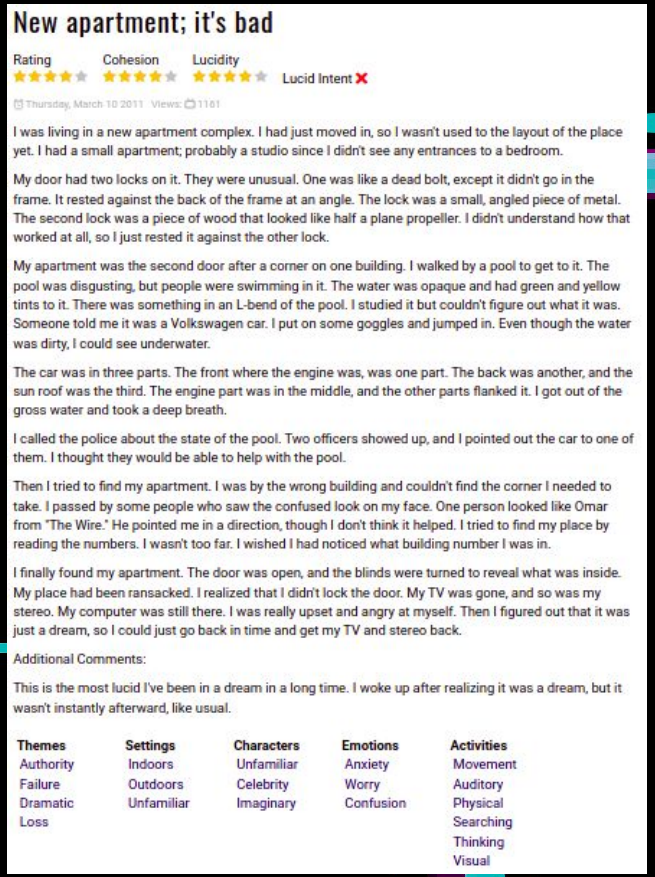
Laboratorio de datos

ANÁLISIS DE SUEÑOS

Joaquin Machulsky
Daniela Villani
Alejandro Wainstock

LOS DATOS

- 14 archivos en formato pickle con relatos de sueños de www.dreamjournal.net
- 124375 filas en el archivo original, encaramos el análisis con 123723 filas
- Columnas originales: `id`, `user`, `url`, `text`, `raices`, `rating`, `cohesion`, `lucidity`, `intent` y `technique`
- Palabras y términos totales (con repeticiones) 38882980
- Lemmatize y tokenization, recalculamos las raíces con `wordnet_lemmatizer`



New apartment; it's bad

Rating ★★★★☆ Cohesion ★★★★☆ Lucidity ★★★★☆ Lucid Intent ✗

Thursday, March 10 2011 Views: 1161

I was living in a new apartment complex. I had just moved in, so I wasn't used to the layout of the place yet. I had a small apartment; probably a studio since I didn't see any entrances to a bedroom.

My door had two locks on it. They were unusual. One was like a dead bolt, except it didn't go in the frame. It rested against the back of the frame at an angle. The lock was a small, angled piece of metal. The second lock was a piece of wood that looked like half a plane propeller. I didn't understand how that worked at all, so I just rested it against the other lock.

My apartment was the second door after a corner on one building. I walked by a pool to get to it. The pool was disgusting, but people were swimming in it. The water was opaque and had green and yellow tints to it. There was something in an L-bend of the pool. I studied it but couldn't figure out what it was. Someone told me it was a Volkswagen car. I put on some goggles and jumped in. Even though the water was dirty, I could see underwater.

The car was in three parts. The front where the engine was, was one part. The back was another, and the sun roof was the third. The engine part was in the middle, and the other parts flanked it. I got out of the gross water and took a deep breath.

I called the police about the state of the pool. Two officers showed up, and I pointed out the car to one of them. I thought they would be able to help with the pool.

Then I tried to find my apartment. I was by the wrong building and couldn't find the corner I needed to take. I passed by some people who saw the confused look on my face. One person looked like Omar from "The Wire." He pointed me in a direction, though I don't think it helped. I tried to find my place by reading the numbers. I wasn't too far. I wished I had noticed what building number I was in.

I finally found my apartment. The door was open, and the blinds were turned to reveal what was inside. My place had been ransacked. I realized that I didn't lock the door. My TV was gone, and so was my stereo. My computer was still there. I was really upset and angry at myself. Then I figured out that it was just a dream, so I could just go back in time and get my TV and stereo back.

Additional Comments:

This is the most lucid I've been in a dream in a long time. I woke up after realizing it was a dream, but it wasn't instantly afterward, like usual.

Themes	Settings	Characters	Emotions	Activities
Authority	Indoors	Unfamiliar	Anxiety	Movement
Failure	Outdoors	Celebrity	Worry	Auditory
Dramatic	Unfamiliar	Imaginary	Confusion	Physical
Loss				Searching
				Thinking
				Visual

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de sueños de www.d
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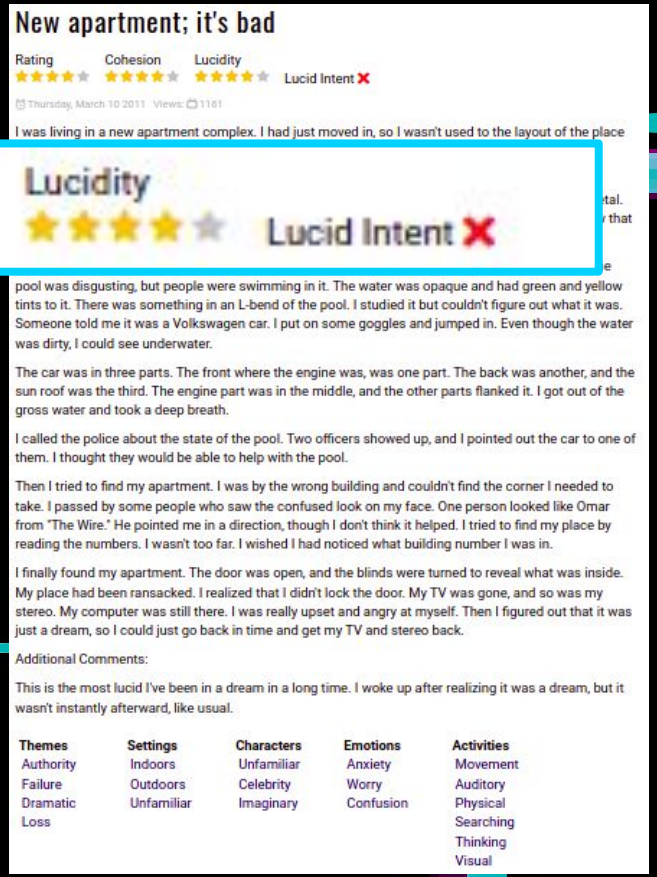

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Loss				Searching
				Thinking
				Visual

¿QUÉ SUEÑAN?

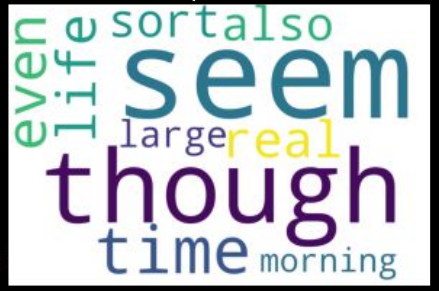
¿QUÉ PREFIEREN LOS DEMÁS?

