

?????

- [\[REDACTED\]](#)
- [RAG](#)
- [\[REDACTED\]](#)
- [\[REDACTED\] WeaveMind](#)
- [\[REDACTED\] LLM\[REDACTED\]](#)
- [\[REDACTED\]](#)
- [\[REDACTED\]](#)
- [\[REDACTED\]](#)
- [\[REDACTED\] SVO\[REDACTED\]](#)

??

- ????

- ??????????

1. 
1. 
2. 
3. A->B(30%) A->C(20%) A->D(25%) A->E(25%) B->C(100%)  A
 C  B
2. 
1.  "  "  "  "
- 
2.  ():  "A  "
- 
3. 
4.   
1. 

2.

meaning????

1. meaning
 1. token meaning
 2. meaning
2. meaning
 1.
 2.
 3. “”
3. token
 1. KVcache
 2. token

????

1.
 1.
 2.
 3.
2.
 1.

meaning4 + meaning= + meaning5

meaning meaning meaning

1. meaning1 + meaning + meaning2 = meaning2
2. meaning4 + meaning + meaning5 = meaning6

RAG

RAG

RAG???

- 1.
 - 1.
- 2.
 - 1.
- 3.
- 4.
- 5.
- 6. prompt LLM
- 7.

?????

- 1.
 - 1. ()
 - 2. ,
 - 3.
- 2.
 - 1. ,
 - 1. “”
 - 2. meaning tree
 - 2.
- 3.
 - 1.
 - 2.
- 4.

??????

- 1. “” AI “”
 “”
- 2. “” “” “” “” “”
 “” HNSW NSG
SSG state-of-the-art

 - 1. HNSW NSG

2.

????

1.
 1. ->
 2. ,
2. MCP Server
 1. AI
 2.
3.
 1. , AI
 2. JiminI2.0 Pro, 2000 token
4. RAG **GraphRAG**
 1. LPG labeled property graph
 2. +prompt
 1.
 2.
 3.

GraphRAG

????

1. Graph RAG
2. Graph RAG **DB-GPT[50] + OpenSPG[42] + TuGraph[46]**
 1.
 2.
 3.
 4. SPG-Reasoner

GraphRAG??

??????

1.
2. LPG
 1. prompt LLM LLM
 2.
 3.
3.
 1.
 1. node group

2. ☐ Node2Vec

☐

☐

4. node group ☐ -- ☐

1. LLM ☐ node group☐

1. ☐

2. ☐

2. ☐

5. ☐

1. ☐ TextUnits

1. ☐

2. ☐

2. ☐

1. ☐

2. ☐

3. ☐

4. ☐

6. ☐

1. ☐ UMAP☐ 2D ☐

????

1. ☐

1. ☐ ☐

2. ☐ Node☐ Node

1. MapReduce

3. ☐ +☐ +☐ ☐ LLM

2. ☐

3. ☐

1. ☐ ☐ node☐

??

1. ☐

1. ☐ "A B"☐

2. ☐

3. ☐

2. ☐

1. ☐

3. ☐ prompt☐

1. ☐

4. ☐

1. ☐

5. ☐

1. ☐ token☐

6. ☐

[illegible]

"xxx"

2. ### xxx□□□□□□□□

xxx

--	--	--	--	--	--	--

xxx

--	--	--	--	--	--

###

--	--	--	--	--

???

1.

--	--	--	--	--	--	--	--

[illegible]

1.

--	--	--	--	--	--	--

label[]

[illegible]

prompt[] [] []

3.

--	--	--	--	--	--	--

[illegible]

2.

--	--	--	--	--	--

Reasoner

???

