

# **Báo cáo đồ án môn Xử lý ngôn ngữ tự nhiên**

## **Lớp CS221.K11**

Thực hiện:

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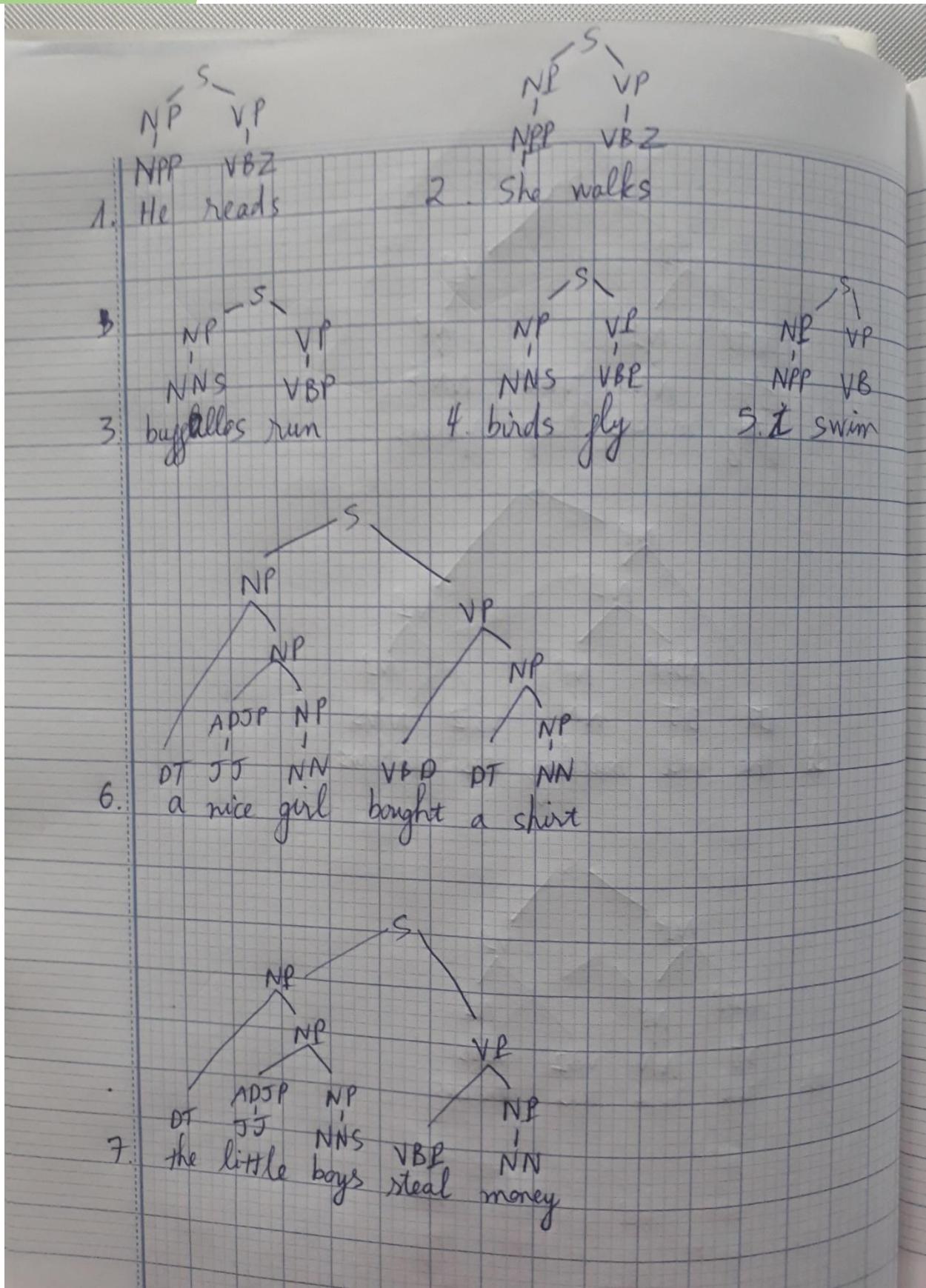
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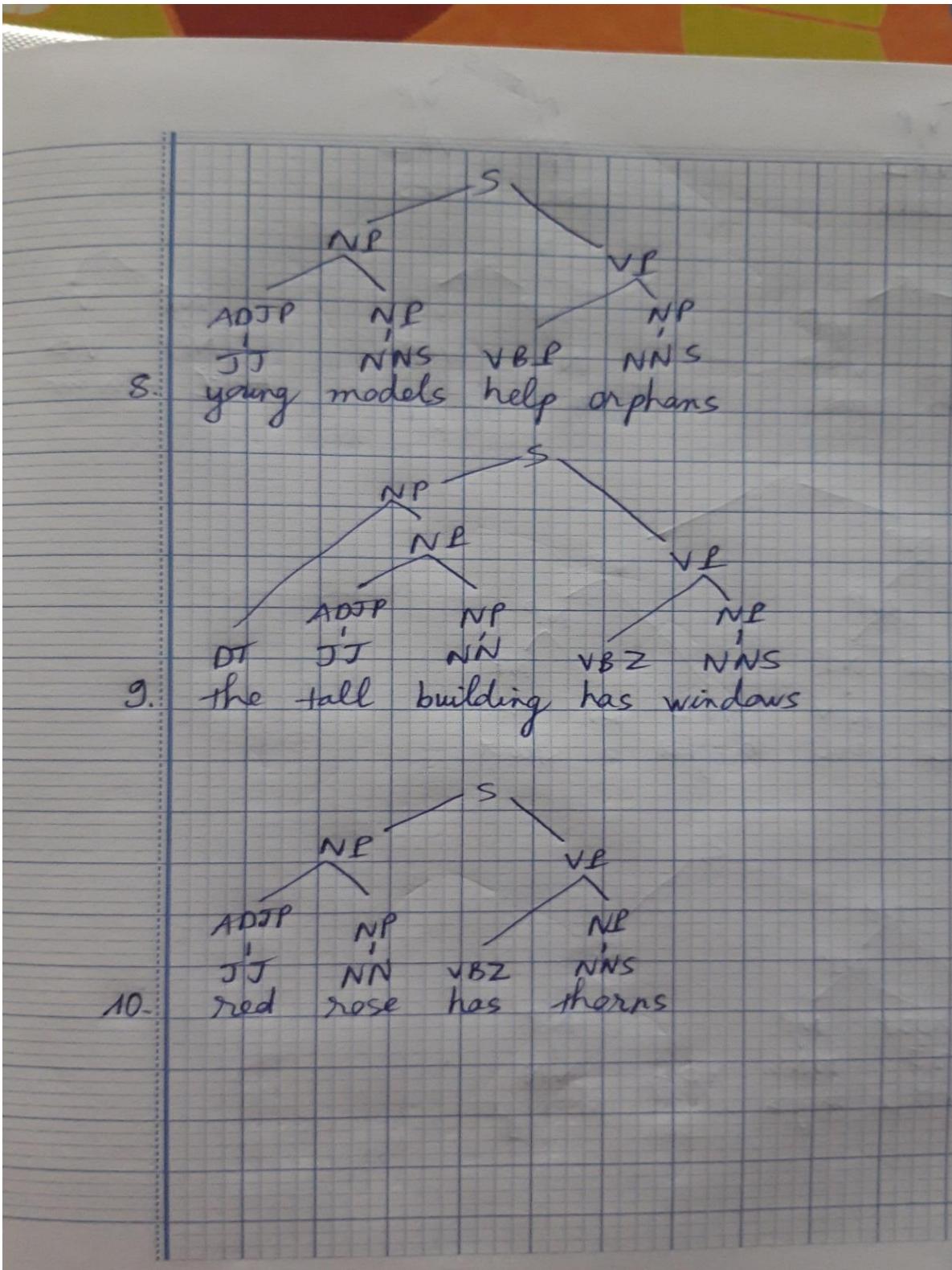
# Tagsets

CC	Liên từ
DT	Định từ
IN	Giới từ
PP	Cụm giới ngữ
JJ	Tính từ
ADJP	Cụm tính ngữ
NN	Danh từ chung số ít
NNS	Danh từ chung số nhiều
NNP	Danh từ riêng số ít
NPP	Đại từ
NP	Cụm danh ngữ
RB	Trạng từ
TO	'to'
VB	Động từ nguyên mẫu
VBD	Động từ thời quá khứ
VBZ	Động từ theo chủ từ ngôi thứ 3 số ít
VP	Cụm động từ