¿SE PUEDEN CLASIFICAR LAS MÉTRICAS?

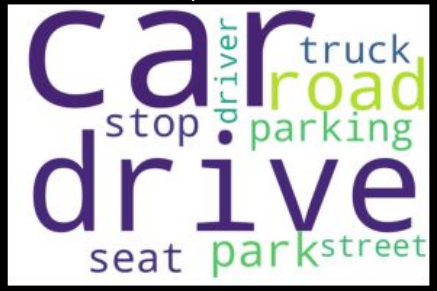
¿QUÉ SUEÑAN?

TÓPICOS

Tópico 0



Tópico 1

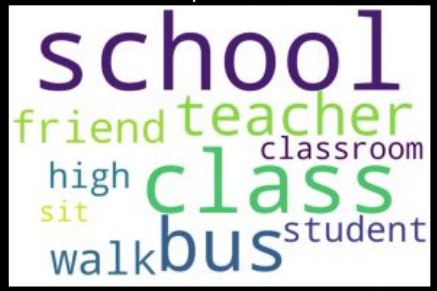


Tópico 2

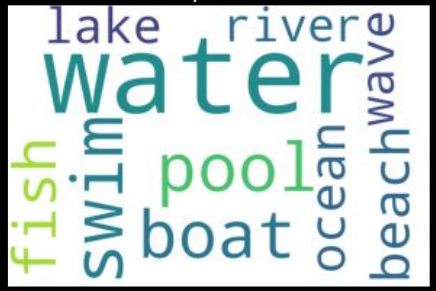
Tópico 3

Tópico 4

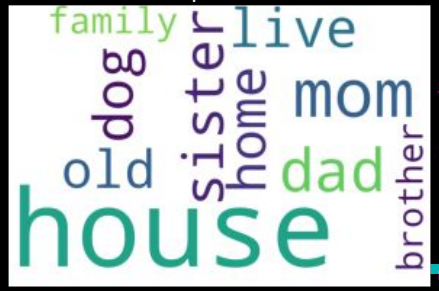
Tópico 5



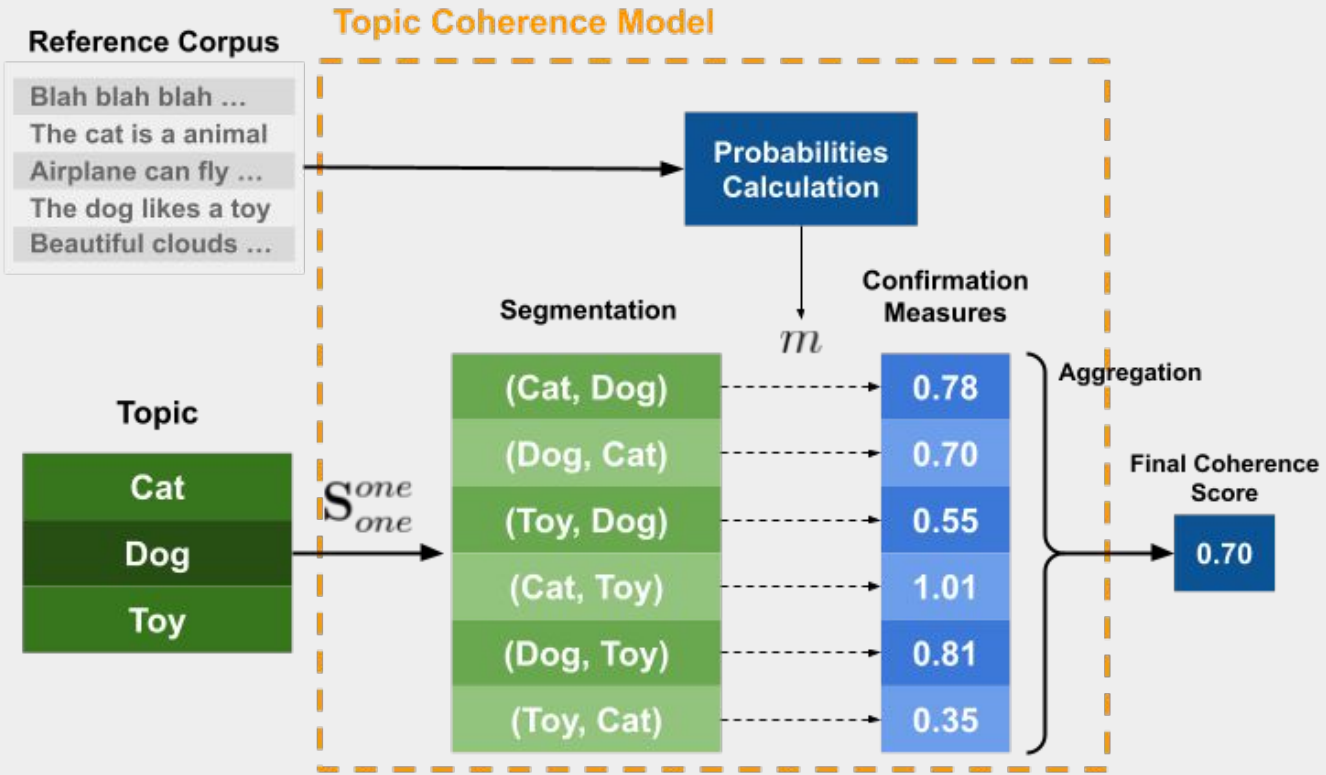
Tópico 6



Tópico 7

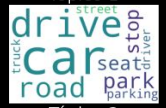


COHERENCIA EN LOS TOPICOS



https://towardsdatascience.com/understanding-topic-coherence-measures-4aa41339634c

Tópico 0
seem
though
time
sort
even
life
also
morning
large
real

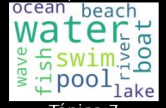

Tópico 1
drive
car
road
park
seat
stop
street
truck
driver
parking

Tópico 2
guy
something
would
remember
really
girl
thing
want
know
friend

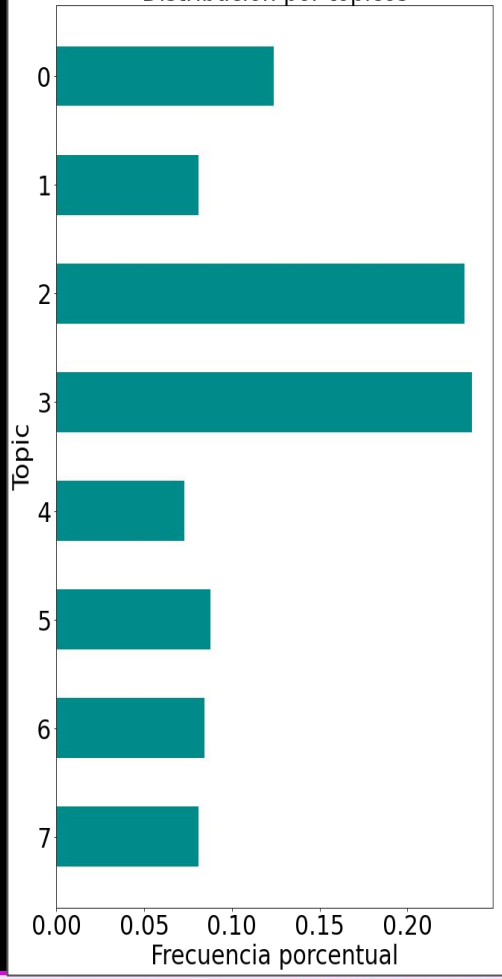
Tópico 3
room
door
open
run
walk
around
woman
start
man
bed