- The diagram illustrates various LLM architectures and their components, organized into six main sections:

 - Section 1:** Shows a sequence of tokens represented by boxes. The first row has 16 boxes, the second has 14 boxes, and the third has 4 boxes.
 - Section 2:** Shows a sequence of tokens. The first row has 8 boxes, followed by a prompt " " and 8 boxes, labeled "-> LLM". The second row has 6 boxes, followed by a list:
 1. 8 boxes
 3. 6 boxes
 1. 8 boxes
 2. 4 boxes
 The fourth row has 4 boxes, labeled "-> LLM".
 - Section 3:** Shows a sequence of tokens. The first row has 8 boxes, followed by a list:
 1. RAG 8 boxes
 2. LLM 8 boxes
 3. 4 boxes + 4 boxes
 1. 8 boxes
 4. **LLM** 16 boxes
 1. 8 boxes
 2. 4 boxes
 To the right of the last two items is **LLM** 8 boxes.
 - Section 4:** Shows a sequence of tokens. The first row has 8 boxes, followed by a list:
 1. 8 boxes
 2. 4 boxes
 3. 8 boxes
 To the right of the first item is **LLM**.
 - Section 5:** Shows a sequence of tokens. The first row has 8 boxes, followed by a list:
 1. LLM
 - 16 boxes
 - 4 boxes
 1. 4 boxes
 2. 4 boxes
 - Section 6:** Shows a sequence of tokens. The first row has 4 boxes / 4 boxes, followed by a list:
 1. 4 boxes / 4 boxes -- LLM 4 boxes
 1. LLM 8 boxes
 2. 4 boxes
 3. 4 boxes
 To the right of the first item is **Latent Space**.

2. 你 “你 ”

1.

2.

7. 你 你 2 你 你

8.

kv cache

9.

KV cache

1.

2.

AI??????

1. 你 LLM

2.

AI

3.

4.

????????????

1.

2. 你 /你 /idea

1. / / 你

2. 你 “ ” markdown ”

3. 你 “transformer ”

3. 你 /

1. 你 xxx 你 xxx

2.

3. 你 AI 你 ”

你 ”

4. 你 “ Anthropic Thinking Machines

你 30

OpenAI

AI

你 ”

LLM

5. AI

6. 你 8B GPT-5

7. “LLM ”

8. LLM AI

9.

10. “maybe know

finetune

你 ”

你

4. Embedding

1. 你 A > 你 B 你 A

2. Karpathy AGI

1. “Karpathy+AGI ”

2. “ Karpathy ”

3. AGI

4. 你 + 你 + 你

1.
2. Karpathy AGI
5.
 1.
 2. $A+B = B+A$
5.
6.
1. ==Karpathy

??

1.
2. $a>b$ $b>a$
3.
4. /

 1.
 2.
5. LLM LLM
6.
7.

????

1.
2.
3.
 1. xx xxx, xxx, xx xxx
 2.
4.
 1. Kapaskey==

?????

1.
 1.
 2.
 3. / --
 4. / --
 5. (Cognitive Primitives)

2. []
1. []
2. [] RAG?
3. [] LLM[]
3. []
4. [] -- []
1. []
2. []
1. []
2. [] AGI[]

token?????

- ```

1. 00 100 :NAND Flash 0000000000000000
2. 00 100 :[[NAND Flash] 0 [[000 0] 000 0]000 0]000 0[[000 0]0 000 0] 0 0]
3. 00 200 :00000000000000000000000000000000
4. 00 200 :[[[0 000 0]000 0]0 0 000 0][0 000 0]0 0]000 0[000 0]000 0]]0 0[[000 0][000 0]0000 0]0
 0[[000 0]000 0]]0 0[000 0][000 0] 0 000 0]]0 0]
5. 00 300 :00000000000000000000000000000000
6. 00 300 :[[0 000 0]000 0]0 0[[[000 0][000 0][000 0]000 0]]0 0[[0 0]000 0][000 0]000 0]]0 0
]
7. 00 400 :00000000000000000000000000000000
8. 00 400 :[[0 000 0]000 0]0 0 000 0]0 0]000 0] 0 000 0[000 0]0 0]0 0[[0 0]000 0][000 0]
 00 0[0 0]0000 0]]0 0]000 0]]0 0 000000000000 "000000000000
python3-dev00000000000000000000000000000000 "

```

- 
1. token [ ] + token [ ] LLM
2. [ ] [ ] [ ]
1. [ ]
2. [ ] “ [ ] ” [ ]
3. [ ]
- [ ] **markdown** [ ] **item** [ ]
- [ ]
4. [ ] **meaning tree**
- [ ]
- [ ]
- [ ]
5. [ ]
- [ ]
6. [ ]
- AI** [ ]
1. [ ] [ ]

2.
3.  --
  1.  LLM
  2.  item
  3.
4.  LLM KVCache
  1.
5. 
  1.
6. 
  1.  / /

??????