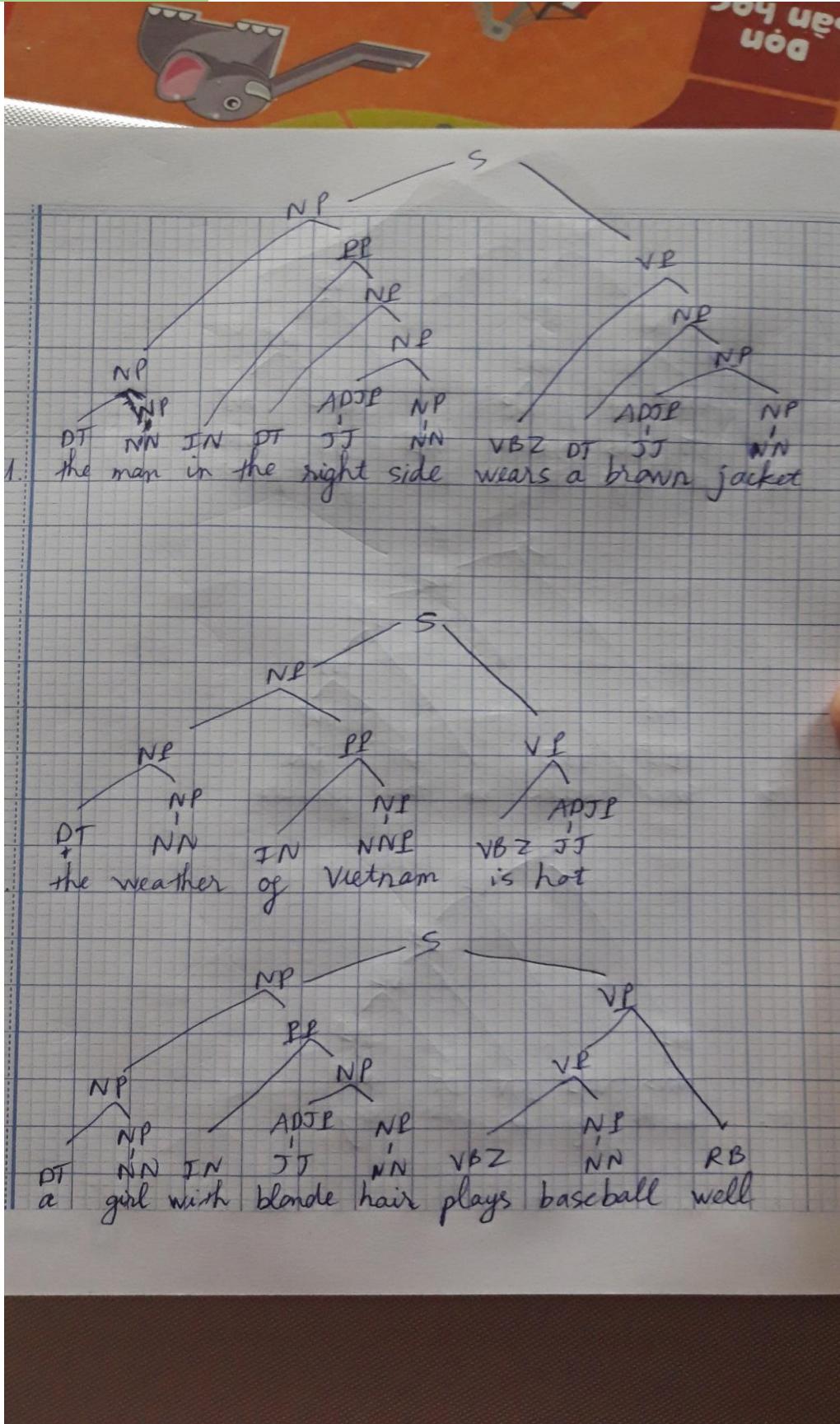
# Cây cú pháp



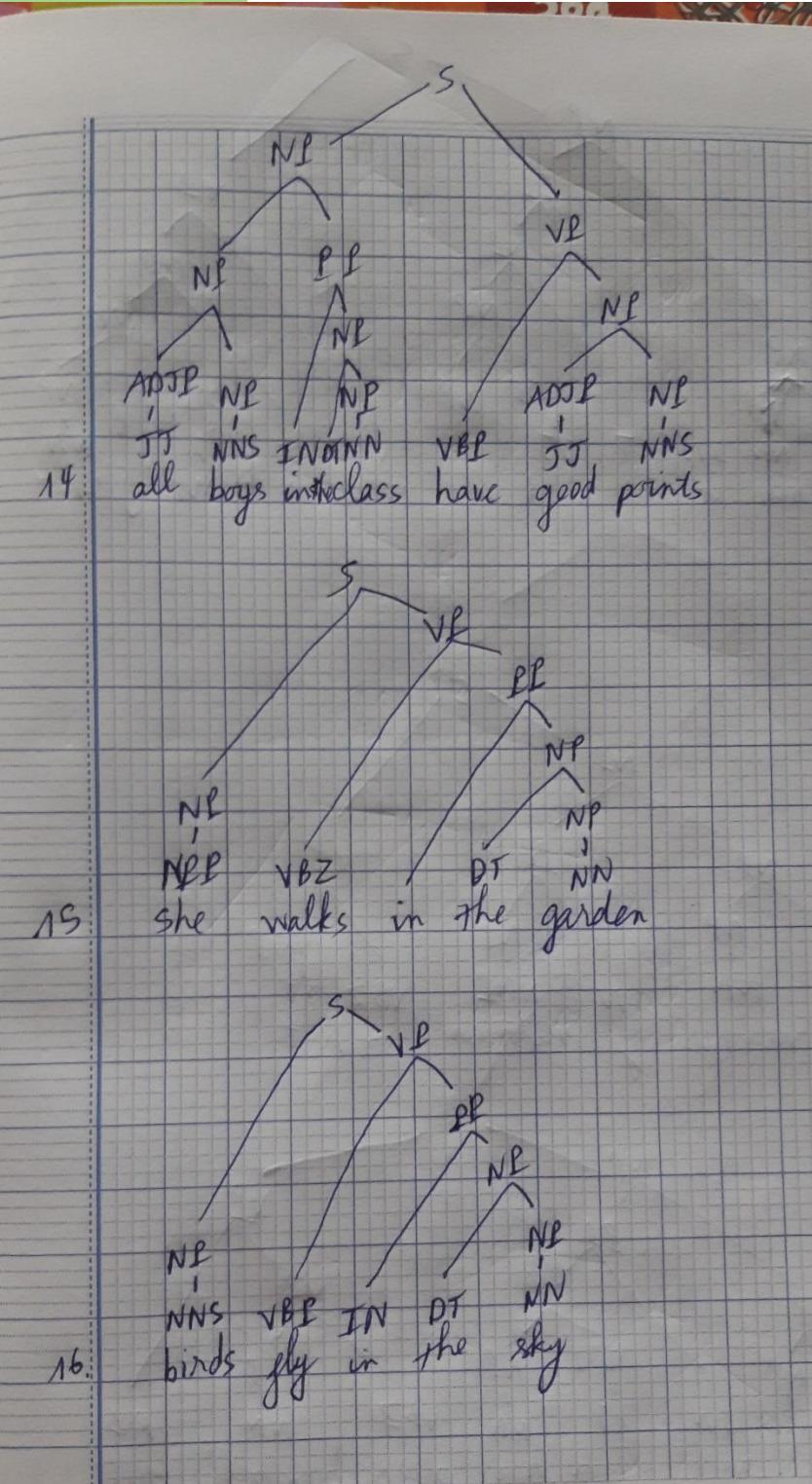
# Cây cú pháp



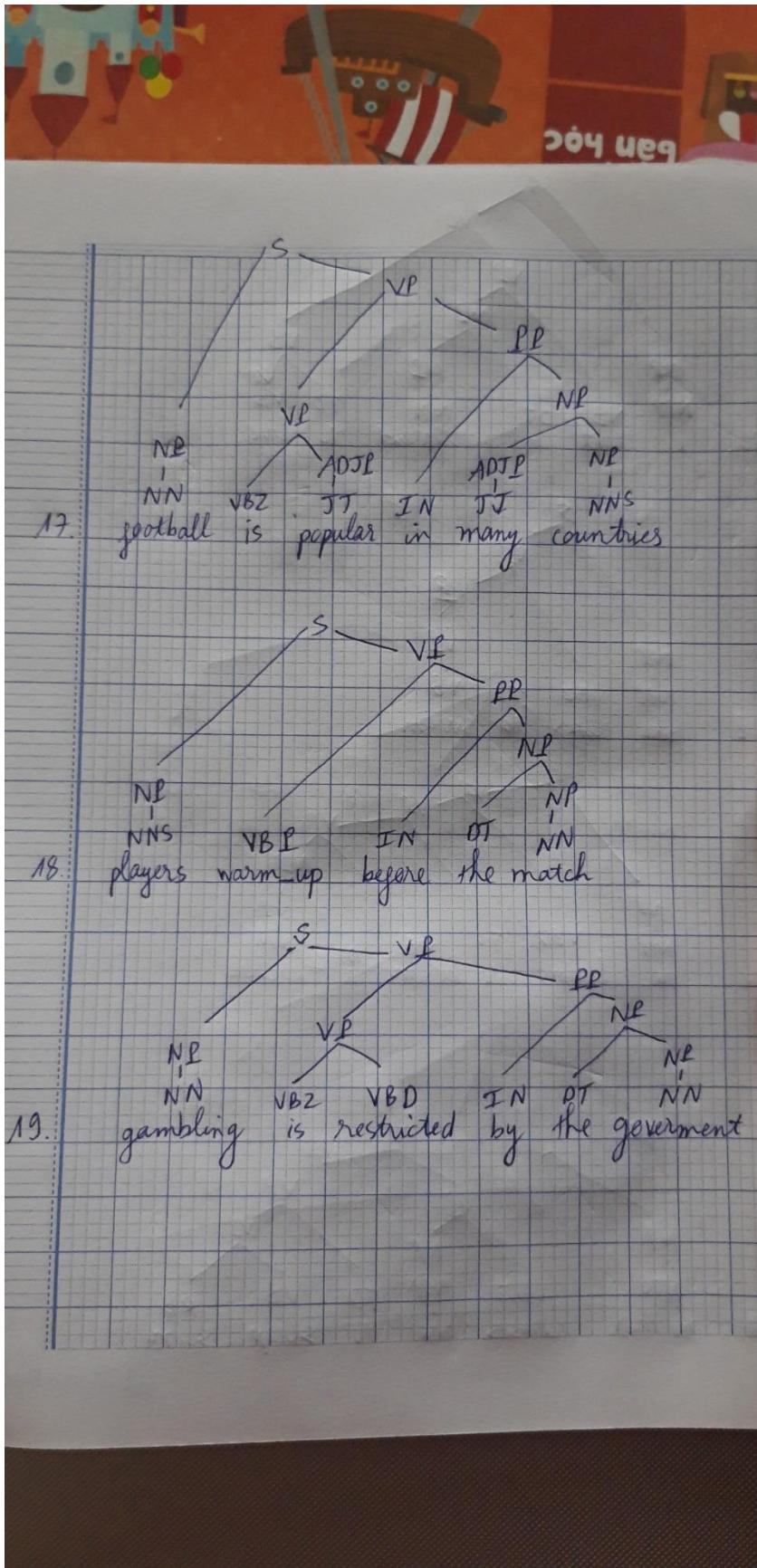
# Cây cú pháp



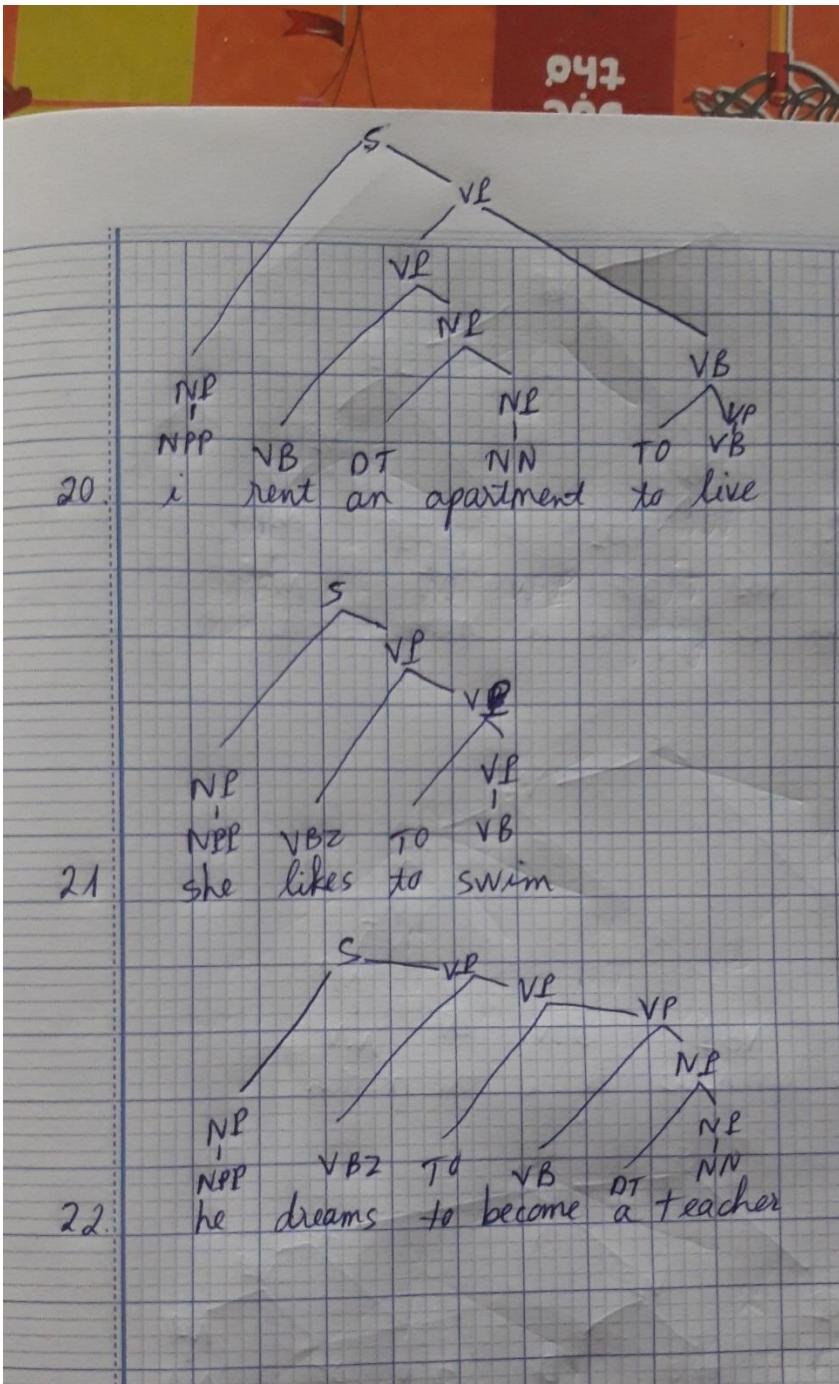
# Cây cú pháp



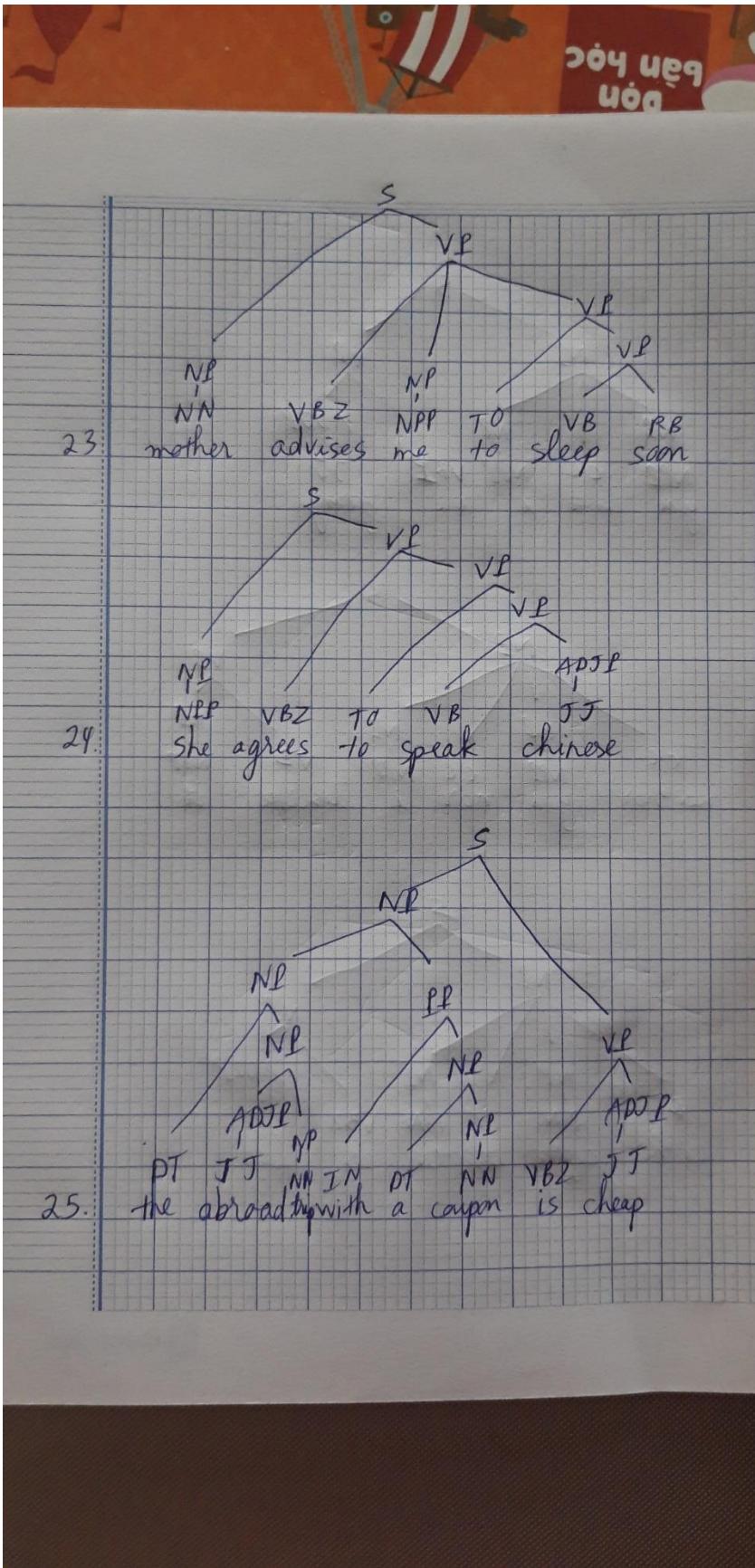
# Cây cú pháp



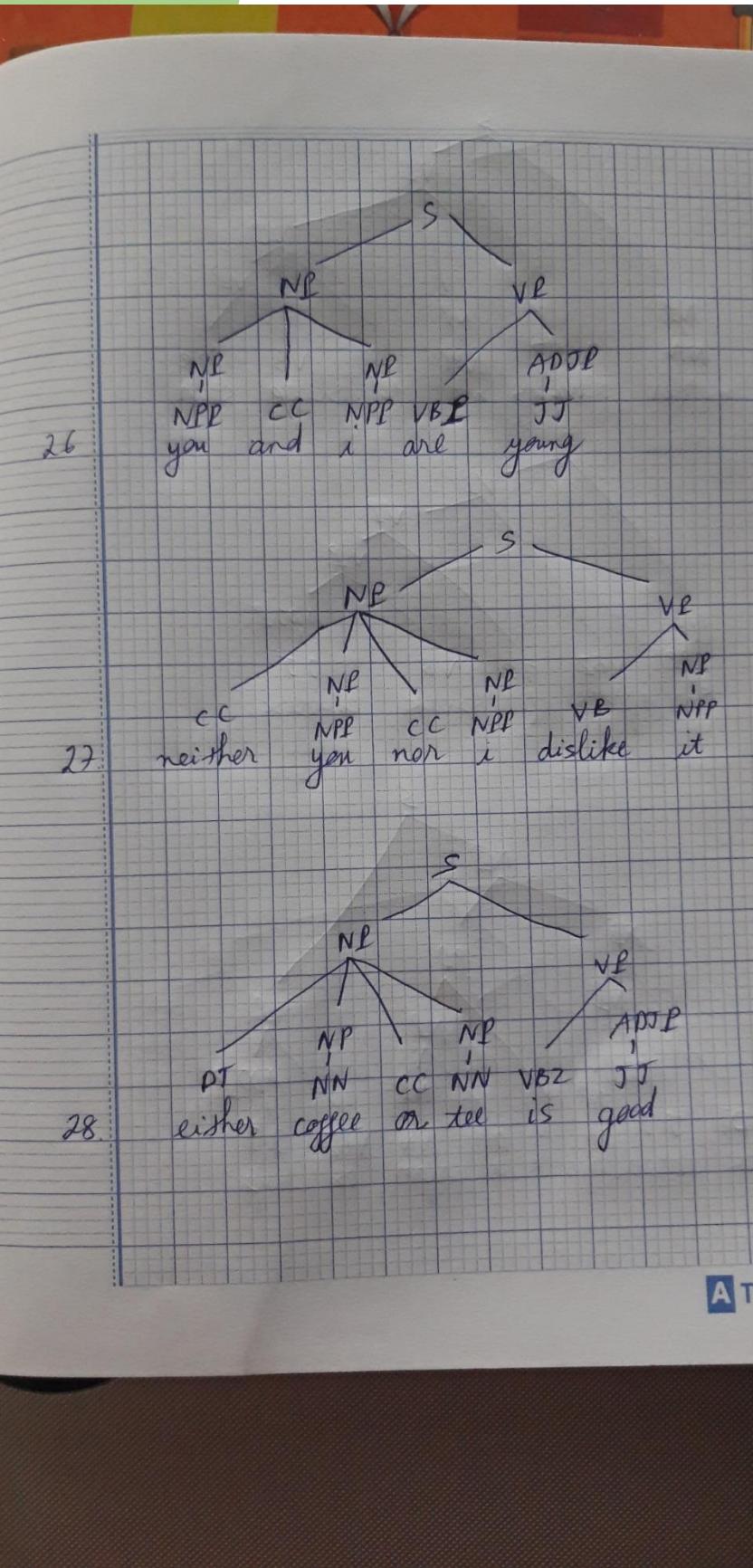
# Cây cú pháp



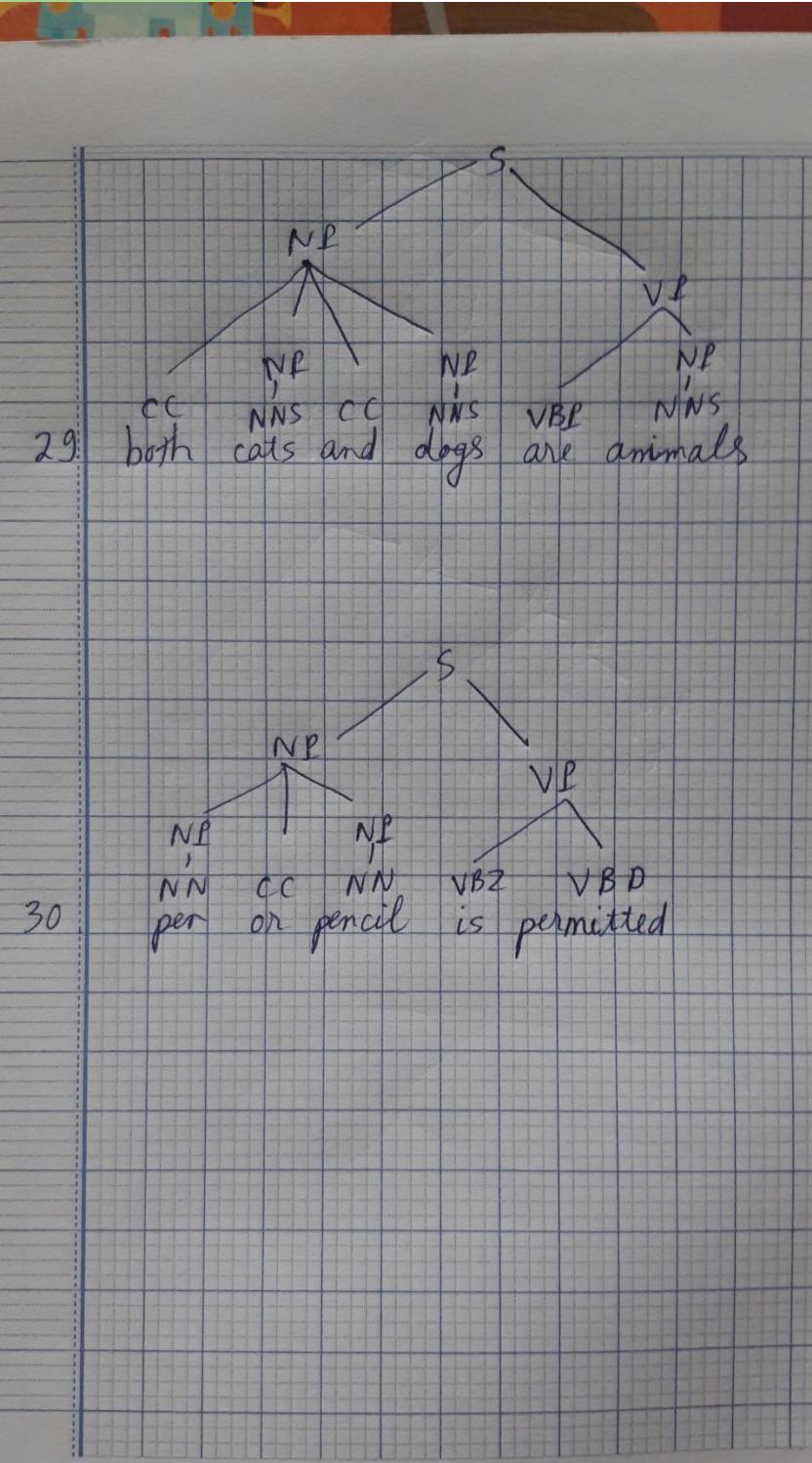
# Cây cú pháp



# Cây cú pháp



# Cây cú pháp



## Ràng buộc Chủ từ- Động từ

Chủ từ	Động từ
boys, players, models, orphans, i, you	speak, bought, steal, help, warm_up, rent, sleep, have, live, dislike, swim, run, restricted, fly
boys, players, models, orphans, you	speak, bought, steal, help, warm_up, rent, sleep, have, live, dislike, swim, run, restricted, fly, are
she, he, man, girl, teacher	has, wears, is, plays, walks, likes, dreams, advises, agrees, reads
it, pen, pencil, shirt, mother, coffee, tea, government, building, rose, trip, class, vietnam	is, has
coupon, jacket, garden, match, weather, money, gambling, baseball, football, vietnam	is
dogs, cats, windows, points, animals, countries, you, thorns	are
countries	have, help, bought
vietnam	permitted, restricted

## Ràng buộc Động từ-Trạng từ

Động từ	Trạng từ
plays, warm_up, swim, live, sleep, speak	well
bought, help, fly, sleep, rent, speak, run, walks, become, permitted, restricted	soon

## Ràng buộc Tân từ

Các đại từ: i, he, she, he, it, me, you

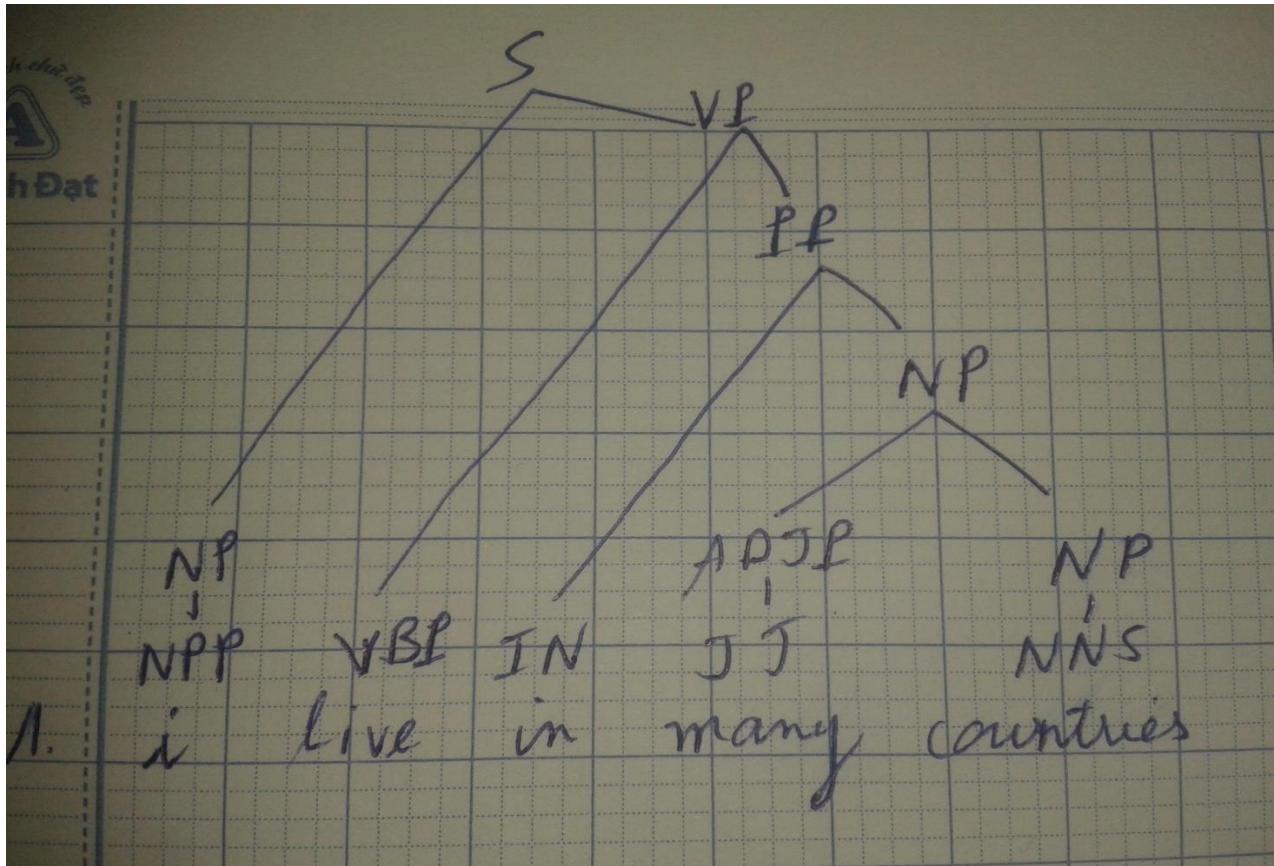
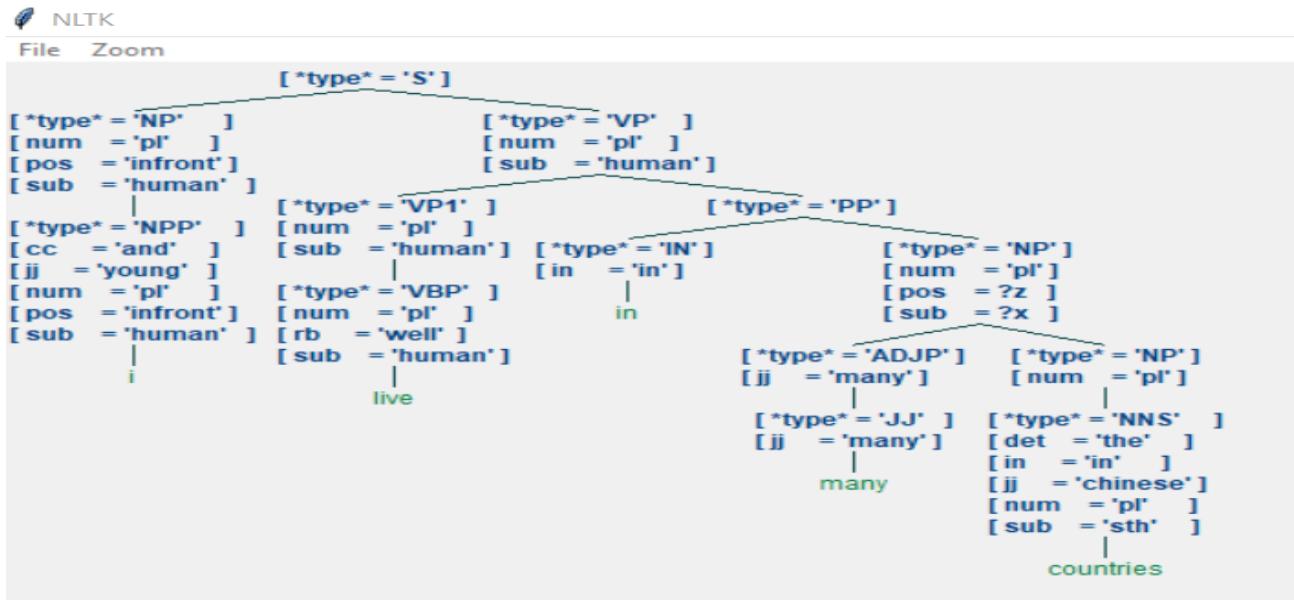
1. 'i', 'he', 'she' chỉ có thể làm chủ từ
2. 'it', 'you' có thể làm chủ từ lẫn tân từ
3. 'me' chỉ có thể làm tân từ

