix
## 945	just	onix
## 946	keep	onix
## 947	keeps	onix
## 948	kind	onix
## 949	knew	onix
## 950	know	onix
## 951	known	onix
## 952	knows	onix
## 953	large	onix
## 954	largely	onix
## 955	last	onix

## 956	later	onix
## 957	latest	onix
## 958	least	onix
## 959	less	onix
## 960	let	onix
## 961	lets	onix
## 962	like	onix
## 963	likely	onix
## 964	long	onix
## 965	longer	onix
## 966	longest	onix
## 967	made	onix
## 968	make	onix
## 969	making	onix
## 970	man	onix
## 971	many	onix
## 972	may	onix
## 973	me	onix
## 974	member	onix
## 975	members	onix
## 976	men	onix
## 977	might	onix
## 978	more	onix
## 979	most	onix
## 980	mostly	onix
## 981	mr	onix
## 982	mrs	onix
## 983	much	onix
## 984	must	onix
## 985	my	onix
## 986	myself	onix
## 987	necessary	onix
## 988	need	onix
## 989	needed	onix
## 990	needing	onix
## 991	needs	onix
## 992	never	onix
## 993	new	onix
## 994	new	onix
## 995	newer	onix
## 996	newest	onix
## 997	next	onix
## 998	no	onix
## 999	nobody	onix
## 1000	non	onix
## 1001	noone	onix
## 1002	not	onix
## 1003	nothing	onix
## 1004	now	onix
## 1005	nowhere	onix
## 1006	number	onix
## 1007	numbers	onix
## 1008	of	onix
## 1009	off	onix

## 1010	often	onix
## 1011	old	onix
## 1012	older	onix
## 1013	oldest	onix
## 1014	on	onix
## 1015	once	onix
## 1016	one	onix
## 1017	only	onix
## 1018	open	onix
## 1019	opened	onix
## 1020	opening	onix
## 1021	opens	onix
## 1022	or	onix
## 1023	order	onix
## 1024	ordered	onix
## 1025	ordering	onix
## 1026	orders	onix
## 1027	other	onix
## 1028	others	onix
## 1029	our	onix
## 1030	out	onix
## 1031	over	onix
## 1032	part	onix
## 1033	parted	onix
## 1034	parting	onix
## 1035	parts	onix
## 1036	per	onix
## 1037	perhaps	onix
## 1038	place	onix
## 1039	places	onix
## 1040	point	onix
## 1041	pointed	onix
## 1042	pointing	onix
## 1043	points	onix
## 1044	possible	onix
## 1045	present	onix
## 1046	presented	onix
## 1047	presenting	onix
## 1048	presents	onix
## 1049	problem	onix
## 1050	problems	onix
## 1051	put	onix
## 1052	puts	onix
## 1053	quite	onix
## 1054	rather	onix
## 1055	really	onix
## 1056	right	onix
## 1057	right	onix
## 1058	room	onix
## 1059	rooms	onix
## 1060	said	onix
## 1061	same	onix
## 1062	saw	onix
## 1063	say	onix

## 1064	says	onix
## 1065	second	onix
## 1066	seconds	onix
## 1067	see	onix
## 1068	seem	onix
## 1069	seemed	onix
## 1070	seeming	onix
## 1071	seems	onix
## 1072	sees	onix
## 1073	several	onix
## 1074	shall	onix
## 1075	she	onix
## 1076	should	onix
## 1077	show	onix
## 1078	showed	onix
## 1079	showing	onix
## 1080	shows	onix
## 1081	side	onix
## 1082	sides	onix
## 1083	since	onix
## 1084	small	onix
## 1085	smaller	onix
## 1086	smallest	onix
## 1087	some	onix
## 1088	somebody	onix
## 1089	someone	onix
## 1090	something	onix
## 1091	somewhere	onix
## 1092	state	onix
## 1093	states	onix
## 1094	still	onix
## 1095	still	onix
## 1096	such	onix
## 1097	sure	onix
## 1098	take	onix
## 1099	taken	onix
## 1100	than	onix
## 1101	that	onix
## 1102	the	onix
## 1103	their	onix
## 1104	them	onix
## 1105	then	onix
## 1106	there	onix
## 1107	therefore	onix
## 1108	these	onix
## 1109	they	onix
## 1110	thing	onix
## 1111	things	onix
## 1112	think	onix
## 1113	thinks	onix
## 1114	this	onix
## 1115	those	onix
## 1116	though	onix
## 1117	thought	onix

