
Fanfiction and *The Lord of the Rings*

Statistical analysis of a fandom



One code to scrape them all, one code to find them, one code to analyze them all and in a report judge them

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Introduction

Fanfiction is as old as literature itself. A story that relies on a well-established myth [1] or a new version of an ancient play [2] are, undoubtedly, fanfictions in the strictest sense: *fiction about characters or settings from an original work of fiction, created by fans of that work rather than by its creator.*

Great works of art have a profound impact on society. They are bound to inspire other creators. I would go as far as to say that the amount of fanart based on a work would be a good metric to judge its popularity.

As strange as it may seem today, there was a time when, in the Western world, fanart was seen as the highest form of art. During the European Renaissance, art and literature from ancient Greek and Roman civilization were the goal every artist aimed at. Sculptures, paintings, books and plays heavily drew from ideas and plots over a millenia old.

Nowadays, society operates under a different paradigm. Fanart has become little more than a legally gray zone, and fanfiction, at best, a springboard new writers can use in order to improve – before moving on to the superior field of original works.

Despite this change in perception, popular works continue to inspire their fanbase. One such work is the famous *The Lord of the Rings* trilogy which can be credited with most of the tropes seen in today's fantasy. Well-known among fantasy enthusiasts ever since its publication in 1954 and 1955, *The Lord of the Rings* became a true social phenomenon starting from 2001 thanks to Peter Jackson's movie adaptations: *The Fellowship of the Ring* (2001), *The Two Towers* (2002) and *The Return of the King* (2003). The most popular fanfiction website, Fanfiction.net, counts 67.4K fanfictions based on Tolkien's universe (49.5K in the *Lord of the Rings* category, 12.4K in the *Hobbit* category and 5.5K for the *Silmarillion*).

In this report, I will focus on the *Lord of the Rings* category in order to:

1. uncover **common characteristics** among LotR fanfictions;
2. see whether or not a popular stereotype is true: that LotR fanfictions are full of **Mary-Sues** serving as a wish fulfillment for teenage writers;
3. find out which feature determine the **popularity** of a fanfiction.

For readers with little time, there is a **tl;dr:** part. IV.

*Fanfiction having developed its own specialized vocabulary, a **glossary** can be found at the end of the report.*

I Preliminary analysis

I.1 Activity of the LotR fandom

In the wake of Peter Jackson’s movies, the number of LotR fanfictions exploded, going from about a hundred to several thousands, with a peak of over 9,000 publications in 2003. Afterwards, the fandom progressively lost its attraction, stabilizing at a bit less than 2,000 publications a year. The three *Hobbit* movies led to a brief renewal (despite the existence of a specific *Hobbit* category) before dipping again (fig. 1).

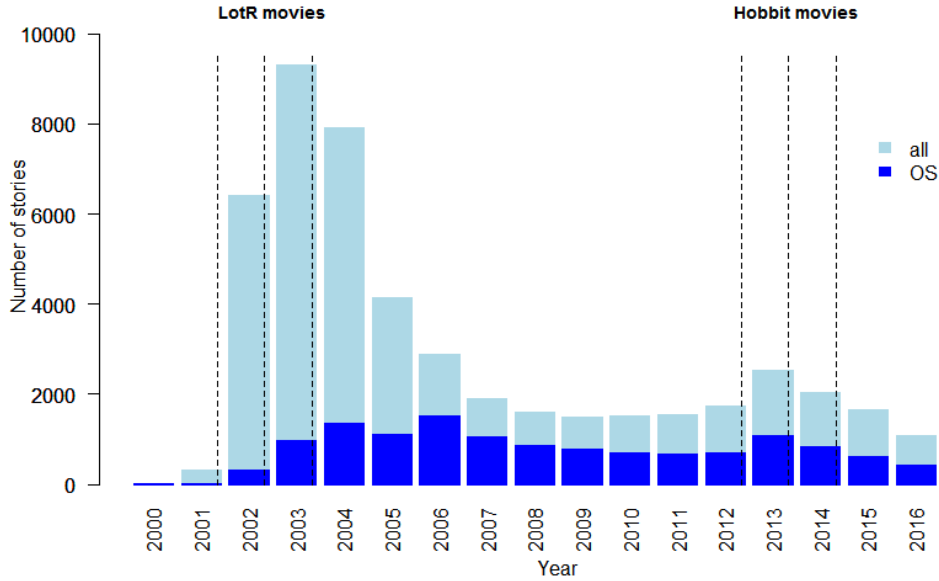


Figure 1: Number of stories published per year (in dark blue: OS), from 2000 to 2017. Release of LotR movies led to an explosion of LotR fanfictions.

It is worth noting that while the *movie wave* was crashing, OS (*one shots*, stories in one chapter) were gaining in popularity until they made up more than half of all new fictions published (from 2006 to 2010), peaking at 55% in 2007.

In terms of **completion**, excluding OS (one-chapter stories), LotR fanfictions are **mostly abandoned** (58%), which is not surprising in the fanfiction world, where writing is a hobby and there is no pressure for an author to finish their fiction. Still, **38% of fanfictions are complete**. Only **4% are currently ongoing**.

I.2 Ratings

Fanfiction.net offers four ratings: K, K+, T and M. Most LotR fanfictions are K- or K+-rated with less than 10% being M-rated. In this, the LotR differs from other fandoms such as Harry Potter where, according to a 2014 study by Reddit user Rangi42, T-rated fictions are the majority and there are as many K-rated as M-rated fictions.

