

Challenging Stylometry

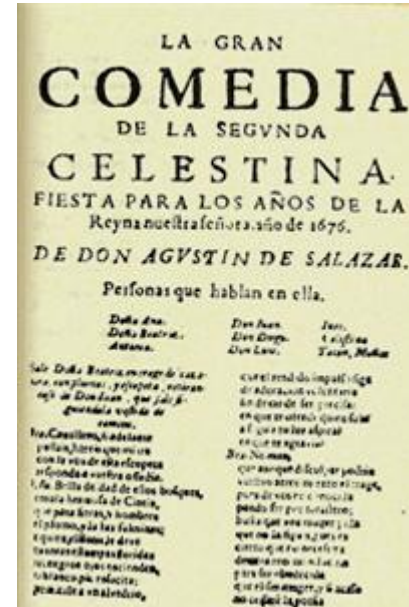
The Authorship of the Baroque Play *La Segunda Celestina*



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Research problem

But Salazar died in November 1675, leaving the play unfinished.



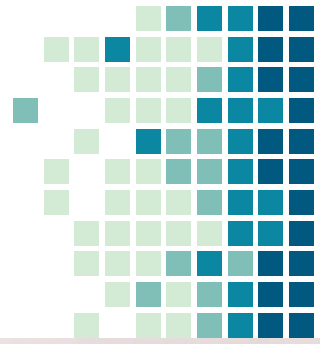
About *La Segunda Celestina*

1989, Guillermo Schmidhuber published a newly discovered 'suelta' with the anonymous ending.

He claimed the anonymous writer was Sor Juana Inés de la Cruz, whom he also thought to have made significant changes to the original.



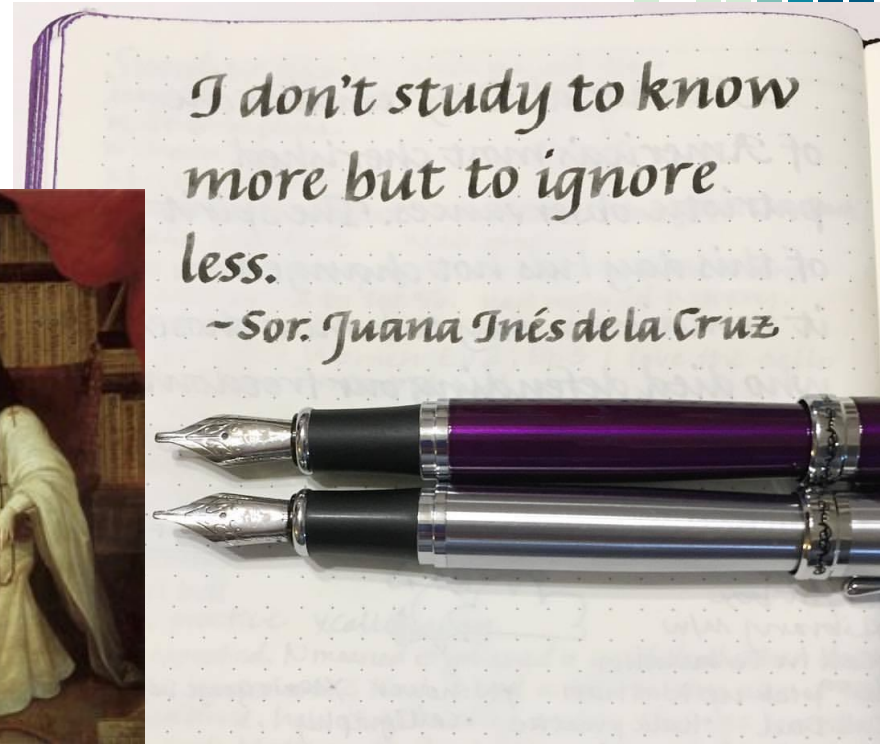
Sor Juana Inés de la Cruz (1648-1695)



New Spain (Mexico) scholar,
poetess, philosopher,
composer, nun

One of the best Baroque
writers from the Spanish
speaking world.

Passionate learner and
defensor of women rights



*I don't study to know
more but to ignore
less.*

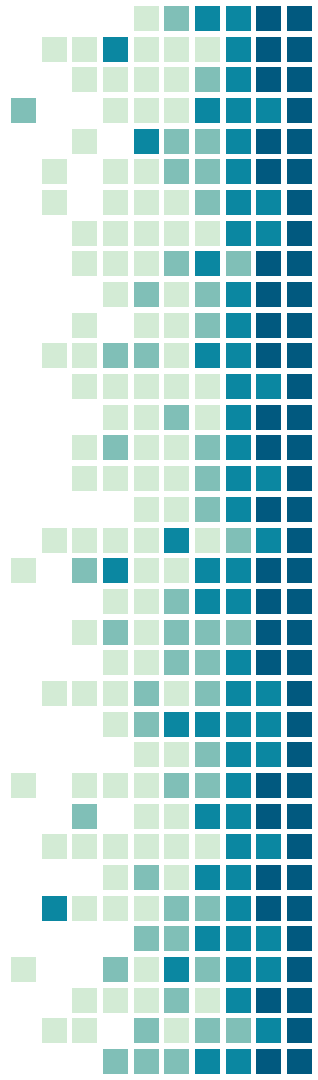
~ Sor. Juana Inés de la Cruz

Scholarly debate on SJ's authorship

Octavio Paz (1990) and Schmidhuber (1991, 2016) point to Sor Juana as the author of the anonymous ending and argue she made significant changes in the rest of the play.

Alatorre (1990) rejects Sor Juana's authorship:

- Problem of navigation times.
- SJ was at the time under the control of a very strict confessor (padre Núñez).



Scholarly debate on SJ's authorship

Sabat de Rivers (1992) after a comprehensive study:

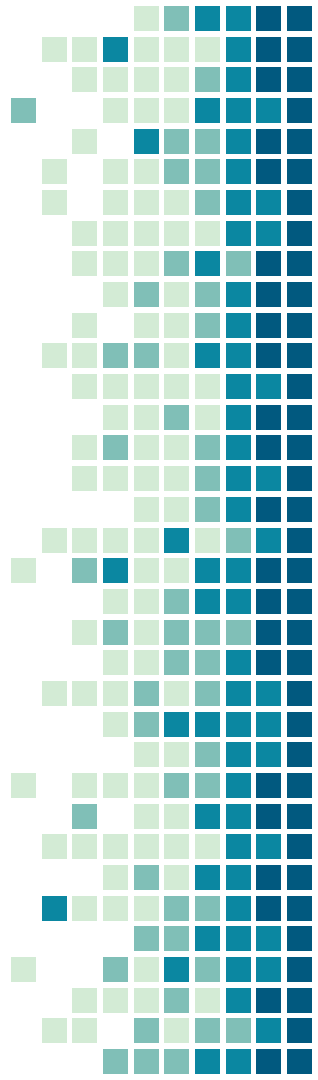
- defends SJ's authorship of the ending
 - Ships to and from America would depart every three months.
 - It would not be the first time SJ chose to disobey her confessor.
- but rejects the possibility that she made changes in the rest of the play



Our study

Questions:

- 1) Who wrote the ending?
- 2) Did the anonymous writer introduce changes to the rest of the play?