# Ràng buộc Danh từ-Tính từ

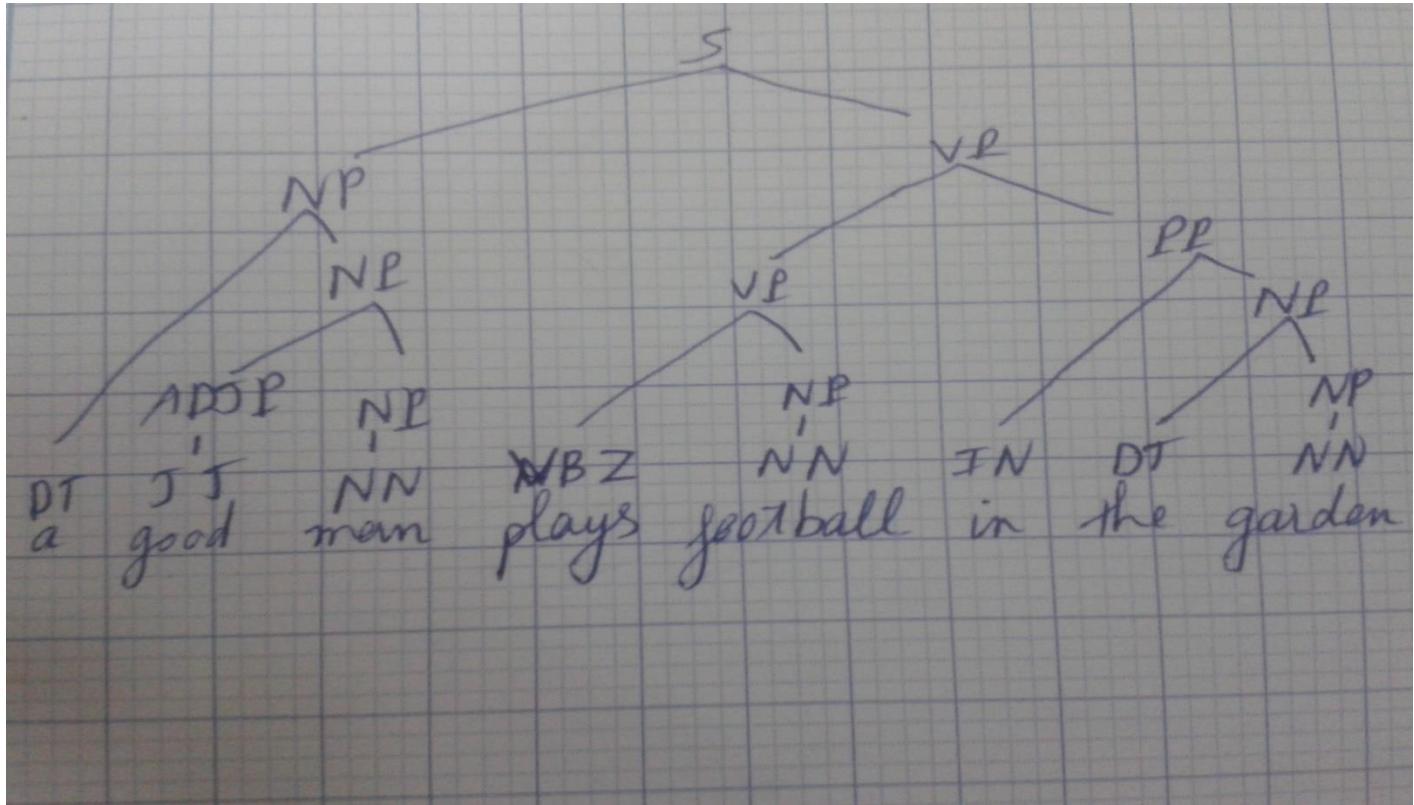
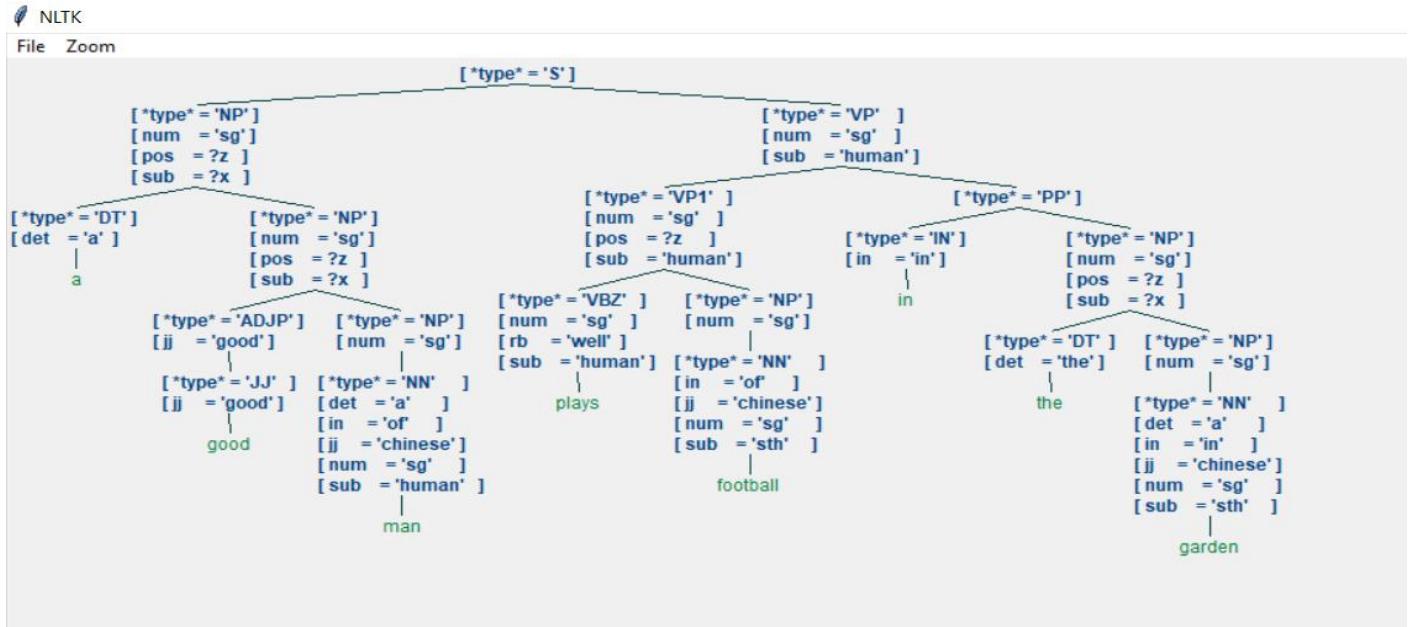
Danh từ	Tính từ
girl, boys, building, models, teacher, mother, man	nice, tall
windows, pen, pencil, tea, coffee, girl, points, boys, jacket, garden, weather, apartment, animals, match, money, countries, cats, dogs	nice, good
hair	brown, red, blonde
cats, dogs, animals, jacket, birds, pen, pencil	brown, red, cheap
apartment, trip, coupon, building, windows, tea, coffee, garden, rose	cheap
girl, boys, football, baseball, apartment, pen, pencil, government, mother, models, animals, gambling, teacher	chinese
countries, animals, models, goverment, trip, weather	abroad
girl, boys, models, teacher, mother, man	young
girl, boys, models, cats, dogs, anumals, birds, jacket, shirt	little
weather, models, boys, girl, teacher, vietnam	hot
boys, countries, dogs, cats, models, animals, birds, windows	all, many
baseball, football, rose, models, animals, dogs, cats, birds, trip, gambling	popular

# So sánh phân tích cú pháp 20 tự chọn

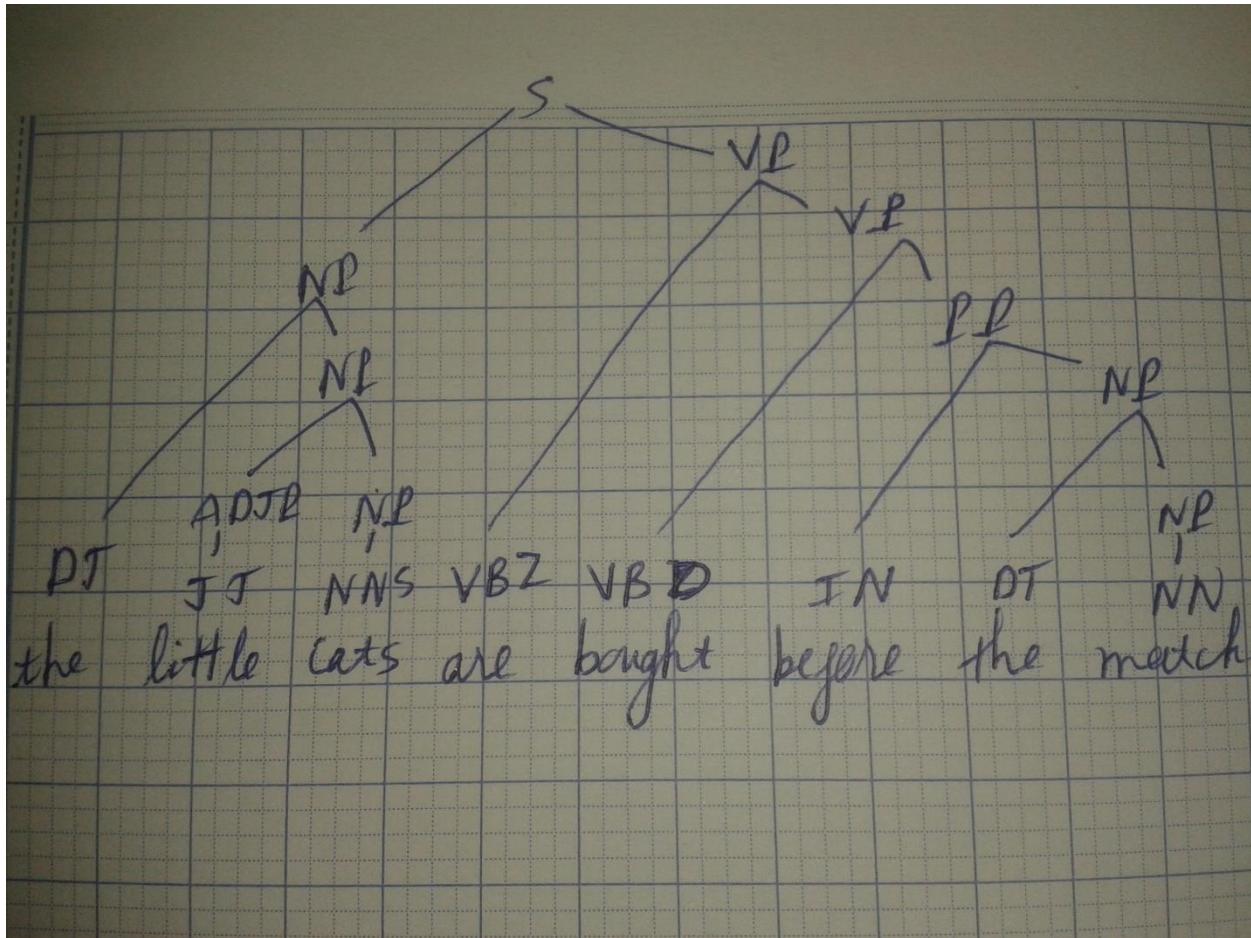
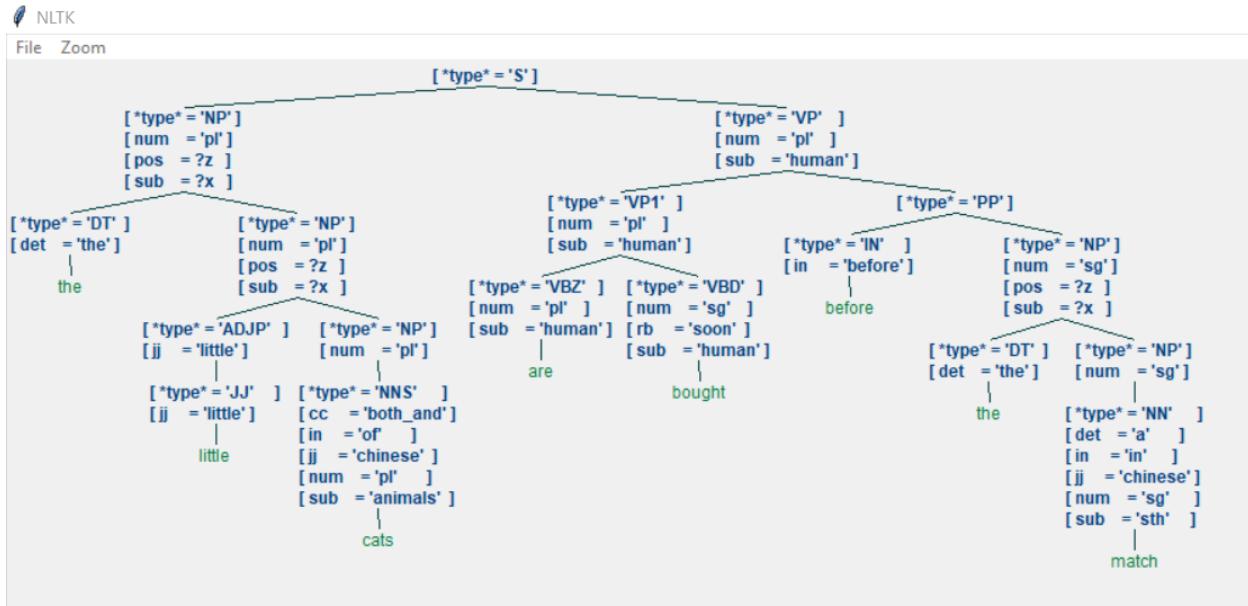
## 1. i live in many countries



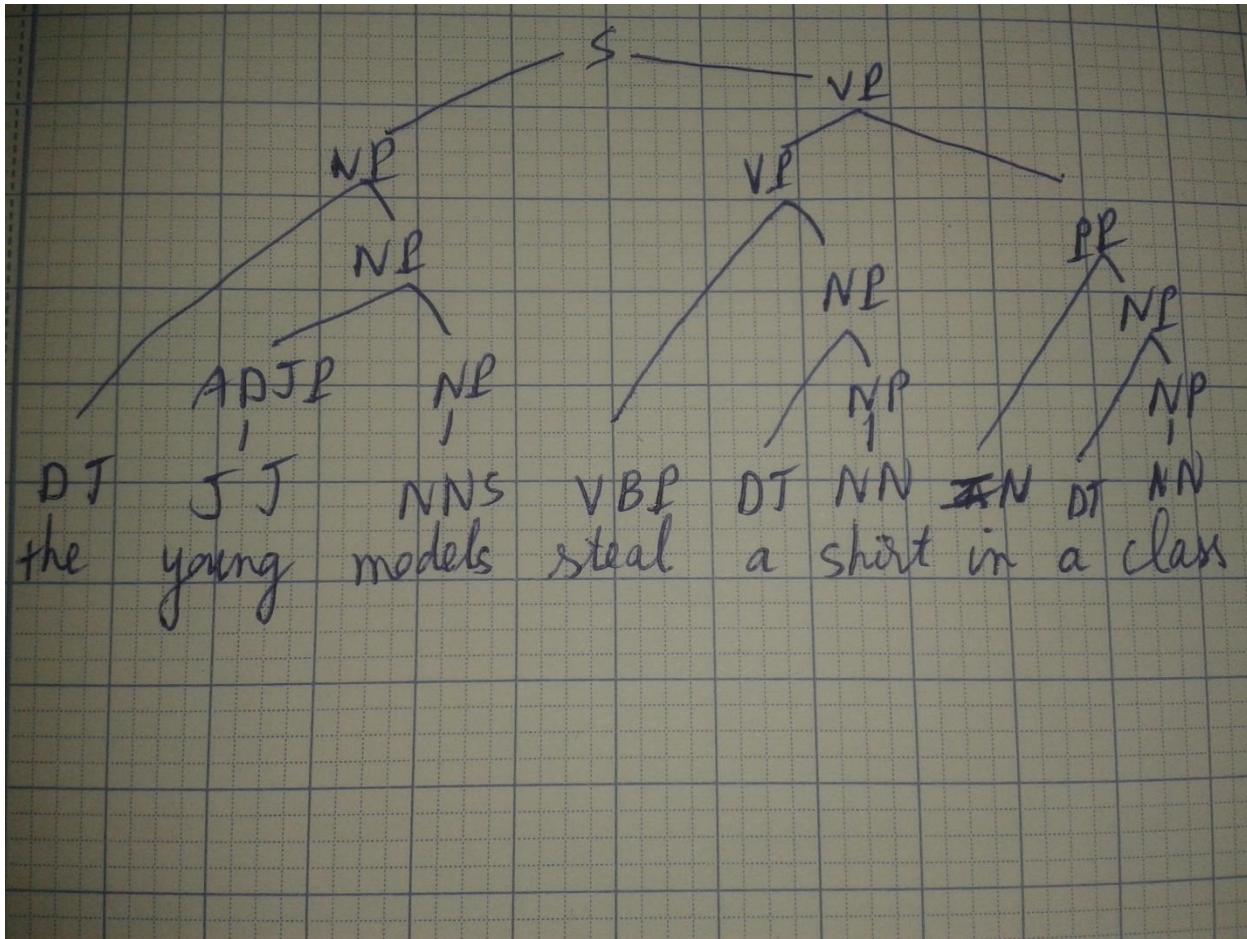
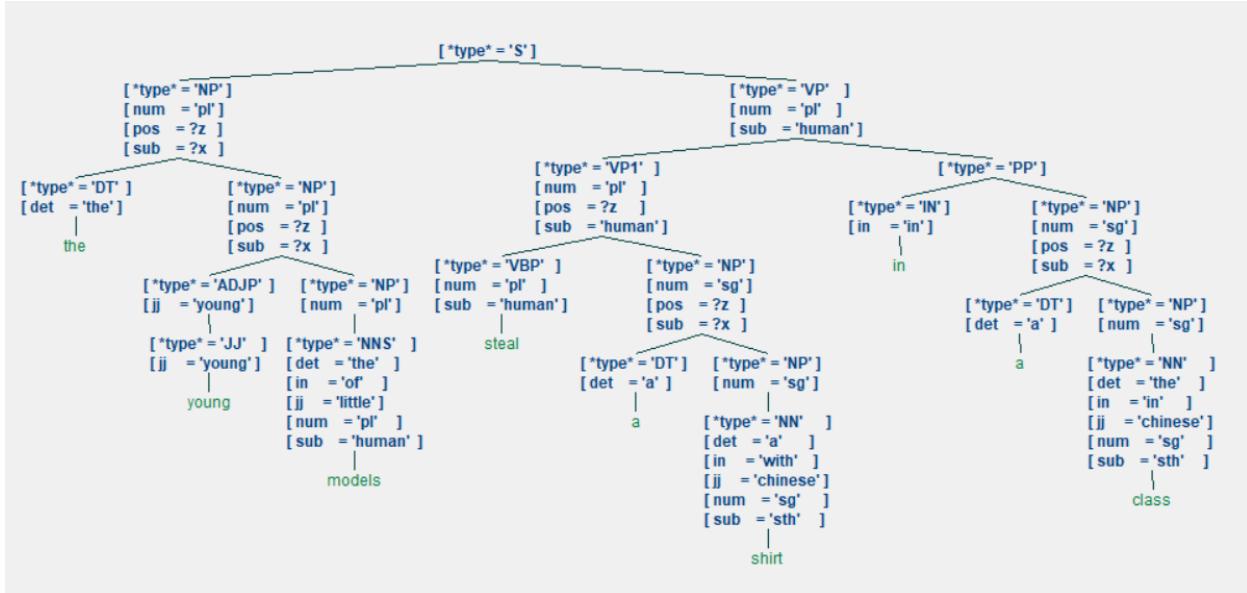
2. a good man plays football in the garden



