理法（Lǐfǎ）Script

A Phonetic–Logical Re-architecture of Mandarin

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2026 年 1 月 16 日

Summary

理法(Lǐfǎ)Script is a phonetic–logical re-architecture of Mandarin: not an orthography reform, and not a constructed-language toy. It is designed to be deterministic, reversible, and procedural, including a compatible mathematics layer.

1 Core Rules (Specification)

- All pinyin syllables must be fully expanded into their phonetic letter sequence; no phoneme may be omitted, merged, or abbreviated.

- Canonical order rule: [**Tone**] + [**Phonetic letters**] + [**Domain**] + [**Word-type marker**].

- Adjacent words sharing a single word-type marker are one compound.

- Negation precedes the word it negates and scopes until punctuation.

- Freeze punctuation semantics: ',' clause boundary; '。' sentence end; ';' logical separation (stronger than comma).

- Commas bind clauses loosely; semicolons bind logic; periods terminate scope.

- If ambiguity remains, append a domain determinative; use sparingly; do not number.

- Style levels: **Formal**: all markers present; **Compact**: markers only at ambiguity points.

- 丿 marks proper nouns and replaces the concrete-noun marker 犭.

- 丨 replaces all disjunctive conjunctions（"or"）, including 或、或者、还是.

- 十 replaces all additive conjunctions ("and"), including 和、及、与、并、且、跟、同、以及、并且、而且, and represents logical addition.

- 一 replaces negation words (不、没) and precedes the word it negates, scoping until punctuation.

- 乂 replaces division, distribution, and rate expressions, including 每、每个、每人、每次、分之、除以、按、平均、各自, and is read as "per / divided by / each".

- 八 replaces temporal partition and interval expressions, including 在、于、到、每逢、每隔、按时、时候、期间, and is read as "at / every / by / interval of".

- 二 replaces identificational copulas ("is"), including 是、为、属于、即、等于 (identity use only), and marks identity or definition.

- 三 marks classification or membership ("is a kind of / belongs to"), replacing 属于、算是、作为、是一种.

- 了 marks questions and replaces 吗、呢; 二了 specifically marks identity questions ("X is what?").

- ◊ replace comparative words (比、更、最) when expressing degree or comparison.

- 「」 mark direct speech or quoted content; 『』 are used for nested quotations.

- Verb at clause end marks completion; verb reduplication marks ongoing or habitual aspect.

- All lexical content must be written phonemically; no Hanzi are permitted except approved domain determinatives.

2 Particles (Legacy Forms)

Particle	Lǐfǎ (with tone)	Notes
个	‘ㄒㄌ	removed by default
的	大ㄦ	removed by default
是	‘ㄕㄌ	removed when descriptive/equative
在	‘ㄗㄉㄌ	removed when location is clear
有	ˇ 元ㄇㄅ	optional / often removed
了	ㄌㄦ/ˇ ㄌㄥㄉㄇ	kept (了 character reused as question marker)

3 Tone System

Tone is marked using standard pinyin diacritics placed before the word (intended to be above the toned vowel in future typography); tone may be omitted only when context makes it unambiguous:

$$\text{-- (1st),} \quad \text{´ (2nd),} \quad \text{˘ (3rd),} \quad \text{` (4th)}$$

4 Word-Type Markers

Each lexical word carries a word-type marker to fix its grammatical role; in Formal writing all markers are present, while in Compact writing markers may be omitted where context is unambiguous but must be restored whenever ambiguity could arise.

Role	Marker
Pronoun	亻
Verb / Action	彳
Concrete noun	犭
Proper noun	丿
Abstract noun	忄
Adjective	ß
Connector	讠
Grammatical / function word	丰

Pronouns refer to the nearest compatible antecedent within the same sentence unless overridden.

5 Domain Markers (Only Permitted Hanzi for Lexical Disambiguation)

If ambiguity remains after tone and word-type marking, insert exactly one domain determinative immediately before the word-type marker; no other Hanzi are permitted for lexical content other than these.

Domain	Marker
General / Education	教
Science / Technical	技
Mathematics / Logic	理
Law / Rules	律
Society / Institutions	会
Physical / Natural World	自
Language / Speech / Text	言

Add a new domain only if ambiguity cannot be resolved by context + existing domains.

6   Optional Logic Extensions (Scope / Reference / Modality)

Quantifier Scope

Quantifier scope is determined by parentheses, where a numeral governs only the smallest immediately following parenthesised phrase unless its scope is explicitly extended by larger parentheses; in the absence of parentheses, quantifiers bind minimally and rely on context, and parentheses are used only when ambiguity would otherwise arise.

Anaphora (Reference Resolution)

Pronouns refer to the nearest compatible antecedent within the same sentence, with proper nouns taking precedence over common nouns, domain mismatches blocking reference, and punctuation resetting reference priority in the order comma, semicolon, then period.

Modality

Modal force may be optionally expressed using comparison operators placed before the verb phrase, where equality denotes factual assertion, greater-than denotes obligation, and less-than denotes permission, with modal scope extending until punctuation.