Setting up the experiment

Dataset

Problems we had to face:

- Small availability of Spanish (historical) texts
- Available corpus imbalanced in terms of:
 - author representation
 - gender
 - genre
 - nationality



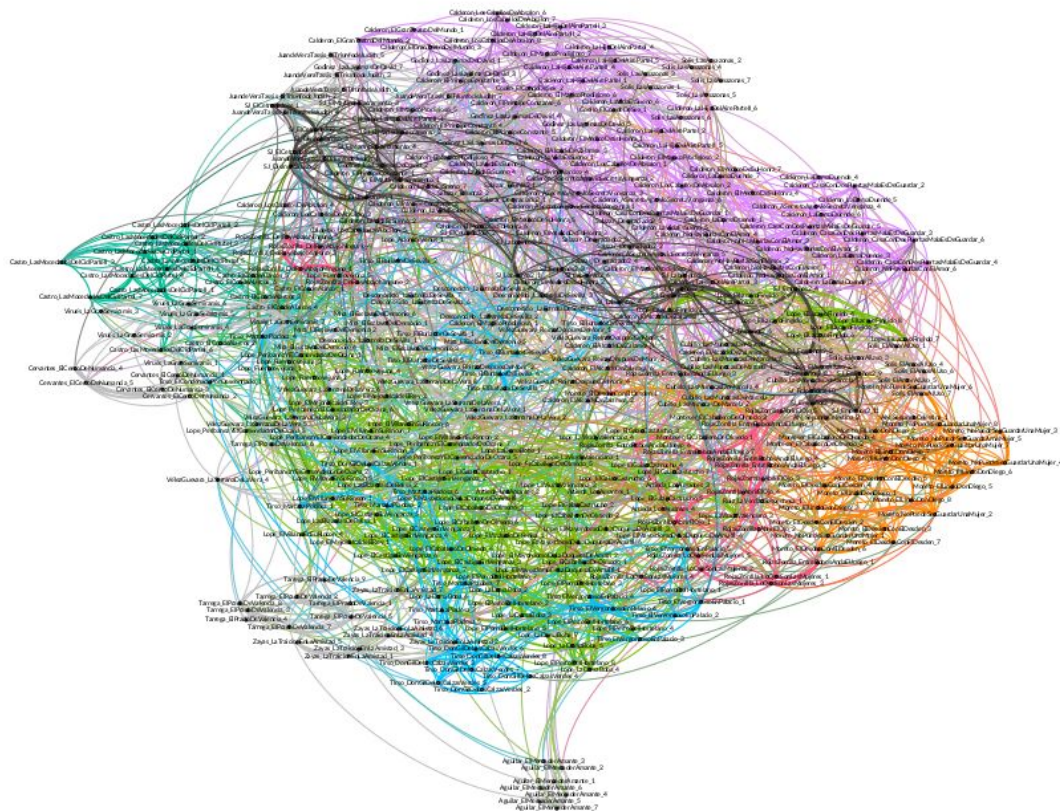
Dataset

Adopted solutions:

- SC and SJ's plays extracted from digital editions (Schmidhuber de la Mora, 2016; Cervantes Virtual Library).
- Poor OCR results – > transcription of Salazar's texts.
- Use of Canon-60 corpus (Oleza 2014), but just one genre: "comedia de capa y espada".



Results



Authorship attribution vs verification

We know the author must be
one of a few candidates

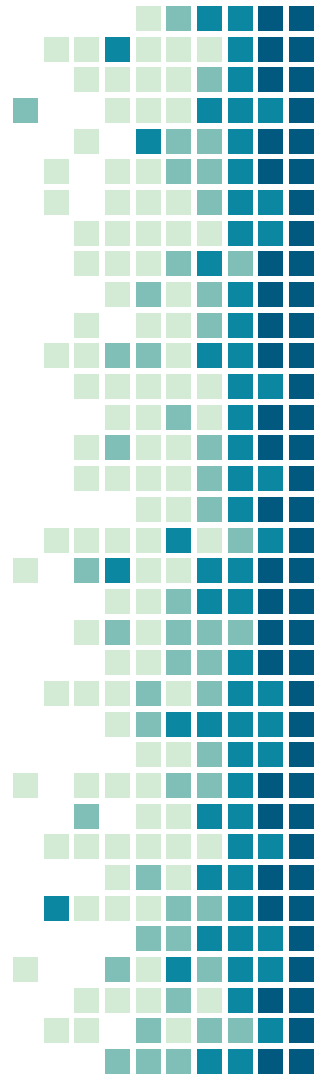
Relatively easy

e.g. `classify()`, `rolling.classify()`

We don't know if we have the
author in our dataset

Still quite difficult

e.g. `imposters()`

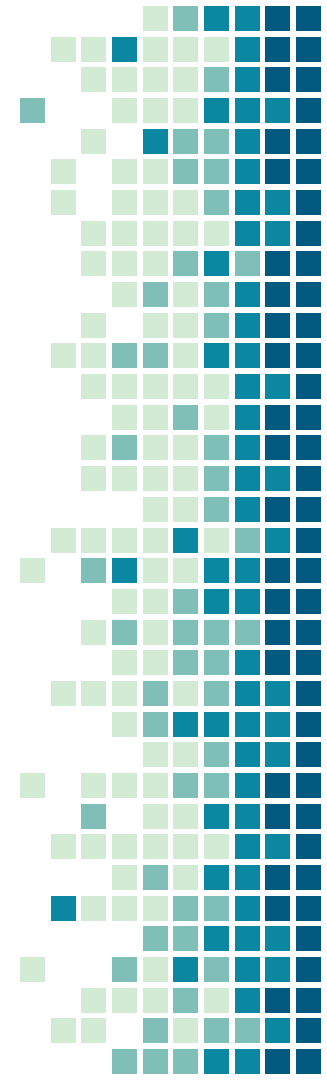


Authorship attribution vs verification – our case

- cross-validated classification with SVM, NSC, Delta
- verification with “Imposters method”
(Kestemont et al., 2016; Koppel and Winter, 2014)

results inconclusive, pointed authors:

Calderón and Moreto to SJ, Solís and de Vera Tassis.



