

*Purpose*

A collated BNF grammar for the syntax of the language in which Inform source text is written.

---

P/bnfg. §2 Literal values; §3 Physical descriptions; §4 Type expressions; §5 Values and conditions; §6 List punctuation; §7 Action patterns; §8-9 Source file layout; §10 Paragraphs; §11 Whole-paragraph sentences; §12 Rules and phrase definitions; §13 Assertion sentences; §14 Exceptional declarative sentences; §15-16 Imperative sentences

---

§1. The following is derived by `inweb` from documentation, not code, and is intended primarily to provide a contents page showing how to find which sections handle which grammatical constructs. While this is close to being a formal syntactic description of I7, semantic considerations are in practice more important. For instance, it is syntactically valid for an action pattern to be used as a value, but one would not normally expect, say, “taking something portable” to be something which can be evaluated: but in sentences like “Taking something portable is permitted behaviour”, the same words are construed as a referential noun phrase. Similarly, the description below does not explain how to resolve ambiguities (though in most cases productions are checked in the order shown). Finally, note that a number of the syntaxes below are undocumented in the public manual for Inform. This is intentional: they are provided only for the bootstrapping process which the Standard Rules goes through, and are not for public use. They may change without notice. The notation used is mostly standard: see the Wikipedia page on EBNF for details. In particular “::=” can be read as “matches”, and each angle-bracketed construction is followed by one or more possibilities. (A vertical stroke means “or”.) Square brackets mean that material is optional. Braces mean “0 or more”: thus “**on {and on}**” matches the texts “on”, “on and on”, “on and on and on”, ...

Bold-face words in lower case are literal words, and bold-face parentheses are literal parentheses. Bold-face small caps are used for lexically defined patterns: the meaning of these is mostly obvious, or can be found elsewhere. (For instance, an I6 identifier is a string of 1 to 31 characters consisting of digits, upper or lower case unaccented letters or underscore signs, such that the first character must not be a digit.) Lower-case roman type denotes a name: thus “world-object” means the name of a world-object, which might be a thing, room, direction or region. Lower-case italic type denotes an inflected usage: thus *verb-usage* might match “has not been” or “carried” or “was supported by”. Finally, the subscripts after angle-bracketed constructions refer to the NI source code: for instance, “5/lit” means the section “Literal Productions” in Chapter 5.

§2. **Literal values.** That is, those which can be determined as constants by lexical means alone, in the same way that a run of digits not starting perhaps with a minus sign but not a 0 can be recognised as a literal number.

---

```

<value>5/tandv
  ::= ( <value>5/tandv )
  ::= [the] <constant-value>5/candd
  ::= [the] property
  ::= <action-pattern>11/ap
  ::= <description>5/candd
  ::= local-variable
  ::= stacked-variable
  ::= [the] value-phrase-usage
  ::= <table-reference>5/tandv
  ::= member/members of <description>5/candd
  ::= member/members of local-variable
  ::= property of [the] <value>5/tandv
  ::= its/his/her/their property
  ::= [the] table-column

```

$\langle \text{description} \rangle_{5/\text{candd}}$   
 $::= [ \langle \text{determiner} \rangle_{5/\text{det}} [ \langle \text{article} \rangle_{3/\text{words}} ] \langle \text{core-description} \rangle_{5/\text{candd}}$   
 $[ \langle \text{relative-phrase} \rangle_{5/\text{tandv}} ] [ ( \text{called} [ \langle \text{article} \rangle_{3/\text{words}} ] \text{WORDS} ) ]$

$\langle \text{core-description} \rangle_{5/\text{candd}}$   
 $::= \langle \text{determining-noun} \rangle_{5/\text{candd}} [ \langle \text{adjective-list} \rangle_{5/\text{candd}} ]$   
 $::= \langle \text{adjective-list} \rangle_{5/\text{candd}} \text{world-object}$   
 $::= \langle \text{adjective-list} \rangle_{5/\text{candd}} \text{kind-of-value}$   
 $::= \text{world-object}$   
 $::= \langle \text{adjective-list} \rangle_{5/\text{candd}}$