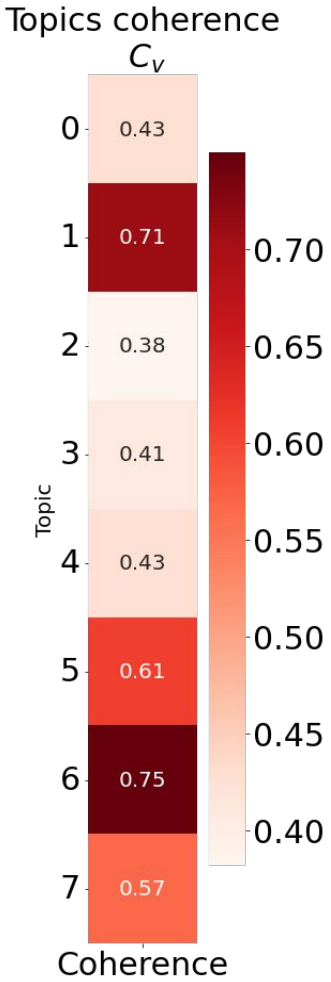
Tópico 4
think
recall
around
sure
try
want
since
felt
something
mom

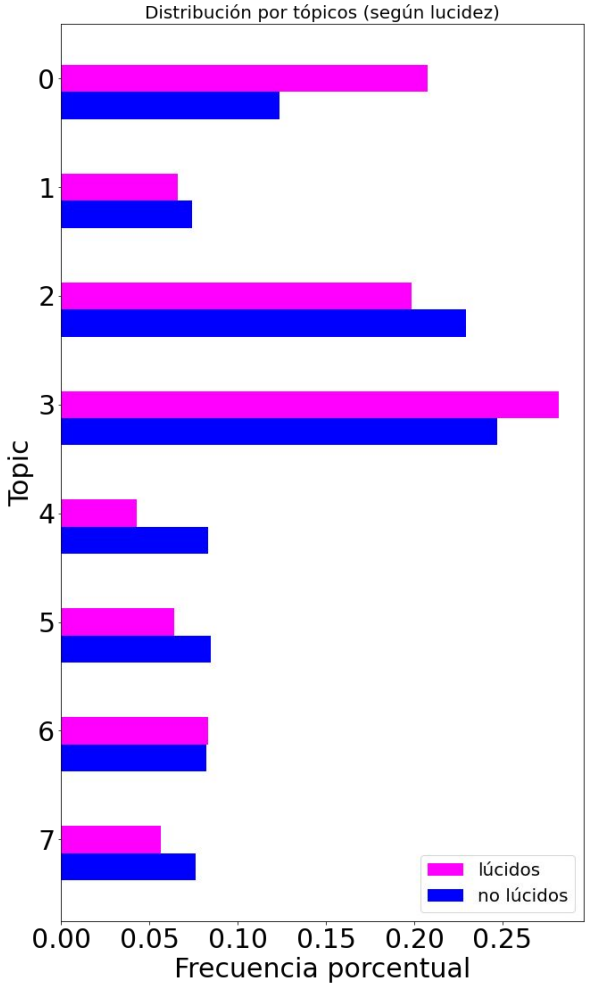
Tópico 5
bus
school
class
friend
student
walk
high
teacher
classroom


Tópico 6
water
ocean
beach
swim
pool
lake
river
boat
wave
fish

Tópico 7
house
old
sister
family
home
mom
dad
dog
brother
live

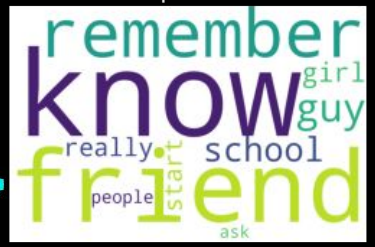

Distribución por tópicos
Topic
0
1
2
3
4
5
6
7
0.00
0.05
0.10
0.15
0.20
Frecuencia porcentual


Topics coherence
C_v
Topic
0
1
2
3
4
5
6
7
0.43
0.71
0.38
0.41
0.43
0.61
0.75
0.57
0.70
0.65
0.60
0.55
0.50
0.45
0.40
Coherence

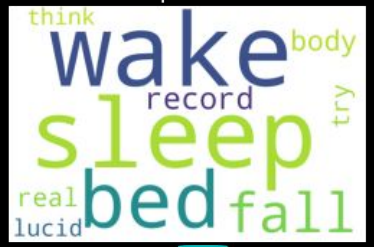

Distribución por tópicos (según lucidez)
Topic
0
1
2
3
4
5
6
7
lúcidos
no lúcidos
0.00
0.05
0.10
0.15
0.20
0.25
Frecuencia porcentual

¿SOBRE QUÉ SUEÑAN LÚCIDAMENTE?

Tópico 0



Tópico 1



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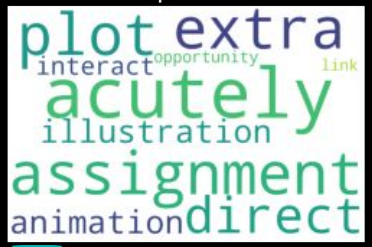
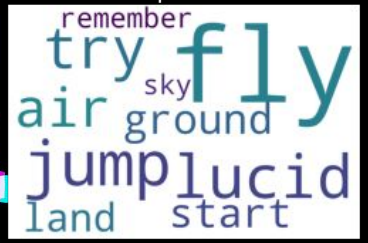
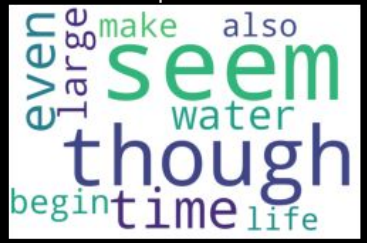


