## Grammar of Classical Chinese between Philology and Typology

Measuring degree of nominalisation in Classical Chinese (part II)

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## Consultation of examples in TLS:

for possible good examples of nominalised verbs: syntactic category *nab* @ semantic category *act* 

for possible good examples of nominalised clauses:
 syntactic category NPab{S}

for subject and object coded explicitly as possessors: 之: GENITIVE PARTICLES, various lexemes with syntactic category *npropostN1.adN2* 

syntax-like= inflexion:

balanced	deranked ("weak" nominalisation)	"strong" nominalisation
=	=	=
balanced	subordination	nominalisation
		- action nouns
		- modal nouns (行)
		- agent (尹), patient (傳), instrument (度)

they hunt	that they hunt	them hunting	their hunting	a hunt
balanced 王行政 行 *g <sup>s</sup> raŋ The king enacts policies.	deranked-subordin 王之行政也善矣 行 *g <sup>s</sup> raŋ The way the king ei		nominalised-lexicalised 王之行善 行 *g <sup>s</sup> raŋ-s The king's behaviour is fine.	

王行善 行\*g<sup>s</sup>raŋ-s The behaviour of kings is fine. Kingly behaviour is fine.

#### $\Leftrightarrow$

*lexicon-like=* 

word formation:

Universal effects of subordination + nominalisation:

# 1) different coding of participants 2) reduction of participants

	<b>they</b> hunt <i>hares</i>	<b>them</b> to hunt <i>hares</i> <b>them</b> hunting <i>hares</i>	<b>their</b> hunting <i>hares</i>	<b>their</b> hunting of <i>hares</i>	<b>their</b> hare-hunt
agent patient	S=nominative O=accusative	O=dative O=accusative	genitive O=accusative	genitive1 genitive2	genitive incorporation
	( <b>is</b> ) <i>leporēs</i> vēnātur	( <b>eum</b> ) <i>leporēs</i> vēnāri	ī	( <b>eius</b> ?) <i>leporum</i> vēnātiō ( <b>eius</b> ?) <i>leporum</i> vēnātus	
agent patient	S=nominative O=accusative	O=accusative O=accusative		genitive1 (?) genitive2	
	<b>(Ø)</b> liè <i>tù</i> 獵兔	<b>(qí)</b> liè tù (其)獵兔		<b>(qí)</b> liè tù (其)獵兔	<b>(qí)</b> <i>tù</i> liè 兔獵
agent patient	S O	genitive O		genitive O	genitive incorporation

†王 兵 殺 犬 廟 以 於 wáng γĭ bīng shā quǎn yú miào king kill dog ancestral temple LOC INSTR weapon The king killed a/the dog with a/the weapon in the ancestral temple. †吾 Ż 以兵殺犬於廟] 也。 知 [王 wú zhī уě zhī 1 know GEN/DEP PTCL †犬 殺 Ŧ 見 於 wáng jiàn shā wáng γú dog kill PASS bv king The dog was killed by the king. 見 殺 +吾 知 [犬] Ż 於 王] 也。 wú zhī zhī уě know GEN/DEP 1 PTCL I know that the dog was killed by the king. = I know about the dog's having been killed by the king. tù(-)liè 兔獵 'hare hunt' 王之獵 兔之獵 兔獵 quǎn(-)shā 犬殺, 'dog massacre' 王獵 *miào(-)shā* 廟殺 'the killing in the ancestral temple'

王之兔獵

兔之王獵

bīng(-)shā 兵殺 'the killing with a weapon'

Criteria of lexicalisation:

a) morphology

b) frequency

c) lexical semantics

d) distributional properties

#### a) morphology

It may offer, if present, a very compelling proof of lexicalisation (main source: *Jīngdiǎn shìwén* 經典釋文, ca. 580 AD).

excep	otional for action	on/property	/ nouns,	but typically not	pure ones ("modal act	ion nouns"):
行	xíng xìng	*g <sup>s</sup> ı	aŋ	*g <sup>s</sup> raŋ-s	'to act'	'a kind of acting' > 'behaviour'
深	shēn [shēn]	*j91	n	*l̥əm-s	'deep'	'depth'
cf. als	50:					
王	wáng wàng	$*G^{W}$	aŋ	*g <sup>w</sup> aŋ-s	'king'	'become the true king; (to rule)'
comr	non for other t	ypes of nom	inalisat	ion (agent/subje	ct/patient/instrument	):
乘	chéng shèng	*Cə	.ləŋ	*Cə.ləŋ-s	'to ride'	'carriage'
傳	chuán zhuàn	*m-	tron	*N-tron-s	'to transmit'	'document'
度	dú duò	*d <sup>s</sup> a	ak	*d <sup>s</sup> ak-s	'to measure'	'measure'
量	liáng liàng	*ra	ŋ	*raŋ-s	'to measure'	'measure'
使	shĭ [shĭ]	*S-1	.9J	*s-rə?	'to send'	'envoy'
難	nán nàn	*n <sup>s</sup> a	ar	*n <sup>s</sup> ar-s	'difficult'	'difficulty'
知		智		智		
*tre	>	*tre-s	>	*tre-s		

to understand

省 \*tre-s > intelligent intelligence

intelligence

intelligent

? ?

