# 1. John ate in the park.

| John | **Prop** | NP > Prop |
|------|----------|-----------|
| ate | **V** | VP > V |
| in | **P** | VP > PP > P |
| the | **Det** | VP > PP > NP > Det |
| park | **N** | VP > PP > NP > N |

**S**

**NP**    **VP**

**Prop**    **V**    **PP**

| John |

| ate |

**P**    **NP**

| in |
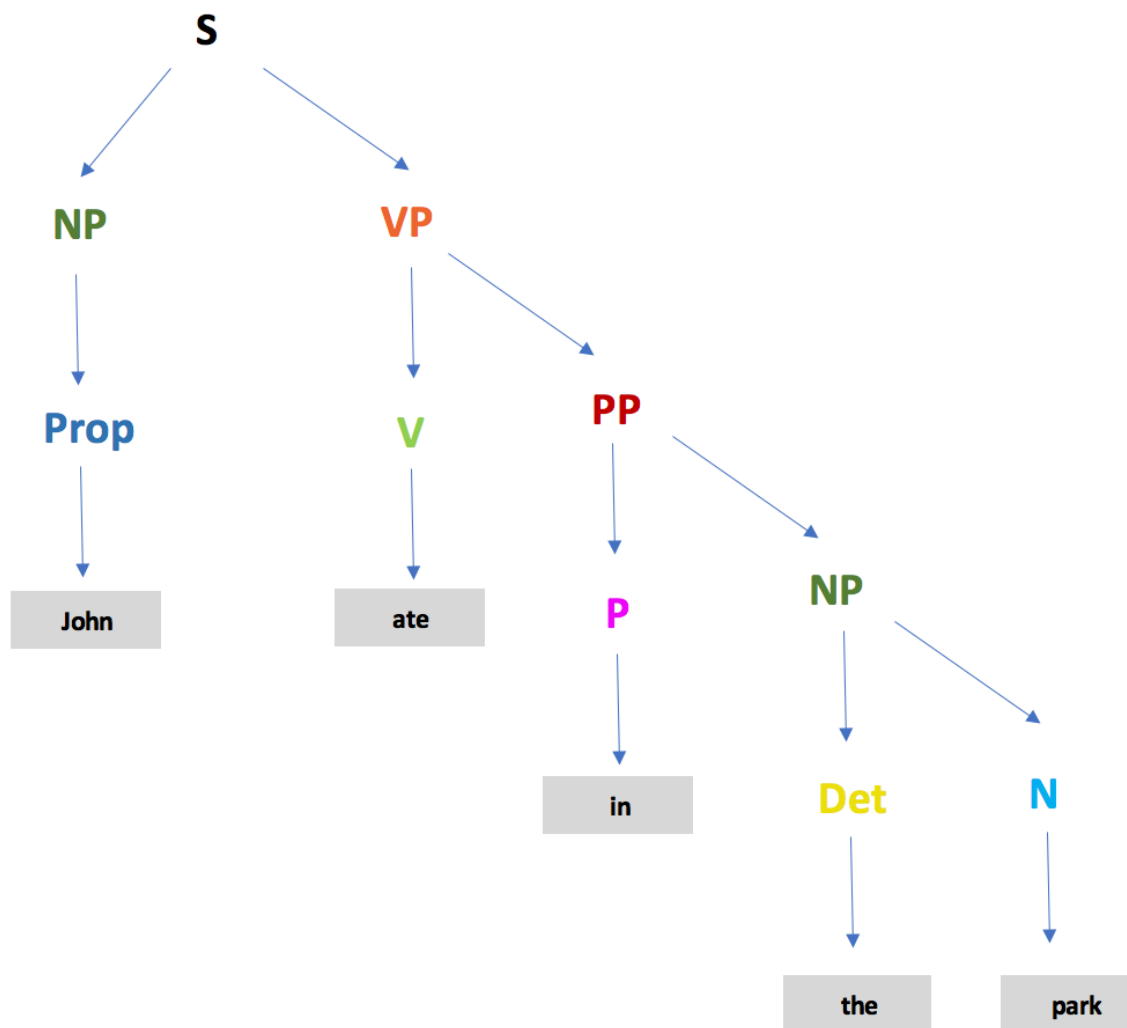
**Det**    **N**

| the |    | park |

## 2. The man with a cat saw my dog.

| | | |
|---|---|---|
| The | **Prop** | NP > Det |
| man | **N** | NP > N |
| with | **Prop** | NP > PP > P |
| a | **Det** | NP > PP > NP > Det |
| cat | **N** | NP > PP > NP > N |
| saw | **V** | VP > V |
| my | **Det** | VP > NP > Det |
| dog | **N** | VP > NP > N |