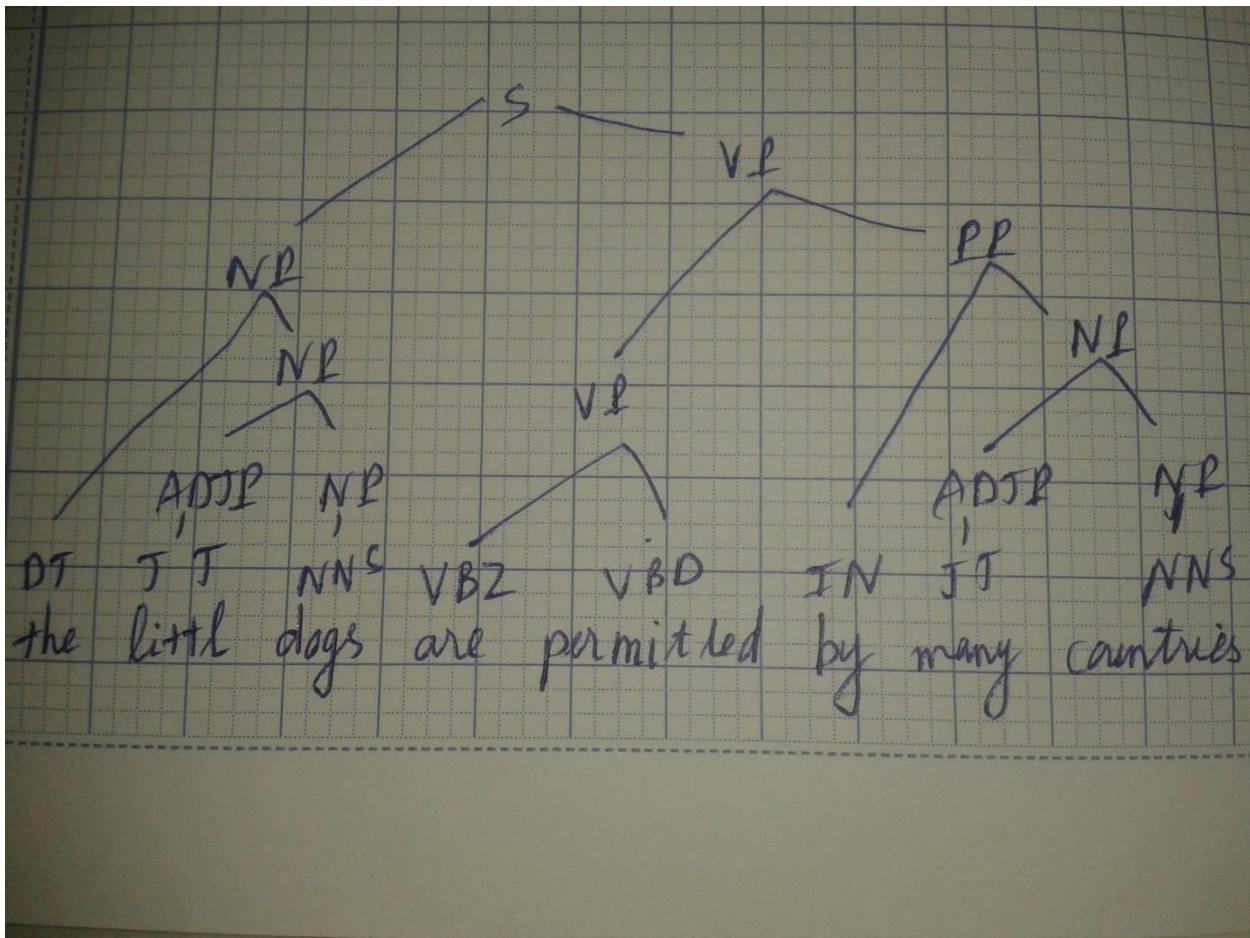
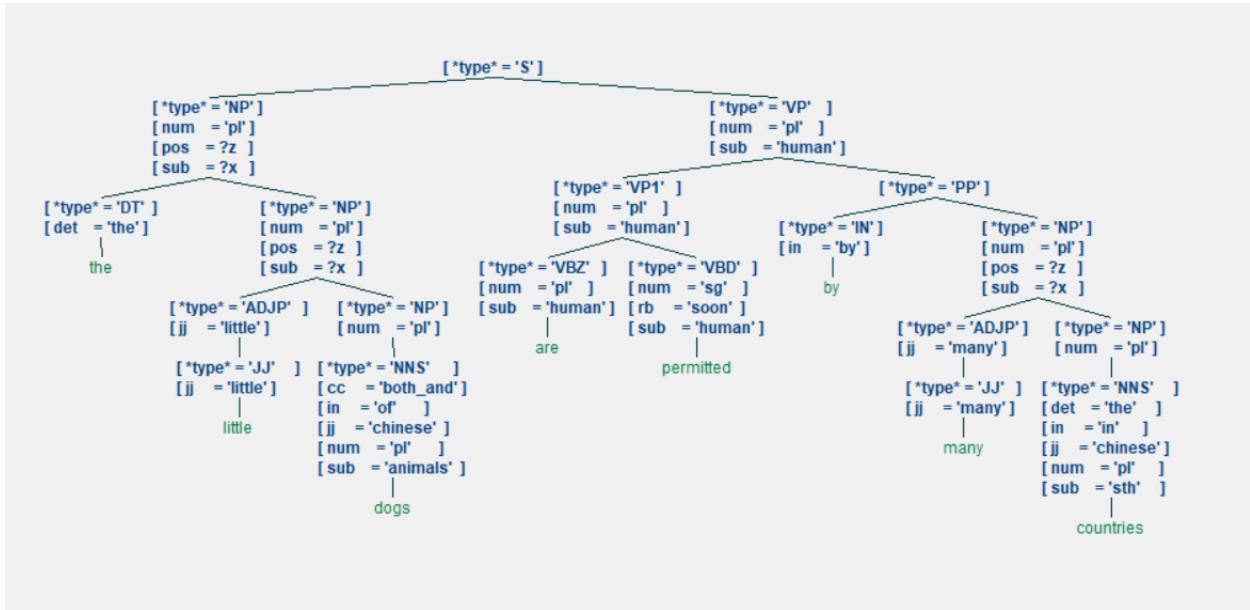
### 3. the little cats are bought before the match



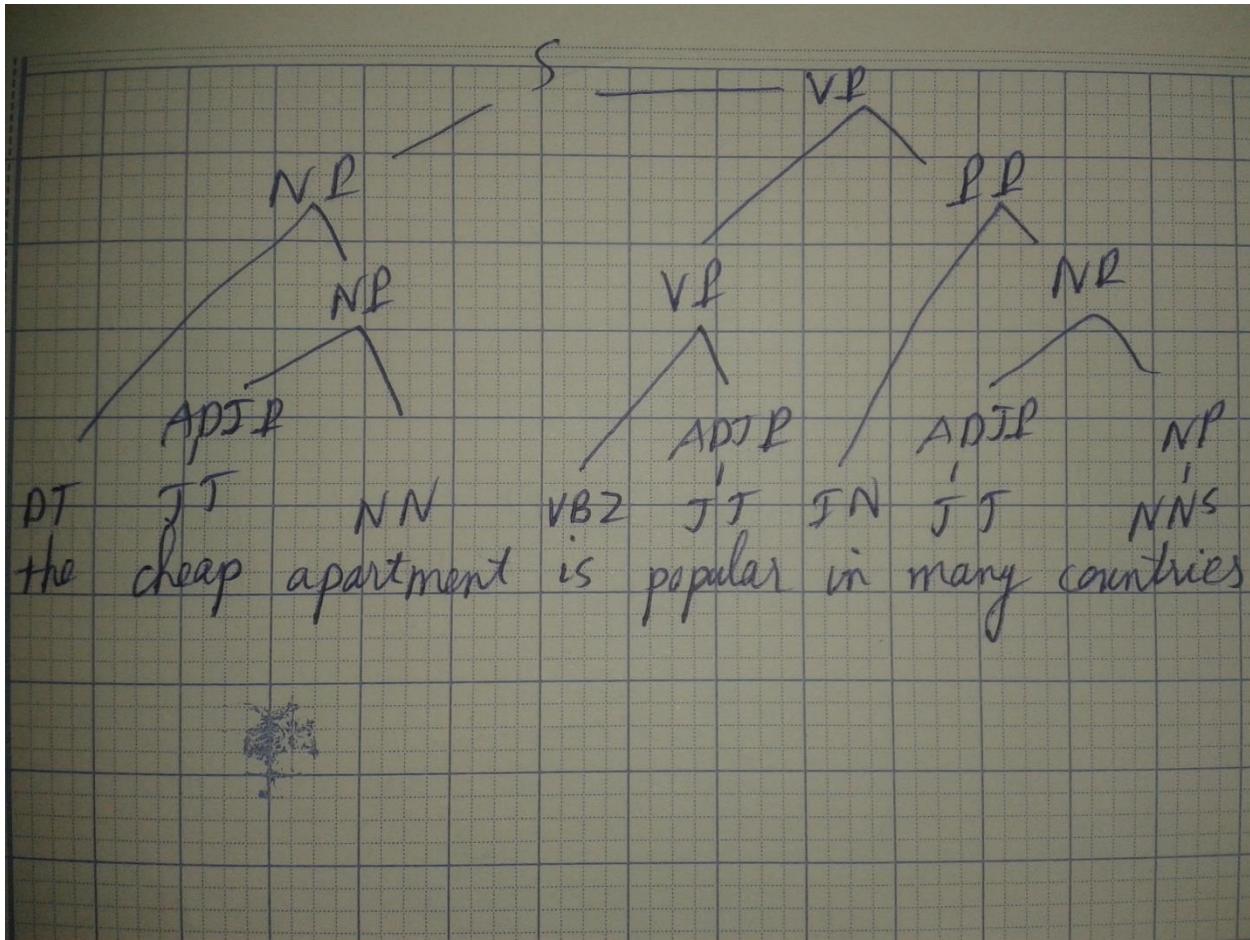
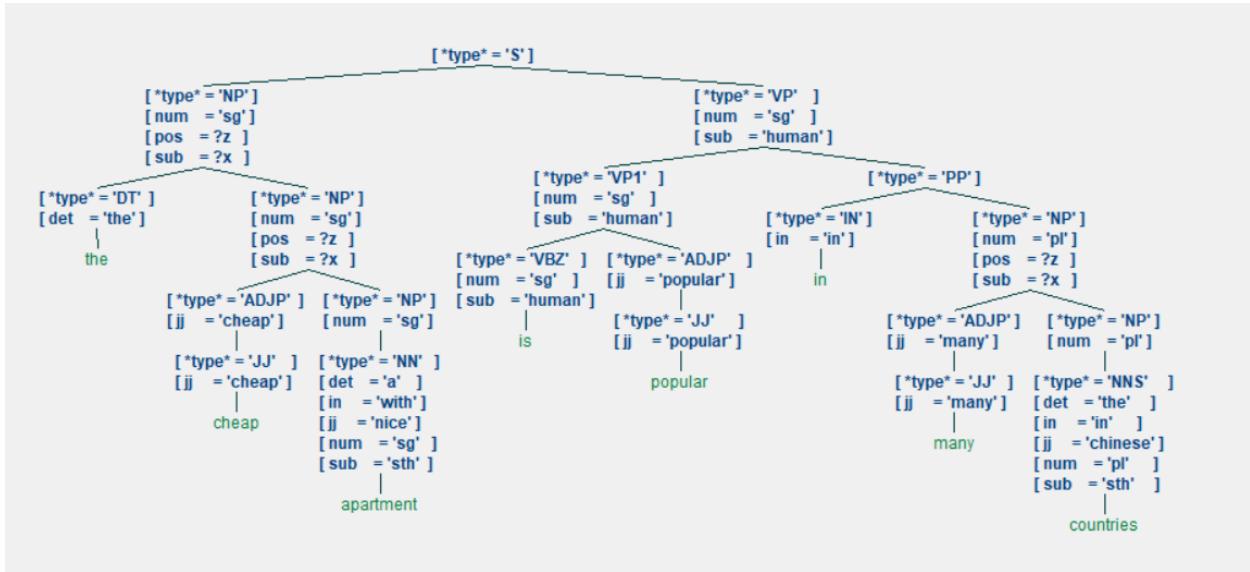
#### 4. the young models steal a shirt in a class



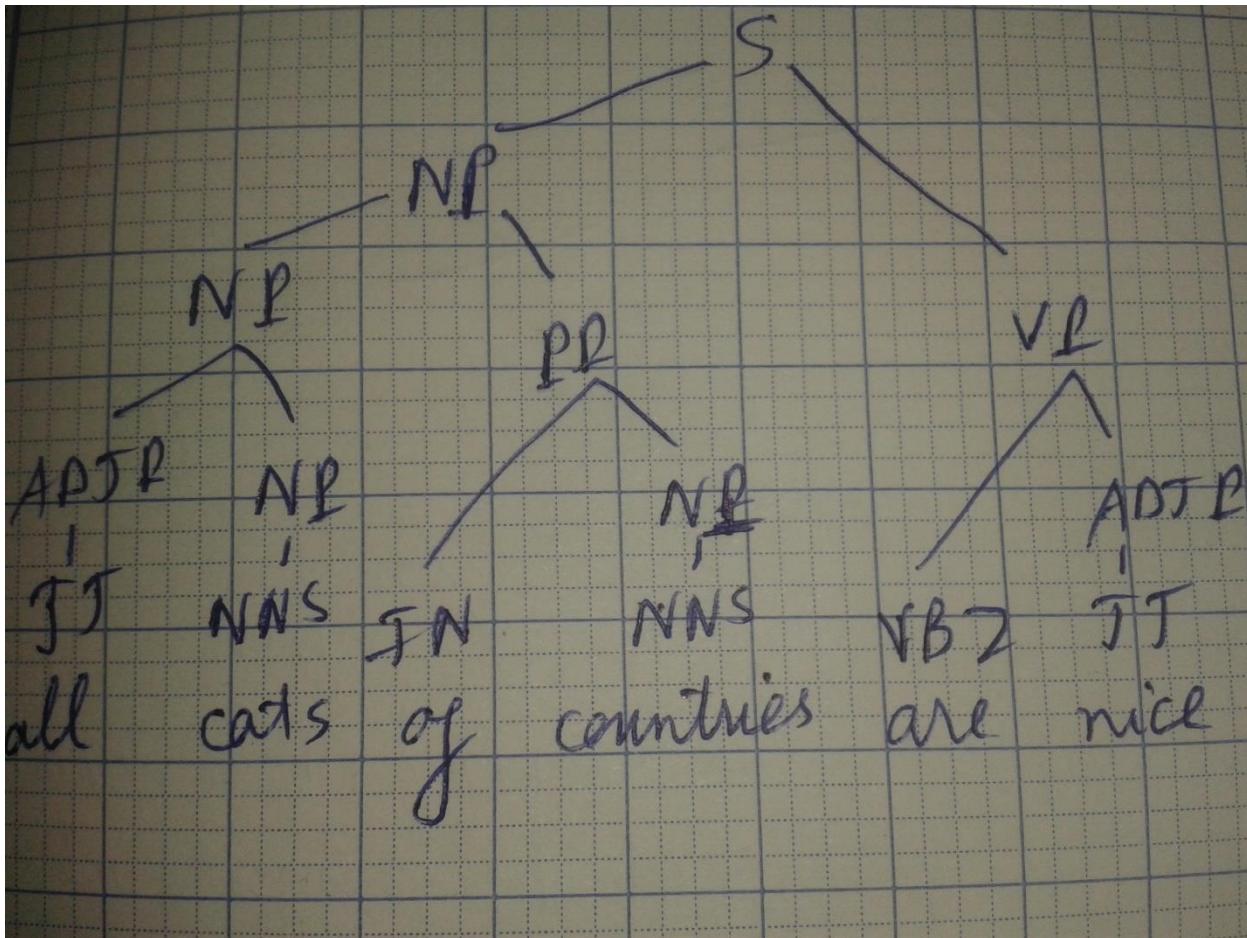
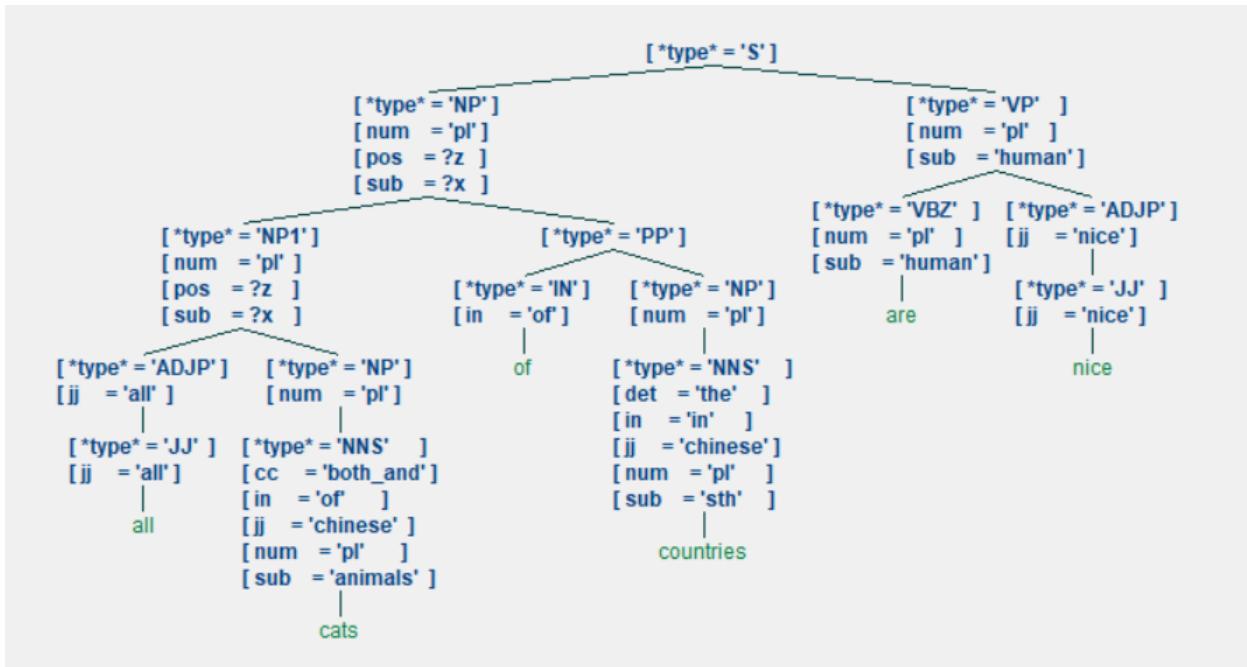
## 5. the little dogs are permitted by many countries