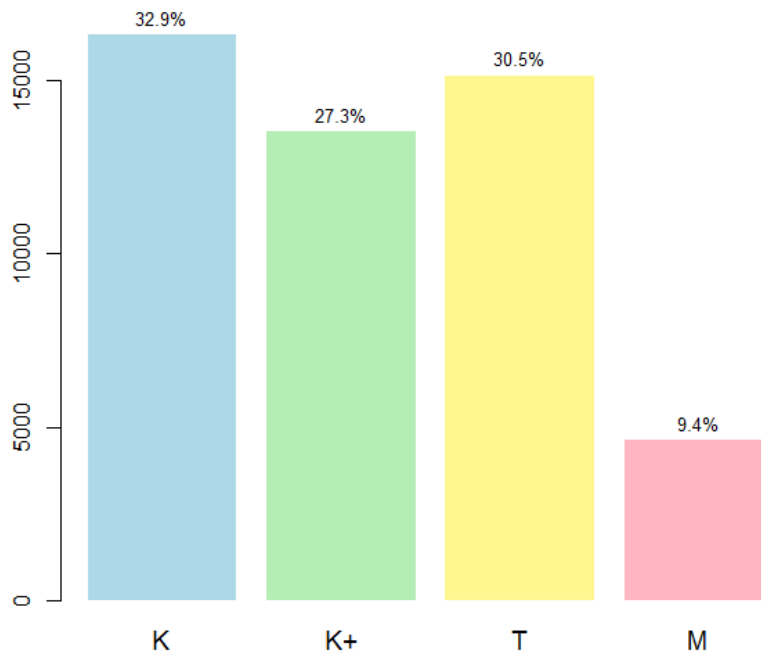


Figure 2: Ratings of LotR fanfictions. Most LotR fanfictions can be read by a young audience. Themes such as graphic violence or sexuality are less common than in, for instance, the Harry Potter fandom, making up only 9.4% of stories.

I.3 Genres

Romance fictions account for a good quarter of LotR fanfictions. A bit less than a quarter are **Humour** fictions. **Adventure**, **Angst** and **Drama** are also common genres. Fanfictions **without an assigned genre** are an eighth of all LotR fictions. On the other end of the spectrum, Sci-Fi, Crime and Western fictions are so underrepresented as to be nonexistent (fig. 3).

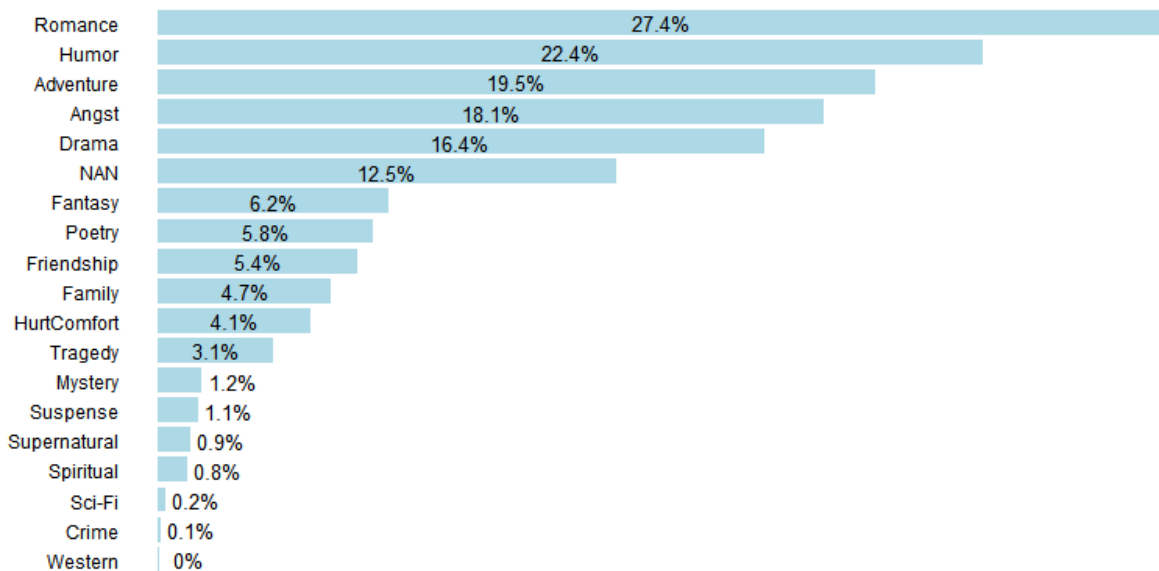


Figure 3: Barplot of genre repartition in the LotR category. Sum of indicated percentages is over 100% because a fiction can have more than one genre.

On FF.net, a fiction can have no genre, one, or two genres. 12.4% of fictions have no genre, 31.2% have a single genre and the majority (56.3%) have two genres. While fictions containing romance are the most common, it seems that romance on its own does not a fiction make, while humour does: there are 2882 Romance-only fictions versus 4414 Humor-only. The most popular couples in the LotR fandom are **Romance/Adventure** (3193 stories), **Humor/Parody** (2098 stories), **Romance/Drama** (2003) and **Romance/Angst** (1782). The Romance and Adventure genres appear to mix pretty well with other genres.

Genres that are redundant (such as Parody, a subset of Humor, or Angst, Drama and Tragedy, which are fairly similar) make popular pairs: there are far more Humor/Parody fictions than Parody-only (227 versus 2098) or Angst/Tragedy than Tragedy-only (377 versus 199), and as many Angst/Drama as Drama-only (1763 versus 1761).

A detailed table of the repartition of genres among stories can be found in the Annex (tab. 17).

For the success of each genre, see the dedicated section III.

I.4 Characters

*Note: For this section, only **fictions with a non-empty character field** were taken into account. This removed 26.5% of the population, leaving 36,434 out of 49,570 fictions.*

*Note: **romances with a single character** were considered to also have an OC as a main character (romance being a genre that usually requires at least two main characters). A quick browse of Romance LotR fictions shows that single-character romances most often do contain an OC paired with the character.*

There are 101 characters that have been chosen as main characters in LotR fictions (using a rather broad definition of *character*: "OC", "Elf" or "Hobbit" are characters). Unsurprisingly, all nine members of the Fellowship figure among the 20 most popular characters, with Legolas, Aragorn and Frodo making the top 4. Legolas is by far the most popular, being present in nearly 2 fictions out of 5. Aragorn is second with a presence in 27% of fictions. OCs characters are very popular, at 15%. Frodo comes fourth: the Ring Bearer and main character of the saga appears in only 1 fiction out of 8.