**S**
- **NP**
  - **Det** → The
  - **N** → man
  - **PP**
    - **P** → with
    - **NP**
      - **Det** → a
      - **N** → cat
- **VP**
  - **V** → saw
  - **NP**
    - **Det** → my
    - **N** → dog
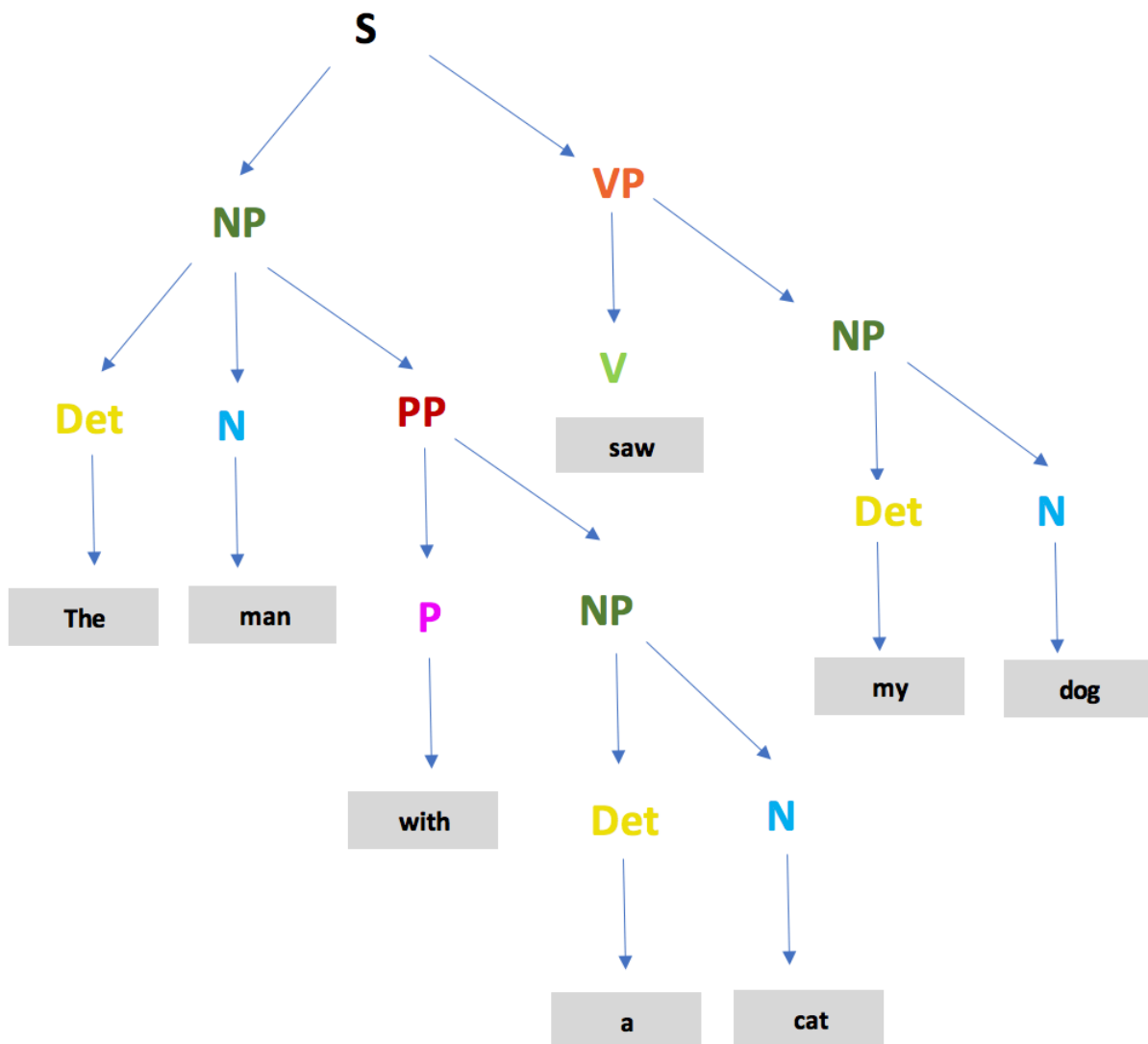
## 3. Bob saw a man in the park with a telescope.

| | | |
|---|---|---|
| Bob | **Prop** | NP > Prop |
| saw | **V** | VP > V |
| a | **Det** | VP > NP > Det |
| man | **N** | VP > NP > N |
| in | **P** | VP > PP > P |
| the | **Det** | VP > PP > NP > Det |
| park | **N** | VP > PP > NP > N |
| with | **P** | VP > PP > NP > PP > P |
| a | **Det** | VP > PP > NP > PP > NP > Det |
| telescope | **N** | VP > PP > NP > PP > NP > N |

```
                    S
                  /   \
               NP      VP
               |      / | \
             Prop    V  NP   PP
               |     |  / \  / \
             Bob   saw Det N P   NP
                      |  |  |  / | \
                      a man in Det N  PP
                              |   |  / \
                            the park P  NP
                                    |  / \
                                  with Det N
                                       |   |
                                       a telescope
```

**Tree 1:**

S
- NP
  - Prop → Bob
- VP
  - V → saw
  - NP
    - Det → a
    - N → man
    - PP
      - P → in
      - NP
        - N → the
        - N → park
        - PP
          - P → with
          - NP
            - Det → a
            - N → telescope

**Tree 2:**

S
- NP
  - Prop → Bob
- VP
  - V → saw
  - NP
    - Det → a
    - N → man
    - PP
      - P → in
      - NP
        - Det → the
        - N → park
- PP
  - P → with
  - NP
    - Det → a
    - N → telescope