#### b) frequency

If a deverbal noun occurs frequently enough in the extant corpus, it signals that it is very probably lexicalised. The major difficulty with this criterion is that it can be applied only on a small part of the expressions under scrutiny. The statistics for the much larger part cannot serve as decisive evidence, since the occurrence frequency of those words in general is far too low.

#### c) lexical semantics

Traditionally and quite appropriately, if a morphological product exhibits a semantic aberration that is not perfectly transparent, that is, it cannot be computed on the basis of syntactic or at least other highly productive rules, it is deemed a coinage of a word-formational type.

(NB racing ≠ race(s), loving ≠ love, teaching ≠ education, producing ≠ production etc.)

#### d) distributional properties

If a word is frequent enough, it is possible to analyse its distributional paradigm. It is self-evident that well-entrenched nouns manifest very different distributional patterns from that of verbs or *ad hoc* nominalisations. This is moreover valid for their compositional properties, i.e. their behaviour in the most common type of word formation in Classical Chinese. For instance, if a deverbal noun commonly features as let us say the head modified by another noun or by adjective in compounds, one can be quite sure that is is lexicalised. Thus, *xìng* 7 – which is clearly lexicalised already by a derivational suffix from *xíng* – appears 366 times in 127 compounds of this kind, according to Academia Sinica corpus restricted to more or less purely Warring States texts.

## AS Corpus query for actants coded as possessors:

though there is the category  $N_{\mbox{\scriptsize V}}$  , there is no  $V_{\mbox{\scriptsize N}}$ 

 $\rightarrow$  semimanual searching:

- 1) selected characters known to record verbs & nominal POS label
- 2a) instances with a nominal expression before the nominalised verb
- 3a) discard cases with pronouns in this position
- 2b) instances with  $\gtrsim$  before the nominalised verb
- 3b) sort out only cases with a noun before that  $\dot{\gtrsim}$
- 4) manual processing of the results

## Verbs:

1	syntactical	Ø		
2	syntactical	zhī/qí		
3	lexical	zhī/qí	WOC	(> affixal derivation)

## Adjectives

1	syntactical	Ø
2	syntactical	zhī/qí

<i>liè</i> 獵 'to hunt' →	<ul> <li>'hunting'</li> <li>'hunt (n.)'</li> <li>*'hunting one, hunter': only in individual lexicalised cases</li> <li>*'hunted one': only in individual lexicalised cases</li> </ul>
<i>zǒu</i> 走'to run' →	*'hunting instrument': only in individual lexicalised cases 'that they run' 'running' 'run ( <i>n</i> .)' <sup>?</sup>
	*'running one, runner': only in individual lexicalised cases
<i>ài</i> 愛'to love' →	'that they love' 'loving' 'love ( <i>n</i> .)' *'loving one, lover': only in individual lexicalised cases
<i>āi</i> 哀 '(to be) sad' →	'that they are sad' 'being sad' 'sadness' NB 'sad one'
dà大'(to be) big' →	'that they are big' 'being big' 'bigness' (only exceptionally 'size': normally 大小) NB 'big one'

## Sample: Xúnzĭ 1.1

- 君子曰:學不可以已。
- 青、取之於藍,而青於藍;
- 冰、水為之,而寒於水。
- 木直中繩,輮以為輪,其曲中規,雖有槁暴,不復挺者,輮使之然也。 故 木受繩則直,
  - 金就礪則利,
  - 君子博學而日參省乎己,則智明而行無過矣。
- 故 不登高山,不知天之高也;
  - 不臨深谿,不知地之厚也;
  - 不聞先王之遺言,不知學問之大也。
- 干、越、夷、貉之子,生而同聲,長而異俗,教使之然也。