$\langle \text{adjective-list} \rangle_{5/\text{candd}}$   
 $::= [ \text{not} [ \text{a/an/some} ] ] \{ [ \text{not} ] \langle \text{adjective} \rangle_{5/\text{candd}} \}$

$\langle \text{adjective} \rangle_{5/\text{candd}}$   
 $::= \text{adjectival-phrase}$   
 $::= \text{either/or-property}$   
 $::= \text{value-of-a-kind-coinciding-with-a-property}$

$\langle \text{determining-noun} \rangle_{5/\text{candd}}$   
 $::= \text{something/someone/somebody/someone}$   
 $\text{everything/everyone/everybody/everyone}$   
 $\text{nothing/nobody/nowhere/no-one/no one}$

$\langle \text{determiner} \rangle_{5/\text{det}}$   
 $::= \text{at least} \langle \text{literal-number} \rangle_{5/\text{lit}} \mid \text{at most} \langle \text{literal-number} \rangle_{5/\text{lit}}$   
 $\mid \text{exactly} \langle \text{literal-number} \rangle_{5/\text{lit}} \mid \text{more than} \langle \text{literal-number} \rangle_{5/\text{lit}}$   
 $\mid \text{less than} \langle \text{literal-number} \rangle_{5/\text{lit}} \mid \text{fewer than} \langle \text{literal-number} \rangle_{5/\text{lit}}$   
 $\mid \text{each} \mid \text{almost all}$   
 $\mid \text{most} \mid \text{some}$   
 $\mid \text{all but} \langle \text{literal-number} \rangle_{5/\text{lit}} \mid \text{all except} \langle \text{literal-number} \rangle_{5/\text{lit}}$   
 $\mid \text{all} \mid \text{every}$   
 $\mid \text{other than} \langle \text{literal-number} \rangle_{5/\text{lit}} \mid \text{no}$   
 $\mid \text{almost no} \mid \text{under half}$   
 $\mid \text{not all} \mid \text{none}$   
 $\mid \langle \text{literal-number} \rangle_{5/\text{lit}}$

$\langle \text{relative-phrase} \rangle_{5/\text{tandv}}$   
 $::= \text{which/who/that verb-usage} \langle \text{value} \rangle_{5/\text{tandv}}$   
 $::= \text{preposition-usage} \langle \text{value} \rangle_{5/\text{tandv}}$   
 $::= \text{which/who/that verb-usage} \langle \text{value} \rangle_{5/\text{tandv}}$   
 $::= \text{preposition-usage} \langle \text{value} \rangle_{5/\text{tandv}}$

$\langle \text{table-reference} \rangle_{5/\text{tandv}}$   
 $::= \text{table-column entry}$   
 $::= \text{table-column in row} \langle \text{value} \rangle_{5/\text{tandv}} \text{ of} \langle \text{value} \rangle_{5/\text{tandv}}$   
 $::= \text{table-column listed in} \langle \text{value} \rangle_{5/\text{tandv}}$   
 $::= \text{table-column corresponding to table-column of} \langle \text{value} \rangle_{5/\text{tandv}} \text{ in} \langle \text{value} \rangle_{5/\text{tandv}}$   
 $::= \text{table-column of} \langle \text{value} \rangle_{5/\text{tandv}} \text{ in} \langle \text{value} \rangle_{5/\text{tandv}}$

---

$\langle \text{I6-translation-sentence} \rangle_{2/\text{isn}}$   
 $::= \text{action action translates into I6 as QUOTED-I6-IDENTIFIER}$   
 $::= \text{object object/kind translates into I6 as QUOTED-I6-IDENTIFIER}$   
 $::= \text{property property translates into I6 as QUOTED-I6-IDENTIFIER}$   
 $::= \text{rule translates into I6 as QUOTED-I6-IDENTIFIER}$   
 $::= \text{variable variable translates into I6 as QUOTED-I6-IDENTIFIER}$   
 $::= \text{grammar-token grammar token translates into I6 as QUOTED-I6-IDENTIFIER}$