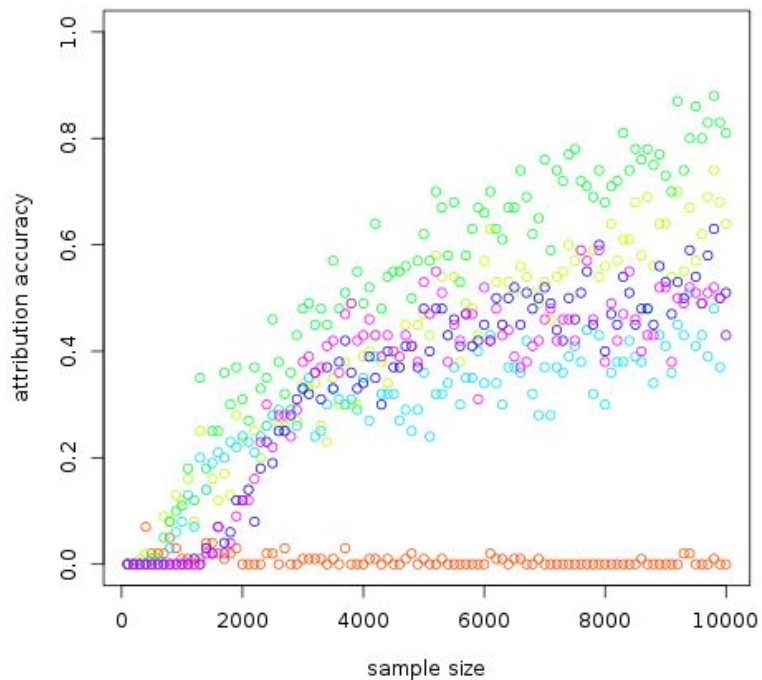
Adjusting – pruning the corpus

- removing 'landscape' authors who could not author the play
- determining strength of authorial signal (Eder 2017)