Tópico 3

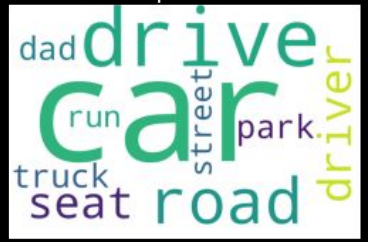
Tópico 4



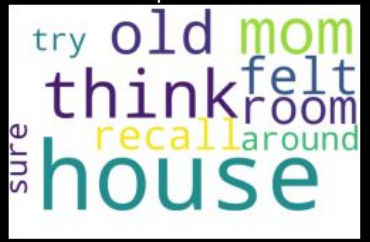
Tópico 5

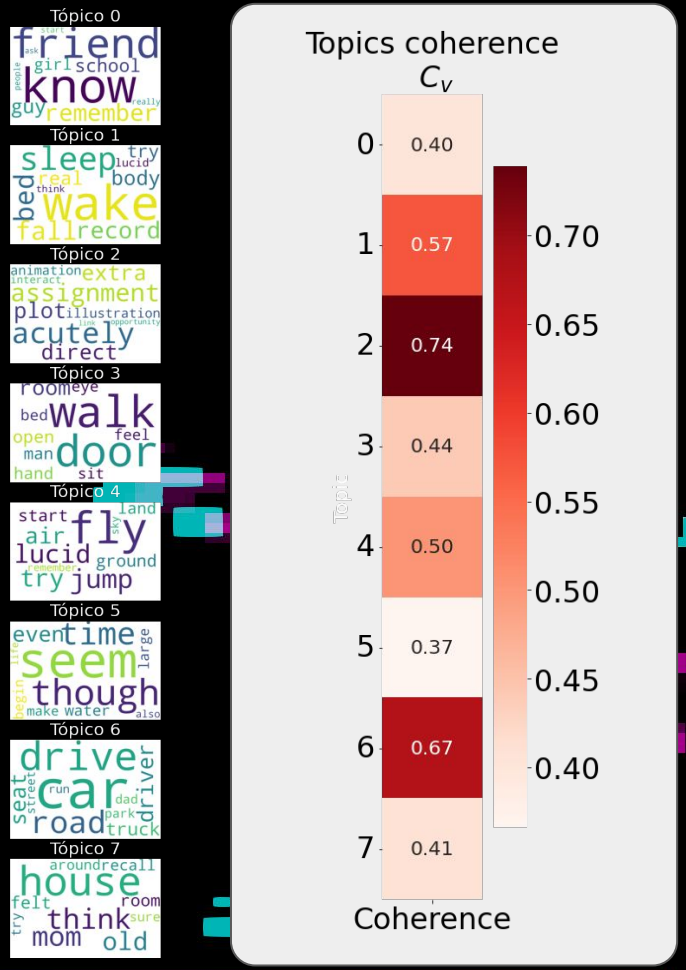


Tópico 6



Tópico 7

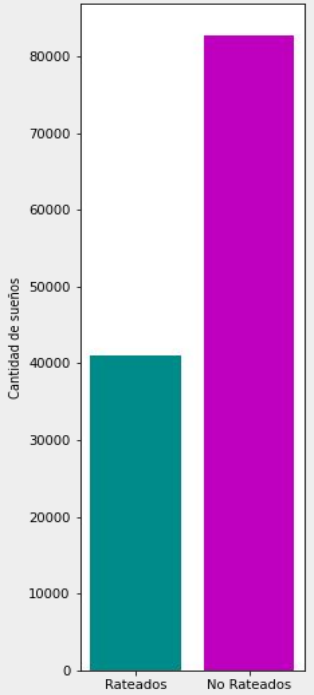


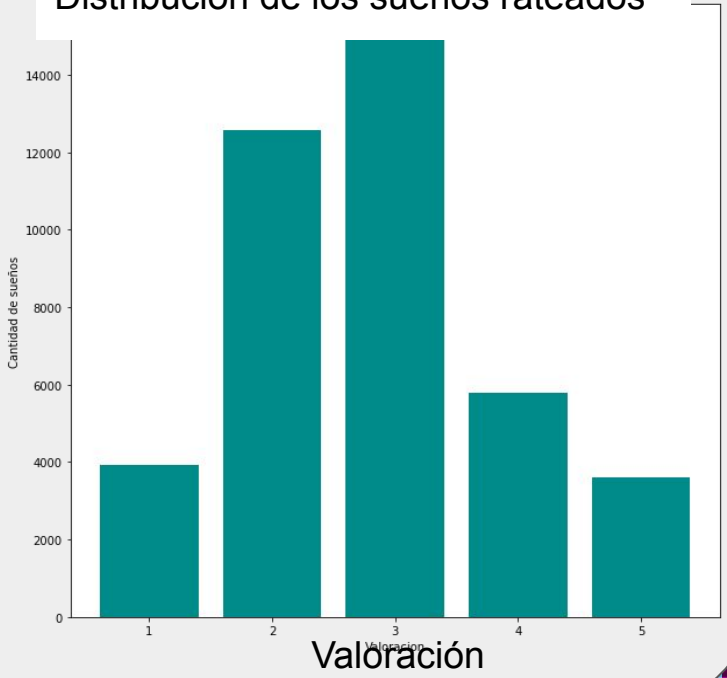

Tópico 0
friend
know
girl
school
guy
remember
Tópico 1
sleep
wake
bed
fall
record
Tópico 2
assignment
plot
acutely
direct
Tópico 3
walk
door
room
bed
open
man
hand
sit
Tópico 4
fly
start
air
lucid
try
jump
land
ground
Tópico 5
seem
time
though
event
large
make
water
Tópico 6
drive
car
road
seat
driver
truck
Tópico 7
house
think
mom
old
felt
room
around
recall
Topics coherence
C_v
0
1
2
3
4
5
6
7
0.40
0.57
0.74
0.44
0.50
0.37
0.67
0.41
Topic
Coherence
0.70
0.65
0.60
0.55
0.50
0.45
0.40

¿QUÉ PREFIEREN LOS DEMÁS?

- ¿Sueños lúcidos?
- ¿Sueños coherentes?
- ¿Sueños de algún usuario específico?

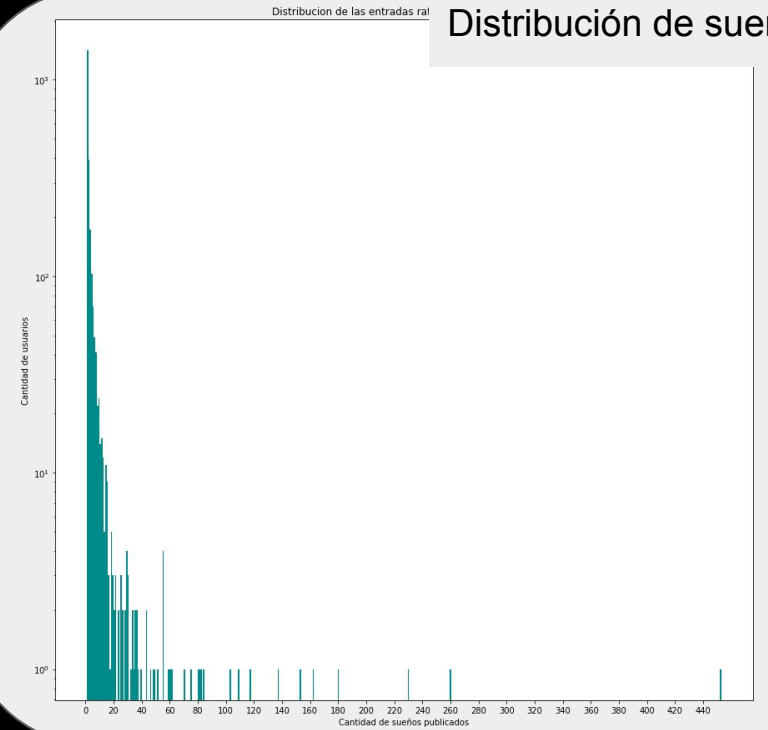
¿QUÉ PREFIEREN LOS DEMÁS?