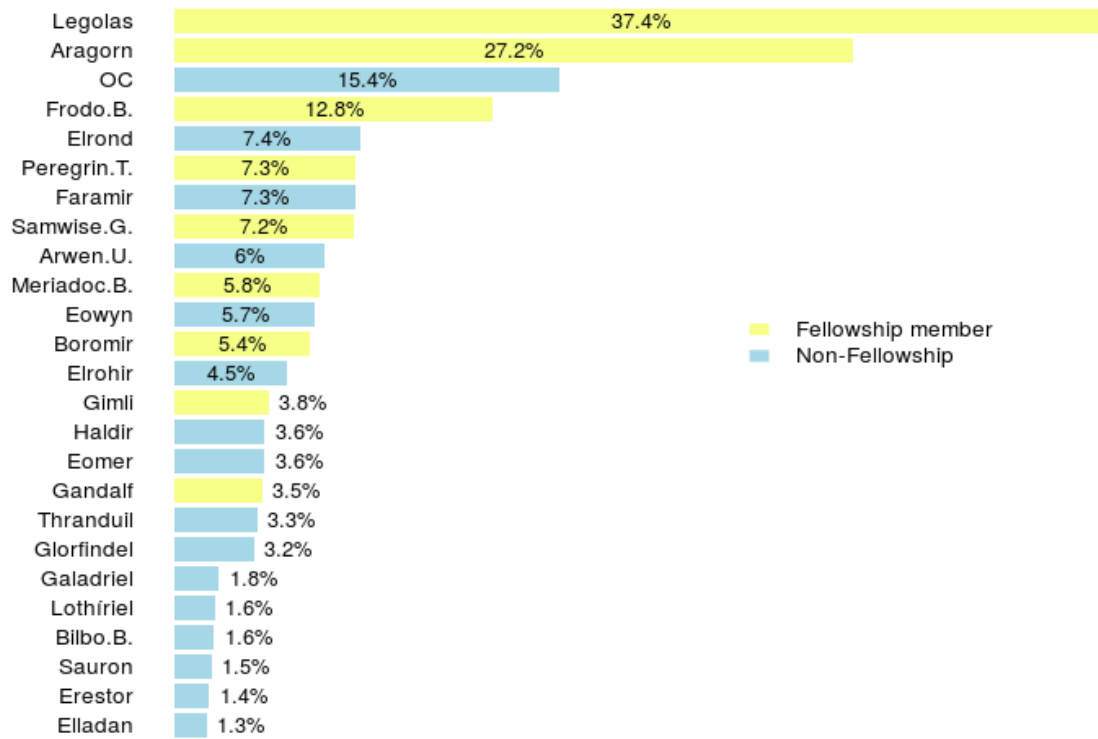


Figure 4: 25 most popular characters

I.4.1 Which characters often appear together?

Out of the 25 most popular characters, some tend to appear together: **Merry and Pippin**, **Frodo and Sam**, **Glorfindel and Erestor** (apparently a common slash pairing), twins **Elladan and Elrohir**, brothers **Boromir and Faramir**, as well as couples **Eowyn and Faramir** and **Eomer and Lothíriel**. Trio **Aragorn, Gimli and Legolas** is also common. Aragorn is usually portrayed with Legolas or with his lover, then wife Arwen.

The PCA plots used to analyze character appearance can be found in the Annex (V).

A chord diagram helps visualize both the importance of a character and its preferred pairings (fig. 5).

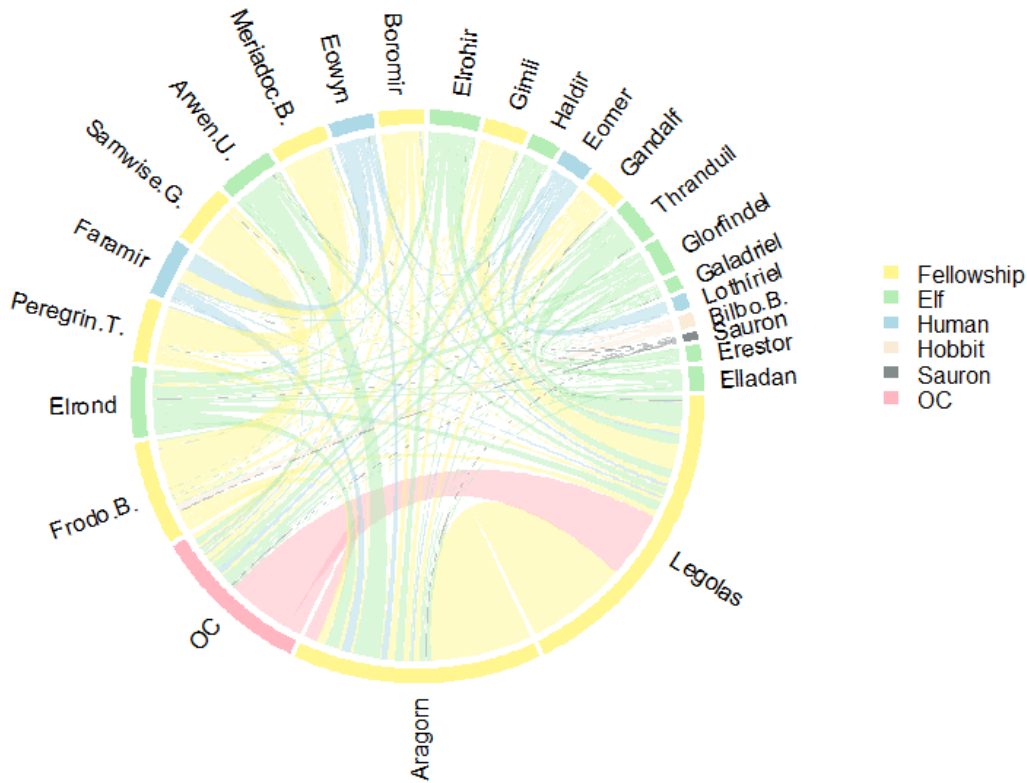


Figure 5: Common appearances of the 25 most popular characters.

I.5 How long are LotR fanfictions?

Note: it is possible, on FF.net, for an author to remove all chapters of their fictions apart from the first one and replace the chapter by a short message announcing their reason for the removal. This makes the 'words per chapter' feature useless. To prevent these fictions from skewing the analysis, I have taken out any fiction that is one chapter long and abandoned (that is, still ongoing but not updated since 2015). This removed 29% of the population, leaving 35,359 stories out of 49,570.

OS, or *one shots* (stories in one chapter) make up 27.4% of stories. They have an average of 1775 words, while multi-chapters stories have on average 20308 words in 9 chapters.