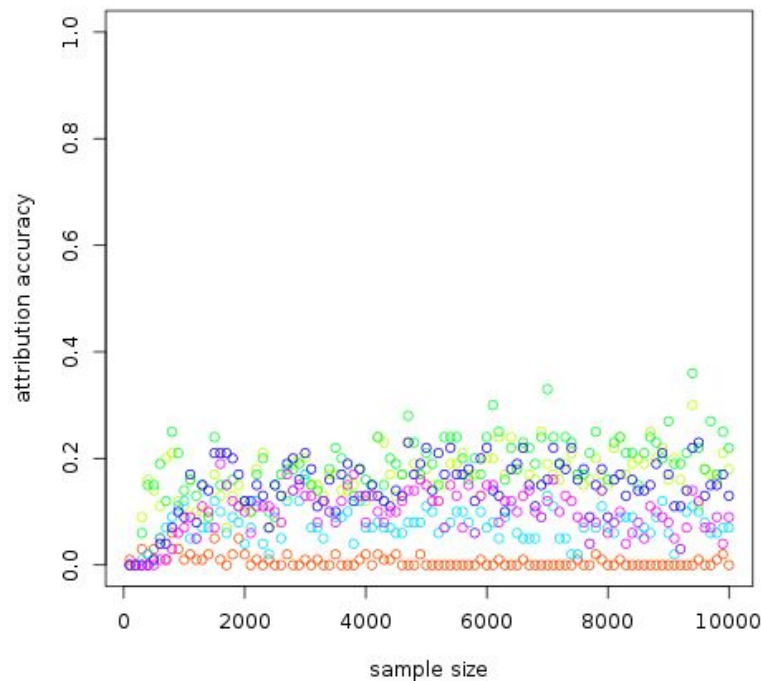


Authorial signal strength

Solis_LasAmazonas

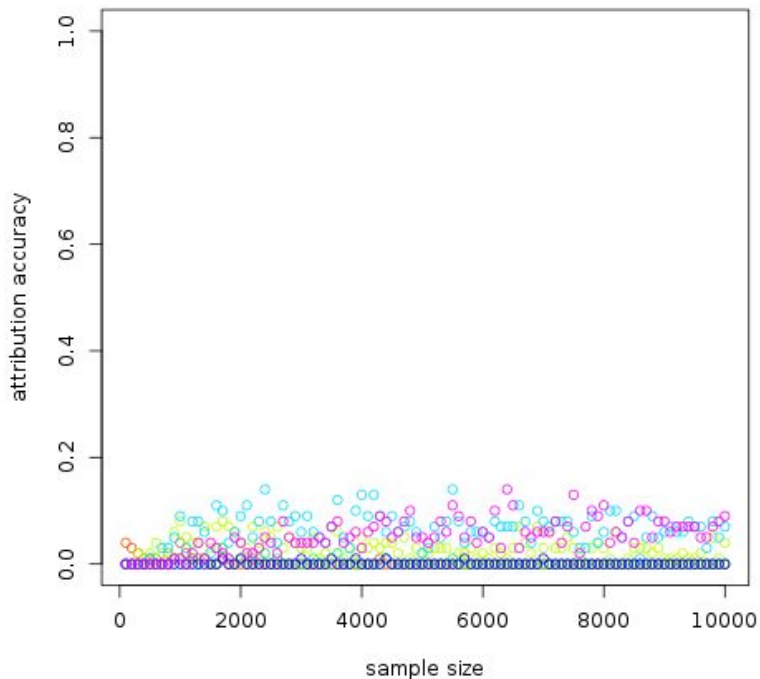


Solis_ElAmorAlUso

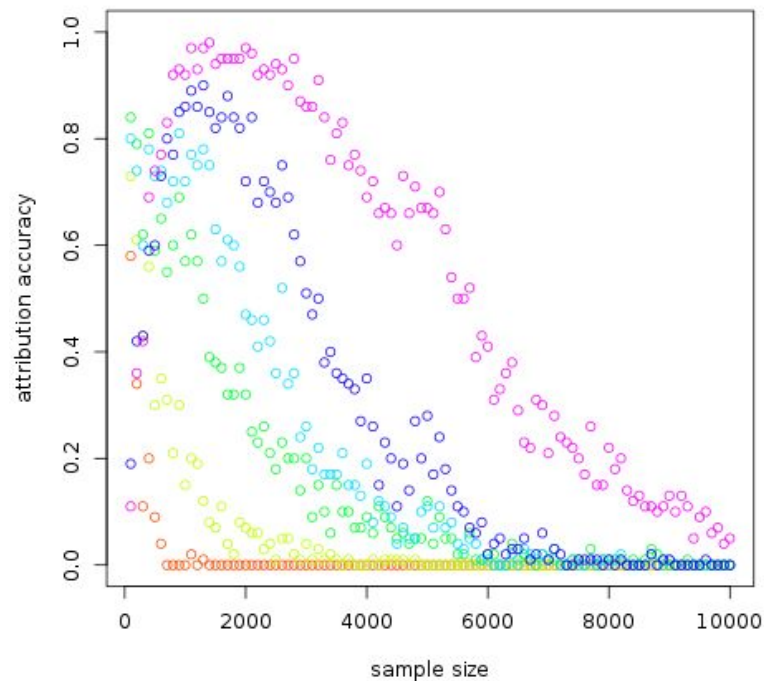


Authorial signal strength

Salazar_Triunfa2

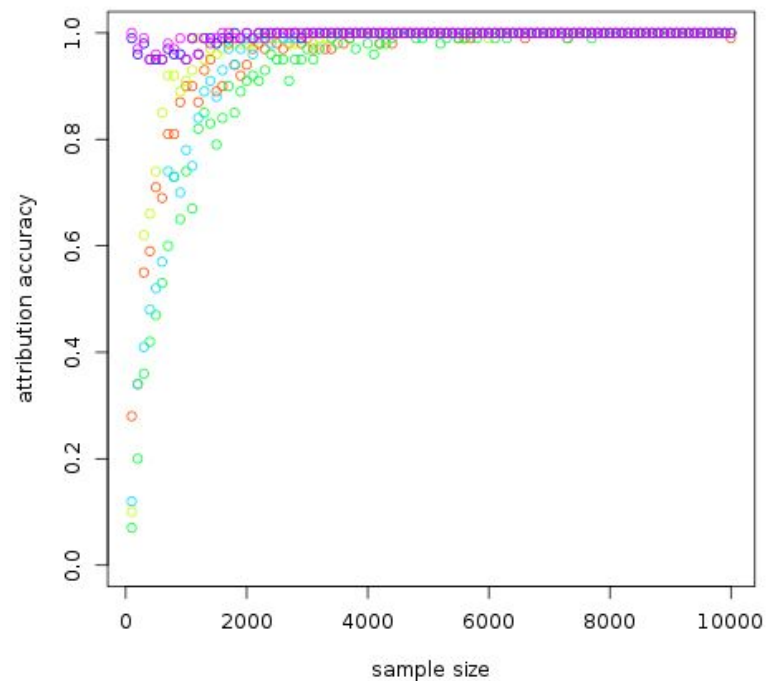


Salazar_Desgraciado2

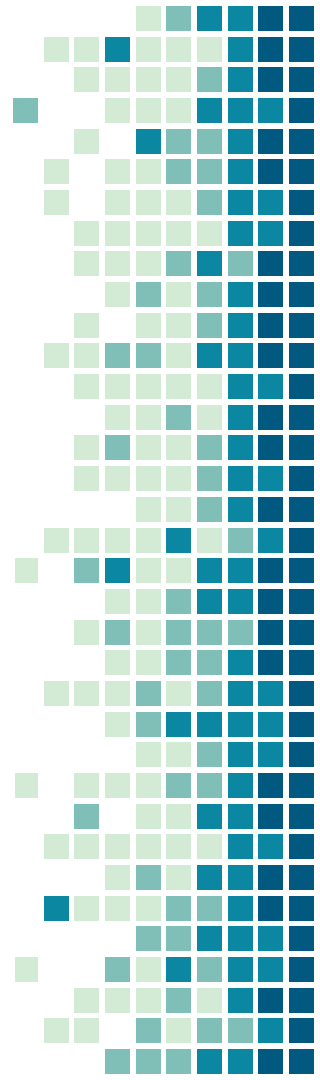
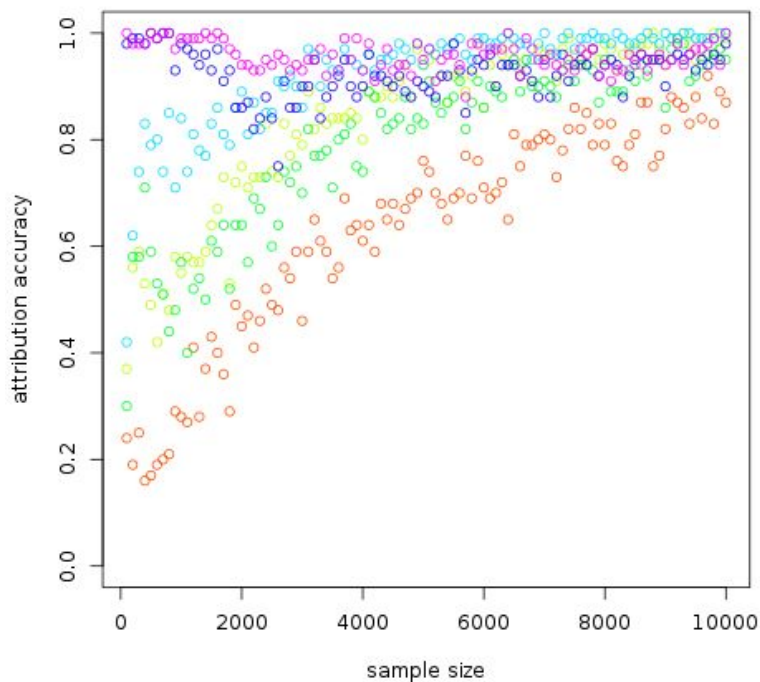


Authorial signal strength

SJ_DivinoNarciso



SJ_Empeños



Revised approach

Cross validation & classification on just these three authors:

- SJ attributed as the author in almost all settings
- some results point to Solís influence in the last two thousand words
- the most reliable results: SVM and 100-500 MFWs range (from 54.8% to 81.2% accuracy, with the average of 72.75%)



Rolling Classify

- Problem that requires detecting multiple authorial voices
 - Salazar's voice and the anonymous author
 - Use of Rolling Classify (Eder 2016)



Rolling Classify

Experiment conditions:

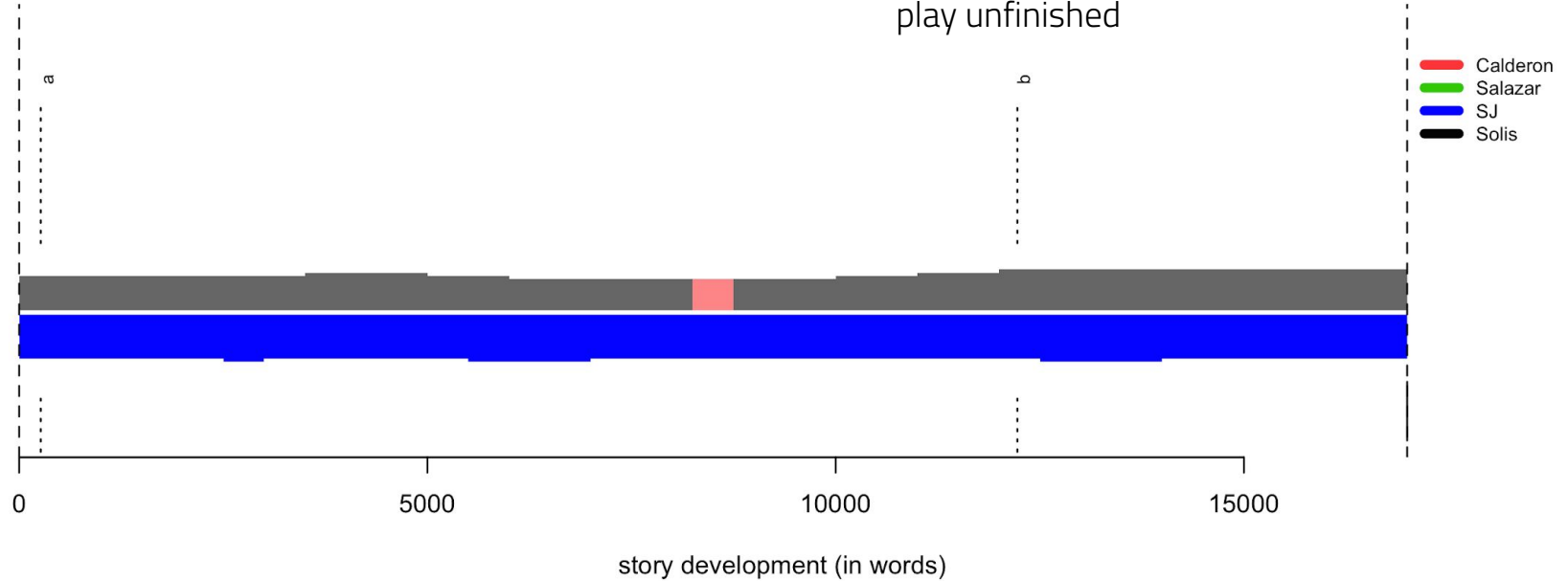
- SVM, NSC and Delta
- 500 MFW
- 5000 words-per-slice
- Authors: candidates (Salazar and SJ), control authors (Calderón and Solís)



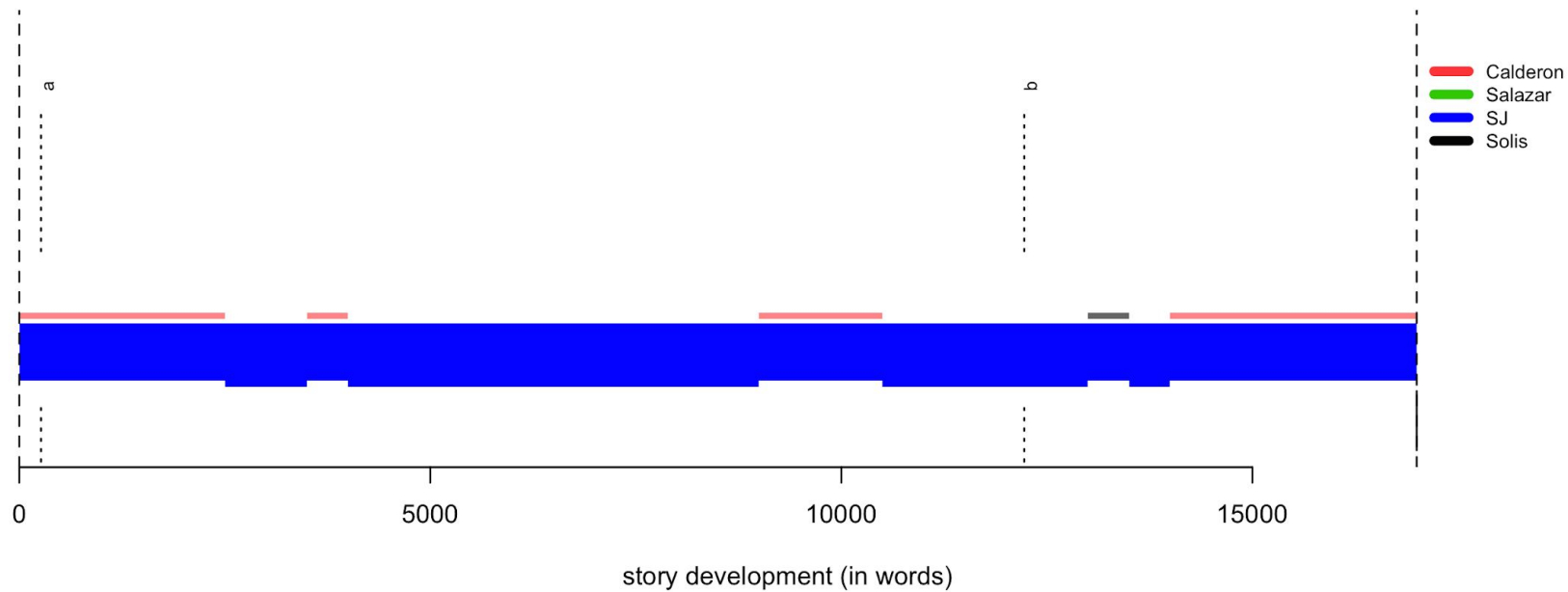
beginning and the first encounter of
protagonists, doña Beatriz and don
Juan → very feminist confrontation