1. 
  1. LLM
2. 
  1.   **SSM**
    1.  LLM
    2. 2 target
  2. 
    1. <https://www.modelscope.cn/models/jinaai/jina-embeddings-v2-base-zh/summary>
    2.
    3.  **Qwen/Qwen3-Embedding-4B**
      1.
      2.
      3.
      4.   **top**
  3.    kv cache
    1. kv cache
  3. 
    1.
    2.
    3.  LLM Agent/MCP
  4. 
    1. LLM
    2.
    3.
  5.  token
    1.
    2.

# ??????????

1.  token/meaning
  1.  mapping
  2.
  3.  A  B  A  B  A  B  A  B  A  B  C
  4. A->vectorA B->vectorB A  B->vectorA&B
2.  **meaning tree** **node** **embedding**
  1.  meaning embedding embedding
  2. meaning
  3.  meaning embedding A  B==B  A
  4.  embedding meaning
  5.   =kaparskey
    1.  kaparskey   meaning tree embedding
    2.  meaning embedding
  6.  **AI**
    1.  ( token  embed  )  emb
    2.  =AGI  embed
    3.  emb

# ??LLM???????

1.  LLM  + **SVO** 
  1.
2. LLM -> AST ->  -> 
  1.  "  "
  2.
  3. LLM
  4. 
    1.
    2.
  5. 
    1.

# ??2

1.  LLM meaning

1. 词义网络
  1. 词义网络图 meaning 词义 词义树
  1. 词义网络
  2. 词义网络
  2. 词义网络 meaning 词义
  3. 词义网络 meaning token 词义树
  4. 词义 AI 词义 meaning tree 词义网络
    1. 词义 meaning 词义网络
      1. 词义网络图
      2. 词义网络图 “词义” 词义网络
      3. 词义网络图
    2. 词义 + 词义 + AI 词义
      1. 词义 LLM 词义网络
      2. 词义网络图
      3. LLM 词义 “词义” “词义” 词义网络
2. 词义
  1. 词义 LLM 词义网络 -> meaning token 词义
2. 词义 meaning tree + 词义 meaning 词义 prompt
3. 词义 meaning 词义网络图
4. 词义 LLM 词义 prompt 词义网络 LLM

??3

??

1. LLM 词义网络 + 词义 + 词义网络
  1. 词义 LLM 词义网络图
  2. 词义 + 词义网络图
2. 词义网络 “词义”
  1. 词义网络图
  2. LLM 词义网络
  3. 词义网络图
  4. 词义
3. 词义网络 token 词义 xx 词义 A 词义 B 词义 B 词义 C 词义 A 词义 C
4. 词义网络图

??

1. 词义 -> LLM 词义 -> 词义网络 -> 词义 / 词义 -> 词义网络
2. 词义 -> LLM 词义 -> 词义 meaning tree 词义
3. 词义网络图

1. 
  1.  $xAx == x \cdot xA$
  2.  $x1$  and  $x2$  and  $x3 == x2$  and  $x3$  and  $x1$
  3.
2. 
  1.
  2.
  3.  LLM
4.  -> prompt -> LLM ->  -> 
  1.  prompt
  2. LLM
  3.
  4.
5.  LLM  ->  ->  -> 
  1.  LLM
  2.

# ??4

1. LLM  seq -> LLM encoder -> vector -> DB
2.  vector  seq seq -> LLM encoder -> vector -> DB -> seq -> LLM -> seq
3.  tree +   $V_{\text{tree}}$  +   $V_{\text{seq}}$ 
  1. 
    1.
  2. tree
 
    1.  LLM
  3.   $V_{\text{tree}}$ 
    1.
    2.  +
    3. LLM
      1.
      2.
4.
5. 
  1.  $V_{\text{tree}}$
  2.  $V_{\text{seq}}$ 
    1.
    2.