However, these results are right-skewed: the means are heavily influenced by some very long stories. 50% of OS have less than 1107 words; 75% have less than 2144. In multi-chapter stories, 50% have less than 1488 words per chapter and 75% less than 2428.

Even more surprising, out of all multi-chapter stories, **only 50% have more than 7802 words in total**; only a quarter pass the 20,000 words mark. Only 10% of multi-chapters stories reach novel-length (50,000) and only 1 story out of 100 is as long as *The Fellowship of the Ring* (177,227 words).

II Original Characters: the bane of LotR fanfictions?

It is *common knowledge* that the LotR fandom is rife with Mary-Sues – original characters of annoying perfection, usually a Tenth Walker, a lost elven princess or a love interest for Aragorn/Legolas, sometimes all three at once. More often than not, the Mary-Sue is a thinly veiled projection of the author’s dream self onto a world they wish they could inhabit.

The OC epidemic has led to a reaction from more *serious* fanfiction authors, leading to hilarious parodies (most notably the famous *Nine Men and a Little Lady*, or any of the **thousand of English LotR fictions** on FF.net that contain the word *Mary-Sue*), surveys checking if an OC falls into the dreaded category (1, 2) and articles taking a bold stand against Mary-Sues. OC-infected fictions are considered to make, depending on the person, up to *half* of all LotR fanfictions.

This *common knowledge* can be summed up by two hypotheses:

1. Mary-Sues (and OCs in general) make up a lot of LotR fanfictions – a least a fifth of them;
2. OC fictions are used as wish-fulfillment, therefore most OC fictions are romances and most of those romances involve a classically attractive character: usually Legolas or Aragorn, less often Boromir (and rarely Faramir).

Since there is no ”Mary-Sue” category on FF.net (and if there were, authors guilty of such a cardinal sin in fanfiction probably wouldn’t admit to it), the next part of the analysis will consider *all OC* as potential Mary-Sues. Note that *this is not, in fact, true*: some of the most popular LotR fictions contain non-Mary-Sue OCs.

II.1 How many LotR fanfictions contain OCs?

*Note: For this section, only **fictions with a non-empty character field** were taken into account. This removed 26.5% of the population, leaving 36,434 out of 49,570 fictions.*

*Note: not all authors use the ’OC’ character option. A quick browse of LotR fictions show that many feature an OC as the main character without indicating it in the character field. I have considered that **all romance fictions with a single character** in the character field also included an OC (romance being a genre that, as far as I know, asks for at least two characters).*

Surprisingly, only 15% of all stories contained an OC among the main character (5% using the OC option, 10% being single-character romances). In Romance fictions, though, the proportion drastically increases: 43% of romances have an OC character (9% using the OC option, 34% being single-character romances).

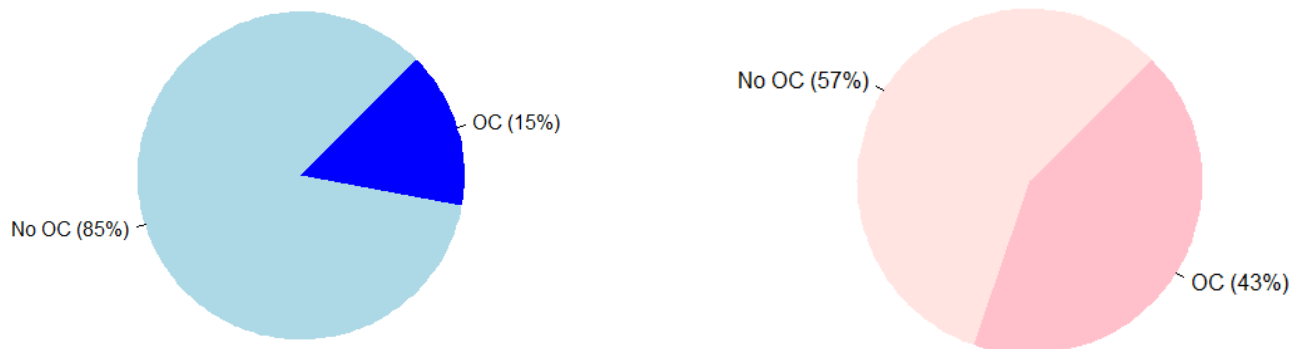


Figure 6: Proportion of OC stories in all fictions (left) and in Romance stories (right)

II.2 How do Romance and OC fictions intersect?

Of the 36,434 stories making up the population, 31% belonged to the Romance genre. 43% of those contained an OC among the main characters – against 15% in all stories. While OCs are not taking over the LotR fandom, it does seem that the **Romance section contains a disproportionate number of OCs** and that **OC stories are overwhelmingly romances**, which lends credit to the hypothesis that OC fictions often contain some sort of wish-fulfillment.



Figure 7: Venn diagram of Romance stories and OC stories. 43% of Romance stories contain OCs and 87% of OC stories are romances.

From this, we can conclude that the first hypothesis ("OC fictions are taking over the LotR fandom") is false, but could instead be that "OC fictions are taking over the Romance section of the LotR fandom".

It is worth noting that for every five potential Mary-Sue fictions, there is one fiction criticizing or parodying the Mary-Sue phenomenon (1000 fictions contain the word *Mary-Sue* while 4805 are romances containing an OC; of those, only 1250 also feature Legolas or Aragorn, and even then, not all will turn out to be Mary-Sues).

II.2.1 Are OC fictions more successful?

In terms of **favorites**, **OC fictions are clearly more successful** (fig. 8) – slightly for OS (going from an average of 13 to 18 favorites) and even more so for multichapter stories where the number of favorites more than double. However, the number of favorites is also influenced by the number of *chapters* a story has. OC multichapter stories have on average 9.64 chapters against 6.12 for non-OC stories.

Another metric, **number of reviews per chapter**, tells a different story: OS and multichapter fictions get more reviews per chapter when there is no main OC (8.67 to 7.84 for OS, 6.65 to 5.16 for multichapter fictions, see fig. 9).