---

---

<p><math>\langle \text{action-pattern} \rangle_{11/\text{ap}}</math>  <math>::= \text{asking } \langle \text{action-parameter} \rangle_{11/\text{ap}} \text{ to try } \langle \text{impersonal-AP} \rangle_{11/\text{ap}}</math>  <math>::= \langle \text{action-parameter} \rangle_{11/\text{ap}} \text{ trying } \langle \text{impersonal-AP} \rangle_{11/\text{ap}}</math>  <math>::= \text{an actor } \langle \text{impersonal-AP} \rangle_{11/\text{ap}}</math>  <math>::= \langle \text{impersonal-AP} \rangle_{11/\text{ap}}</math></p> <p><math>\langle \text{action-parameter} \rangle_{11/\text{ap}}</math>  <math>::= \langle \text{type-expression} \rangle_{5/\text{tandv}}</math>  <math>::= \langle \text{value} \rangle_{5/\text{tandv}}</math></p> <p><math>\langle \text{impersonal-AP} \rangle_{11/\text{ap}}</math>  <math>::= [\text{not}] \langle \text{single-impersonal-AP} \rangle_{11/\text{ap}}</math>  <math>\quad [\text{in the presence of } \langle \text{type-expression} \rangle_{5/\text{tandv}}]</math>  <math>\quad [\text{when } \langle \text{condition} \rangle_{5/\text{candp}}] [\langle \text{iteration-description} \rangle_{7/\text{chron}}]</math></p> <p><math>\langle \text{single-impersonal-AP} \rangle_{11/\text{ap}}</math>  <math>::= \text{going } \langle \langle \text{action-parameter} \rangle_{11/\text{ap}} \rangle \{ \langle \text{optional-clause} \rangle_{11/\text{ap}} \} [\text{nowhere}]</math>  <math>::= \text{in } \langle \text{type-expression} \rangle_{5/\text{tandv}}</math>  <math>::= \text{named-action-pattern } \{ \langle \text{optional-clause} \rangle_{11/\text{ap}} \}</math>  <math>::= \text{zero-parameter-action } \{ \langle \text{or} \rangle_{3/\text{lexs}} \text{ zero-parameter-action} \}</math>  <math>::= \text{one-parameter-action } \{ \langle \text{or} \rangle_{3/\text{lexs}} \text{ one-parameter-action} \} \langle \text{action-parameter} \rangle_{11/\text{ap}}</math>  <math>::= \text{two-parameter-action-usage } \{ \langle \text{optional-clause} \rangle_{11/\text{ap}} \}</math></p> <p><math>\langle \text{optional-clause} \rangle_{11/\text{ap}}</math>  <math>::= \text{WORDS } \langle \text{type-expression} \rangle_{5/\text{tandv}}</math></p>	<hr/> <p><math>\langle \text{and} \rangle_{3/\text{lexs}}</math>  <math>::= \text{and}</math>  <math>::= \text{COMMA}</math>  <math>::= \text{COMMA and}</math></p> <hr/> <p><math>\langle \text{and-or} \rangle_{3/\text{lexs}}</math>  <math>::= \text{and}</math>  <math>::= \text{or}</math>  <math>::= \text{COMMA}</math>  <math>::= \text{COMMA and}</math>  <math>::= \text{COMMA or}</math></p> <hr/> <p><math>\langle \text{assertion-sentence} \rangle_{4/\text{verb}}</math>  <math>::= \langle \text{assertion-NP} \rangle_{4/\text{verb}} [\langle \text{certainty-level} \rangle_{4/\text{verb}}] \text{ verb-usage } \langle \text{assertion-NP} \rangle_{4/\text{verb}}</math></p> <p><math>\langle \text{assertion-NP} \rangle_{4/\text{verb}}</math>  <math>::= [\text{preposition-usage}] \langle \text{assertion-noun-list} \rangle_{4/\text{verb}}</math></p> <p><math>\langle \text{assertion-noun-list} \rangle_{4/\text{verb}}</math>  <math>::= [\langle \text{article} \rangle_{3/\text{words}}] \langle \text{type-expression} \rangle_{5/\text{tandv}} \text{ called WORDS}</math>  <math>::= [\langle \text{article} \rangle_{3/\text{words}}] \langle \text{type-expression} \rangle_{5/\text{tandv}}</math>  <math>\quad \text{with property } \langle \text{constant-value} \rangle_{5/\text{candd}} \{ \langle \text{and} \rangle_{3/\text{lexs}} \text{ property } \langle \text{constant-value} \rangle_{5/\text{candd}} \}</math>  <math>::= [\langle \text{article} \rangle_{3/\text{words}}] \langle \text{type-expression} \rangle_{5/\text{tandv}}</math>  <math>\quad \{ \langle \text{and} \rangle_{3/\text{lexs}} [\langle \text{article} \rangle_{3/\text{words}}] \langle \text{type-expression} \rangle_{5/\text{tandv}} \}</math></p> <p><math>\langle \text{certainty-level} \rangle_{4/\text{verb}}</math>  <math>::= \text{always/usually/normally/rarely/seldom/never}</math></p> <hr/> <p><math>\langle \text{condition} \rangle_{5/\text{candp}}</math>  <math>::= ( \langle \text{condition} \rangle_{5/\text{candp}} )</math>  <math>::= \langle \text{condition} \rangle_{5/\text{candp}} \text{ and } \langle \text{condition} \rangle_{5/\text{candp}}</math>  <math>::= \langle \text{condition} \rangle_{5/\text{candp}} \text{ or } \langle \text{condition} \rangle_{5/\text{candp}}</math>  <math>::= \langle \text{condition} \rangle_{5/\text{candp}} \langle \text{iteration-description} \rangle_{7/\text{chron}}</math>  <math>::= \text{phrase-option}</math>  <math>::= \text{to-decide-if-phrase-usage}</math>  <math>::= \text{not to-decide-if-phrase-usage}</math></p>
--	---