where Salazar left the
play unfinished

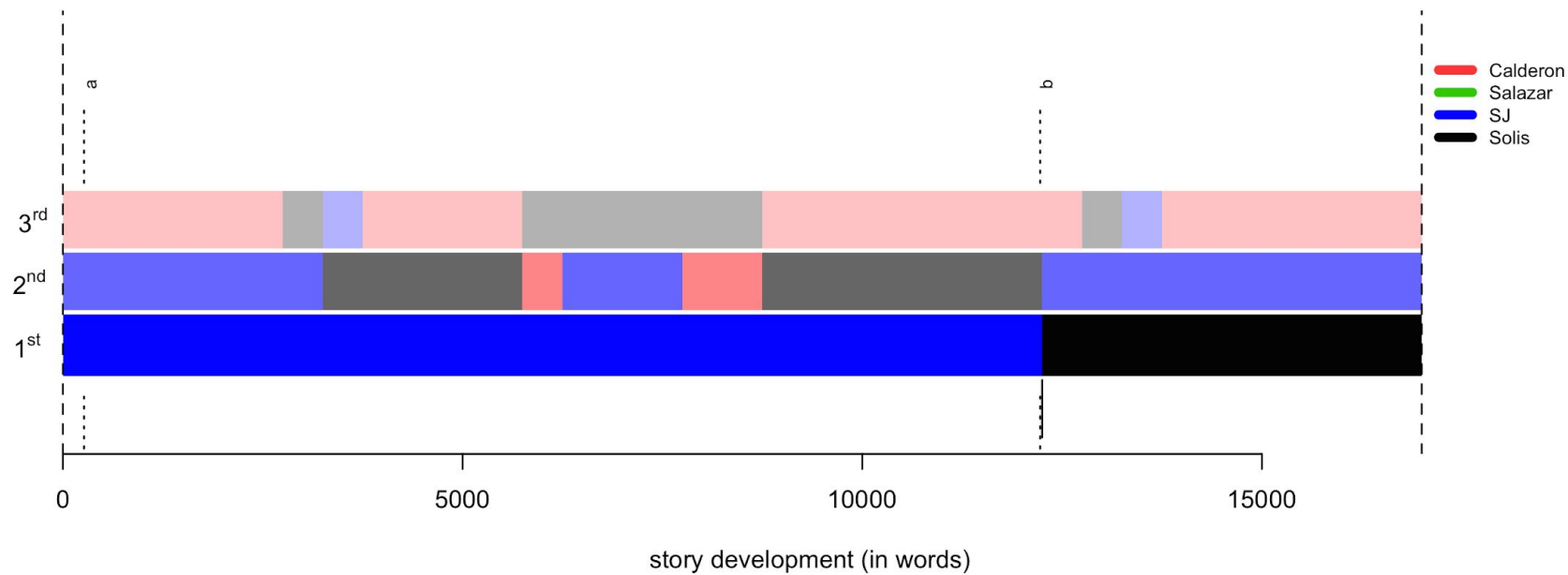
SVM classification



NSC classification



Delta classification



Concluding remarks

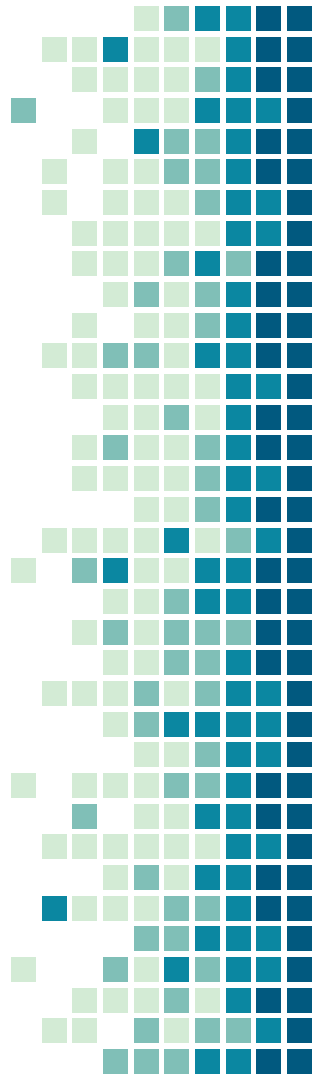
Importance of taking corpus evaluation steps in all analyses, and especially in the case of historic works, for which it is impossible to create a truly balanced corpus.

Various authors seem important for the text and the situation is quite blurry.



Solís is a new discovery, and his possible relation to SC and SJ, especially in terms of influence or themes, may also be of interest to future studies.

However, quantitative analysis and literary evidence history show that the influence of SJ is definitely the strongest, supporting the theory of her being the author of anonymous part and editor of the whole text.



Thank you!

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Documentation and resources:

<https://github.com/JoannaBy/La-Segunda-Celestina>



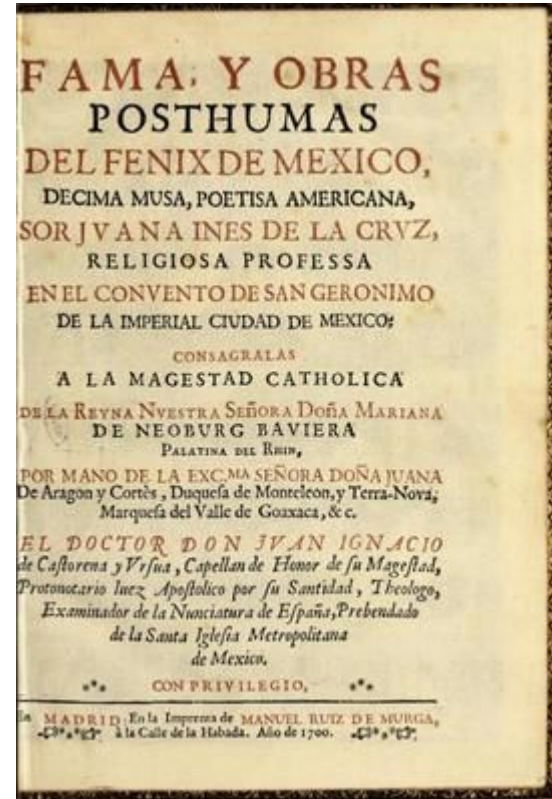
Back-up slides



Historical facts which support SJ's authorship

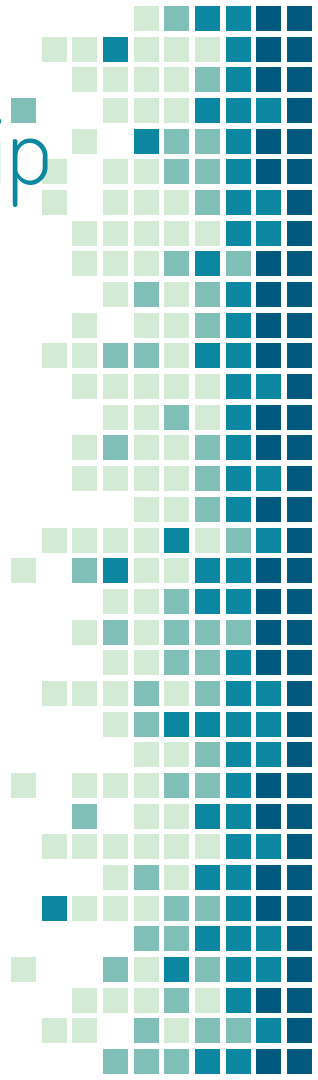
Castorena y Úrsua mentions in the prologue of *Fama y obras posthumas* (1700) a poem left unfinished by Agustín de Salazar and completed by Sor Juana.

1957, Salceda concludes that this "poem" is SC. He sees another reference to SC in another play by SJ (*Los empeños de una casa*).



Historical facts supporting SJ's authorship

Marqués de Mancera, Sor Juana's friend, was at time in Madrid as the royal butler of the Spanish Queen and in charge of celebration arrangements for the Queen's birthday.



Historical facts supporting SJ's authorship

Sabat de Rivers (1992) points out that:

- ships to and from America would depart every three months.
- Marqués de Mancera's authority was above padre Núñez's and it would not be the first time SJ chose to obey Mancera against her confessor's will.

Antonio de Solís y Rivadeneyra (1610-1686)

1651: official playwright of the Royal Palace

1658: moment of maximum protagonism with *Triunfos de amor y fortuna*, which celebrated the birth of Felipe Próspero and earned him recognition as an Indian Chronicler.

1661: Solís is named "Cronista de Indias" and abandons dramatic writing to focus on writing the *Historia de la conquista de México*, which does not end until two decades later.