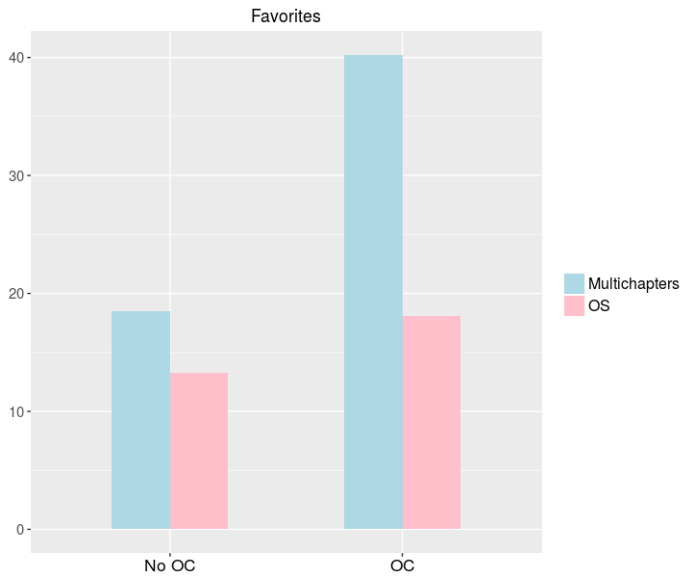


Figure 8

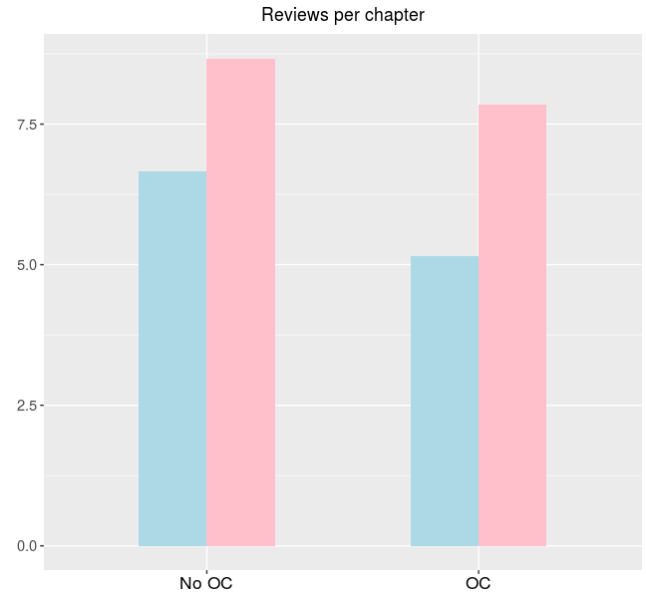


Figure 9

Figure 10: Number of favorites (left) and reviews per chapter (right) depending on whether or not the fanfiction is an OC fiction.

OC fictions get more favorites but have less reader engagement (and thus reviews).

II.3 Chad's Curse: Legolas and Aragorn

As we've seen in part. I, 74% of LotR fanfictions with non-empty character field contain a character from the Fellowship of the Ring, and half of LotR fanfictions (51%) contain Legolas or Aragorn.

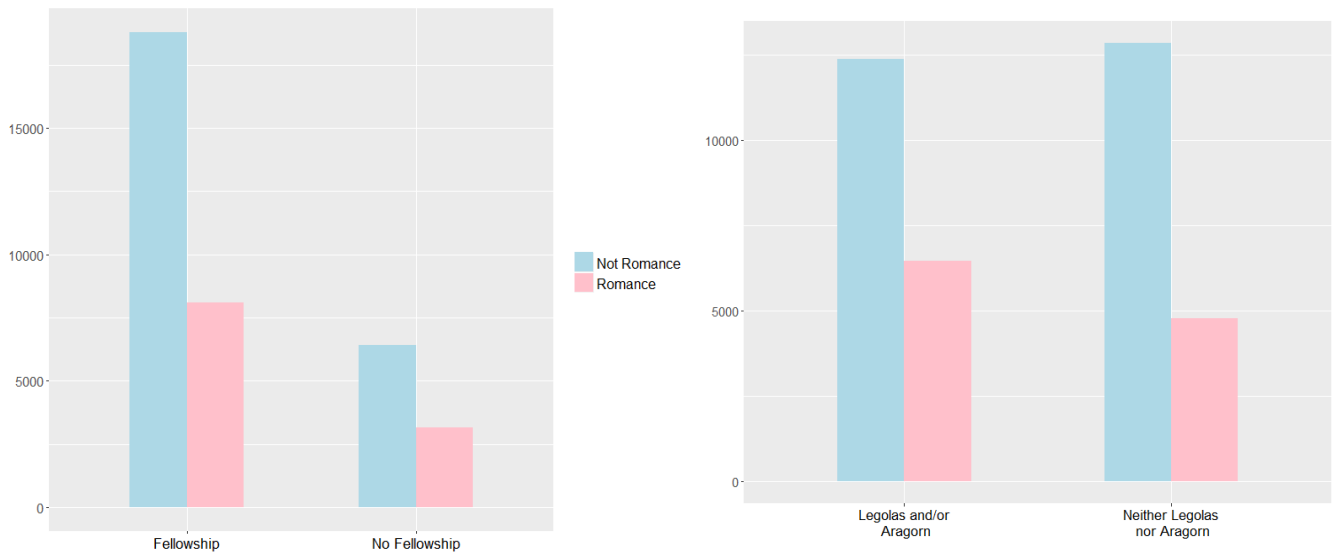


Figure 11: Romance and non-romance stories depending on the presence of a member of a Fellowship among main characters (left) or the presence of either Legolas or Aragorn among main characters (right).

Fellowship fictions in general are significantly less likely to be romances (chi-square test, p-value = 1e-07). The Fellowship Don Juans, however, hog love stories: if a Fellowship fiction is a romance, odds that it includes Legolas

III How to write a successful fiction?

A *successful* fiction may not always be a *good* fiction but only a liar would claim not to be looking for success. In the fanfiction world, where stories are openly accessible on the Internet and no money changes hands, a story's success is measured by readers' engagement. Fanfiction.net offers three criteria to assess it, here in ascending order of importance for writers:

- firstly, **followers**: a **follow** indicates that a reader has subscribed to the story and wants to read the next chapters. However, some readers use *follows* as a way to indicate their appreciation without adding the story to their (publicly available) favorites, as shown by the presence of follows on stories made of a single chapter (on average, 1.6 follows per OS).
- secondly, **favorites**: when a story is added to a reader's favorites, it will be shown in the "Favorites" tab of their profile, allowing them to broadcast their tastes and to find their favourite stories easily. It is common among fanfictions readers to look for good stories among the favourites of a writer they appreciate.
- lastly, **reviews** are what writers prefer. With a review, a reader engages the writer. Reviews can be a single word or several paragraphs long, but they are always appreciated. The acronym "R&R", which stands for "Read & Review", can often be found at the beginning of a chapter (and even in a story's summary).