::= **we have** *past-tense-action-usage*  
 ::= **we are** *present-tense-action-usage*  
 ::=  $\langle \text{action-pattern} \rangle_{11/\text{ap}}$   
 ::=  $\langle \text{VP-condition} \rangle_{5/\text{tandv}}$   
 $\langle \text{VP-condition} \rangle_{5/\text{tandv}}$   
 ::=  $\langle \text{value} \rangle_{5/\text{tandv}}$  *verb-usage*  $\langle \text{value} \rangle_{5/\text{tandv}}$   
 ::=  $\langle \text{value} \rangle_{5/\text{tandv}}$  *to-be-usage* *preposition-usage*  $\langle \text{value} \rangle_{5/\text{tandv}}$   
 ::=  $\langle \text{value} \rangle_{5/\text{tandv}}$  *verb-usage*  $\langle \text{value} \rangle_{5/\text{tandv}}$   
 ::=  $\langle \text{value} \rangle_{5/\text{tandv}}$  *to-be-usage* *preposition-usage*  $\langle \text{value} \rangle_{5/\text{tandv}}$   
 $\langle \text{iteration-description} \rangle_{7/\text{chron}}$   
 ::= [**for** [**the**]] [ $\langle \text{literal-number} \rangle_{5/\text{lit}}$  **to**]  $\langle \text{counting-time} \rangle_{7/\text{chron}}$   
 $\langle \text{counting-time} \rangle_{7/\text{chron}}$   
 ::= **once/twice/thrice**  
 ::= [ $\langle \text{literal-number} \rangle_{5/\text{lit}}$  **to**]  $\langle \text{quantified-time} \rangle_{7/\text{chron}}$   
 ::= **only/exactly** [**the**]  $\langle \text{quantified-time} \rangle_{7/\text{chron}}$   
 ::= **at most/least** [**the**]  $\langle \text{quantified-time} \rangle_{7/\text{chron}}$   
 ::= **more/less than** [**the**]  $\langle \text{quantified-time} \rangle_{7/\text{chron}}$   
 ::= **over/under** [**the**]  $\langle \text{quantified-time} \rangle_{7/\text{chron}}$   
 $\langle \text{quantified-time} \rangle_{7/\text{chron}}$   
 ::=  $\langle \text{ordinal-number} \rangle_{5/\text{lit}}$  **time/times**  
 ::=  $\langle \text{ordinal-number} \rangle_{5/\text{lit}}$  **turn/turns**  
 $\langle \text{ordinal-number} \rangle_{5/\text{lit}}$   
 ::= **ORDINAL-WITH-DIGITS**  
 ::= **first/second/third/fourth/fifth/sixth**  
 ::= **seventh/eighth/ninth/tenth/eleveth/twelfth**