# ????? WeaveMind

1. 
    1.  /
    1.
    2.
    3.  / /
    4.
  2. 
    1. AI
    2.
    3.
  3.  AI
    1.  /
    2.
    3.
    1.
    2.
    4.
    1.
    2.
    4.
    1.
    2.
    3.
    4.
    5.  /
      1.  ->  ->
      2.
      3. ->
      4.
    6. **deep research**
      1.
      2.
      3.
      4.
    7. 
      1.

2.

    1.
    2. “”
    3.

1.
4.
1.
2.
5.
1.
2.
6.
3.
1.
1.
2.
3.
4.
2.
3.
4.
5.
4.  AI
1. AI
1.  --
2.
3.
2.  topic
1. LLM
3.

AI

AI

1.
1.  “ ”
- 
- AI
- 
- 
2.
1.  “ ”  LLM
- 
- “ ”
3.
1.  “ → → → ”
- 
-



????LLM???

????????????

??????

[illegible]

????

- AI [ ]
- top-K chunks [ ]
- [ ] " [ ] " [ ] " [ ] "
- GraphRAG [ ]
- [ ] AI [ ]
- [ ] AI  
[ ]

LLM???????

- 
1. LLM
1. [tokens]
2. [tokens]
3. [tokens] " " [tokens]
4. [tokens] MoE
2. KVCache [tokens]
1. [tokens]
1. [tokens] KVCache [tokens] token

[illegible][illegible]

3. 

|  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|

1. ☐ ☐ ☐ ☐ ☐ ☐ Latent Chain-of-Thought ☐ ☐ ☐ ☐ ☐ ☐

[illegible]

1.

2.  

3. 

|  |  |  |  |  |
|--|--|--|--|--|
|  |  |  |  |  |
|--|--|--|--|--|

4. 

|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|--|--|--|--|

      " 

|  |  |  |
|--|--|--|
|  |  |  |
|--|--|--|

 "      "

?????

???????

- 1. 
  - 1.  AGI
- 2. 
  - 1.
  - 2.  LLM
  - 3. 
    - 1.  +
    - 2.  ...
- 3.  RAG
  - 1. 
    - 1.
    - 2.
  - 2. 
    - 1.  AI
    - 2.  LLM
  - 3. LLM
    - 1.  kv cache
    - 2.
- 4. 
  - 1. 
    - 1.  rStar-Math CoT
    - 2. AlphaGo
  - 2. **Tool-Integrity Reasoning****TIR**

???????

- 1. 
  - 1. xxx xxxx
  - 2. xxx xxxx
- 2. 
  - 1.  xxx xxxx
  - 2. xxx xxx
- 3. 
  - 1.
  - 2.

?????

- 1. meaning tree
  - 1. [ ]
  - 2. [ ]
  - 3. [ ] LLM [ ]
  - 4. [ ]
- 2. [ ]
  - 1. [ ]
  - 2. [ ]
  - 3. [ ] prompt [ ]

?????

- 1. [ ]
  - 1. [ ] Consolidation [ ]
    - 1. [ ]
    - 2. [ ]
  - 2. [ ] Updating [ ]
  - 3. [ ] Indexing [ ]
    - 1. [ ]
    - 2. [ ]
  - 4. [ ] Forgetting [ ]
    - 1. [ ]
  - 5. [ ] Retrieval [ ]
  - 6. [ ] Compression [ ]
    - 1. [ ]
    - 2. [ ]
    - 3. [ ]
- 2. AI [ ]
  - 1. [ ]
    - 1. [ ]
    - 2. [ ]
  - 2. [ ]
    - 1. [ ] KV cache [ ]
    - 2. [ ]
    - 3. [ ]
      - [ ]
        - 1. [ ]
        - 2. [ ]

????

- 1. [ ]
  - 1. [ ] ...
- 2. [ ]
  - 1. [ ]

2.
3. 
  1.
  2.  prompt
3. 
  1.
  2.
  3.
4. 
  1.  “”
  2.  LLM
  3.

????

1.
2. 
  1.
3. 
  1.
  2.
  3.
4. 
  1.

AI

1.
2.
3.

Forward: input -> format -> meaning tree -> calculate -> meaning tree -> gen -> output

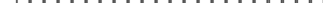
Learning: input -> format -> meaning tree -> calculate -> new meaning -> update meaning

???