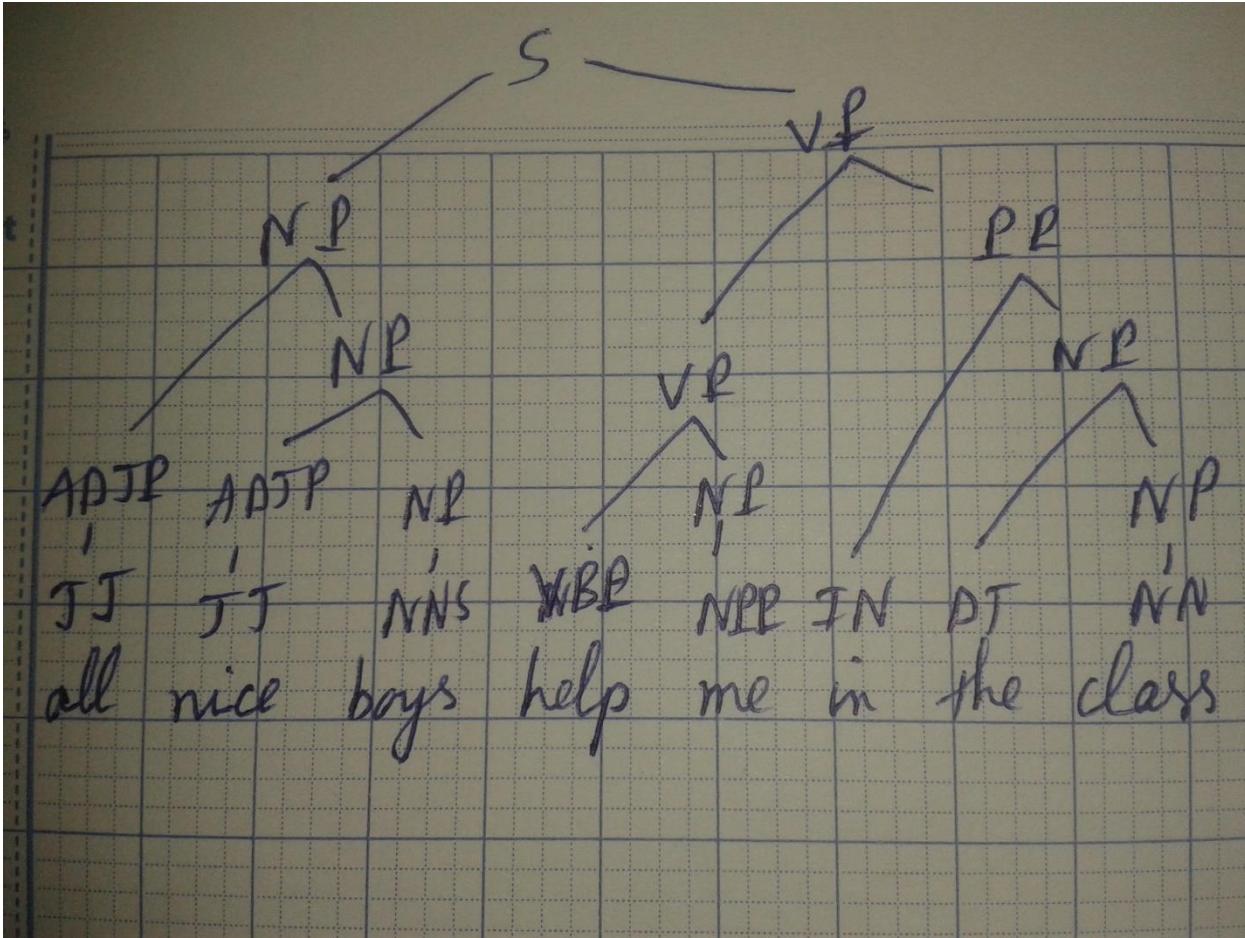
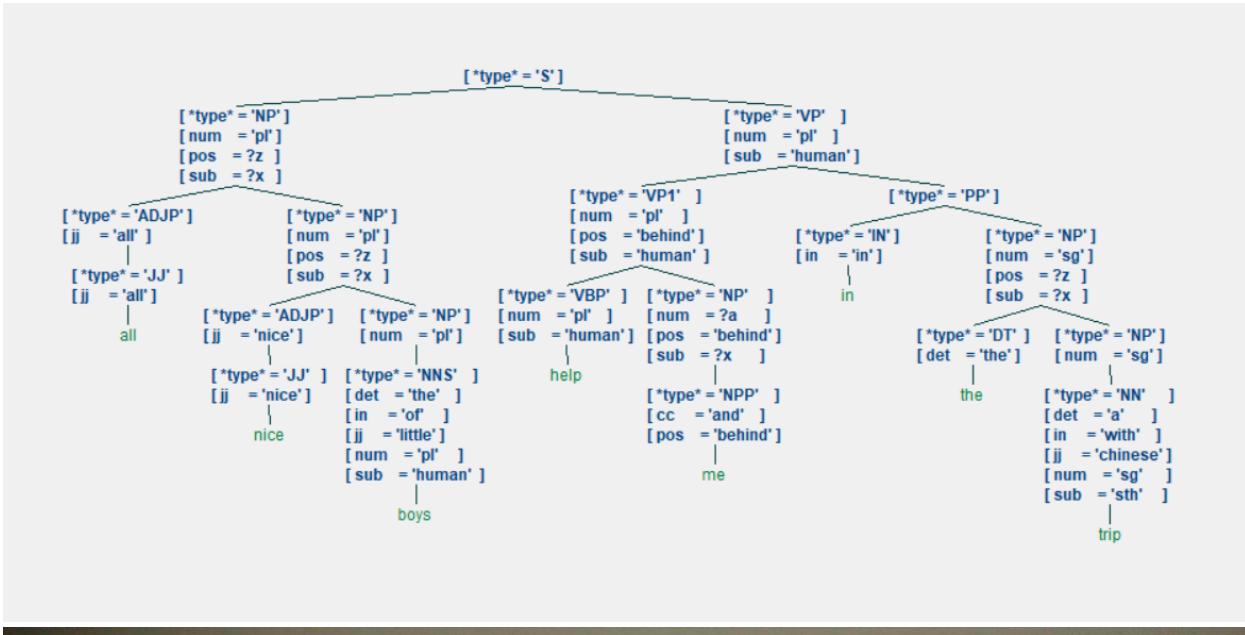
6. the cheap apartment is popular in many countries



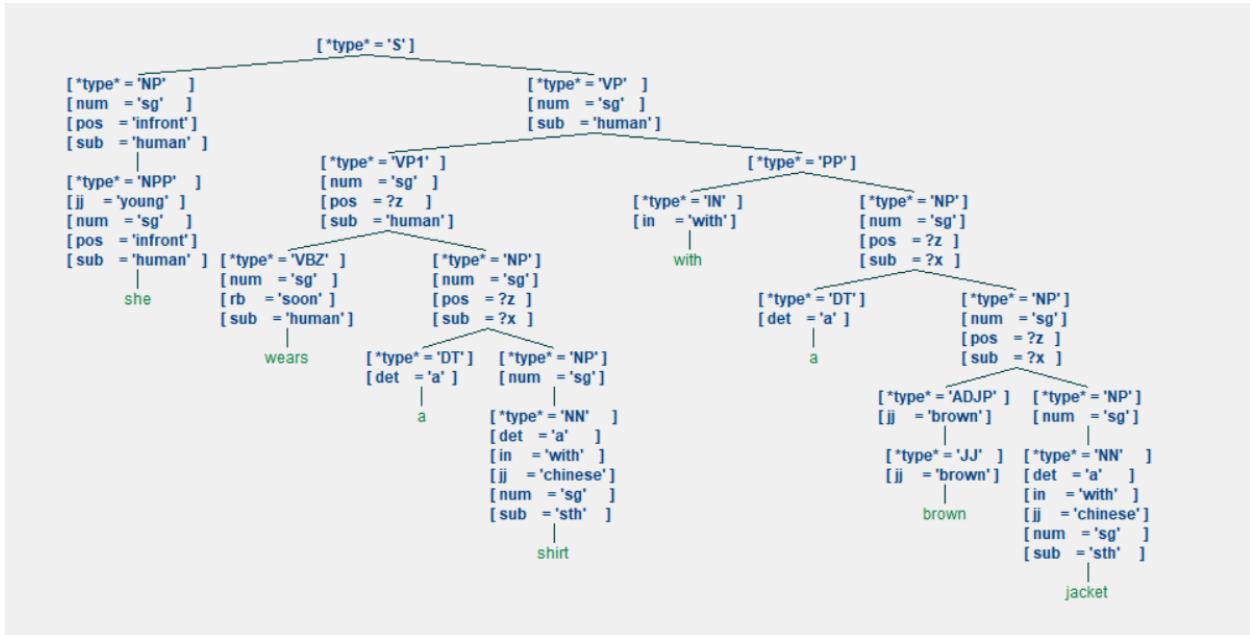
## 7. all cats of countries are nice



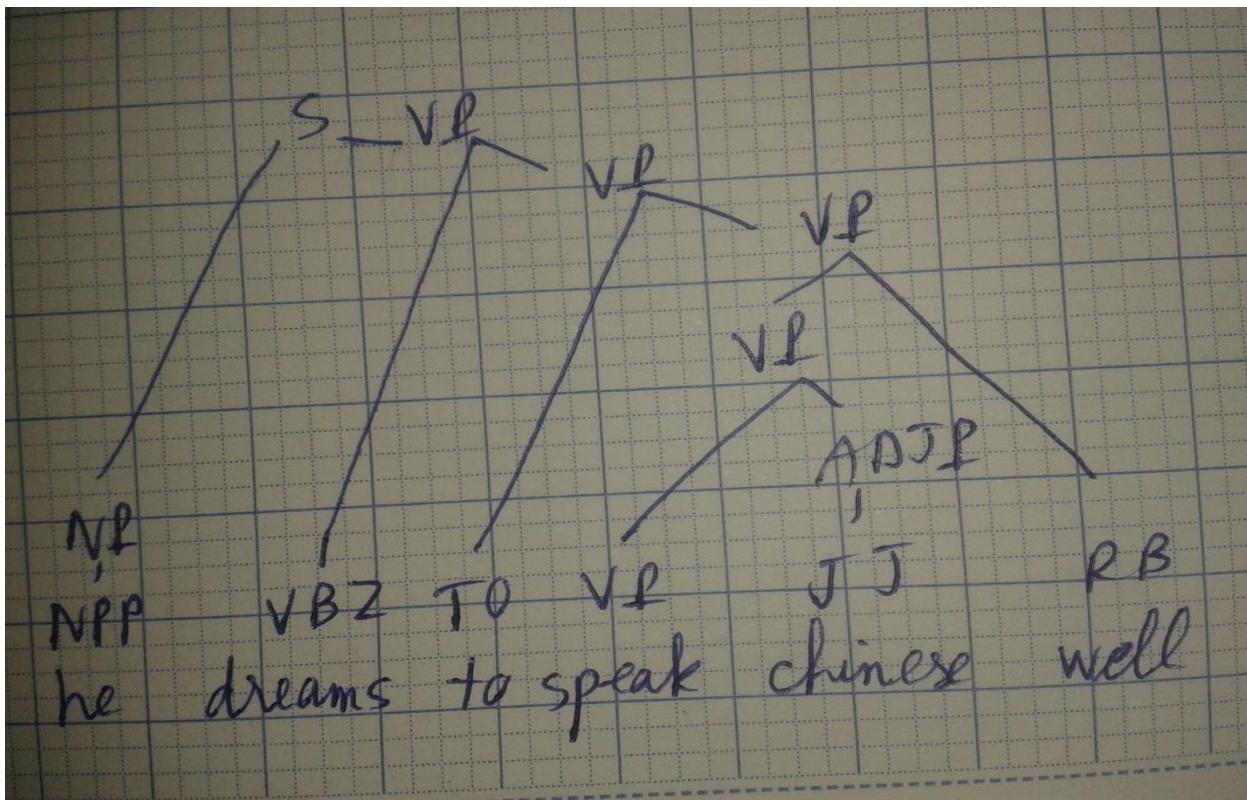
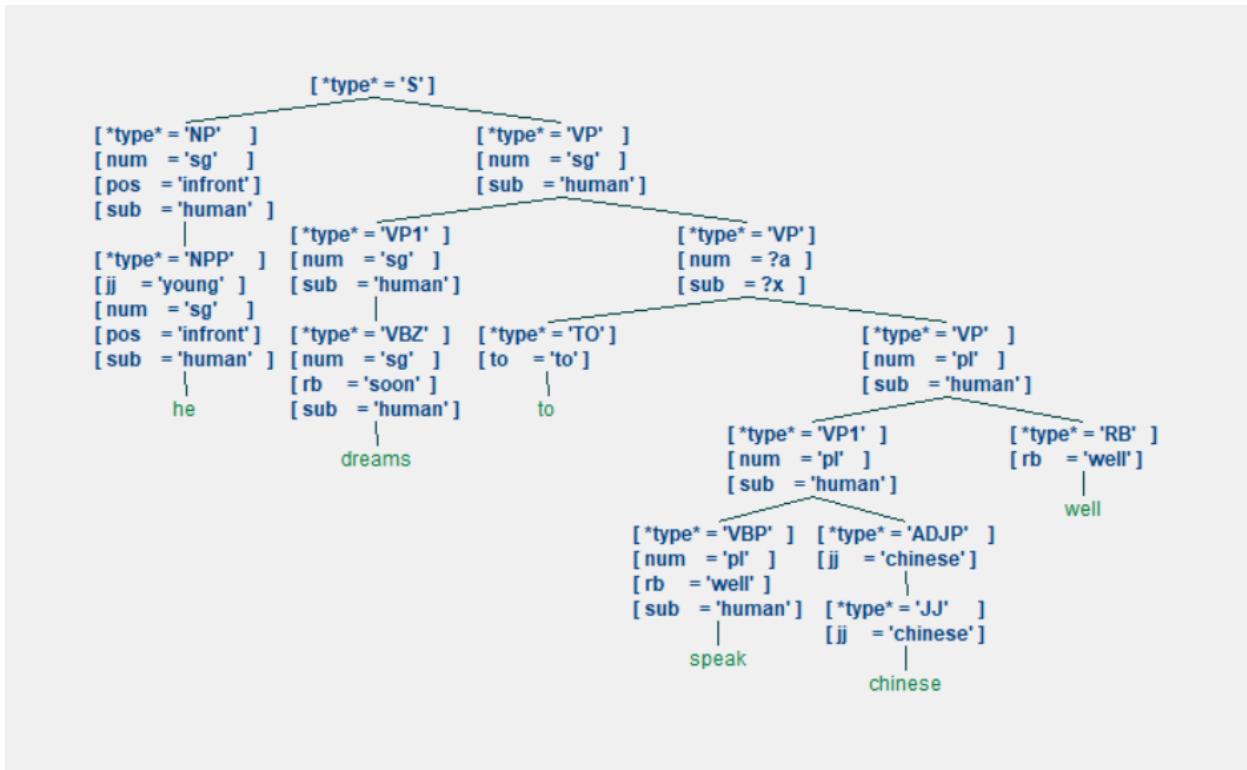
## 8. all nice boys help me in the class