## 1118	thoughts	onix
## 1119	three	onix
## 1120	through	onix
## 1121	thus	onix
## 1122	to	onix
## 1123	today	onix
## 1124	together	onix
## 1125	too	onix
## 1126	took	onix
## 1127	toward	onix
## 1128	turn	onix
## 1129	turned	onix
## 1130	turning	onix
## 1131	turns	onix
## 1132	two	onix
## 1133	under	onix
## 1134	until	onix
## 1135	up	onix
## 1136	upon	onix
## 1137	us	onix
## 1138	use	onix
## 1139	used	onix
## 1140	uses	onix
## 1141	very	onix
## 1142	want	onix
## 1143	wanted	onix
## 1144	wanting	onix
## 1145	wants	onix
## 1146	was	onix
## 1147	way	onix
## 1148	ways	onix
## 1149	we	onix
## 1150	well	onix
## 1151	wells	onix
## 1152	went	onix
## 1153	were	onix
## 1154	what	onix
## 1155	when	onix
## 1156	where	onix
## 1157	whether	onix
## 1158	which	onix
## 1159	while	onix
## 1160	who	onix
## 1161	whole	onix
## 1162	whose	onix
## 1163	why	onix
## 1164	will	onix
## 1165	with	onix
## 1166	within	onix
## 1167	without	onix
## 1168	work	onix
## 1169	worked	onix
## 1170	working	onix
## 1171	works	onix



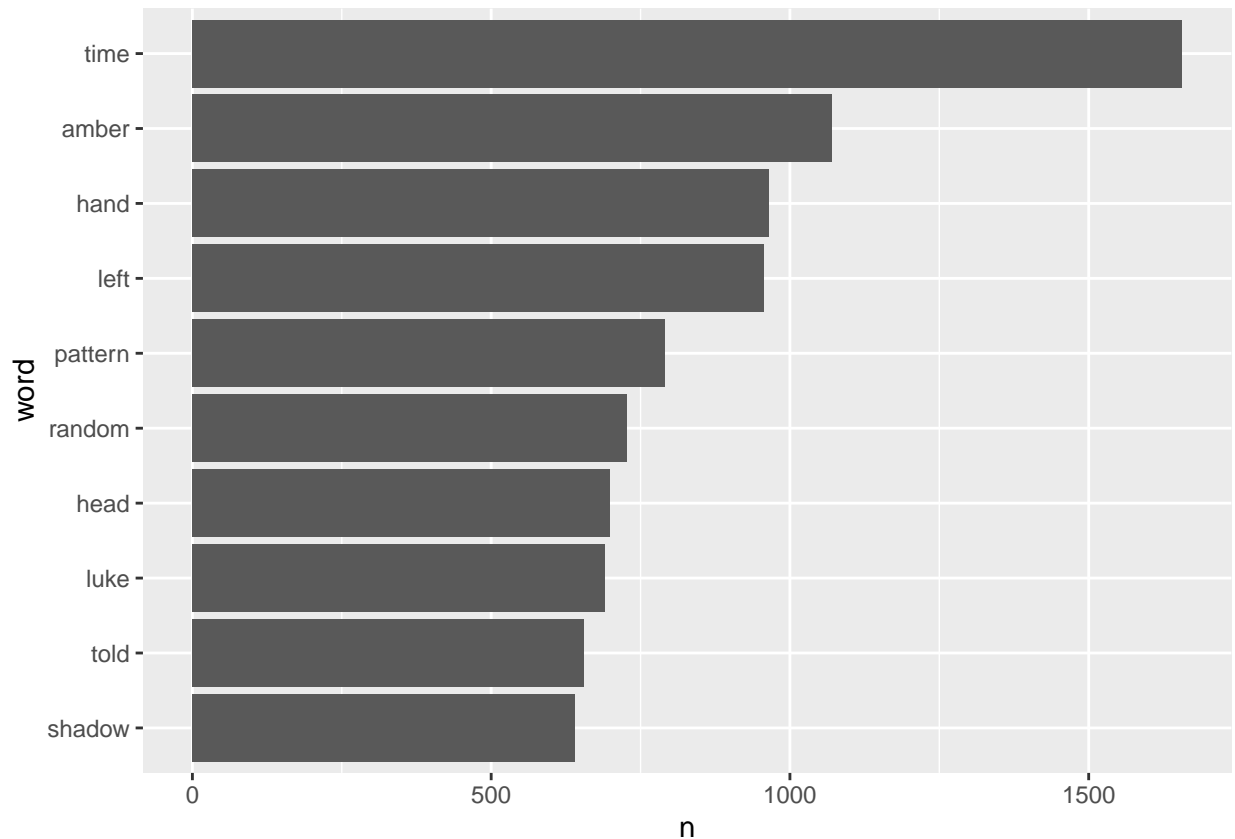
```
## 1172      would      onix
## 1173       year      onix
## 1174      years      onix
## 1175       yet       onix
## 1176       you       onix
## 1177      young      onix
## 1178     younger      onix
## 1179    youngest      onix
## 1180      your       onix
## 1181     yours       onix
```

```
# rerunning amber tidy with new custom_stop_words
amber_tidy <- anti_join(amber_tidy, custom_stop_words, by = "word")

amber_tidy %>%
  count(word, sort = TRUE)
```

```
## # A tibble: 17,824 x 2
##   word      n
##   <chr>  <int>
## 1 time    1656
## 2 amber   1070
## 3 hand     965
## 4 left     956
## 5 pattern   791
## 6 random   727
## 7 head     699
## 8 luke     691
## 9 told     655
## 10 shadow  640
## # ... with 17,814 more rows
```

```
amber_tidy %>%
  count(word, sort = TRUE) %>%
  filter(n > 600) %>%
  mutate(word = reorder(word, n)) %>%
  ggplot(aes(word, n)) +
  geom_col() +
  coord_flip()
```