□□ meaning -> weight

□□□□ LLM □□□□ meaning□□ format □ gen □□□□□□□□□□

???

1.  1   
meaning tree -> meaning tree
2.  2  +  +  
3.   



“ ” , :

- “ka-ba-si-ji”
- K Logo
- “ ” “ ” “ ”
- 
- / /

, “ ” ; ,

## 1.3 ?????????????

1. (Graceful Degradation) — , , —— “

2. — “ + + “ , “ ” ,

3. — ( ), embedding ”

## 1.4 ??? AI ???

embedding , , ——

# ????????(Hebbian Learning & Weighting)

## 2.1 ????

1949 Donald Hebb :

“ Neurons that fire together, wire together. ( ) ”

“ ” , “ ”

2.2 ?????????

“ ” “AGI 10 “ , \$w\_{ij}\$

$$\Delta w_{ij} = \eta \cdot a_i \cdot a_j$$

$\eta$  ,  $a_i$   $a_j$

(LTP, Long-Term Potentiation) —NMDA  
AMPA ,

2.3 ?????????

learning rate:

- 
- 
- 
- 

, —  $\times$  =

2.4 ???????

(LTD) , , —

?????:?????

3.1 ?????????

—

- (working memory) ,
- = ; = —
- " " " ,

### 3.2 ?????????????







-  : 
-  : 
-  : 
-  : 
-  : 








### 3.3 ??????,????












-  ,  (  ) 
-  "  " , 
-  =  "  "











|  |  |  |  |  |
|--|--|--|--|--|
|  |  |  |  |  |
|--|--|--|--|--|

- 
-  (  H.M.)  , 
-   (reconsolidation) —  "  " 

### 3.4 ?? : ????????

1.  :
2.  ( ) :
3.  :   ,
4.  :  ,



 (  ) 

 (  ) —— 
 ,  


### 3.5 "?????"

•  →  "  " →  → 

•  →  → 

### 3.6 ?????:reconsolidation ?????

1.  ( )
2.  (  ) 
3.  (§2.2), 
4.  — 

# ??????(Spreading Activation)

## 4.1 ?????

## 4.2 ????(??)

-  ()
-  (,  2-3 )
-  ()

$$a_j(t+1) = \sum_i w_{ij} \cdot a_i(t) \cdot \text{decay}$$



模型 : 模型 模型 , 模型 query-triggered 模型 ; 模型 ( 模型 , 模型 LLM) 模型 模型

4.4 ?????????

- 模型 (priming) 模型
- 模型 模型
- 模型 模型
- 模型 模型
- 模型 模型
- 模型 模型 + 模型 , 模型 "模型" 模型

4.5 ???????"?????"

模型 模型 :

1. 模型 → 模型
2. 模型 → 模型
3. 模型 → 模型
4. 模型 → 模型 , 模型

??????:????????????

5.1 Collins-Loftus ??????(1975)

模型 : 模型 , 模型 , 模型 模型 (模型 )

5.2 ACT-R ??(Anderson)

模型 模型 (Base-Level Activation):

$$B_i = \ln\left(\sum_{k=1}^n t_k^{-d}\right)$$

模型 "模型" —— 模型 , 模型

5.3 ????????

[illegible]

## 5.4 ??????(Complementary Learning Systems, CLS)

McClelland□ McNaughton□ O'Reilly □□□□ ,□□□□□□ :□□□□□□□□  
 □□□□□□□□□□ □

-  
-  

## 5.5 预测编码(Predictive Coding)

-  =  + 
-  = 
-  = 
-  = 

?????????:?????