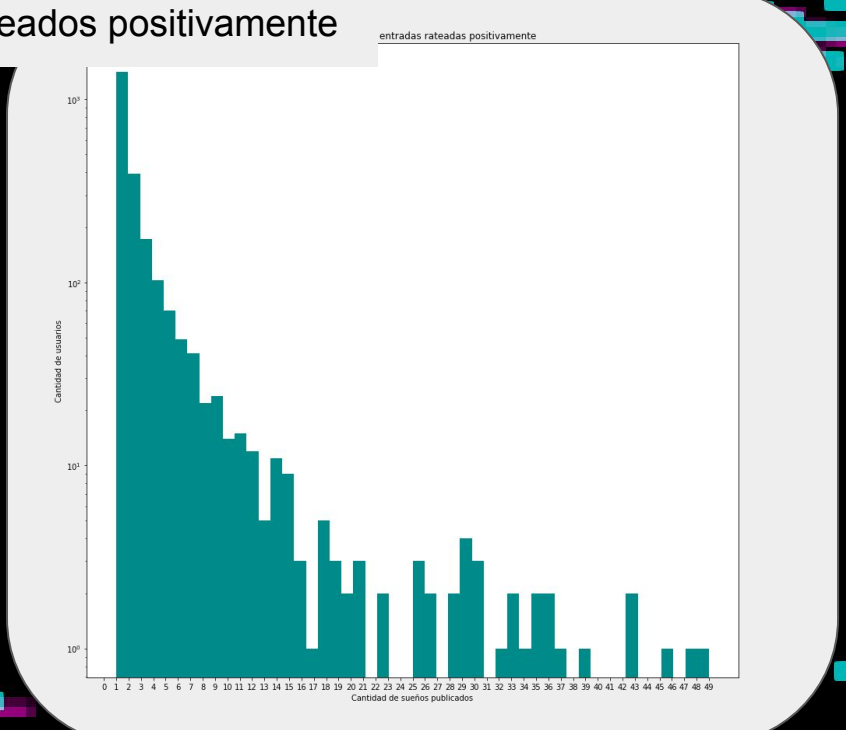




¿QUÉ PREFIEREN LOS DEMÁS?

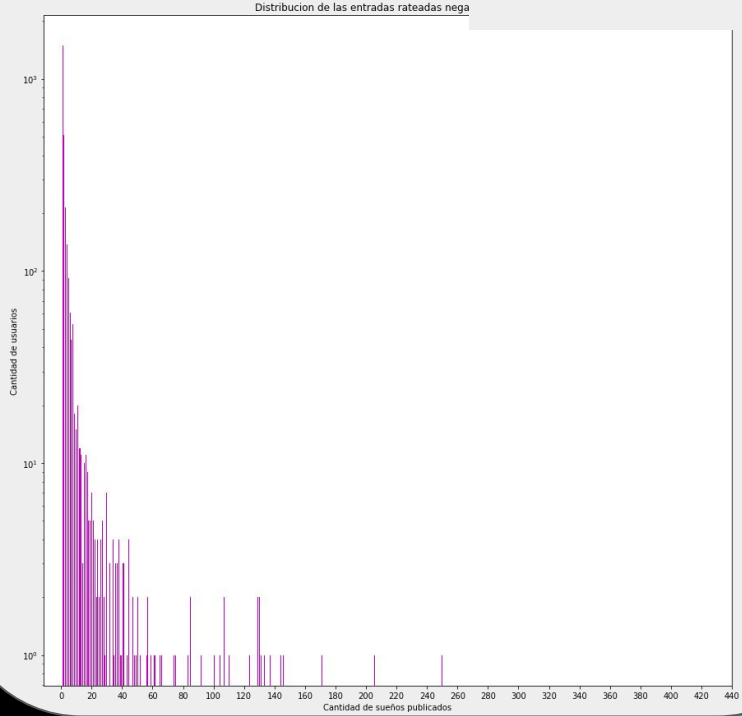
Distribución de sueños rateados positivamente

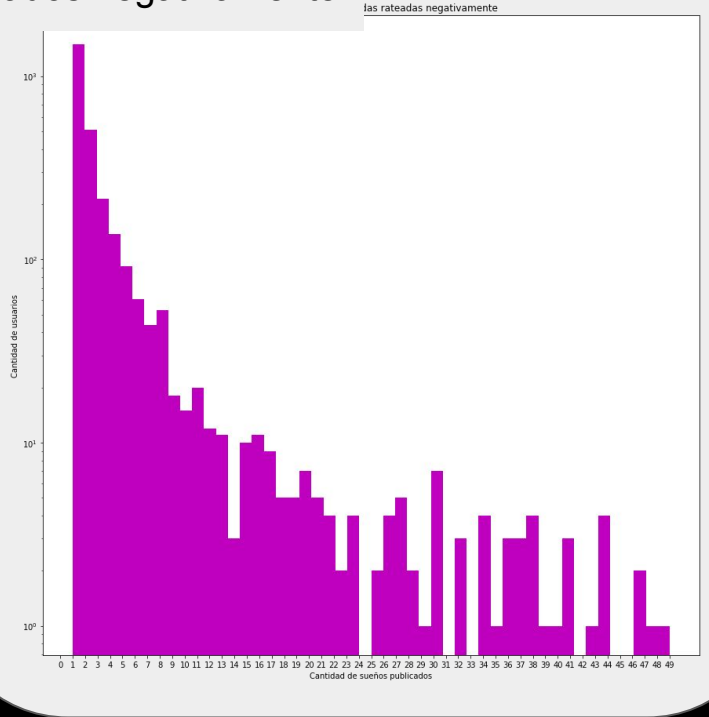




¿QUÉ PREFIEREN LOS DEMÁS?

Distribución de sueños rateados negativamente





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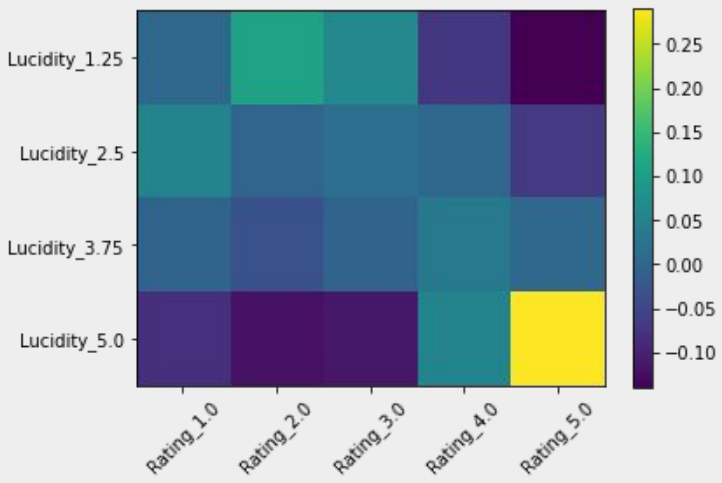
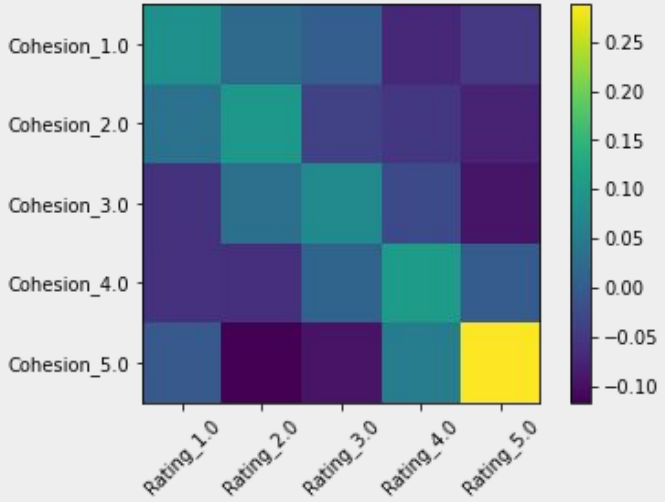