7 Alphabet (Letters)

Latin	Glyph	Spoken (Lǐfǎ)
A	夕	夕
B	币	币乙
C	从	从乙
Ch	出	出乙
D	大	大乙
E	儿	儿
F	非	非乙
G	工	工乙
H	火	火乙
I	乙	乙
J	几	几乙
K	开	开乙
L	力	力乙
M	木	木乙
N	乃	乃乙
O	冂	冂
P	丕	丕乙
Q	千	千乙
R	人	人乙
S	厶	厶乙
Sh	山	山乙
T	土	土乙
U	匕	匕
Ü	女	女乙
W	王	王乙
X	小	小乙
Y	元	元乙
Z	子	子乙
Zh	中	中乙

8 Example Usage (Mandarin → Lǐfǎ)

Simplified Chinese Mandarin

今天八点鲍勃和菲尔在学校学习数学和物理，鲍勃是学生菲尔是一种老师，他们每天三次学习每小时学习两课，鲍勃不学习物理学习学习数学所以成绩更高，老师说「数学是科学吗」，鲍勃问学生是什么。

Pinyin Mandarin

jīn tiān bā diǎn bào bó hé fēi ěr zài xué xiào xué xí shù xué hé wù lǐ bào bó shì xué shēng fēi ěr shì yì zhǒng lǎo shī tā men měi tiān sān cì xué xí měi xiǎo shí xué xí liǎng kè bào bó bù xué xí wù lǐ xué xí xué xí shù xué suǒ yǐ chéng jì gèng gāo lǎo shī shuō 「shù xué shì kē xué ma」bào bó wèn xué shēng shì shén me.

理法 Lǐfǎ

ˉ几乙乃ˉ土乙夕乃八困ˊ帀夕冂丿十ˊ非儿乙丿彳从乙ˉ丕乙乃工理忄十火于ˈ自犭，ˊ帀夕冂丿二ˉ从乙工ˉ山儿乃工教犭ˊ非儿乙丿三ˉ力夕冂ˉ山火乙教犭，彳八因次彳从乙乂ˉ山火乙教犭彳从乙囚ˉ开儿教犭，ˊ帀夕冂丿一彳从乙火于ˈ自犭彳从乙从乙ˉ丕乙乃工理忄人匕冂讠〉，ˉ力夕冂ˉ山火乙教犭讠「ˉ丕乙乃工理忄二ˉ开儿技忄了」，ˊ帀夕冂丿讠ˉ从乙工ˉ山儿乃工教犭二了。

9 Mathematics

9.1 Math Operators (Fixed)

Operation	Symbol
$+$	十
-	一
$*$	乂
/	八
$\wedge$ (power)	个
$\sqrt{\ }$	厂
$=$	二
. (decimal point)	|

Mathematical expressions are written in infix form and evaluated by fixed operator precedence and associativity; brackets are optional and used only to override precedence or improve readability.

Example (Infix)

$$\sqrt{(8^2)} + (9/3) + 2 \cdot 4 - 7 - 6 + 5 + 1 - 0 = 12.0$$

厂国个囚十囷八因十囚义困一困一图十囚十回一口二回囚 | 口

9.2 Greek Notation (Lǐfǎ Equivalent)

Greek symbols denote operators by default; when preceded by 丿 they denote lowercase Greek values or parameters, and when preceded by 丨 they denote variables or indices; the combined prefix 丨丿 marks a variable that holds a derived result. Greek symbols use the form [**role marker**][**Greek glyph**].

Uppercase Greek (Operator Forms)

Name	Greek UC	Meaning	Lǐfǎ usage
alpha	A	constant / coefficient	夕
beta	B	coefficient / parameter	帀
gamma	Γ	gamma function / operator	工 (乃)
delta	Δ	change / difference operator	大从
epsilon	E	error / tolerance	儿
zeta	Z	zeta function	子 (乃)
theta	Θ	angle / parameter	土
lambda	Λ	eigenvalue / rate operator	力
mu	M	mean (definition)	回厶乃义乃
pi	Π	product operator	回丕乃
rho	P	density / correlation operator	人
sigma	Σ	summation operator	回厶乃
phi	Φ	function / mapping	非 (从)
omega	Ω	domain / sample space	从 王

Lowercase Greek (Scalar/Result Forms)

Greek lc	Meaning	Lǐfǎ lc	Notes
	scalar parameter	丿夕	scalar value
	scalar parameter	丿帀	scalar value
	gamma value	丿工	scalar result
	small change	丿大	may appear as 丿大从 when bound to a variable
	small quantity	丿儿	scalar small value
	zeta value	丿子	scalar result
	angle value	丿土	scalar angle
	specific eigenvalue	丿力	scalar eigenvalue
	mean value	丿木	scalar mean
	circle constant	丿丕	scalar constant
	density value	丿人	scalar density
	standard deviation	丿厶	scalar deviation
	function value	丿非	scalar output
	specific element / limit	丿王	scalar element

Standard Deviation Example

Standard text form:

$$\sigma = \sqrt{\frac{1}{n}\sum_{i=1}^{n}(x-\mu)^2}$$

Lǐfǎ form (using your operator mapping):

丿厶二厂 ((回厶丨乙 ((丨从一丿木) 个囚)) 八乃)

10   Functions (Mathematical)

The prefix 非 marks a function, binding to the immediately following symbol and its argument list; it may precede ordinary or variable-marked symbols; it binds tighter than arithmetic and looser than parentheses; and it exclusively identifies callable constructs.

11   Optional Extensions

The mathematics layer is complete, with limits, vectors, matrices, and calculus as optional extensions that must reuse existing operators and scope rules.

12 Short-Form Concept Labels (Optional, One Hanzi + Lǐfǎ)

Lexical mathematical concepts such as matrix, vector, domain, and limit function as optional descriptive labels and are not required for procedural expressions, which are fully specified by operators and scope alone.

Concept (Chinese)	1 Char	Lǐfǎ
无穷 (infinity)	极	几乙
极限 (limit)	限	力乙乃
函数 (function)	函	火夕乃
变量 (variable)	变	币夕乃
常数 (constant)	常	出夕乃
向量 (vector)	向	小乙夕乃
矩阵 (matrix)	矩	木乙女
概率 (probability)	概	工夕乙
均值 (mean)	均	几于乃
方差 (variance)	差	出夕
域 (domain)	域	元于
值域 (range)	值	中乙