: ,

, CNN

## 6.1 ????? CNN:????????

Hubel □ Wiesel □ 1950-60 □□□□□□□□ , □□□□□□ :

- **V1** : ( CNN )
- **V2** :
- **V4** :
- **IT** ( ): ( CNN )



**CNN**  Yann LeCun  LeNet  Hubel-Wiesel 

[illegible]

-  (local receptive field) → CNN 

-  → CNN 
-  →  → CNN  + 
-  → CNN 

 :  "  "  ,  



——  CNN

## 6.2 ????? ? ???????

 :

-   ↔  
-   ↔  
-   ↔  
-   ↔  + LTP 
- **Batch training**  ↔ 
-  **epoch**   ↔  
-   ↔  
- **Experience replay(RL)** ↔ 
- **Learning rate scheduling** ↔ 
-  →  ↔  → 

 ,   (Dropout  Batch Normalization 

LSTM  ) 

## 6.3 ?? ? ????? + ???

 Transformer  :

- **Query:**  / 
- **Keys:** 
- **Values:** 
- **Softmax**  : 

 "  " ,  "Query  Key  "



## 6.4 ??????:????

 ,  :

-  ,  "  "  " 
-  ——  (  +  )  ) 

-  Al 

The diagram illustrates the memory access pattern for a loop. It shows four stages of memory access, each represented by a box divided into two sections. The top section is labeled 'Accessed' and the bottom section is labeled 'Stored'. The first stage shows the first 10 elements (0-9) being accessed and stored. The second stage shows the next 10 elements (10-19) being accessed and stored. The third stage shows the next 10 elements (20-29) being accessed and stored. The fourth stage shows the next 10 elements (30-39) being accessed and stored. Arrows indicate the flow from Stage 1 to Stage 2, Stage 2 to Stage 3, and Stage 3 to Stage 4.

1. ,  ()
2. ,  ()
3.  —   
4. ,  ()
5. , , 
6. ,  ()

7.   "  "

8.  (reconsolidation), 

??????

-  ↔ Embedding 
-  ↔  / 
-  ↔ CNN 
-  ↔  / 
-  ↔ Recency / frequency 
-  ↔ RAG 
-  ↔  embedding + 
-  ↔ Experience replay
-  ↔  learning rate + RLHF
-  ↔ 

**RAG**()  : , LLM  
,

- :  +  ,
- /  :
- :
- :  "  "  "  "
- :  ,

??



- 
- 
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- 
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, CNN Transformer RL


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Thompson □ Mandarin Chinese: A Functional Reference Grammar □ □ □ □ □

| | | | |

| 項目      | 日本語                | 英語                   |
|---------|--------------------|----------------------|
| 文法      | 文法 / 文法            | 文法 / 文法              |
| 文法      | 文法                 | 文法                   |
| 文法      | 文法                 | 文法                   |
| 文法      | SVO                | SVO / SOV / VSO      |
| 文法      | 文法                 | 文法                   |
| 文法 / 文法 | 文法 topic-prominent | 文法 subject-prominent |
| 文法 / 文法 | 文法 parataxis       | 文法 hypotaxis         |
| 文法      | 文法 "文法" "文法" "文法"  | 文法                   |
| 文法      | 文法                 | 文法                   |
| 文法      | 文法                 | 文法                   |

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3.4 ????????

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“□ □ □ "□□□ vs "□ □ □ "□□□ "□ □ □ "□□□ vs "□ □ □ "□□□ "□ □ □ "□□□ vs "□ □ □ "□□□ "□ □ □ "□□□"

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4.1 ??????SVO?????

“□□ S□ □ V□ □□ O□

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“✓ □□ X □□□□□□□□□□

4.2 ????????

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|---------|-------|-------------------|
| □□ → □□ | □□□□□ | "□□ □ "□□ "□ □□ " |
| □□ → V  | □□□□□ | "□□ □ "□□ "□ □□ " |
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4.3 ?????

topic

“ / / / / / ”

“ ”

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5.1 ????

5.2 ?????????

=     

(1) ????

V + V/Adj

“ / / / / ”

“ ” ” ”

(2) ????

V +     / / / / / / / /

“ / / / ”

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- (3) ???? ?

“000 / 000 000 / 000 000 / 000

(4) ????

**"**□ □ / □ □ □ / □ □ □

(5) ????

“□□□□ / □□□□ / □□□□□□

(6) ????