1667: Solís becomes a priest

1671: the Count of Oropesa, patron of Solís, dies.



Antonio de Solís y Rivadeneyra (1610-1686)

In the decade of 1670

- Solís has been separated from the palace,
- his patron has died,
- and his only position is that of chronicler of the Indies for which he has left the dramatic activity and has devoted himself to write the *Historia de la conquista de México*,
- has become a priest (spiritual occupations, he is preparing himself for death).



El amor al uso, Solís

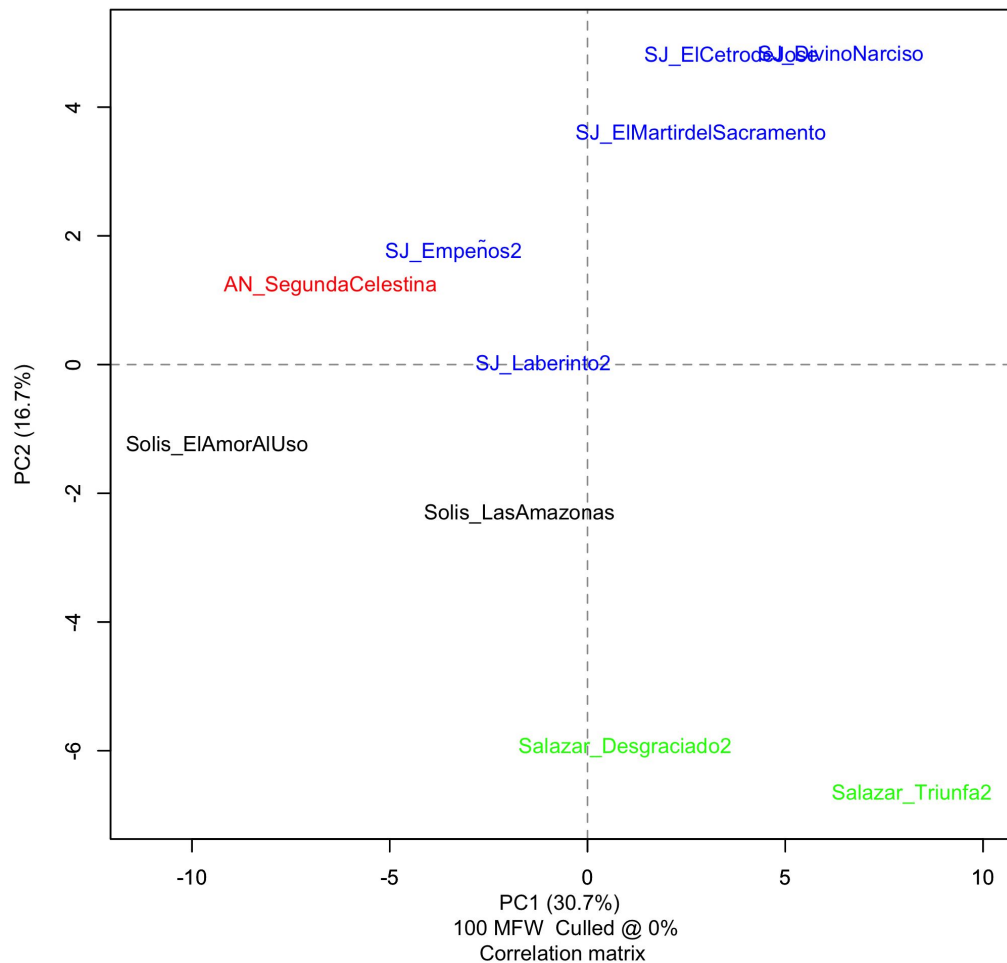
El amor al uso (1640): satire of love, critique of customs, revolutionary against the social structure of the baroque, a rare 'comedia de capa y espada', more sarcastic → thematic interference with SC?

The SC is quite special as 'comedia de capa y espada' for the Celestina character, not limited to the characteristics of the genre. Celestina myth has a great literary tradition of its own → a more degraded side.