The average LotR fanfiction has 27 reviews, 15 favorites and 7 follows.

Unsurprisingly, the three features are positively correlated (fig. 13, $R^2 = 0.774$ between follows and favorites, 0.735 between favorites and reviews, 0.565 between follows and reviews).

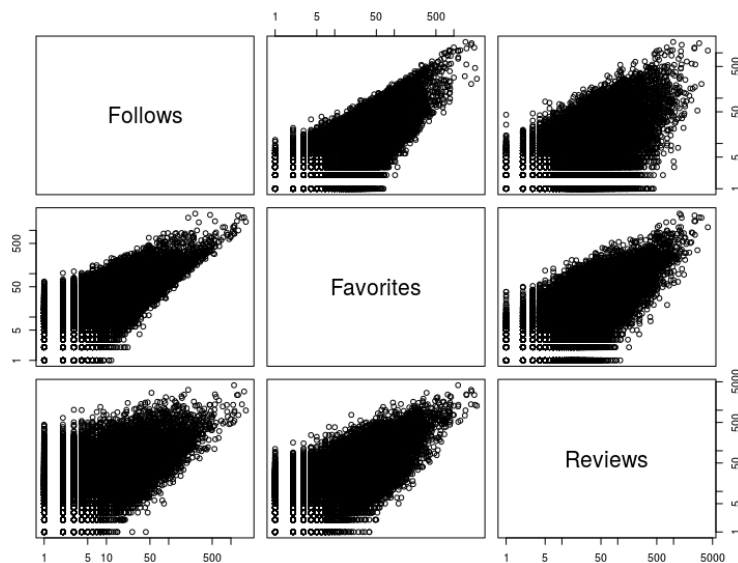


Figure 13: Correlation plots of number of: follows, favorites, reviews (logarithmic scale).

III.1 Influence of genre

Fictions of good and bad quality can be found across all genres. That said, some genres do attract more readers in the LotR fandom.

The most successful genres in terms of favorite counts are **Romance** and **Adventure** (which together make up the very common Romance/Adventure genre). On the other end of the spectrum, genres with few writers have few readers too: Crime, Western, Sci-Fi and Spiritual stagnate at the bottom of the barrel.

Humor fictions, while second most common (22%), reach only 9th place out of 21. Poetry, a relatively common genre too in the LotR fandom (6% of fictions), is the least appreciated of all, which is not surprising since this is a genre that is very different from others not only in its content, but also in its form.

Three genres do unexpectedly well: **Hurt/Comfort**, **Friendship** and **Family**, at the 3rd, 4th and 5th places. All three involve close, usually non-romantic relationships between characters (although Hurt/Comfort often overlaps with Romance), which could be the cause of their success. Horror fictions also appear to be well-liked by readers.

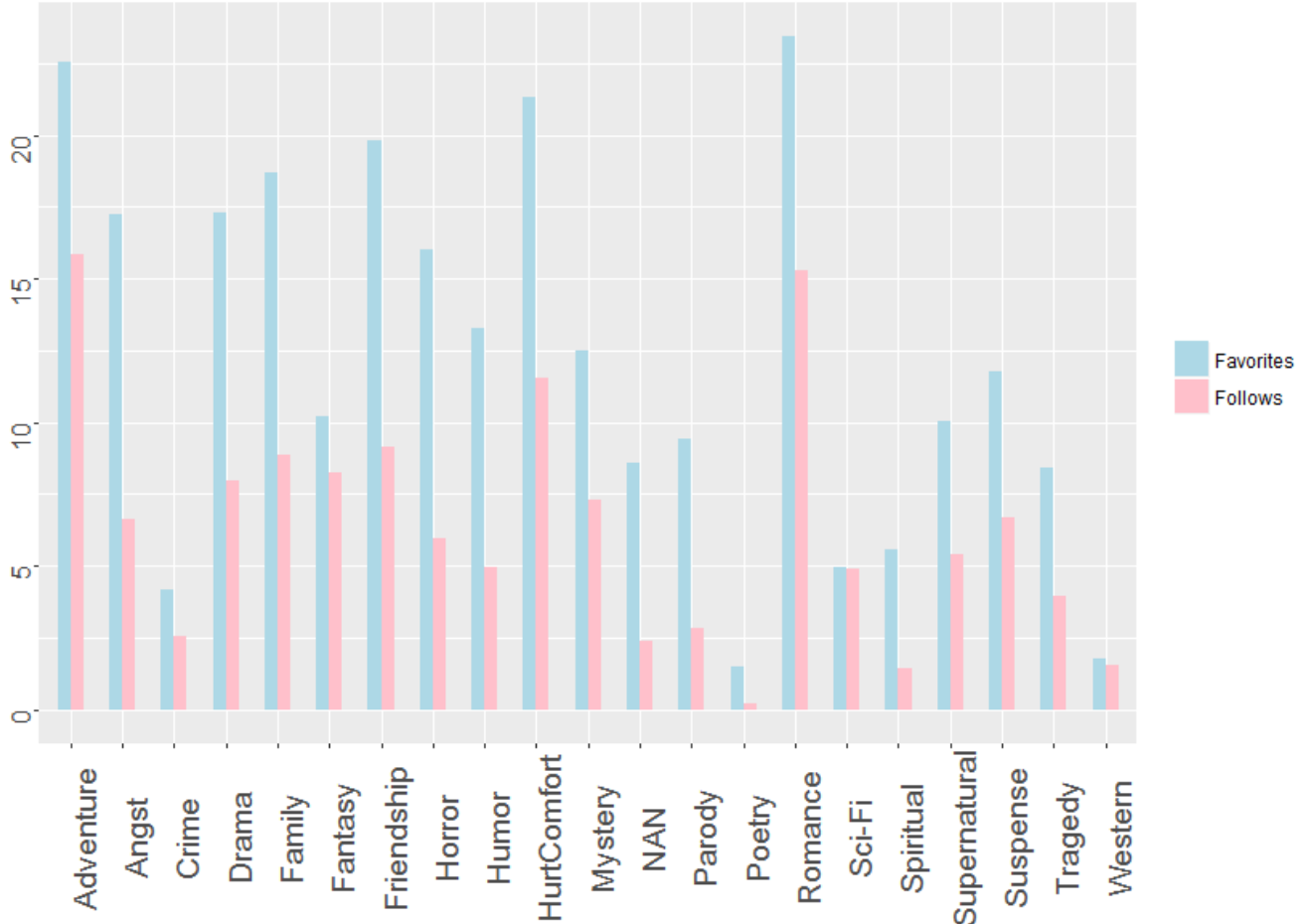


Figure 14: Average number of favorites and follows for each genre.

