

The Logic, Syntax and Semantics of Numerals in pre-Buddhist Chinese

by

何莫邪

Christoph Harbsmeier

Le 26/05/2022 à 22:41, Christoph

Harbsmeier a écrit :

Je suis en train de m'occuper de cette phrase, dont les historiens de la pensée mathématique auraient du s'occuper longtemps. J'espere ils ont fait ça, et si non, je trouve que c'est un scandale!

二五為非十也。

"Two quintuplets do not count as the same as a decuplet. Two times five does not count as the same as ten"

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Yesterday, 22:19 Christoph Harbsmeier cher j'aurais tendance à traduire "ce que fait deux

Early derived use in bronze inscription

- Wolfgang Behr's Jinwen PhD thesis no. 96

- *shū Duōfù pán* 叔多父盤

- 百子千孫

- 1000 SON 1000 GRANDCHILD

- Behr “ihre Söhne zu ver Hundertfachen, ihre Enkel zu vertausendfachen”

- **“hundredise the children and thousandise the grandchildren”**

- Clearly, the derived use (活用) of numbers is early.

Some basic references

- Gottlob Frege, *The Foundations of Arithmetic: A Logico-mathematical Enquiry into the Concept of Number*, Oxford: Blackwell, 1951, 2. ed. New York: Harper Torchbooks, 1960
- translated from the German by the great analytical philosopher J.L. Austin (of *How To Do Things With Words* fame),
- Crispin Wright, *Frege's Conception of Numbers as Objects*, Edinburgh: Edinburgh University Press, 1983 is fundamental for an assisted understanding of Gottlob Frege.

“Number” versus “counted quantity”

- Zahl “number”
- Anzahl “numeric quantity”
- Marcel Granet noted first that Chinese mathematical discourse is about numeric quantities of things (often explicitly specified kinds of things, measures, items)
- Chinese mathematical discourse of *Anzahl* “quantities of things”, not numbers as such.
- The question is: when was oddness and evenness of numbers as such discussed in the history of Chinese mathematics.

Try to analyse precisely 二八十六 ”

2 8 10 6

- The grammar of Chinese mathematical discourse deserves the same type of systematic treatment that is given Greek mathematical discourse in Fabio Acerisi, *The Logical Syntax of Greek Mathematics*, Berlin: Springer, 2022. Indeed, both the Greek and the Chinese deserve straightforward corpus grammars like
- *A Grammar of Euclid's Elements*
- *A Grammar of Suànshù jiǔzhāng*
- etc.

- Bartsch, R. 1973: “The Semantics and Syntax of Number and Numbers”, In Kimball, *Syntax and Semantics*, Vol. 2, pp. 51-93.
- Guitel, G. 1975. *Histoire comparée des numérations écrites*, Paris: Flammarion, 1975
- Hurford, James R. 1987. *Language and number: the emergence of a cognitive system*, Oxford: Basil Blackwell.

- Kluge, T. 1937-42: I . Die Zahlenbegriffe der Sudansprachen;
- II. Die Zahlenbegriffe der Australier, Papua und Bantuneger;
- III. Die Zahlenbegriffe der Voelker Amerikas, Nordeurasiens, der Munda und der Palaioafricaner;
- IV. Die Zahlenbegriffe der Dravida, der Hamiten , der Semiten
- und der Kaukasier;
- V. Die Zahlenbegriffe der Sprachen Central Suedostiens, Indonesiens, Micronesiens und Polynesiens.
- All: Published by the author, Berlin 1937.
- Sakai, Hiroshi 1981. Kodai Chūgokujin sū kannen 古代中國人數概念 , Tokyo: Tsukumo shuppan, 1981.

數字的活用法 is ancient:

- Zhang Bingquan 張秉權, 甲骨文所見的數
“Numbers in Oracle Bone Inscriptions”, 中
央研究院歷史語言研究所集刊 49.3 (1975)
347-387.

Modes of counting

- 三人
- THREE PERSON
- 三人成虎
- THREE PERSON BECOME TIGER

- 三民
- THREE PEOPLE
- 三酒
- THREE LIQUOR

- The overall structural pattern of number-word grammatical functions is as follows:
- **Intransitive verbal** A:
- **Transitive verbal** B:
- **Deverbal-adjectival** C:
- **Deverbal-nominal** D:
- **Deverbal-adverbial** E:

A: VERBAL

1. vi stative: be X in number

- Zhōu Fǎgāo regards this as a nominal predicate. This raises fascinating fundamental issues on what it is to be a nominal predicate.
- We might expect that yě 也 would at least be **possible** if not current after this kind of numeral, if it were nominal.
- LY 2.2 子曰。詩三百。 The *Songs* **are three hundred in number**. (一言以蔽之。)
- MENG 夫道一而已矣 "is only one, no more"
- 而已 is normally post-verbal. Can it be post-nominal? We need to find examples.