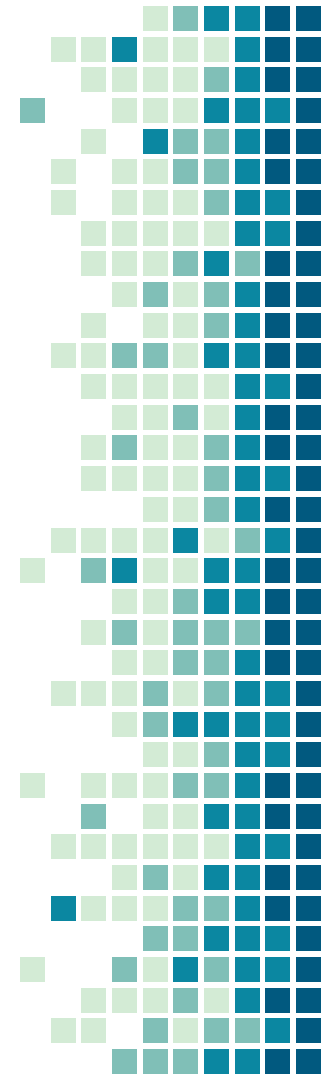


PCA

PCA Principal Components Analysis

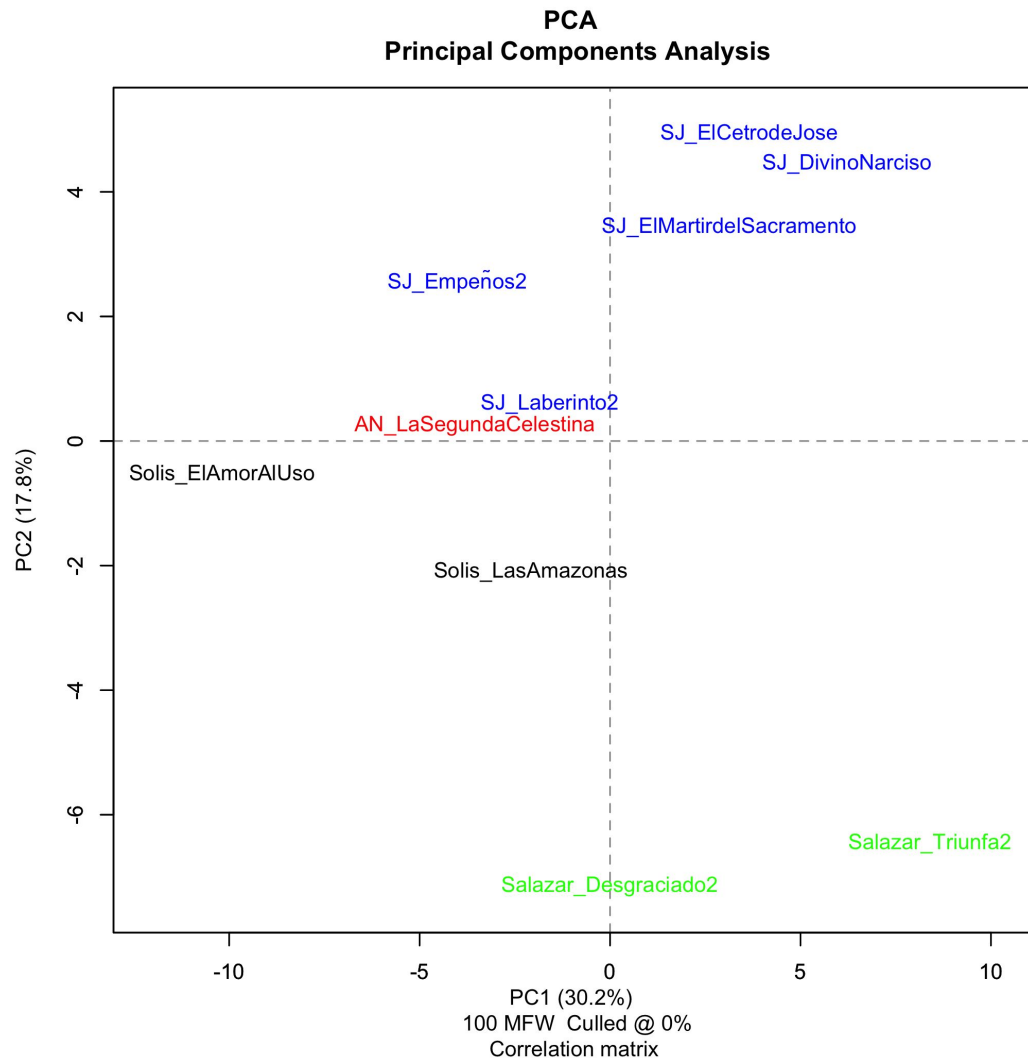


Anonymous
ending



PCA

Complete SC play



oiga una vez, que en la Region vacia
á Procris repeta:
y conociendo mi pasión penosa,
fuese el Alba zelosa,
con que he quedado aora,
sin Procris, sin remedio, y sin la Aurora;
pero la Aurora ha de vencer primero,
yá su belleza quíbro:
mi afeto, mi pasión, y Procris muestra
Vive el Cielo, Moscon, que si la viera,
huyera de ella, aun con mayor tormento;
ni aun tengo de decirlo que siento,
por huir della, me holgára el encontrarla.

Entre Luna, Procris?

Ceph. Procris dixerón: Vol á hablarla.

Mofe. Tente, aguarda, señor: que te atropella?

Ceph. Ven, verémos á Procris. *Mofe.* No huyes della?

Ceph. Ven, que del pecho aun oy arde la llama,
que Procris ha encendido.

Ya á entrar, y salen Procris, y Luna, con arcos,

y flechas.

Procr. Quien me llama?

Ceph. Yo, señora, que en mi daño
con vuestro nombre he querido,
que el olvido
no halle puerta al defengaño.

No, porque yo busqué medio
para curar mi dolor,
que mi amor
no solicite remedio.

Y es tanto mi desvario,
que aun os adoro en mi pena,
siendo agena,

y no pudiendo ser mio.

Y es tal el cuidado nuestro,
que ser no puedo, en mi abismo,
de mi mismo,

ni vos queréis que sea vuestro.

Acabad en mi cuidado,
y pues muero aborrecido
de ofendido,
meera de defengañado.

Procr. Cephalo, dize á entender:
porque en tu amor, ó tu pena,
ni yo agena,
ni tu mio puedes ser.

Si es porque tu temeroso
estás de tu misma culpa,
no es disculpa,
anticiparte quexoso.

Ceph. Vos os disculpais aora,

Procr. Y tu disculparte quieres

Ceph. Os Photo eres.

Procr. Y tu eres de la Aurora?

Que para aumentar mi daño,
quando amante te buscaba,
escuchaba

yo misma mi defengaño.

Desde esse bosque intrincado
te vi, y tu, Aurora querida,
yo escondida,

y mi daño declarado.

Y quando precipitada
iba á estorvar tus amores,
mis rigores

detuvo aquesta criada.

Aguarda, Procris, detente,
dixo, y quedaste turbado,
y tu cuidado

hizo á la Aurora impaciente.

Mira si falta otra cosa,
que cuente en lo sucedido,
tu rendido,

y el Alba se fue zelosa.

Ella venganzas previno,
no seas contigo tyrano,
ni lo humano

iguales con lo divino.

Ceph. Vos misma, porque os aflombró
os satisficis aora,
si á la Aurora

la dexé por vuestro nombre.

Pero vos en tanto empeño,
qué satisfacción darteis,
si tenéis

admitido yá otro dafño?

Hablan los dos á parte.

Mofe. Luna, como vide amante á

Luna. Dizeame, que eres cansado,
y menguado.

Mofe. Y tu, Luna, eres menguante?

Como ha sido mi fortuna,
pues si á amante me provooco,
como loco

siempre he de andar con la Luna.

Y por mas que amante puedo,
quando con mayor decoro
yo te adoro,

siempre á la Luna me quedo.

Pero rendido me tienes,
que aunque tus males son hartos,
tienes quarto.

Luna. Por esto tango los dientes
y así en tu corta fortuna,
aunque tu amor pagaré,

«»go una tcz, que en la Rf o iCs ■ a i ríais repetía; S
VoCi3 I Cor.ccierto mi psfsicn penosa,
ti A loa zí lofa, <oa que be quedado sera, En Prccrís,
ijn r j ya lu belleza culero;
' P ° ' Viiflfr-f tf?0 * y Prc ^n-uer3 , ni Zif
Wng° ¿ ¿ "cWa lo
¿ que fc^
BtO*
^rocris ditzren : VV>} ir . «* ■ ?» rSaí^¿rsn
E' l! que Procris ba encendido * " dama, * * * tnitar> P
Ms Procri; y l/{ „. Prwr. Quien te e !la raa ? Cephal.Yo.
fenora, quc . „ - 7 7*\" ° ° »|« be aueliíc °
q4J c! olvijo * * ec hauepa-t - 3 a j defengaño. * ° '
porque yo bufque medía
para tarar mi dolqr, que to! 23!Cr \" ° fólidra remedio.
Yes Unto oidcfvarlo, sur^r
y^ofulhndofcr a ^mío. Y e* tal ti cuidado nueíiro, que
\"roa puedo, en mi abjfine, de mi toifcio, ; 4 £™r\"S
^viiñrOa JV-abad en m; cuidado, y pues muero
aborrecido oc ofendido, muera de defengañado.
«Vírr.Cepbalo, daré á cotender» Fr ^« e en .n, amorró
tu pena,