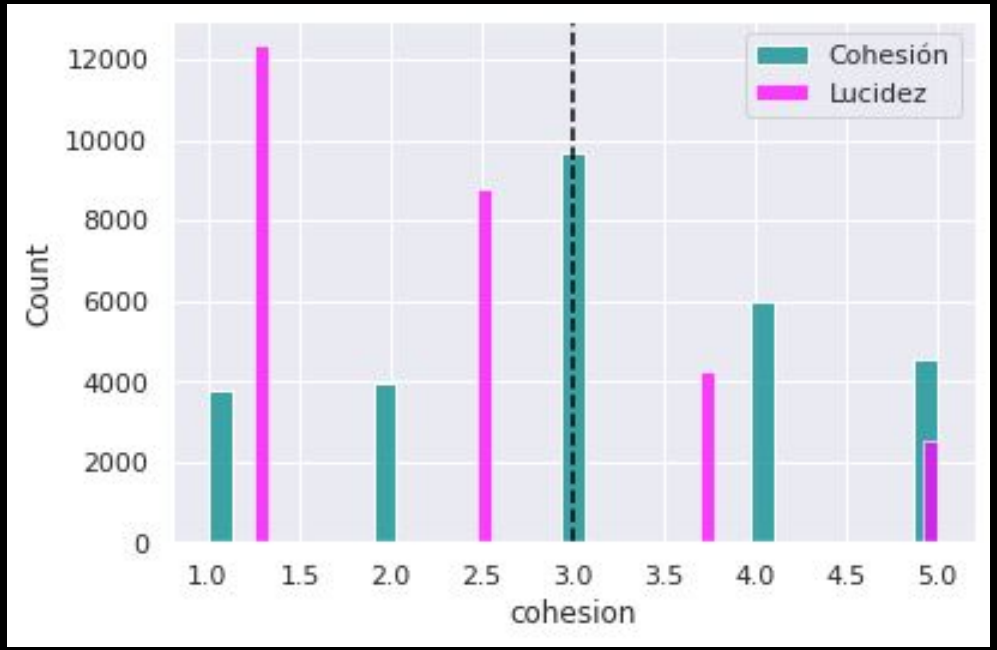


¿QUÉ PREFIEREN LOS DEMÁS?

AUC

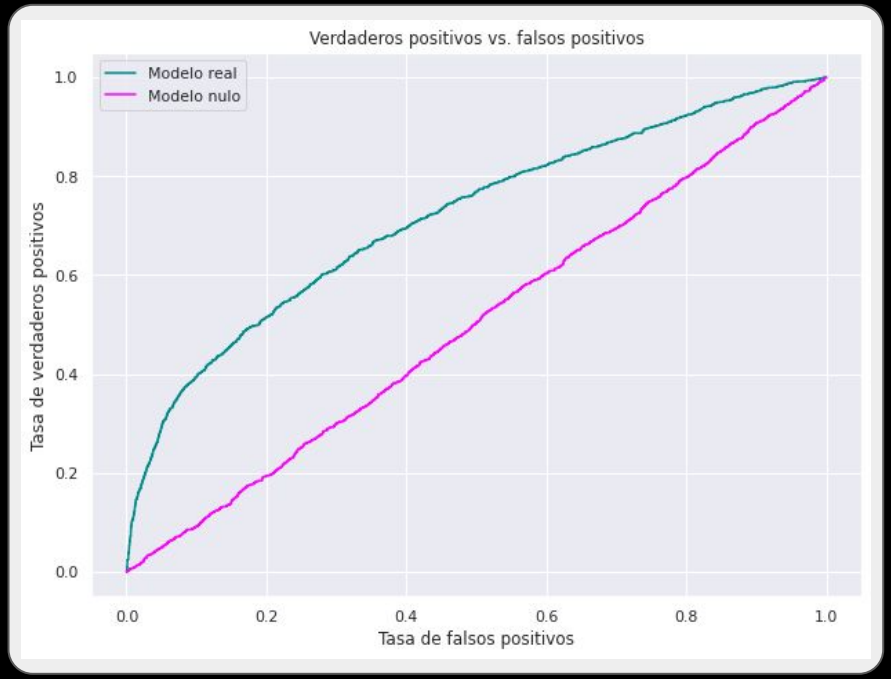
Train 0.66 Test 0.80

CLASIFICACIÓN

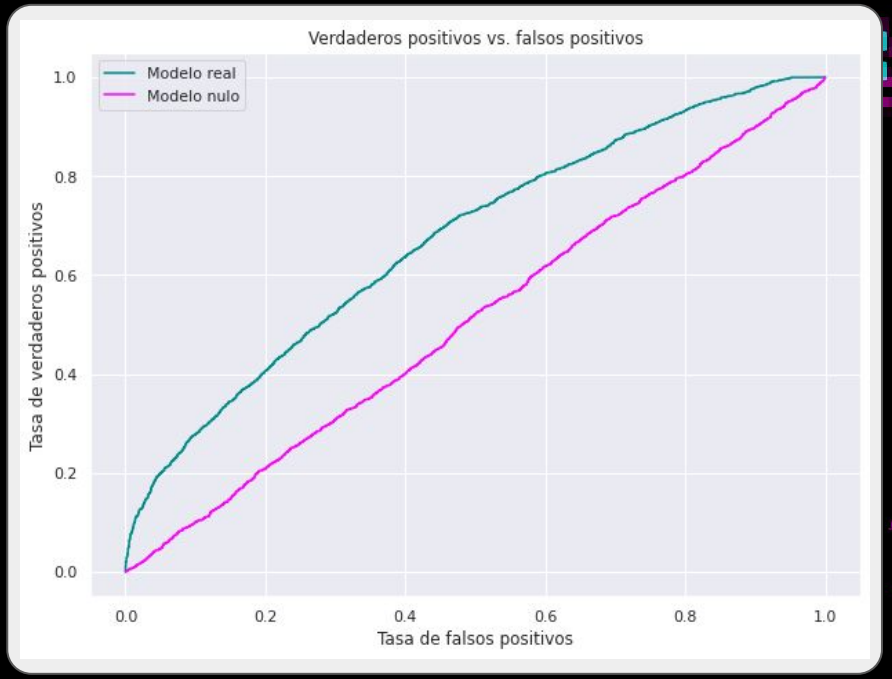


- Paragraph Vector (Doc2Vec) *Representación de documentos como vectores de longitud fija y dimensión reducida.*
- Regresión logística binaria

AUC
Train 0.76 Test 0.71



CONEXIÓN



LUCIDEZ

AUC
Train 0.73 Test 0.67

CONCLUSIONES

- Las predicciones lograron un AUC de test razonable y superior al modelo nulo utilizando únicamente features de entrenamiento provenientes del relato del sueño.
- Considerar la dimensión del modelo y la capacidad de cómputo (tiempo y espacio).
- Pudimos explorar, aunque seleccionamos un subconjunto, prácticamente todas las clases de Procesamiento de Lenguaje Natural.