2. vi stative-cataphoric: “be the following X in number”

- MENG lilou A:
- 孔子曰：『道二，仁與不仁而已矣。』
- "there are two ways, to be good and not to be good"

3 vi: “be X years of age”

- MENG, gongxunchouA 孟子曰：「否，我四十不動心。」
- LY 2.4; tr. CH
- 子曰：
- 「**吾十有五**而志于學， [1] By the age of fifteen my ambition was for study.
- **三十**而立， [2] By the age of thirty I had taken my stand.
- **四十**而不惑， [3] By the age of forty I was not confused.
- **五十**而知天命， [4]By the age of fifty I understood what was ordained by Heaven.<1>
- **六十**而耳順， [5] By the age of sixty my ears were attuned.
- **七十**而從心所欲， By the age of seventy, when I followed my heart's desires
- 不踰矩。」 [6] I would not overstep the rules."

4. vi: be X in number (of given larger number or set)

- MENG 2B02; tr. D. C. Lau 1.73f, mod. CH
- 天下有達尊三： There are three things which are acknowledged by the world to be exalted:
- 爵一， rank is one of them,
- 齒一， age is one of them
- 德一。 and virtue is one of them.
- I think I have seen this with other numbers but have not found the references so far.
- NB: In 達尊三 the 三 is postposed adjectival, i.e. **vpostadN**

5 (numerologically:) vi: be quintessentially associated with the number X

- GY Zhōu 3, 3.2, ed. Shànghǎigǔjí 1978, 1.98
- 天六 Heaven is associated with the quantity six” (i.e. has six kinds of energy liù qì 六氣)
- 地五, and Earth is associated with the quantity five (i.e. has five phases wǔ xíng 五行)
- 數之常也。 These are regularities in numerology.

6 vi: “be X in kind, be of X kinds”

- HF 46.1
- 姦偽無益之民六，
- The wicked and false people who are of no benefit are of six kinds.

7 vi: preceded by marker dì 第, “be the Xth”

- SHIJI
- 蕭何第一, Xiāo Hé was the first,
- 曹參次之。 Cáo Cān was the next.

- SJ 84/2491-2492; tr. Watson 1993, Han, vol.1, p.443
- 孝文皇帝初立, When Emperor Wen first came to the throne
- 聞河南守吳公 he heard that Lord Wu, the governor of Henan,
- ... 治平為天下第一, was **was the number one in the world as an administrator,**
- 故與李斯同邑 being from the same city as the famous Qin minister Li Si,
- ... 而常學事焉, had once studied (p.444) under Li Si.

8. (with pronominal object) **vtoNpro**: “**carry out something as the Xth person**”

- GY Zhōu 1, 1.6, ed. Shànghǎigǔjí 1978, 1.20
- 農師一之， The Master of Agriculture was the first to do so
- 農正再之， 后稷三之， 司空四之， 司徒五之， 太保六之， 太師七之， 太史八之， 宗伯九之， 王則大徇， 耨穫亦如之。

9. (in calculation) **vt: multiply by X**

- XUN 27:44, Knoblock 3:217
- 六六三十六, “multiplying six by six (chǐ) makes thirty-six.

10. vi: "make up/constitute an X-let"

- 六六三十六，
- “multiplying six by six (chǐ) makes thirty-six.

11. vtoN: “cause to become X in number”

- HF 10.08:04; jiaoshi 676; jishi 192; jiaozhu 94; shiping 398
- 顏涿聚曰：覈 Yán Zhuōjù said:
- “15 昔桀殺關龍逢 In ancient times Jié killed Guān Lóngpáng
- 而紂殺王子比干， and Zhòu killed Prince Bǐgàn.
- 今君雖殺臣之身 Even if you kill me
- 以三之可也。 to make it three of us, that will be all right.
- 臣言為國， I speak up for the sake of the state,
- 非為身也。” I do not by any means speak up on behalf of my person.

12. *vtoN relational*: “be ten times more”

- HF 46.03:02;
- 母之愛子也倍父， A mother loves her children twice as much as a father,
- 父令之行於子者十母； but the execution of father’s orders is ten times that of (those from) the mother.