III.2 Key criteria

Note: it is possible, on FF.net, for an author to remove all chapters of their fictions apart from the first one and replace the chapter by a short message announcing their reason for the removal. This does not remove reviews and skews the 'reviews per chapter' metric. To prevent such fictions from overtaking the analysis, I have taken out any fiction that is one chapter long and abandoned (that is, still ongoing but not updated since 2015). This removed 29% of the population, leaving 35,359 stories out of 49,570.

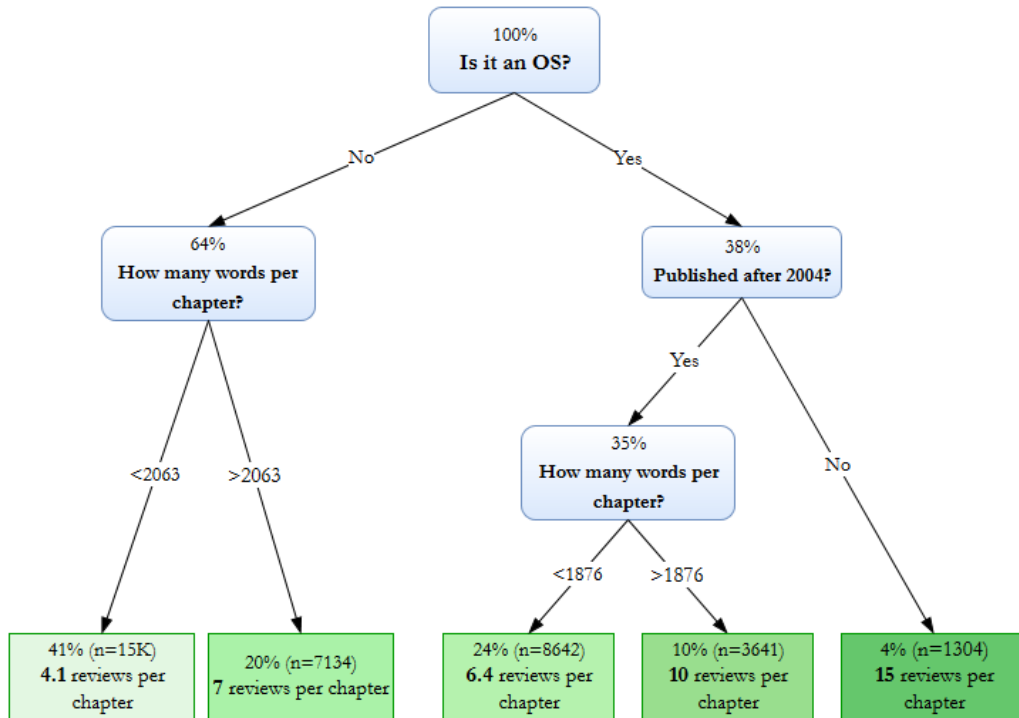


Figure 15: Decision Tree showing which criteria matter most to have the maximum number of reviews per chapter. Pool of possible features: rating, is an OS or not, number of chapters, words per chapter, year of publication, completion, presence of an OC, presence of a Fellowship member, is a romance, is a Humour fiction.

To maximize readers' response, **writing a long OS** (or having written an OS before 2004) seems to be the best path.

IV tl;dr

- 38% of LotR fanfictions are complete; 58% are abandoned (no update since 2015). **Only 4% are still ongoing.**
- Most LotR multichapter fictions are **surprisingly short**: 50% are less than 7802 words, only 10% are over 50,000 words (I.5). A few monsters go against the current:

Where it Doesn't Show by Wynja2007 with 859,477 words

Brono a Chuio by Kaisaan with 770,332 words

FEUD by robey331 with 765,093 words

- **Romance** is the most popular genre out there, but **Humor**, **Adventure** and **Angst** are also popular (I.3).
- Fellowship characters appear in only **3 out of 4** LotR fanfictions with non-empty character field (I.4).
- **Legolas** is by far the most featured character, with **Aragorn** and **Original Character** second and third (I.4, **Frodo** is only fourth).
- the average LotR fanfiction has 27 reviews, 15 favorites and 7 follows (III).
- the top 3 fictions with the most **reviews per chapter** (excluding multichapter fictions that had their additional chapters deleted by the author) are all OS:

Nine Men and a Little Lady by Kiele with 1279 reviews;

Perfection by Irena with 166 reviews;

Dragons or Ribbons by Joannawrites with 149 reviews;

- out of all multichapter fictions (excluding, again, multichapter fictions that had their additional chapters deleted by the author), the top 3 with the most **reviews per chapter** were:

Beyond This World by Thundera Tiger with 136 reviews per chapter;

Broken by Dinathiel with 99 reviews per chapter;

Death to Legolas by Fangz with 88.5 reviews per chapter.

- **original characters** appear in 15% of all fictions and in 43% of romances (II), but only in 5% of all fictions and 9% of romances is the *OC* option of the character field used. Maybe authors do not know of this option; maybe there are aware of the prejudice against OCs and choose not to use the option.
- for every **5 OC fictions**, there is **one fiction talking about Mary-Sues**. There are **1250 potential Mary-Sue fictions** (defined as *romance fictions containing an OC and Legolas or Aragorn*) for **1000 fictions talking about Mary-Sues** (II.2).
- OS get more reviews per chapter than multi-chapter fictions, maybe because in multi-chapter fictions, reviews are more spread out (with new readers frequently commenting only on the last chapter, III.2).