“ ”    /    /

### 5.3 ?? "de"

 de   

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□□□□□□□□ "□ "——□□□□□□□□ □□ □□□□□□ □□ □□

6.1 ???

| □□     | □□  | □□  | □       |
|--------|-----|-----|---------|
| □ 1    | V □ | □□  | □□ □ □□ |
| □ 2    | □□  | □□□ | □□ □    |
| □      | V □ | □□  | □□ □ □  |
| □      | V □ | □□  | □□ □    |
| □ / □□ | V □ | □□  | □ □ □   |

"□ " □□□□□□□□□□□□□□□□

- □ 1□□□□ = □□□□ □□
- □ 2□□□□ = □□ □□□□□□ / □□□□

□□□□□□□□□□

“□□ □ □ □ □ □□ "□ " □□□□□□□□□□ □□□□□□□□□□ "□ "

6.2 ??????????????

“□ □□ □□□□ □ □□ □□□□ □ □□ □□□□

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6.3 ????? vs ??

□□ "I went / I go / I will go" □□□□□□ □□□□ "□□ "□□□□□□□□□□

“□□ □□□□□□ □ □□ □□□□ □□ □□□□□□ □ □□ □□□□

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7.1 ??????? / ???

“XXX XXX XXX XXX

XXXXXXXXXX V XXXXX " "XXX XXX XXXXXX XXXXXX XXXXX " " " " " " " / XXXXXXXX V XXXXXXXXXXXXXXXXXXXXXXX

“X XXX ✓ XXXX X XXXX

7.2 ??????? / ???

“XX X XXXX XX XXXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX / XXXXX "XXXXXX "XX

7.3 ???

XX NP XXXX V XXXXX V XXXX

“XX X [XX ] XXXXX

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

7.4 ???

XXXXXXXXXX VXXXXXX

|

□ [□□□□] □ [□□] □ [□] □

V   

7.5 ?...???

“**It is not a matter of if, but when.**”



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"□□□□ / □ / □□"

## 7.6 ???











[illegible]

11/11

## 7.7 ???

“ A □ B + adj□□ □ □□ A □□ B + adj□□ □□ □□ A □ B □□ + adj□□ □□ □□□ A □□ B + adj□□□□□ □□ □□□

$$|| \begin{array}{|c|c|} \hline & \\ \hline \end{array} || \neq || \begin{array}{|c|c|} \hline & \\ \hline \end{array} || \begin{array}{|c|c|c|c|} \hline & & & \\ \hline \end{array}$$

11 

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11

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## 8.1 ???????????

|                                                                                     |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
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## 9.1 ? vs ?

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| □    | □ □ / □ □     | □ □ / □□ □ |

" " " — / " " —



 " vs "
 
 "

## 9.2 ?????

" " " " " "

[illegible]

“ ” — “ ” ” ” ” ” ” ”

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## 10.1 ??

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"□ " □□□□□□      ——□□□□□□□□      □□ □□□□□□

“□□ □ □□□ — □□□□ □□ "□ "□□□□ "□□□□□□ "□□□□□□

10.2 ??

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| □ / □□  | □□ □□   |
| □□      | □□ □□   |

10.3 ????????????

□□□□□□□□□□□□      □□ □ □□ □

“□ □□□□□ — □□□□□□ □ □□ □□□□ — □□□□ □ □□ □□□□ — □□□□□□

□□□□□□□□□□□□□□□□□□□□      "□ "□ "□ "□□□□□□□□

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11.1 ?????

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| □□□ | □□□□    | □ □□□□ □□ |

|  | " " |  |
|--|-----|--|
|  | V V |  |

—

11.2 ??

“ / / ”

+

11.3 ?????

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12.1 ???

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|  | / / |   |

" " " " — /

12.2

| / / / / | / / / / |
|---------|---------|

this/that/those este/ese/aquel

12.3

/

“ Q A ”

“ [ ] [ ] [ ] ”

[ ]

????-???

13.1

+ +

“ [ ] [ ] ”

" "

“ [ ] — [ ] [ ] — [ ] ”

"As for this book, I have read it." [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]

11



15.5 ?? / ????

Li & Thompson               Langacker

   "  /  "  / 

????????

[illegible]

1. 主谓宾 → 主谓宾 (主谓宾) "主谓宾" (主谓宾)
2. 主谓宾 "X Y" (主谓宾) "X Y"
3. 主谓宾 "主谓宾" (主谓宾) "主谓宾"
4. 主谓宾 "主谓宾" (主谓宾) "主谓宾"
5. 主谓宾 "主谓宾" (主谓宾) "主谓宾"
6. 主谓宾 "主谓宾" (主谓宾) "主谓宾"
7. 主谓宾 "主谓宾" (主谓宾) "主谓宾" SVO

[illegible]

??????????