13. vtoN *causative* “cause to be X-fold in number”

- 百子千孫
- 1000 SON 1000 GRANDCHILD
- Behr “ihre Söhne zu ver Hundertfachen, ihre Enkel zu vertausendfachen”
- **“hundredise the children and thousandise the grandchildren**

13. vtoN: “be X times superior to”

- MO, gongmeng:
- 有人於此， Suppose there is a person here
- **百子**， and he is a hundred times your superior.
- 子能中身譽其善而子無一乎？
- hanshu, 陳湯傳：功得百之。顏師古注：百倍勝之。
- hanshu, 賈誼傳：權力且十此者乎。

14. vtoN: “be different from by a factor of X”

- HF 44.02:03; jiaoshi 232; jishi 614; jiaozhu 596; shiping 1522
- 20 往世之主， Among the rulers of bygone generations
- 有得人而身安國存者， there are those who find able collaborators so they are safe and their state survives
- 有得人 and there are those who find able collaborators
- 而身危國亡者。 but who get into danger and have their state ruined.
- 得人之名一也， On the face of it they all find able collaborators
- **而利害相千萬也， but the profit and harm differ one thousand or ten thousand-fold.**
- 25 故人主左右不可不慎也。 Thus the ruler has to pay close attention to his entourage.

15. vtoN: “use X kinds of”

- ZUO Ai 昔闔廬食不**二味**，居不重席 “use two separate dishes”
- HF 33.29:01
- 食不**二味**， When eating he did not use more than one dish,

20. vtoN, indefinite, generic: “befriend X kinds of”

- LY 16.04, D.C. Lau p 163
- 孔子曰。 4. Confucius said,
- 益者三友。 "He stands to benefit who **makes friends with three kinds of** people.
- 損者三友。 Equally, he stands to lose who **makes friends with three other kinds of** people.

ADNOMINAL:

16. vadN, indefinite: “X specimens of the N kind”

- MENG 5A05; tr. D. C. Lau 2..185
- 孔子曰： According to Confucius,
- 『天無二日， 'there cannot be two kings for the people
- 民無二王。』 just as there cannot be two suns in the heavens.'
- **Sometimes complex NPs with adj:**
- guoyu, zhoyu: 王不聽，遂征之，得四白狼 四白鹿以歸。

vpostadN “three Ns”

- 天下有達尊三： There are three things which are acknowledged by the world to be exalted:

17. vadN, definite: “the X members generally acknowledged to constitute the NP kind”

- 四海，五霸，九州 etc
- LY 12.05; tr. D.C. Lau p. 111
- 四海之內、皆兄弟也
- and all within the Four Seas are his brothers.

18. vadN *anaphoric*, definite: “the X known members of the NP kind”

- ZZ 6.250
- 二人相視而笑曰：
- **The two men** looked at each other and smiled, saying,
- 是惡知禮意！
- "What does he know about the meaning of the rites?"
- ZZ 6.250
- 三人相視而笑，
- **The three men** looked at each other and smiled.
- 莫逆於心， Since there was no discord in their hearts,
- 遂相與友。 they became friends with each other.

19. vadN, definite, generic, in front of non-count-nouns: “the X kinds of”

- GUOYU, qiyu: 管子對曰：「四民者，勿使雜處
- ”**The four kinds of people** one must not let live together.
- Sometimes anaphoric “these X kinds of”
- GUAN 20.2; WYWK 1.100; tr. Rickett 1985, p. 325.
- 「士農工商四民者， 'The gentry, peasants, artisans, and merchants, these (preceding) four types of people,
- 國之石

21. vadN: “the Xth N”

- MENG 7a0; tr. D. C. Lau 2.271
- 孟子曰： 20. Mencius said,
- 「君子有三樂， "There are three things a gentleman delights in,
- 而王天下不與存焉。 and being a ruler over the Empire is not amongst them.
- 父母俱存， His parents are alive
- 兄弟無故， and his brothers are well.
- **一樂也。 This is the first delight.**
- 仰不愧於天， Above, he is not ashamed to face Heaven;
- 俯不忤於人， below, he is not ashamed to face man.
- **二樂也。 This is the second delight.**
- 得天下英才 He has the good fortune
- 而教育之， of having the most talented pupils in the Empire.
- **三樂也。 This is the third delight.**
- 君子有三樂， There are three things a gentleman delights in,
- 而王天下不與存焉。」 and being a ruler over the Empire is not amongst them."