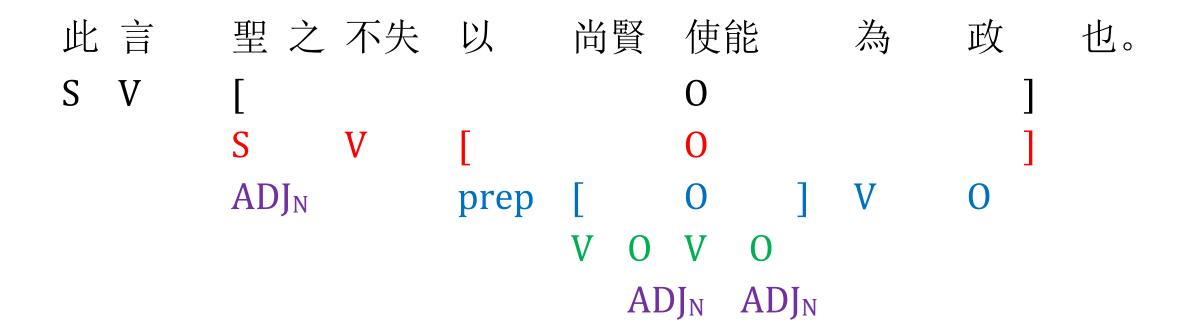
君子曰:		
學不可以已。	to study > studying/studies <i>n.</i>	v.1/3
<b>青</b> ,取之於藍,而青於藍; 冰,水為之,而寒於水。	blue > blue colour/blue dye	a.3
你,小為之, 而表於小。 木 <b>直</b> 中繩,	straight > straightness	a.1
乘以為輪,	straight > straightness	a.1
其曲中規,	curved > curvedness	a.2
雖有槁暴不復挺者	even when sun-dried, it does not stretch again	
	> that it doesn't stretch again, though sun-dried	v.1
<b>輮</b> 使之然也。	to bend > bending	v.1
故木受繩則直,		
金就礪則利,		
君子博學而日參省乎己,		
則 <b>智</b> 明而 <b>行</b> 無 <b>過</b> 矣。	intelligent > intelligence	a.3
	to behave > behaviour	v.3
	to make mistake > mistake	v.3
故不登高山,		
不知天之 <b>高</b> 也;	tall > how tall they are,	
	them/their being tall, their tallness	a.2
不臨深谿,		
不知地之 <b>厚</b> 也;	thick > how thick it is,	2
了明开工业准子	it/its being thick its thickness	a.2
不聞先王之遺 <b>言</b> , 不知 <b>學問之大</b> 也。	to speak >speech	v.3
个和学问之入也。	study + ask > learning great > how great it is,	v.3
	it/its being great, its greatness	a.2
干、越、夷、貉之子	it its being great, its greatness	a.2
生而同聲,長而異俗,		
<b>教</b> 使之然也。	to educate > education	v.1/3

## 富在知足, 貴 在 求退。 S V O S V O ADJ<sub>N</sub> {V O} ADJ<sub>N</sub> {V O} ADJ<sub>N</sub> V O}

人(之)(不)富 在 人(之)(不)知(不)足
人(之)(不)貴 在 人(之)(不)求(不)退

不能 不穀 不祥

- 不足 (bù zú) DISSATISFIED SYN 2
  - NPab psych: feeling of dissatisfaction SWL: 1
  - VPi : feel (still) unsatisfied SWL: 1
- 不足 (bù zú) HUNGRY SYN 1
- 不足 (bù zú) INSUFFICIENT 3
  - NPab feature: insufficiency (of resources) SWL: 4
  - VPi : be insufficient; suffer insufficiency of resources; suffer famine SWL: 1
  - VPt+V[0]:=不足以 not qualified to V SWL:0
- 不足 (bù zú) LACK SYN 1
- 盈不足術 (yíng bù zú shù) MATHEMATICAL METHOD 1
- 不足 (bù zú) POOR SYN 1
  - NP{vt{NEG}+V(.adN)} plur: those, who are short of means for living or production SWL: 2



This applies to the fact that the wisest ones do not fail in making their policy of showing respect to the competent ones and employing the able ones.

### 其爭也君子 (LY 3.7)

\*such is the competition of gentleman (君子之爭若是 vel sim.)

the way he competes is gentlemanly

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夫尹公之他端人也,其取友必端矣 (MZ 4B.24)
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<sup>?</sup>Yingong zhi Tuo is a principled person and the friends whom he chooses must be principled as well. 其所取之友 *vel sim.* 

其取友也必端矣

The way he chooses friends is surely principled.

Gassmann: Der werte Tā aus dem Stamm der Yin-gōng ist eine korrekte Personlichkeit. Wenn *er* jemanden Juniorfreundschaft anbot, dann wird dieser bestimmt korrekt sein.'

When he chooses a friend, that friend will surely be principled.