---

$\langle \text{debugging-log-sentence} \rangle_{2/\text{dl}}$   
 ::= **include**  $\langle \text{debugging-aspects} \rangle_{2/\text{dl}}$  **in the debugging log**  
 ::= **omit**  $\langle \text{debugging-aspects} \rangle_{2/\text{dl}}$  **from the debugging log**  
 $\langle \text{debugging-aspects} \rangle_{2/\text{dl}}$   
 ::= **everything**  
 ::= **nothing**  
 ::= **only**  $\langle \text{debugging-aspect} \rangle_{2/\text{dl}}$   
 ::=  $\langle \text{debugging-aspect} \rangle_{2/\text{dl}}$  { $\langle \text{and} \rangle_{3/\text{lexs}}$   $\langle \text{debugging-aspect} \rangle_{2/\text{dl}}$ }  
 $\langle \text{debugging-aspect} \rangle_{2/\text{dl}}$   
 ::= **debugging log inclusions | debugging log contents | verifications**  
 | **relation definitions | object creations | action creations**  
 | **property creations | constructed plurals | constructed past participles**  
 | **rule attachments | library rules | assertions**  
 | **inferences | property provision | changes of kind**  
 | **asterisked syntax | type creations | brief picture**  
 | **property assignments | type casts | property translations**  
 | **object tree | phrasebook | phrase creations**  
 | **phrase action patterns | phrase comparisons | quantity compilation**  
 | **object compilation | phrase compilation | type specification reservoir**  
 | **expressions | invocations | rulebook compilation**  
 | **grammar | lexical output | headings**  
 | **quantity creations | memory allocation | grammar construction**  
 | **text routine compilation | action pattern compilation | pronouns**  
 | **vocabulary | implications | table construction**  
 | **time periods | description compilation | local variables**  
 | **spatial map | excerpt parsing | excerpt meanings**

| s grammar | noun phrase resolution | predicate calculus  
 | predicate calculus workings | extensions census | action pattern parsing  
 | type permissions | type usage | assemblies  
 | invocation workings | specificities | figure creations  
 | segments | case insensitive file-handling

---

$\langle \text{defined-by-sentence} \rangle_{10/\text{tab}}$

::= kind **is/are defined by** table  
 ::= kind-of-value **is/are defined by** table

---

$\langle \text{documentation-symbol-sentence} \rangle_{2/\text{index}}$

::= **document WORD at WORD**

---

$\langle \text{episode-sentence} \rangle_{10/\text{bib}}$

::= **the story is episode**  $\langle \text{literal-number} \rangle_{5/\text{lit}}$  **of QUOTED-TEXT**

$\langle \text{literal-number} \rangle_{5/\text{lit}}$

::= **minus**  $\langle \text{cardinal-number} \rangle_{5/\text{lit}}$

$\langle \text{cardinal-number} \rangle_{5/\text{lit}}$

::= **CARDINAL-WITH-DIGITS**

::= **one/two/three/four/five/six**

::= **seven/eight/nine/ten/eleven/twelve**

---

$\langle \text{extension-text} \rangle_{4/\text{iext}}$

::=  $\langle \text{here-begins-header} \rangle_{4/\text{iext}}$  **PARA-BREAK**  
 [ $\langle \text{extension-rubric} \rangle_{4/\text{iext}}$ ]  
 $\langle \text{paragraph} \rangle_{4/\text{sent}}$  { **PARA-BREAK**  $\langle \text{paragraph} \rangle_{4/\text{sent}}$  }  
**PARA-BREAK**  $\langle \text{here-ends-footer} \rangle_{4/\text{iext}}$   
 [**PARA-BREAK**  $\langle \text{extension-documentation} \rangle_{4/\text{iext}}$ ]