22. vadNab: “the Xth kind of Nab”

- MENG 4B30; tr. D. C. Lau 1.173
- 孟子曰：
- 「世俗所謂不孝者五： "What the world commonly calls undutiful in a son falls under five heads (are of five kinds)," said Mencius.
- 惰其四支， "through laziness of limb
- 不顧父母之養， to neglect the care of one's parents
- **一不孝也； that is the first kind of failure of filial piety**
- 博弈、好飲酒， Second,
- 不顧父母之養， the neglect of one's parents
- **二不孝也；** through indulgence in the games of *po and yi* and *fondness for drink*.
- 好貨財， Third,
- 私妻子， the neglect of one's parents
- 不顧父母之養， through miserliness in money matters
- **三不孝也；** and partiality to one's wife.
- shiji, bianquezhuan: 故病有六不治：驕恣不論於理，一不治也。輕身重才二不治也。
- sy 2.1 故人臣之行有六正、六邪。行六正則榮，犯六邪則辱。
- sy 1.23 晏子曰：「國有三不祥.... 夫有賢而不知，一不祥也；知而不用，二不祥也；用而不任，三不祥也。所謂不祥，乃若此者也。

23. vadNab: “X kinds of abstract N”

- SHUOYUAN 1.23
- 晏子曰： Yànzǐ said:
- 「國有三不祥 **There are three inauspicious things in a state...**
- Contrast the following:
- 夫有賢而不知，一不祥也；知而不用，二不祥也；用而不任，三不祥也。所謂不祥，乃若此者也。

24. vadNab: “the following X Nab”

- LY 16.08; tr. D.C. Lau p. 165
- 孔子曰 8. Confucius said,
- 君子有三畏 "The gentleman stands in awe of three things.
- 畏天命 He is in awe of the Decree of Heaven.
- 畏大人 He is in awe of great men.
- 畏聖人之言 He is in awe of the words of the sages.

- LY 16.10; tr. D.C. Lau p. 165
- 孔子曰 10. Confucius said,
- 君子有**九思** ” The gentleman has **the following nine moral preoccupations**:
- 視思明 to seeing clearly when he uses his eyes,
- 聽思聰 to hearing acutely when he uses his ears,
- 色思溫 to looking cordial when it comes to his countenance,
- 貌思恭 to appearing respectful when it comes to his demeanour,
- 言思忠 to being conscientious when he speaks,
- 事思敬 to being reverent when he performs his duties,
- 疑思問 to seeking advice when he is in doubt,
- 忿思難 to the consequences when he is enraged,
- 見得思義 and to what is right at the sight of gain."

20.vad.v'[adN] *N=things* X things characterised by being V

- X v [items], X [items] of the v kind
- liji 8: 行一物而**三善**皆得者，唯世子而已。
- As for a person who by doing one thing so that **three good [things]** are achieved...
- zhongyong 8 子曰：「回之為人也，擇乎中庸，得一善，則拳拳服膺而弗失之矣。」

25. vad.v'[adN] *N=human* : “X humans characterised by being V”

- LY 18.01; tr. D.C. Lau p. 183
- 孔子曰： Confucius commented,
- 殷有**三仁**焉！
- "There were **three benevolent [men]** in the Yin."
- meng, gongsunchouA 行**一不義**，殺**一不辜**，而得天下，皆不為也

26. vadN1.postadN2 *N1classifier*: “postposed numeral modifier”

- LY 8.20; tr. D.C. Lau p. 73
- 舜有**臣五人**而天下治 20. Shun had **five officials** and the Empire was well governed.

27. vpostadN “X items in number” (postposed)

- LY 13.05; tr. D.C. Lau p. 123
- 子曰 5. The Master said,
- 誦詩三百
- "If a man who knows **the three hundred Odes** by heart
- ZUO Ding 4 以其**屬五千**先擊子常之足 "with **his men, five thousand of them**, he first attacked the soldiers of Zǐcháng.
- MENG, gongsunchouB 天下有**達尊三**

28. vpostadN “the following X items in number” (postposed), cataphoric

- ZZ 4.138
- 仲尼曰： "For all under heaven," said Confucius,
- 天下有**大戒二**： "there are two great precepts:
- 其一，命也； one is destiny
- 其一，義也。 and the other is duty.