V Methods

The population analysed was English fanfictions from Fanfiction.net posted in the Lord of the Rings category.

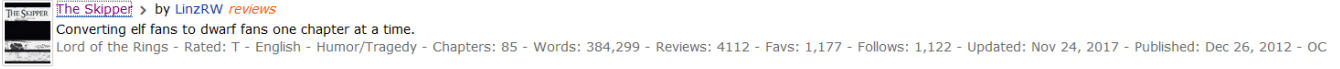


Figure 16: A fanfiction on FF.net. Data analyzed in this study was taken from the gray line at the bottom (excluding category and language, which were always "Lord of the Rings" and "English").

All relevant information provided by Fanfiction.net was downloaded through a Python script, with a forced sleep of 2 seconds between each page in order to comply with FF.net Terms of Services. This resulted in a table of **49,570 stories with 11 features**.

Category	Nature	Length	Success	Time	Status
Features	Rating Genres Characters	Number of : Chapters Words	Number of: Favorites Followers Reviews	Year of: Publication Last update	Completion

To these features were added the following:

- number of reviews per chapter;
- if the story has been abandoned (not complete but hasn't been updated since 2015);
- lifespan of story (year of last update minus year of publication);
- if the story is an OS;
- if the story has an OC in its character field;
- if the story is a single-character romance (romance story with only one character in the character field, which is likely to have an OC as the second character);
- if there are members of the Fellowship in the main characters;
- if Legolas or Aragorn are among the main characters.

Statistical analysis was done using R with packages `stats` and `rpart` for analysis, `factoextra`, `circlize`, `VennDiagram`, `rattle` and `ggplot2` for visualisation.

The regression tree used in part III.2 was made using all 35,359 stories. The tree was made for explanatory purposes, not for prediction.

Glossary

Angst genre in which characters undergo emotional pain, especially anxiety. 3, 4

canon material accepted as officially part of the story in the fictional universe of that story. 10

Mary-Sue idealized and seemingly perfect fictional character, usually a projection of the author. A Mary-Sue can be an original character or an existing character. The male Mary-Sue is called a **Gary-Stu**. See: Ebony Dark'ness Dementia Raven Way, Batman. 1, 7

rating K: suitable for all ages (5+)

K+: some content may not be suitable for young children (9+)

T: contains content not suitable for children (13+)

M: content suitable for mature teens and adults (16+)

(source). 2

slash adjective or noun referring to a fiction centering a male homosexual relationship. 5

Acronyms

OC Original Character, character made up by the fanfiction writer. 7, 13, 15

OS One Shot, story in one chapter. 2, 6, 11, 13, 15

References

- [1] R. Riordan. *Percy Jackson & The Olympians*. Disney Hyperion, 2005-2009.
- [2] J. Anouilh. *Antigone*. 1944.

Annex

Genres

	Romance	Humor	Adventure	Angst	Drama	Fantasy	Poetry	Friendship	Parody	Family	Hurt, Comfort	Tragedy	Mystery	Horror	Suspense	Supernatural	Spiritual	Sci-Fi	Crime	Western	NAN	Total
Romance	2882	1535	3193	1782	2003	575	249	245	72	171	361	242	97	31	35	50	30	6	3	1	0	13563
Humor	1535	4414	1009	208	393	262	272	342	2098	292	44	34	63	65	24	24	5	8	4	0	0	11096
Adventure	3193	1009	1411	870	936	972	48	340	70	127	111	88	147	62	127	76	20	26	7	4	0	9644
Angst	1782	208	870	2319	1763	108	363	231	37	208	356	377	46	102	77	49	53	5	3	0	0	8957
Drama	2003	393	936	1763	1761	176	249	124	36	135	90	192	67	56	74	54	35	4	4	0	0	8152
Fantasy	575	262	972	108	176	476	144	73	25	51	28	53	26	16	28	30	29	21	0	0	0	3093
Poetry	249	272	48	363	249	144	1249	37	47	14	17	114	8	18	10	12	43	0	0	0	0	2894
Friendship	245	342	340	231	124	73	37	499	1	327	374	33	8	11	15	17	12	0	0	2	0	2691
Parody	72	2098	70	37	36	25	47	1	227	1	0	6	2	14	1	3	0	4	1	0	0	2645
Family	171	292	127	208	135	51	14	327	1	502	412	43	6	3	5	10	13	2	0	0	0	2322
HurtComfort	361	44	111	356	90	28	17	374	0	412	158	64	9	10	9	3	10	1	0	0	0	2057
Tragedy	242	34	88	377	192	53	114	33	6	43	64	199	5	37	29	10	23	0	2	0	0	1551
Mystery	97	63	147	46	67	26	8	8	2	6	9	5	47	17	23	10	10	1	2	0	0	594
Horror	31	65	62	102	56	16	18	11	14	3	10	37	17	52	20	24	6	0	2	1	0	547
Suspense	35	24	127	77	74	28	10	15	1	5	9	29	23	20	47	11	0	2	2	0	0	539
Supernatural	50	24	76	49	54	30	12	17	3	10	3	10	10	24	11	47	12	1	0	0	0	443
Spiritual	30	5	20	53	35	29	43	12	0	13	10	23	10	6	0	12	97	0	0	0	0	398
Sci-Fi	6	8	26	5	4	21	0	0	4	2	1	0	1	0	2	1	0	10	0	0	0	91
Crime	3	4	7	3	4	0	0	0	1	0	0	2	2	2	2	0	0	0	3	1	0	34
Western	1	0	4	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	1	0	0	9
NAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6173
Total	13563	11096	9644	8957	8152	3093	2894	2691	2645	2322	2057	1551	594	547	539	443	398	91	34	9	6173	49570

Figure 17: Repartition of genres in LotR fanfictions. On the diagonal are fictions with only one genre. Of the dual genres, Romance/Adventure is by far the most common, with Humor/Parody and Romance/Drama as second and third. Romance and Adventure are the genres most suited to dual genres.

Characters appearing together

The four PCA plots allow us to visualize characters on the first 8 axes of variance, explaining together half of character variance. Only the 25 most common characters were analyzed. For each plot, clustered characters at the center weren't shown in order to make the plot clearer.