BONUS TRACK

¿SUEÑA RIVERITO CON OVEJAS ELÉCTRICAS?

LA QUINIELA

- Descargamos los sorteos de Quiniela Nacional desde mayo de 2014 del sitio www.quinielaenvivo.com.ar

Sorteos del día viernes, 02 de mayo de 2014

LA PRIMERA, Quiniela Nacional. 02/05/2014

Cabeza: 6210 - La leche (ver sueños...)

1	**6210**	6	5951	11	2596	16	5615
2	3128	7	6485	12	1804	17	3612
3	8618	8	0563	13	9812	18	6323
4	0661	9	0832	14	2435	19	4964
5	4698	10	8599	15	2833	20	5520

Letras
I G J P

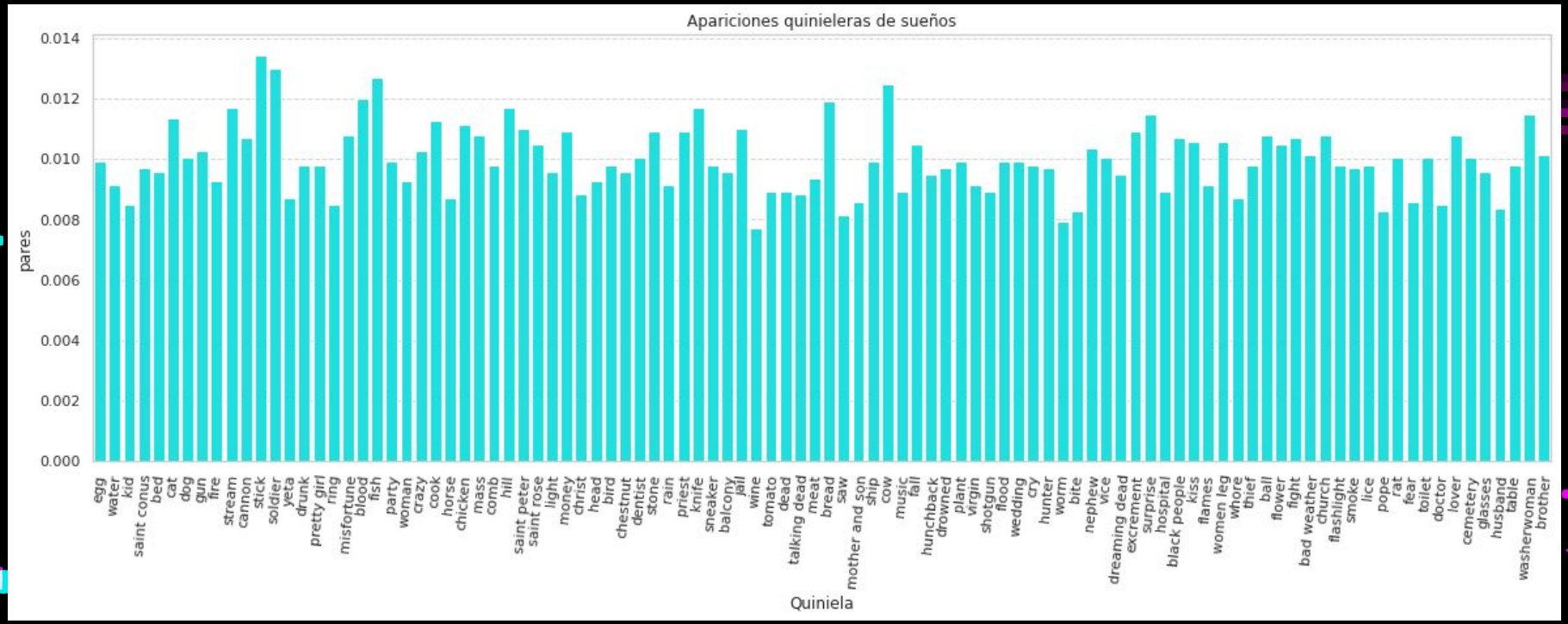
MATUTINA, Quiniela Nacional. 02/05/2014

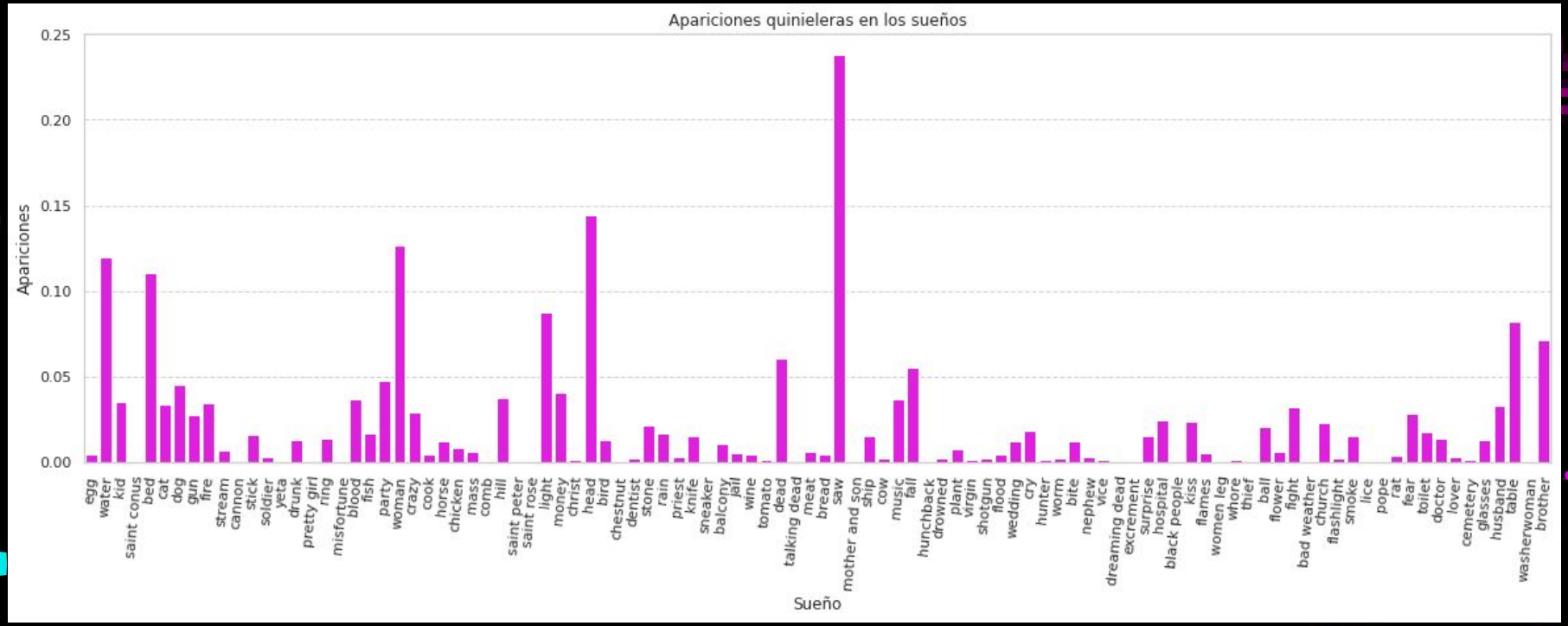
Cabeza: 7274 - Negros (ver sueños...)