29. vi.post-N “be the first of the Ns”

- ZUO Xiang zhuan 26.02; tr. Legge
- 「臣知罪矣。 “I know my offences.
- 臣不佞， In my incompetency
- 不能負羈繼以從扞牧圉， I was not able to carry a halter and tether, and follow you to play the part of a herd and a groom;
- 臣之罪一也。 this is my first offence.
- 有出者， There were you who had left the State,
- 有居者， and there was he who was in it;
- 臣不能貳， I was not able to play a double part,
- 通外內之言以事君， and keep up a communication between the outside and inside of th State;
- 臣之罪二也。 this is my second offence.

30. vadN: “X groups (rows/troupes etc) of members consisting of Y members

- HF 10.5.87; tr. CH
- 一奏之， When he played it for the first time
- 有玄鶴二八， two groups of eight reddish-black cranes
- 道南方來， came in from the south

31. vadN.adV: “every X TIME-EXPRESSIONs”

- SHU Yaodian 38; tr. Karlgren
- **三載**考績 **Every three years** he examined the achievements (of his subordinates)

NOMINAL:

32. v(adN), definite: “X definite kinds; the X kinds”

- HSWZ 2.27; tr. Hightower 1951, p. 67
- 孔子曰： Confucius said,
- “**士有五**。 There are **five** [kinds of] gentlemen.

- MENG 4A16; tr. D. C. Lau 1.155
- 孟子曰： 26. Mencius said,
- 「**不孝有三**， "There are three ways of being a bad son.
- 無後為大。 The most serious is to have no heir.

33. v[adN], cataphoric: the following X kinds/degrees

- LIJI 24; Couvreur 2.300; Sūn Xīdàn 12.60f; tr. Legge 2.226
- 曾子曰： 9. (?)a(ng-(?)ze said,
- 「**孝有三**： 'There are three degrees of filial piety.
- **大孝尊親**， The highest is the honouring fo our parents;
- **其次弗辱**， the second is the not disgracing them;
- **其下能養。**」 and the lowest is the being able to support them.'

34. v(adN), indefinite, general: X things, things which are X in number

- LY 16.13; tr. D.C. Lau p. 167
- 陳亢退而喜曰 Ch'en Kang retired delighted and said,
- 問一得三 "I asked about **one thing** and learned **three things**.
- liji 19 宮為君，商為臣，角為民，徵為事，羽為物。五者不亂，則無怙懣之音矣。
- “When these five are in good order, then there will be no offensive? music.”

35. v(adN), indefinite, specialised: person X years old

- LIJI 1, Couvreur 1.48f; Sūn Xdàn 1.69; tr. Legge 1.87
- **五十**不致毀，
- 6. 34. **A fifty-year-old** should not allow himself to be reduced (by his abstinence) very much;
- **六十**不毀， a hexagenerian, not at all.
- **七十**唯衰麻在身， A heptagenenarian will only wear the unhemmed dress of sackcloth,
- 飲酒食肉， and will drink and eat flesh,
- 處於內。 and occupy (the usual apartment) inside the house.
- [Try to analyse : 二八 “16-year-old girl”]

36. v(adN){PRED} ordinal: “be number X, be the Xth thing”

- ZUO Xi 23.6 (637 B.C.); Yáng Bójùn 408; Wáng Shǒuqiān et al. 293; tr. Watson 1989:42
- 晉公子， Yet this prince of Chin,
- 姬出也， though born of a mother of the Chi surname,
- 而至於今， has been able to come this far.
- **一也。 This is the first proof.**
- 離外之患， He has had the misfortune to wander abroad,
- 而天不靖晉國， and yet Heaven has not in the meantime brought peace to the state of Chin,
- 殆將啟之， no doubt because it intends to open the way for him there.
- **二也。 This is the second proof.**

shu, hongfan: 五行：一曰水，二曰火，三曰木，四曰金，五曰土。

- 我有三寶 I have three treasures,
- 持而保之： And these I hold and guard.
- 一曰慈， **The first** is kindness.
- 二曰儉， **The second** is frugality.
- 三曰不敢為天下先。 **The third** is that I dare not be the foremost in the world.(Lǎozǐ 67)
- shu, hongfan: 五行：一曰水，二曰火，三曰木，四曰金，五曰土。

37. vpost-npro “all other X things”

- Shuoyuan 2.4
- 子曰：「賜，
- 汝徒知其一，
- You only know the first thing
- **不知其二。**
- but you do not know the other things.