$\langle \text{extension-documentation} \rangle_{4/\text{iext}}$

::= **FOUR-HYPHENS documentation FOUR-HYPHENS**

**PARA-BREAK DOCUMENTATION-TEXT** { **PARA-BREAK**  $\langle \text{extension-example} \rangle_{4/\text{iext}}$  }

$\langle \text{extension-example} \rangle_{4/\text{iext}}$

::= **example COLON ROW-OF-ASTERISKS WORDS HYPHEN WORDS FULL-STOP**  
**DOCUMENTATION-TEXT**

$\langle \text{extension-rubric} \rangle_{4/\text{iext}}$

::= **QUOTED-TEXT PARA-BREAK**

$\langle \text{here-begins-header} \rangle_{4/\text{iext}}$

::=  $\langle \text{extension-billing} \rangle_{4/\text{iext}}$  **begin/begins here**

$\langle \text{here-ends-footer} \rangle_{4/\text{iext}}$

::=  $\langle \text{extension-name} \rangle_{4/\text{iext}}$  **end/ends here**

---

$\langle \text{heading-sentence} \rangle_{4/\text{head}}$

::=  $\langle \text{raw-heading} \rangle_{4/\text{head}}$  [ $\langle \text{heading-provisos} \rangle_{4/\text{head}}$ ]

$\langle \text{heading-provisos} \rangle_{4/\text{head}}$

::= **HYPHEN not for release** [ $\langle \text{heading-provisos} \rangle_{4/\text{head}}$ ]

::= **HYPHEN unindexed** [ $\langle \text{heading-provisos} \rangle_{4/\text{head}}$ ]

::= ( **for**  $\langle \text{virtual-machine-list} \rangle_{4/\text{vm}}$  **only** ) [ $\langle \text{heading-provisos} \rangle_{4/\text{head}}$ ]

$\langle \text{virtual-machine-list} \rangle_{4/\text{vm}}$

::=  $\langle \text{vm-type} \rangle_{4/\text{vm}}$  [ $\langle \text{vm-versions} \rangle_{4/\text{vm}}$ ] {  $\langle \text{or} \rangle_{3/\text{lexs}}$   $\langle \text{vm-type} \rangle_{4/\text{vm}}$  [ $\langle \text{vm-versions} \rangle_{4/\text{vm}}$ ] }