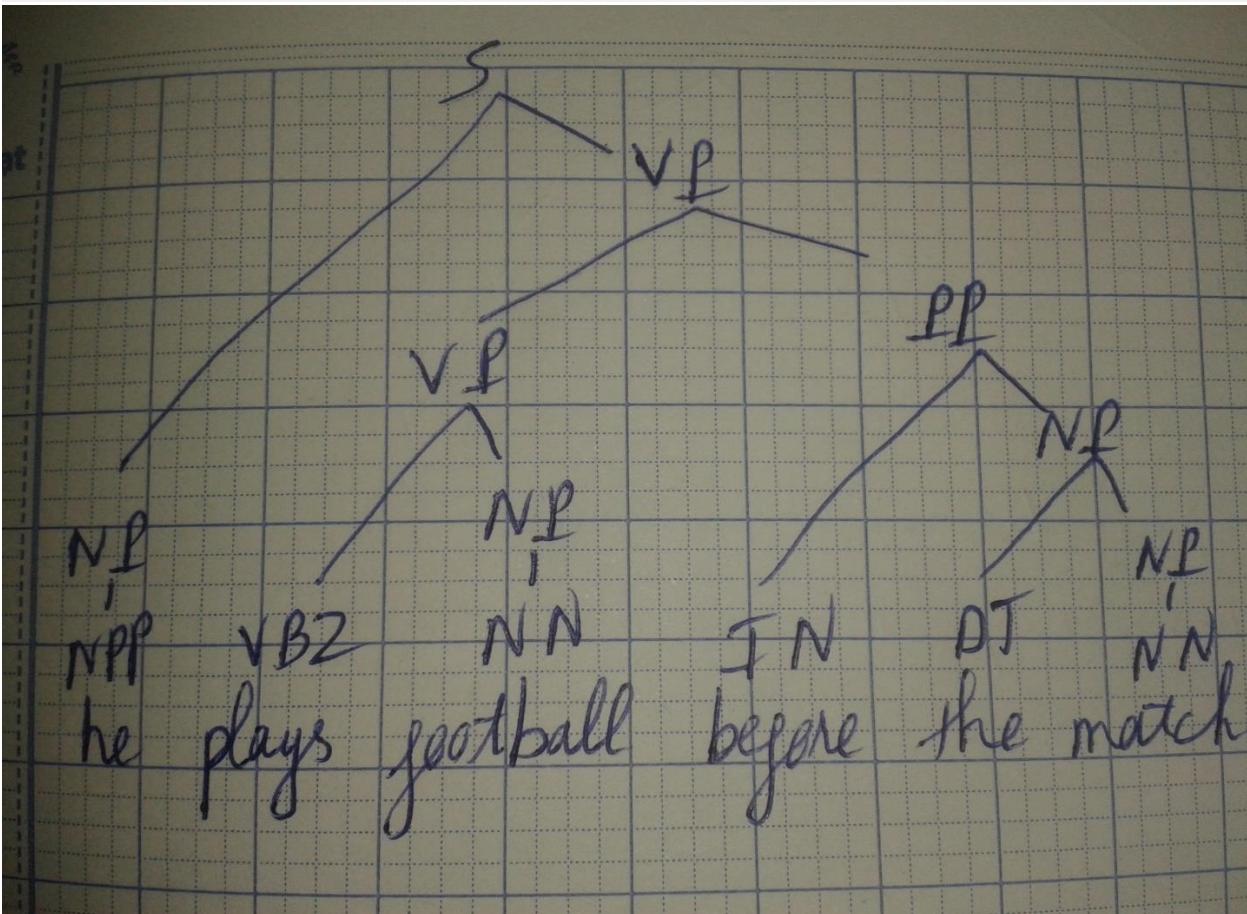
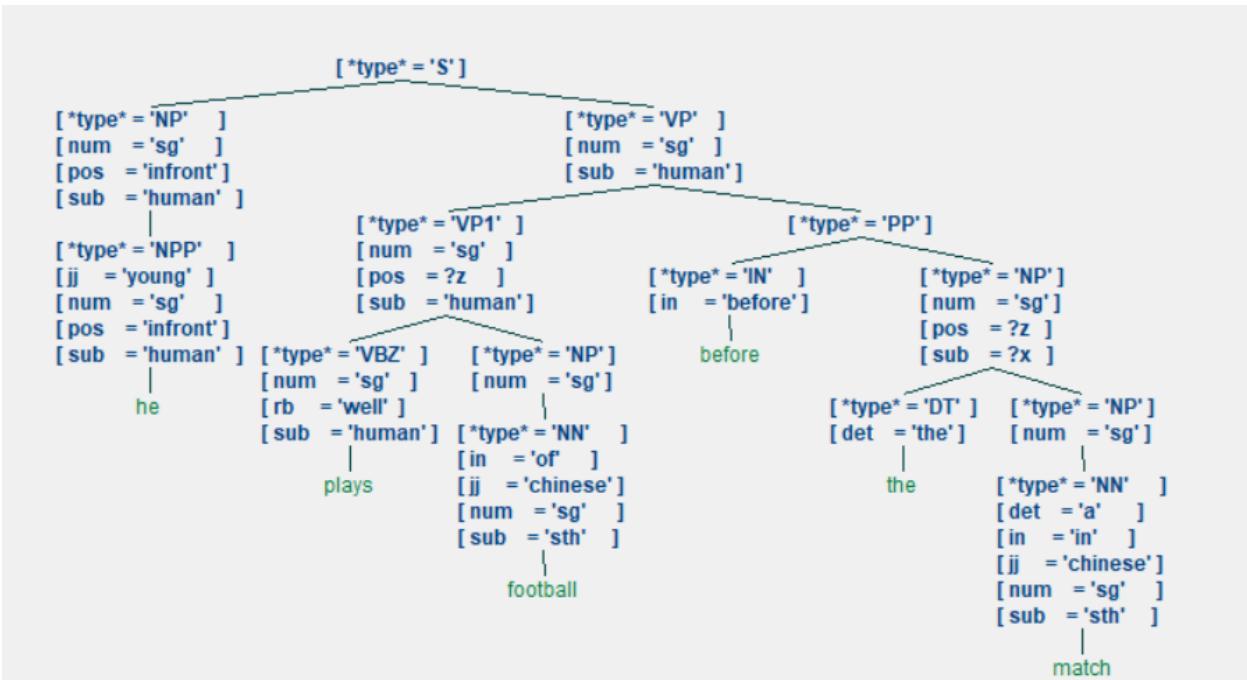
## 9. she wears a shirt with a brown jacket



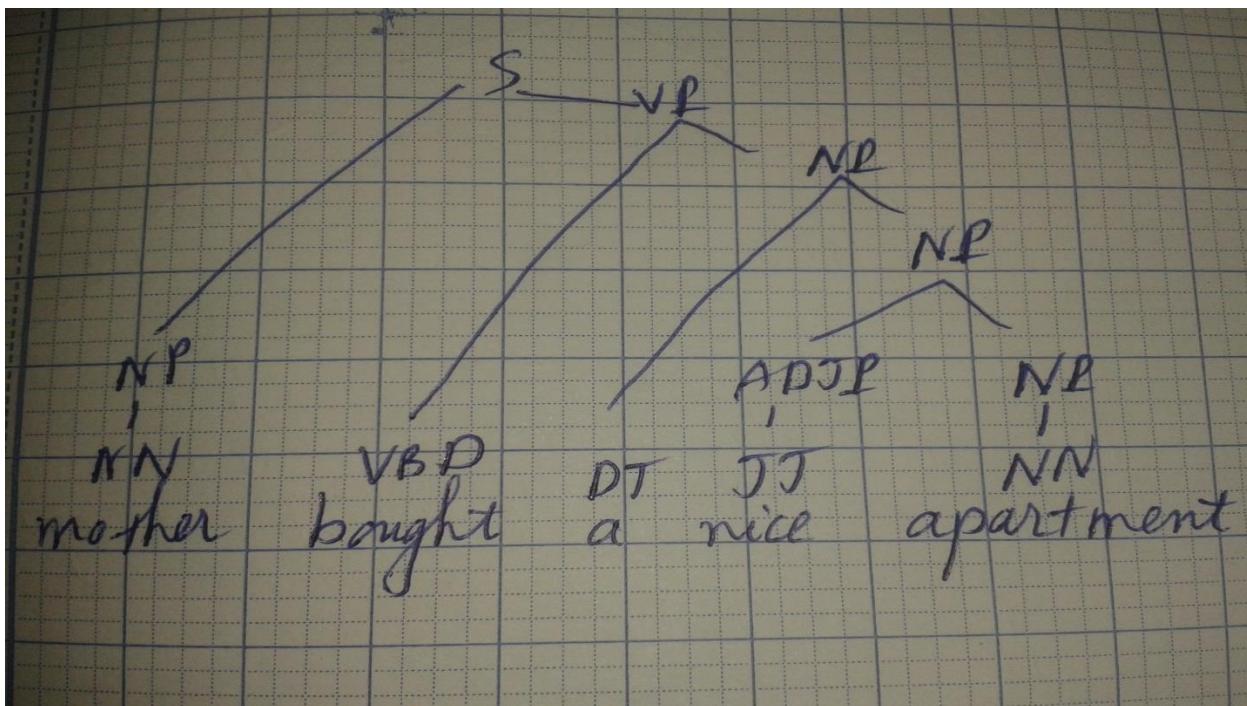
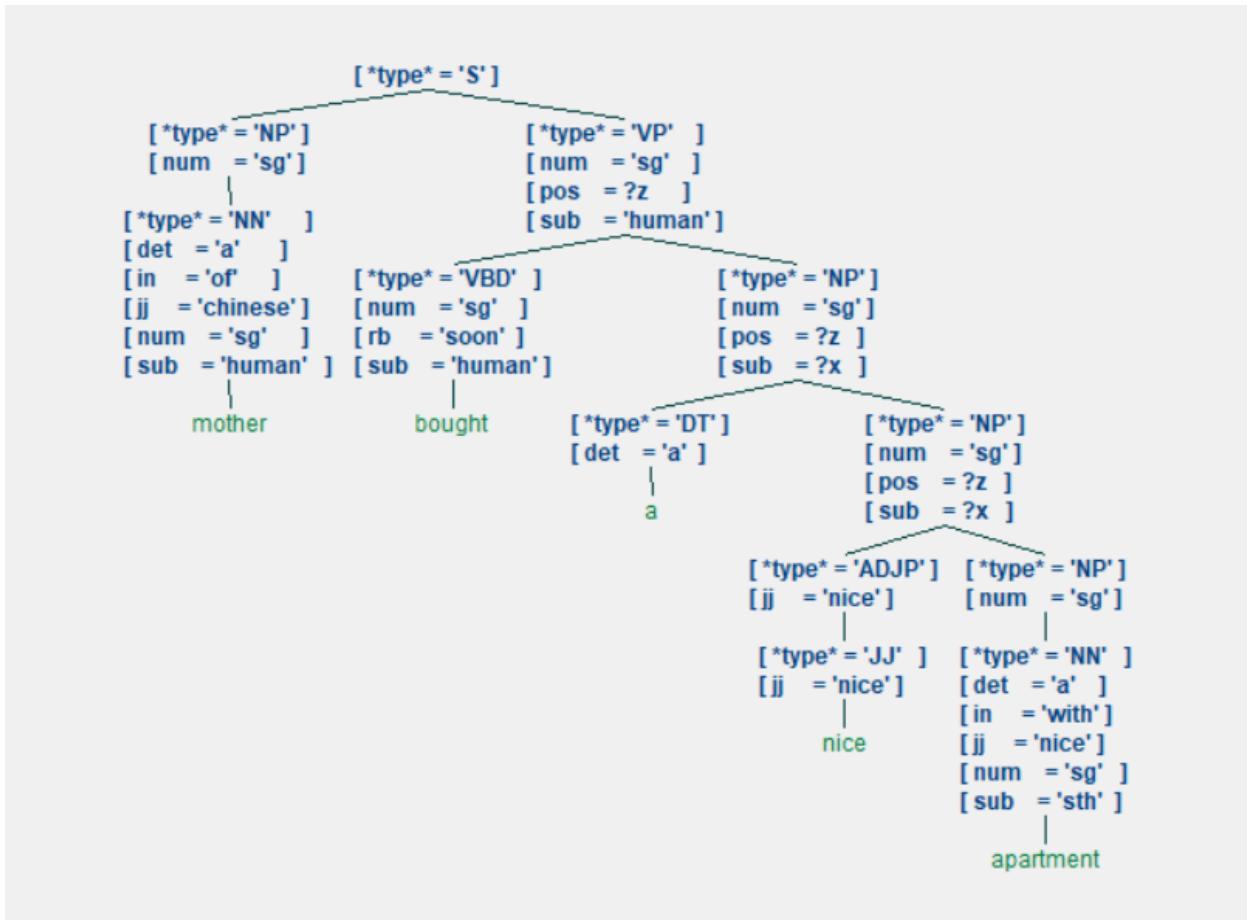
10. he dreams to speak chinese well



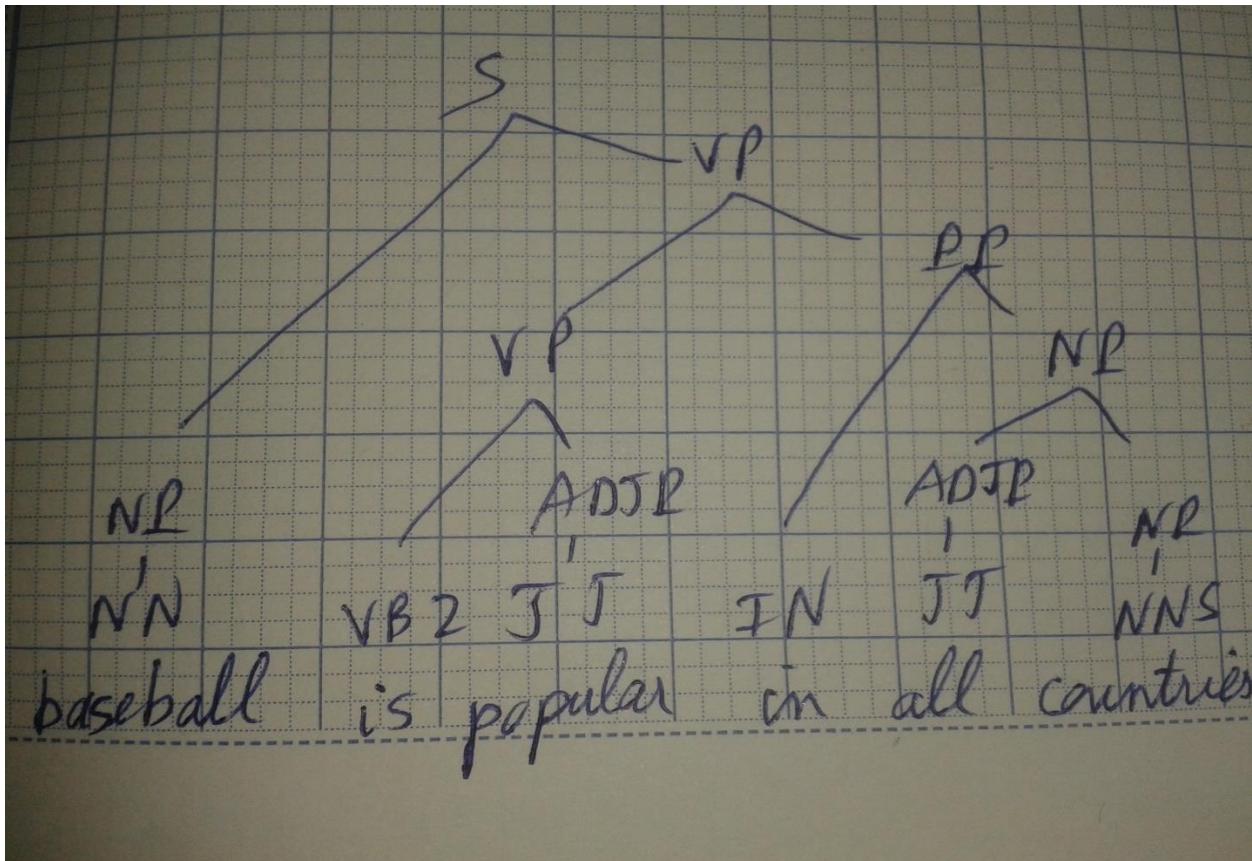
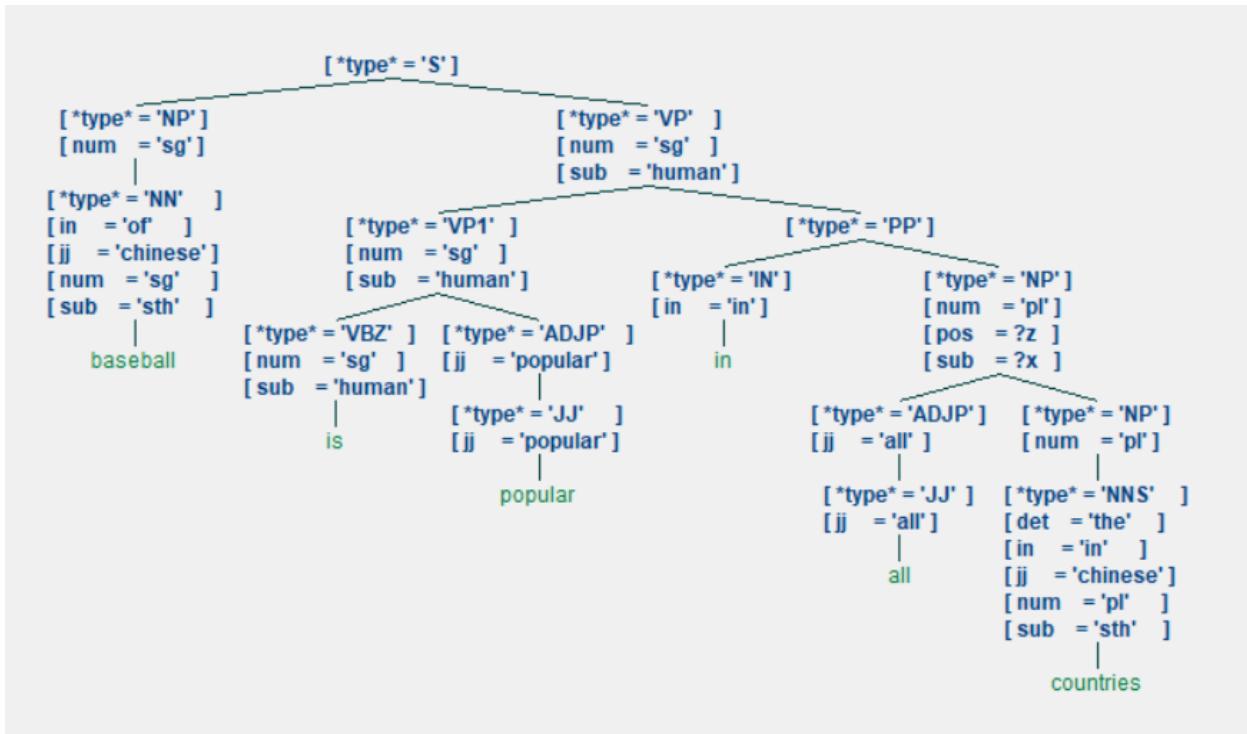
## 11. he plays football before the match



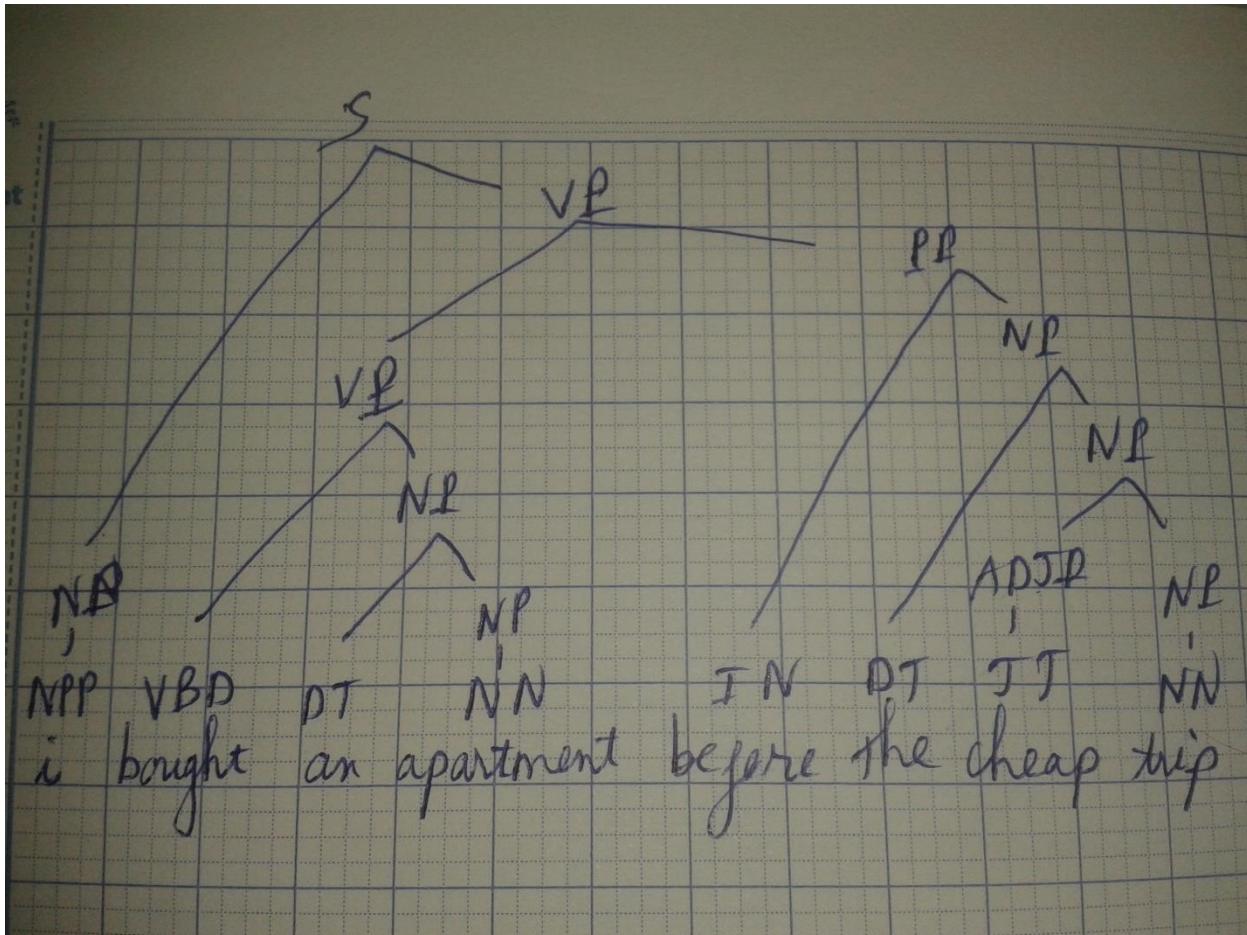
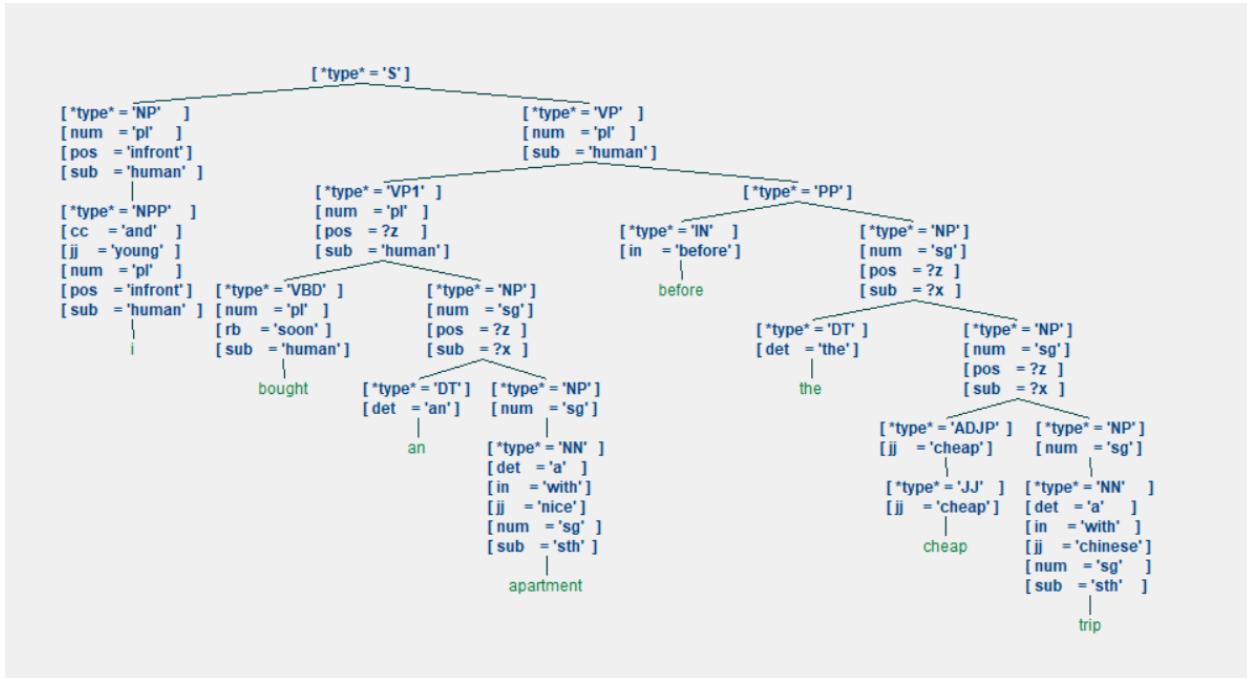
## 12. mother bought a nice apartment