38. **vadnpro** anaphoric: X 者 "the aforementioned X things"

- LIJI 19; Couvreur 2.78f; Sūn Xīdàn 10.45; tr. Legge 2.112
- 詩言其志也， Poetry gives expression to the thoughts;
- 歌詠其聲也， singing prolongs the notes (of the voice);
- 舞動其容也。 pantomimic movements put the body into action (in harmony with the sentiments).
- **三者**本於心， **These three things** originate in the mind,
- 然後樂氣從之。 and the instruments of the music accompany them.

- LIJI 31, Zhongyong; Couvreur 2.451f; tr. Legge 2.313
- 知、仁、勇**三者**， Wisdom, benevolence, and fortitude - **these three** :
- 天下之達德也， are the universal virtues for all.
- 所以行之者一也。 That whereby these are carried into exercise is one thing.

39. cataphoric v[adN]: “the following X things”

- LY 9.04; tr. D.C. Lau p. 77
- 子絕四 4. There were four things the Master refused to have anything to do with:
- 毋意、毋必、 he refused to entertain conjectures or insist on certainty;
 - T`ang here is the name of Yao`s dyansty and Yü the name of Shun`s dyansty, not to be confused with T`ang the founder of the Yin or Shang dyansty and Yü the founder of the Hsia dynasty.
- 毋固、毋我 he refused to be inflexible or to be egoistical.

40. v(adN), “the following X items of the specified kind”

Yanzichunqiu no. 17 (25.3)

- 不仁之君見二 As for rulers of the inhumane kind I have seen **two specimens of those**
- 諂諛之臣見二。 as regards ministers of the fawning kind I have seen **two specimens of those.**

ADVERBIAL:

41. vadV: “X times”

- LY 5.20; tr. D.C. Lau p. 43
- 季文子三思 20. Chi Wen Tzu always thought three times 而後行 before taking action.
- 子聞之、
- 曰 When the Master was told of this, he commented,
- 再斯可矣 ” (doing it) twice is good enough.”
- LIJI 4, tangong, xia is more open to debate:
- [君於大夫，將葬，弔於宮，及出，命引之，三步則止，]
- LY 14.16 桓公九合諸侯。
- [guoyu, wuyu 三戰三北 “ thrice go to battle, thrive be defeated> be thrice defeated in battle”,

v(adV) “X times”

- LY 5.20; tr. D.C. Lau p. 43
- 季文子**三思** 20. Chi Wen Tzu always **thought three times**
- 而後行 before taking action.
- 子聞之、
- 曰 When the Master was told of this, he commented,
- **再斯可矣** ” (doing it) **twice** is good enough."

42. vadV: “for the Xth time”

- ZUO Wen 16.2 (611 B.C.); Yáng Bójùn 616; Wáng Shǒuqiān et al. 454; tr. Legge 274
- 夏五月， In the summer,
- 公四不視朔， the Duke for the fourth time failing to observe the shuo
- 疾也。 was owing to illness.

43. v(adV) “(do it) for the Xth time”

- ZUO Zhuang 10: 夫戰，勇氣也。
- 一鼓作氣； When one beats the drum for the attack for the first time this creates energy,
- 再而衰， when one does it for the second time there is a decline in energy,
- 三而竭。 and if one does it for the third time there is exhaustion.

44. vadV: “in X respects”

- LY 1.04; tr. D.C. Lau p. 3
- 曾子曰 Tseng Tzu said,
- 吾日三省吾身 "Every day I examine myself on three counts.
- 為人謀、 In what I have undertaken on another's behalf,
- 而不忠乎 have I failed to do my best?
- 與朋友交、 In my dealings with my friends
- 而不信乎 have I failed to be trustworthy in what I say?
- 傳不習乎 Have I passed on to others anything that I have not tried out myself?"

45. vadV:

“into X parts, X-wise, X-fold”

- LY 8.20; tr. D.C. Lau p. 73
- **三分**天下有其二 Of the world divided into three parts they controlled three parts

46. v[adN].post-npro1:adnpo2 “these X in number”

- MENG jinxin A 孟子曰：「君子之所以教者 **五**：有如時雨化之者，有成德者，有達財者，有答問者，有私淑艾者。
- **此五者**，君子之所以教也。」
- “these which **are five in number are the means by which the gentleman instructs (others).**”

48. vt[oNab].postNab{ACT.OBJ}

- 如是者三，君退 .
- Having **acted like this thrice** the ruler withdraws.
- “As for this (kind of) action, having
- thrice- performed(-it, i.e.that kind of action) (三)
the ruler withdraws.”
- 者 creates an action NP, very literally: “that
which is the acting-like-this” 待考