[illegible]

- [illegible]












????????SVO????

??????? SVO ?????

“ ” /

(S) [V] (O)

” ”

→

???????SVO ?????????

(S) [V] (O)

1. realis / / /

2.

3. / /

4. V

5. ” ”
- ” ”

????????

| A. | / SVO | / / / |  |
|----|-------|-------|--|
| B. | /     |       |  |
| C. | / /   | / / / |  |





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| 項目  | 内容      | 単位  |
|-----|---------|-----|
| 第1回 | 基礎知識の習得 | 1単位 |
| 第2回 | 基礎知識の習得 | 1単位 |
| 第3回 | 基礎知識の習得 | 1単位 |
| 第4回 | 基礎知識の習得 | 1単位 |

**SVO** ☐☐☐ ☐☐☐☐☐☐☐☐☐ ☐☐☐☐☐☐ ☐☐☐☐☐☐






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| 項目 | 内容         | 備考           |
|----|------------|--------------|
| 1  | 1111111111 | "1111111111" |
| 2  | 1111111111 | "1111111111" |
| 3  | 11111111   | "11111111"   |
| 4  | 1111111111 | "1111111111" |

**SVO** ☐ ☐ ☐ ☐

**"** **"** **"**

**"** **"** **"**

() [] ()

   $5 \div 0$  



8.1 ???

“ ”

/ / / / NP V V

S1=, V1=, [01=S2=], V2=, 02=

( ) ( ) + ( ) ( ) " "——

8.2 ???

“ ”

V → V

8.3 ??? / ???

“ ” / “ ”

SVO / /

8.4 ??? / ???

“ ” / “ ”

/ V " " —— " "

/ / " V"

8.5 ???

"A B " / "A B" / "A B "

A B / / SVO

????????????

|  | " " " |
|--|-------|
|  | " " " |
|  | " "   |
|  | " " " |
|  | " " " |

SVO S O

“ ”

( ) ( ) " " ( ) ( ? )

S O

???????????? / ???

topic-prominent

| -     | " " "         |  |
|-------|---------------|--|
| ...   | " " " / " " " |  |
|       | " " "         |  |
|       | " " "         |  |
| ... / | " " "         |  |

SVO  

“ ”  " " SVO  " —

  /  /  /

?????????

   pro-drop

“ [ ]  [ ]  [ ] ”

“ ”

SVO  S  SVO  

  5 “ ”  —

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|---------|--|
| X  /  X |  |
|         |  |

SVO

"  "

□□□ □□□□□□ evidence □□□□ / □□ / □□ / □□ / □□□□ confidence □□

| 名前 | 説明 | 参照 |
|----|----|----|
| 名前 | 説明 | 参照 |
| 名前 | 説明 | 参照 |
| 名前 | 説明 | 参照 |
| 名前 | 説明 | 参照 |

**“ ”** “ ” “ ” “ ” “ ” “ ”

□□□ SVO □□□□□□□□□□□□□□□□

1.
2.
3.    $\neq$    $\neq$
4.   "  SVO  "  "  SVO  "
5.  /
6.   /  /  /  /  /  /  /  /
7.   /  "  "

(S) [V] (O)                      - □□□□□□□□

```
@tense: past | present | future | (unmarked)
```

```
@purpose: <[] [] [] [] []>
```

```
@quantifier(0): universal | existential | numeric(n)
```

■ ■ ■

```
@focus: <which constituent>
```

```
@source: <speaker / cited entity>
```

□□□□□ (speech act)

```
@act: assert | question | command | exclaim
```

[illegible]

????????

1.   — 
2.  +   — 
3.   — 
4.   — 

□□□□ SVO □□□□□□□□ "□□□□□□ "□□ "□□□□□□ "□□ 3□ "  
 □□□□□□ "□□□□□□□□ □□□□ ———□□□□□□□□ V  
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 00000000 00 0000 "000000"——00000000 SVO  
 0000000000