1	**7274**	6	4080	11	3241	16	3957
2	5688	7	4453	12	2140	17	3378
3	6321	8	1369	13	1858	18	0089
4	5103	9	4931	14	0243	19	2693
5	3623	10	4791	15	4247	20	3560

Letras
I D N N

	sorteo	fecha	resultado	pares	suenio
count	9070	9070	9070	9070	9070
unique	5	2318	5934	100	100
top	LA PRIMERA	11/05/2022	8117	11	Palito
freq	2280	5	7	122	122


Apariciones quinieleras de sueños
pares
0.014
0.012
0.010
0.008
0.006
0.004
0.002
0.000
egg
water
kid
saint conus
bed
cat
dog
gun
fire
stream
cannon
stick
soldier
yeta
drunk
pretty girl
ring
misfortune
blood
fish
party
woman
crazy
cook
horse
chicken
mass
comb
hill
saint peter
saint rose
light
money
christ
head
bird
chestnut
dentist
stone
rain
priest
knife
sneaker
balcony
jail
wine
tomato
dead
talking dead
meat
bread
saw
mother and son
ship
cow
music
fall
hunchback
drowned
plant
virgin
shotgun
flood
wedding
cry
hunter
worm
bite
nephew
vice
dreaming dead
excrement
surprise
hospital
black people
kiss
flames
women leg
whore
thief
ball
flower
fight
bad weather
church
flashlight
smoke
lice
pope
rat
fear
toilet
doctor
lover
cemetery
glasses
husband
table
washerwoman
brother
Quiniela


Apariciones quinieleras en los sueños
Apariciones
0.25
0.20
0.15
0.10
0.05
0.00
egg
water
kid
saint conus
bed
cat
dog
gun
fire
stream
cannon
stick
soldier
yeta
drunk
pretty girl
ring
misfortune
blood
fish
party
woman
crazy
cook
horse
chicken
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saint peter
saint rose
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christ
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flames
women leg
whore
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ball
flower
fight
bad weather
church
flashlight
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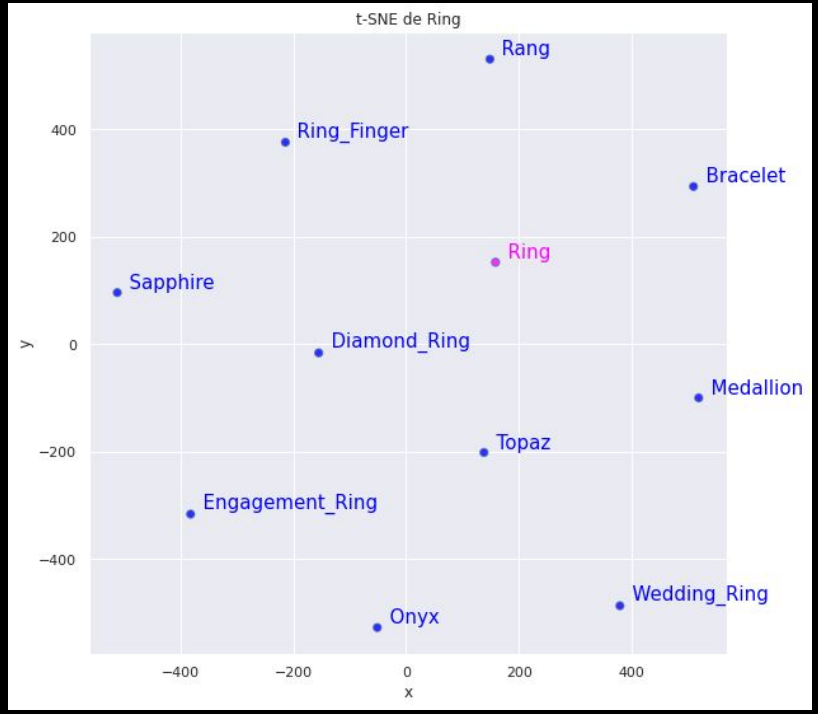
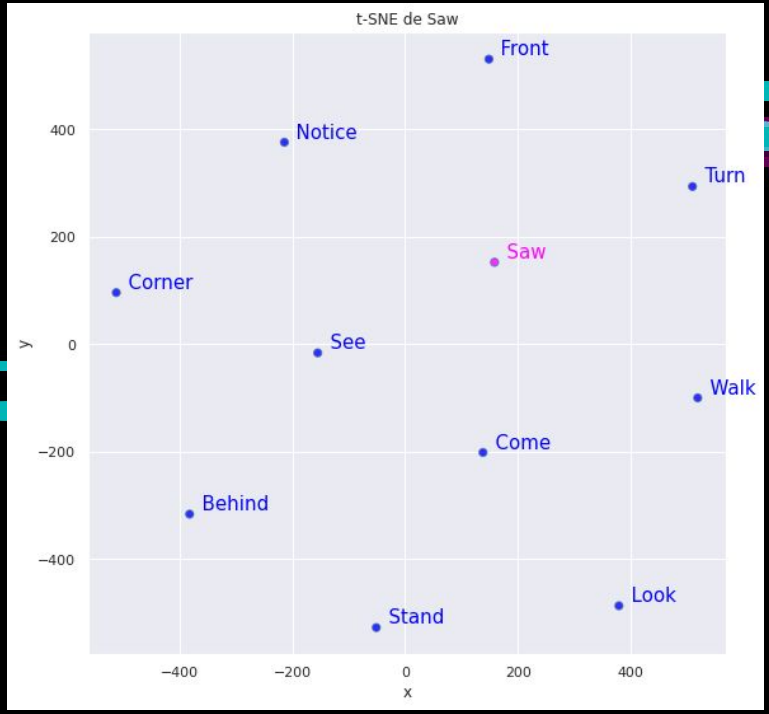
toilet
doctor
lover
cemetery
glasses
husband
table
washerwoman
brother
Sueño


t-SNE de Ring
Rang
Ring_Finger
Bracelet
Ring
Sapphire
Diamond_Ring
Medallion
Topaz
Engagement_Ring
Onyx
Wedding_Ring
400
200
0
−200
−400
y
−400
−200
0
200
400
x


t-SNE de Saw
Front
Notice
Turn
Saw
Corner
See
Walk
Come
Behind
Look
Stand
400
200
0
−200
−400
y
−400
−200
0
200
400
x

PRÓXIMOS PASOS

- Profundizar en el uso de los tópicos y los algoritmos como w2v para perfeccionar los modelos de predicción.
- Sumar análisis de sentimientos.
- Buscar nuevas estrategias para gestionar volúmenes de datos que requieren alta capacidad de cómputo.
- Seguir buscando el secreto para ganar la quiniela

Gracias