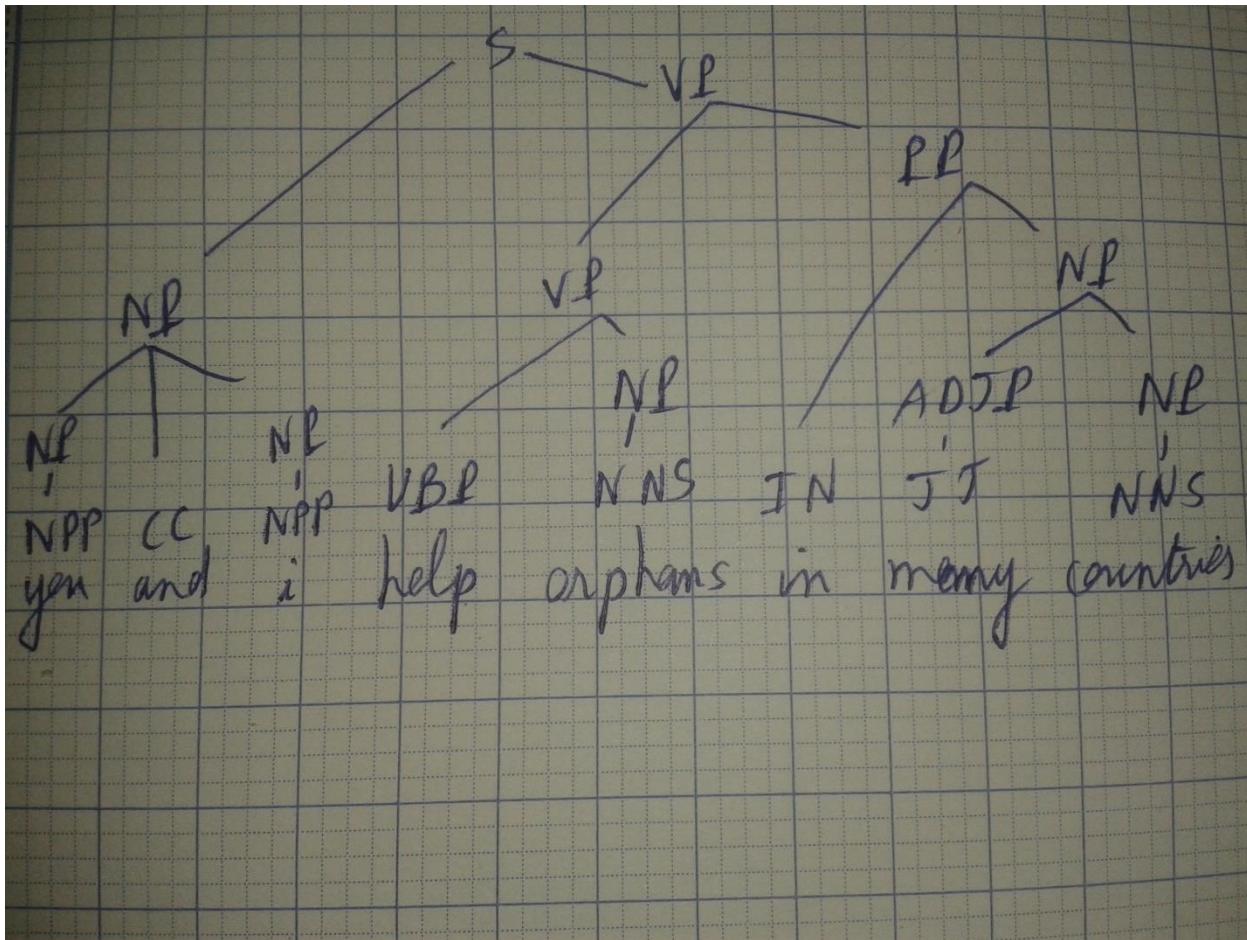
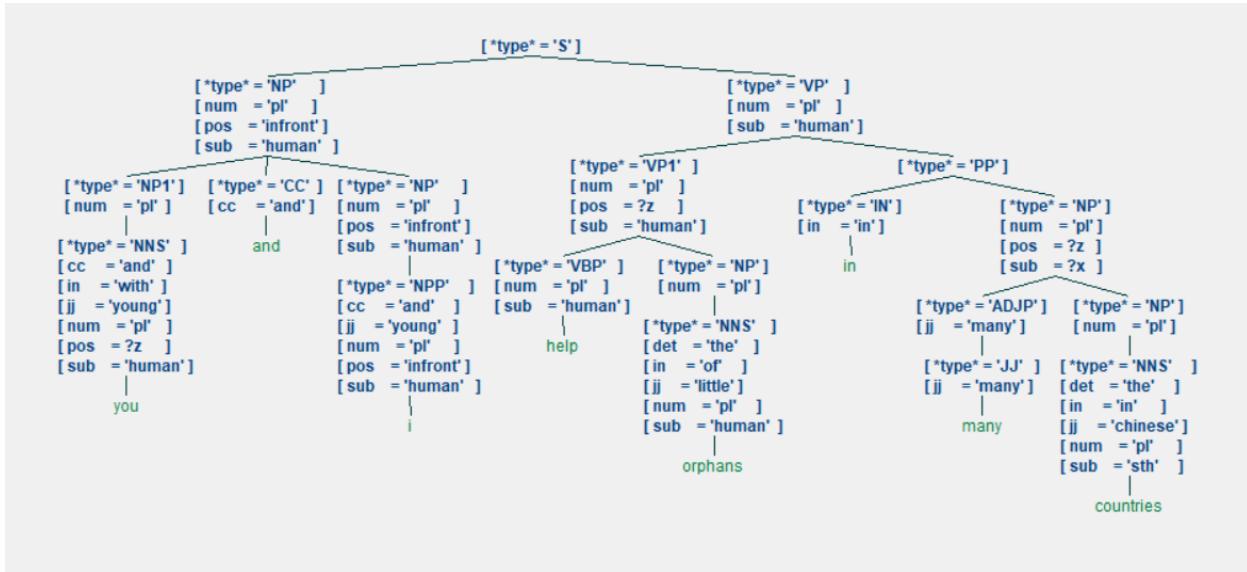
### 13. baseball is popular in all countries



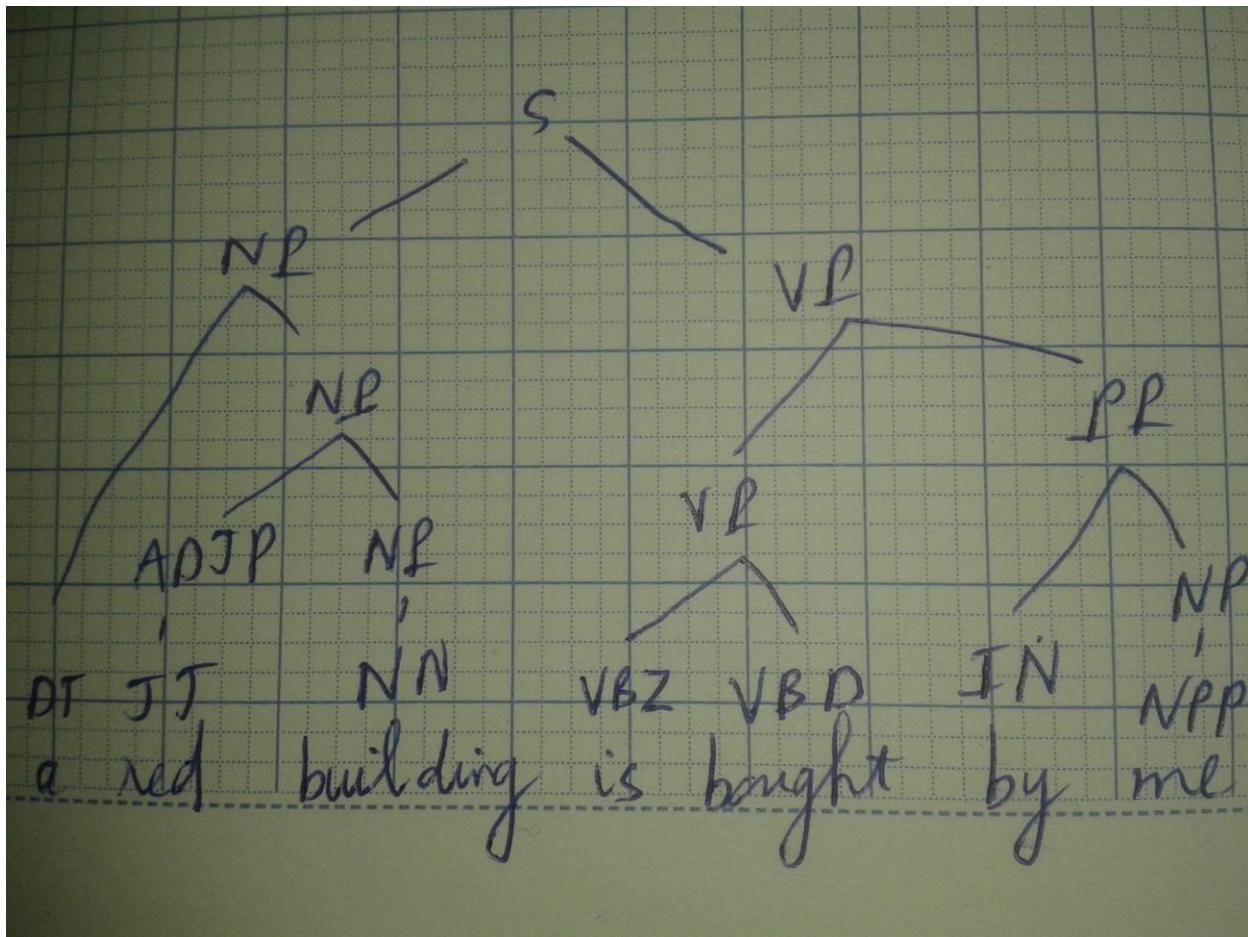
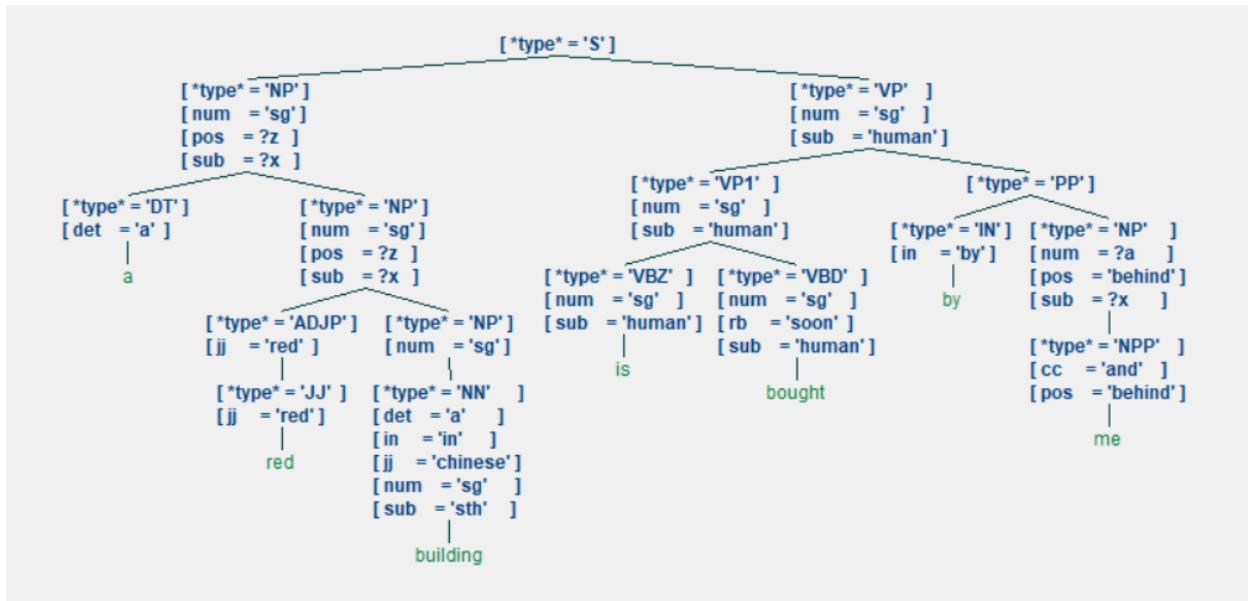
## 14. i bought an apartment before the cheap trip



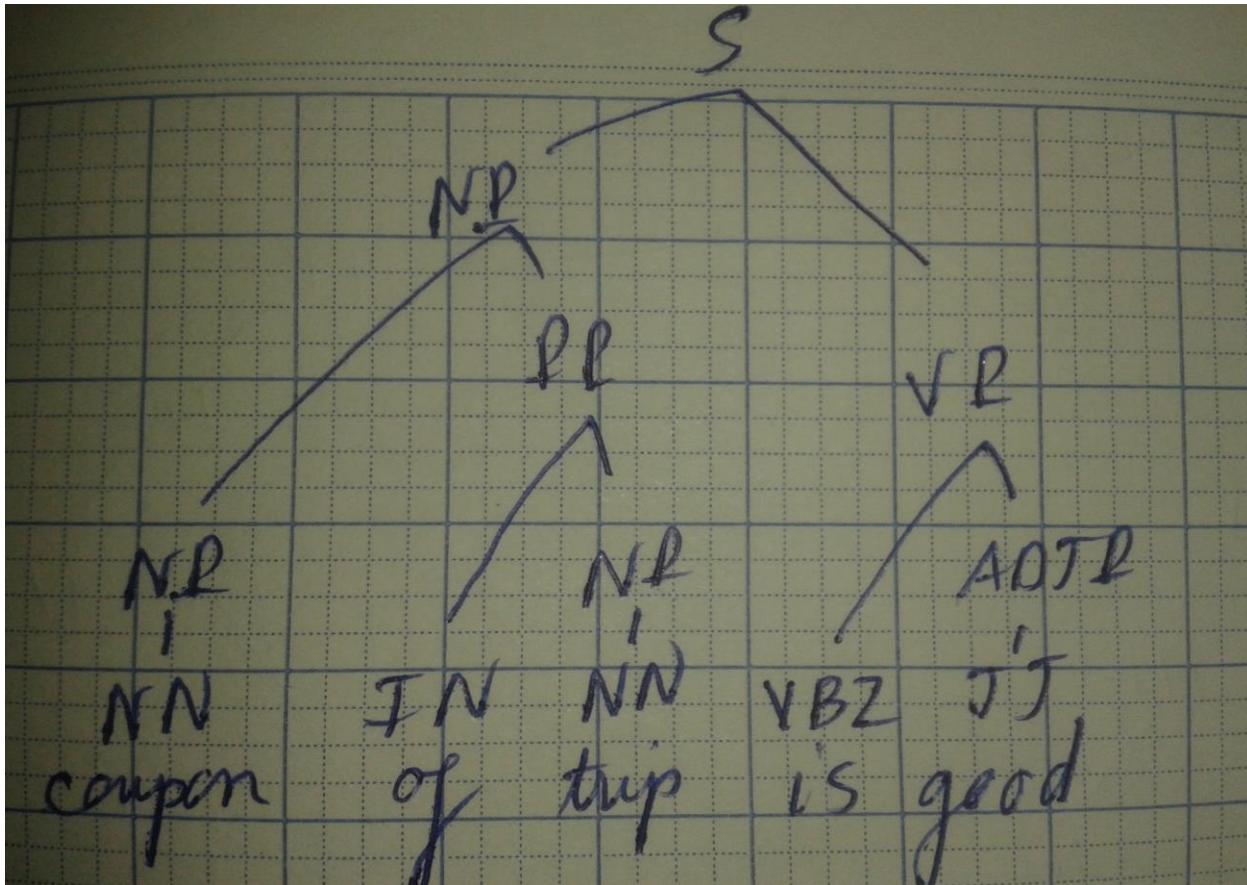
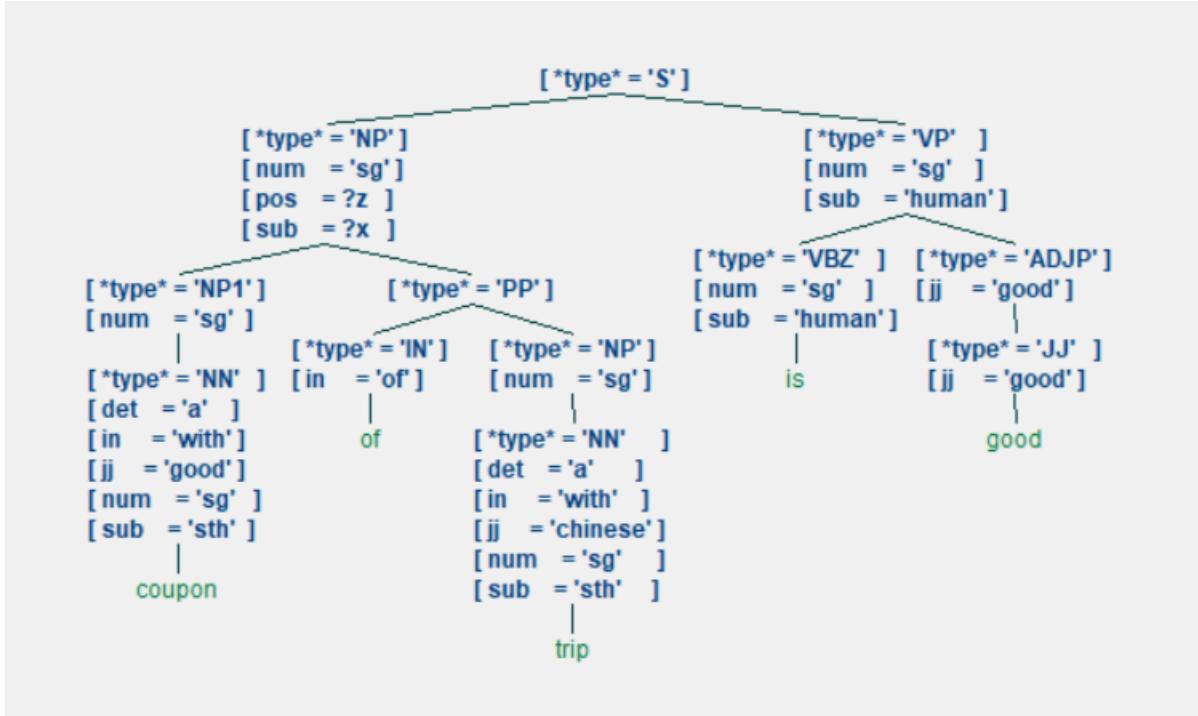
15. you and i help orphans in many countries