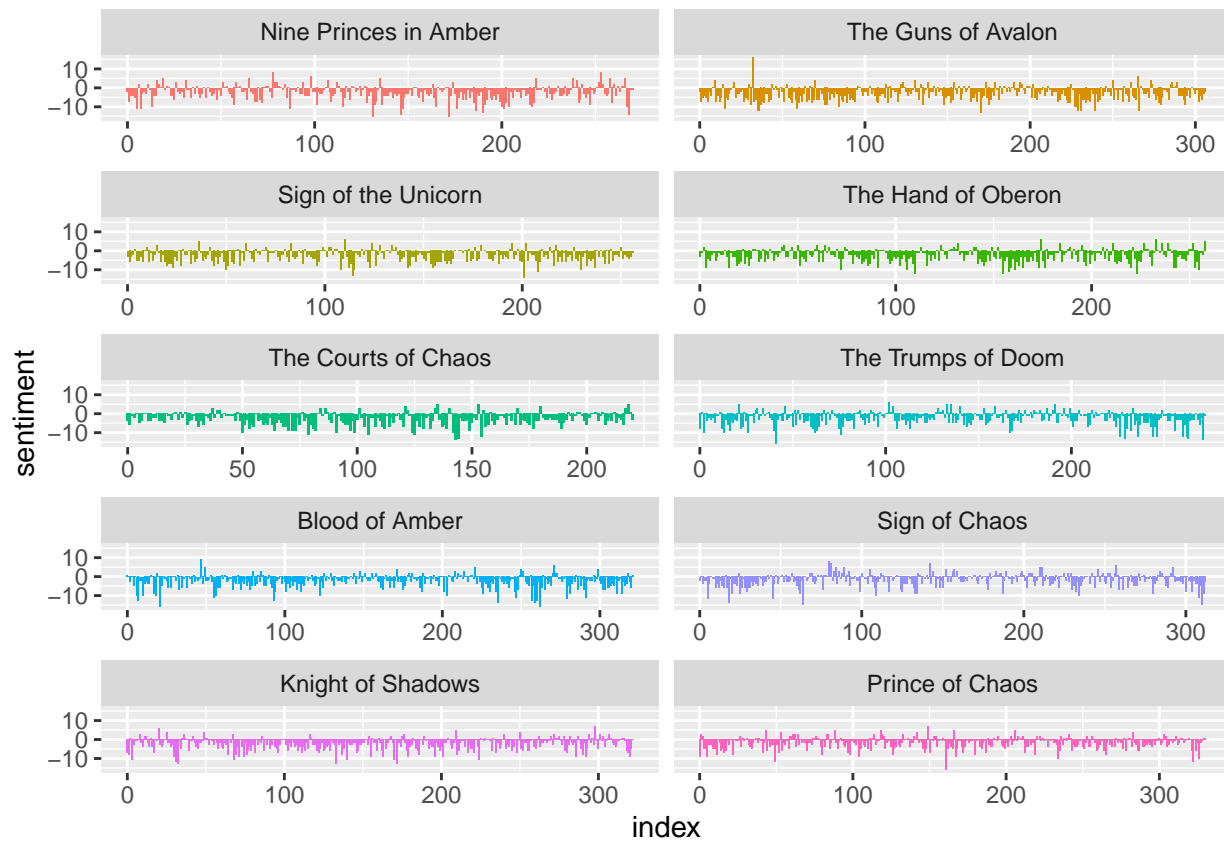
*# graph the sentiment of every 20 pages*

```
amber_sentiment <- amber_tidy %>%
  inner_join(get_sentiments("bing")) %>%
  count(book, index = linenumber %/% 20, sentiment) %>%
  spread(sentiment, n, fill = 0) %>%
  mutate(sentiment = positive - negative)
```

## Joining with 'by = join\_by(word)'

```
## Warning in inner_join(., get_sentiments("bing")): Each row in 'x' is expected to match at most 1 row
## i Row 1535 of 'x' matches multiple rows.
## i If multiple matches are expected, set 'multiple = "all"' to silence this
## warning.
```

```
ggplot(amber_sentiment, aes(index, sentiment, fill = book)) +
  geom_col(show.legend = FALSE) +
  facet_wrap(~book, ncol = 2, scales = "free_x")
```



```
# break out the first book in the series
nine_princes_in_amber <- chronicles_of_amber() %>%
  group_by(book) %>%
  filter(book == "Nine Princes in Amber") %>%
  mutate(linenumber = row_number(),
         chapter = cumsum(str_detect(text, regex("^chapter [\\divxlc]")))))

# nine_princes_in_amber
```