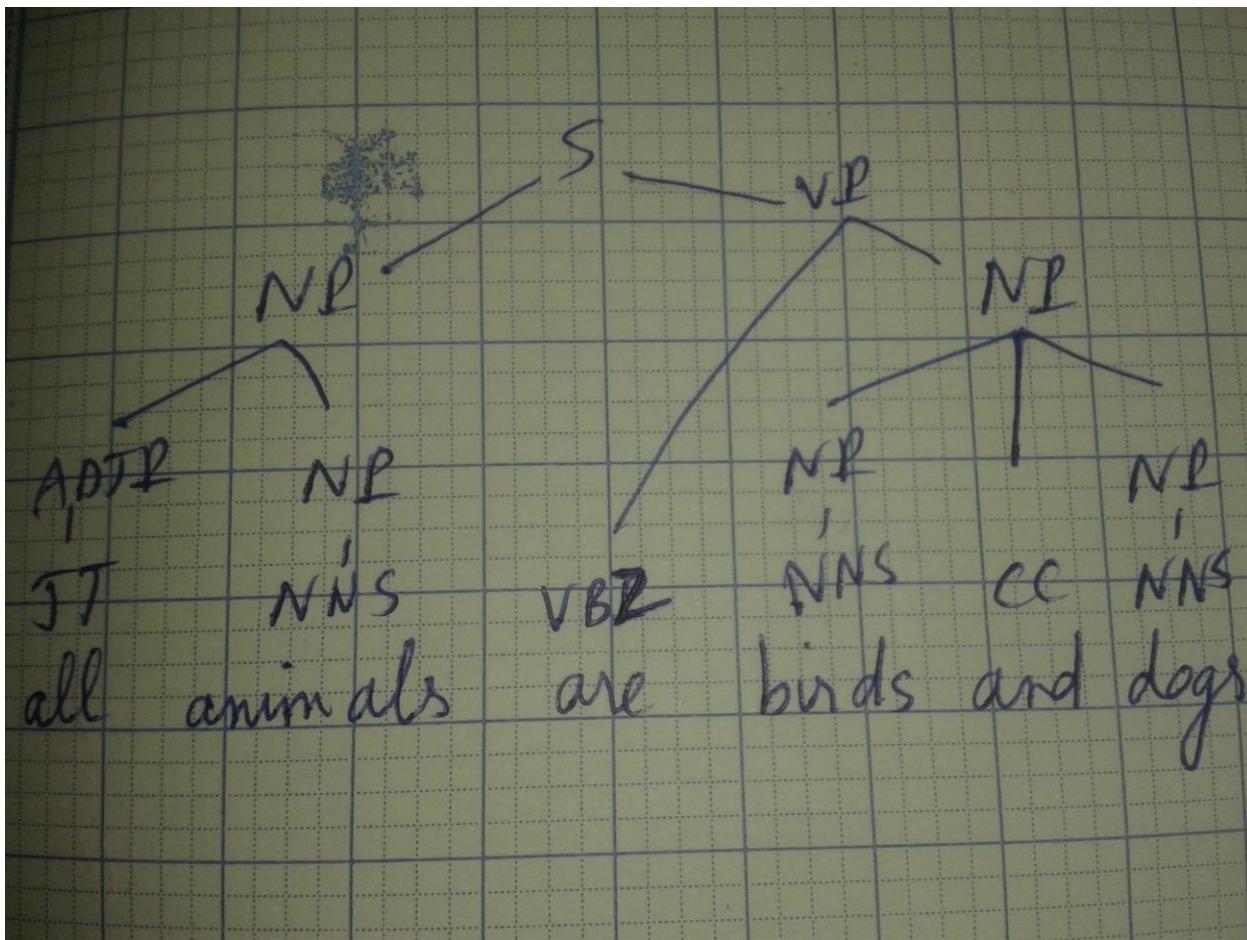
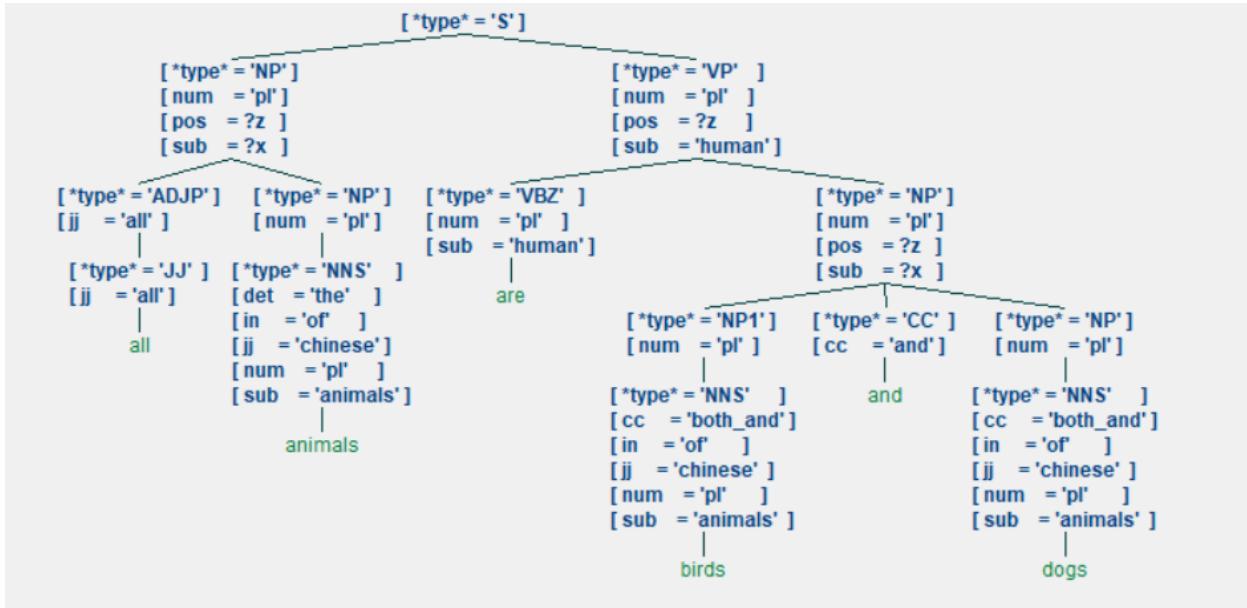
## 16. a red building is bought by me



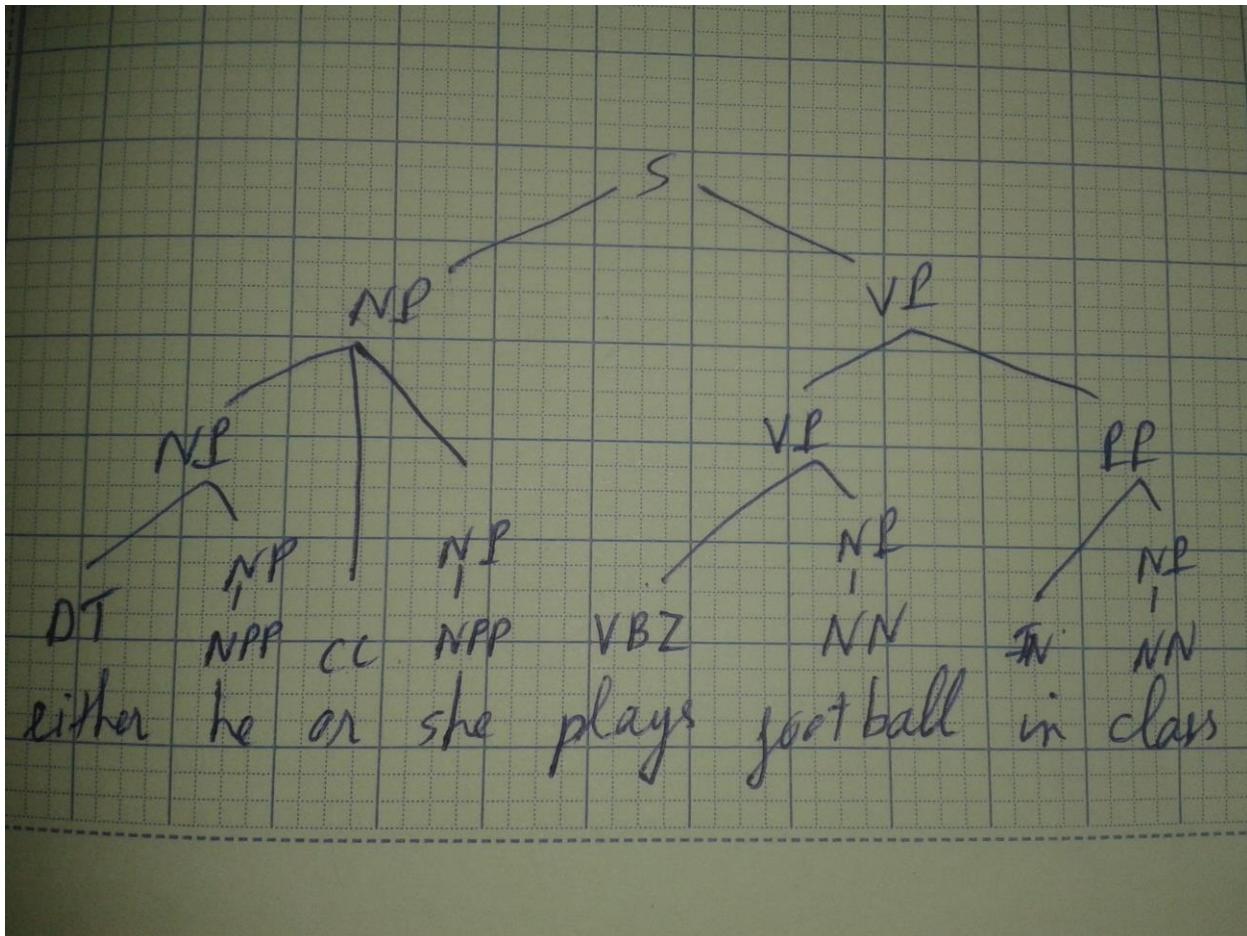
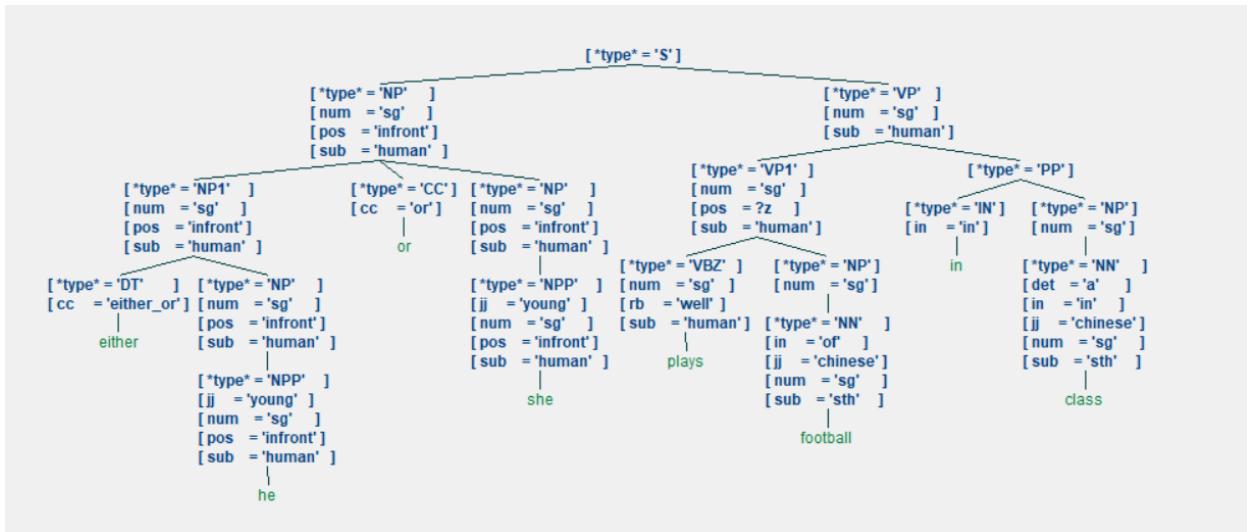
17. coupon of trip is good



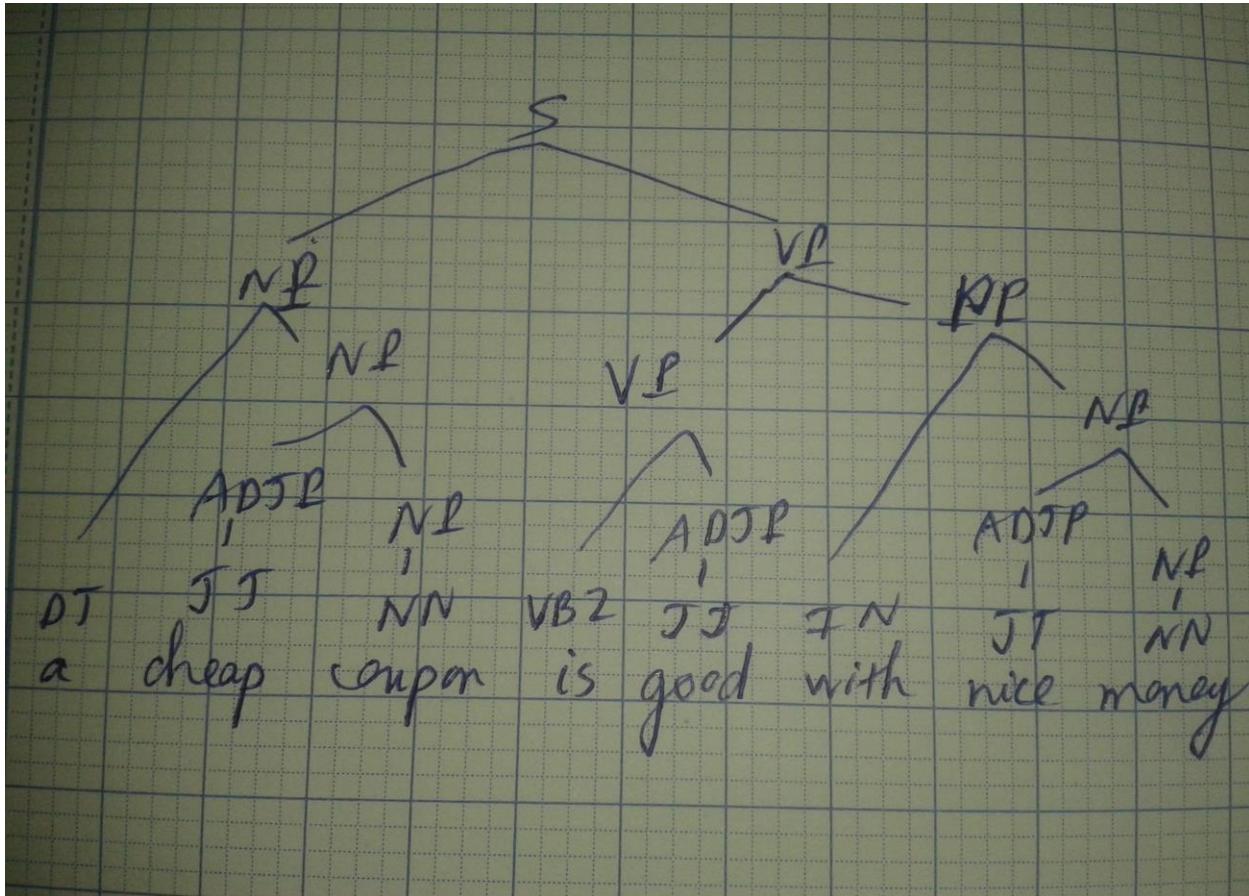
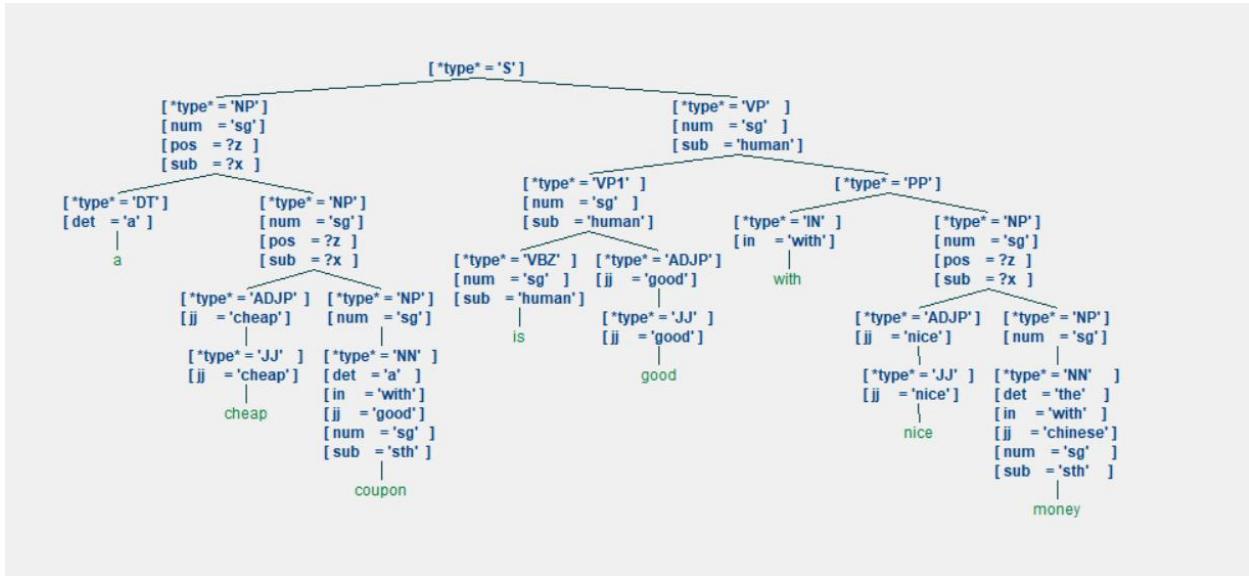
18. all animals are birds and dogs



19. either he or she plays football in class



## 20. a cheap coupon is good with nice money



Hết