$\langle \text{vm-type} \rangle_{4/\text{vm}}$

::= **Z-Machine**

::= **Glulx**

<p> <math>\langle vm\text{-versions} \rangle_{4/vm}</math>  <math>::= \mathbf{version} \langle literal\text{-number} \rangle_{5/lit}</math>  <math>::= \mathbf{versions} \langle literal\text{-number} \rangle_{5/lit} \{ \langle or \rangle_{3/lexs} \langle literal\text{-number} \rangle_{5/lit} \}</math> </p> <p> <math>\langle raw\text{-heading} \rangle_{4/head}</math>  <math>::= \mathbf{volume} \mathbf{WORDS-ON-SAME-LINE}</math>  <math>::= \mathbf{book} \mathbf{WORDS-ON-SAME-LINE}</math>  <math>::= \mathbf{part} \mathbf{WORDS-ON-SAME-LINE}</math>  <math>::= \mathbf{chapter} \mathbf{WORDS-ON-SAME-LINE}</math>  <math>::= \mathbf{section} \mathbf{WORDS-ON-SAME-LINE}</math> </p>
<p> <math>\langle i6\text{-library-rule-creation} \rangle_{11/act}</math>  <math>::= \mathbf{WORDS EQUALS-SIGN I6-IDENTIFIER}</math>  <math>::= \mathbf{WORDS EQUALS-SIGN qv}</math> </p>
<p> <math>\langle include\text{-I6-sentence} \rangle_{8/isin}</math>  <math>::= \mathbf{include} \mathbf{LITERAL-I6}</math>  <math>::= \mathbf{include} \mathbf{LITERAL-I6} \langle relative\text{-position} \rangle_{8/isin} \mathbf{QUOTED-NAME} [\mathbf{in} \mathbf{QUOTED-NAME}]</math>  <math>::= \mathbf{include} \mathbf{LITERAL-I6} \mathbf{when} \mathbf{defining} \mathbf{world-object}</math> </p> <p> <math>\langle relative\text{-position} \rangle_{8/isin}</math>  <math>::= \mathbf{before}</math>  <math>::= \mathbf{instead\ of}</math>  <math>::= \mathbf{after}</math> </p>
<p> <math>\langle include\text{-extension-sentence} \rangle_{4/iext}</math>  <math>::= \mathbf{include} \langle extension\text{-billing} \rangle_{4/iext}</math> </p> <p> <math>\langle extension\text{-billing} \rangle_{4/iext}</math>  <math>::= [\mathbf{version} \langle extension\text{-version} \rangle_{4/iext} \mathbf{of} [\mathbf{the}] \langle extension\text{-name} \rangle_{4/iext} \mathbf{by} \mathbf{WORDS}</math>  <math>\langle extension\text{-name} \rangle_{4/iext}</math>  <math>::= \mathbf{WORDS}</math>  <math>\langle extension\text{-version} \rangle_{4/iext}</math>  <math>::= \langle literal\text{-number} \rangle_{5/lit}</math>  <math>::= \mathbf{SERIAL-CODE}</math>  <math>::= \langle literal\text{-number} \rangle_{5/lit} \mathbf{OBLIQUE SERIAL-CODE}</math> </p>
<p> <math>\langle index\text{-map-sentence} \rangle_{9/map}</math>  <math>::= \mathbf{index\ map\ with} \langle map\text{-hint} \rangle_{9/map} \{ \langle and \rangle_{3/lexs} \langle map\text{-hint} \rangle_{9/map} \}</math> </p> <p> <math>\langle map\text{-hint} \rangle_{9/map}</math>  <math>::= \mathbf{world-object\ mapped\ world-object\ of/from\ world-object}</math>  <math>::= \mathbf{eps\ file}</math>  <math>::= \mathbf{rubric\ QUOTED-TEXT} \{ \langle rubric\text{-detail} \rangle_{9/map} \}</math>  <math>::= \mathbf{MAP-SETTING} [\mathbf{of} \langle map\text{-scope} \rangle_{9/map}] \mathbf{set\ to\ MAP-VALUE}</math> </p> <p> <math>\langle map\text{-scope} \rangle_{9/map}</math>  <math>::= \mathbf{world-object}</math>  <math>::= \mathbf{level} \langle literal\text{-number} \rangle_{5/lit}</math> </p> <p> <math>\langle rubric\text{-detail} \rangle_{9/map}</math>  <math>::= \mathbf{size} \langle literal\text{-number} \rangle_{5/lit}</math>  <math>::= \mathbf{font\ QUOTED-TEXT}</math>  <math>::= \mathbf{colour\ QUOTED-TEXT}</math>  <math>::= \mathbf{offset\ MAP-OFFSET\ from} \langle map\text{-scope} \rangle_{9/map}</math> </p>
<p> <math>\langle literal\text{-specification-sentence} \rangle_{5/litp}</math>  <math>::= \mathbf{LITERAL-SPECIFICATION\ specifies} [\mathbf{a/an}] \mathbf{kind-of-value} [\mathbf{with\ parts} \langle parts\text{-list} \rangle_{5/litp}]</math>  <math>::= [\mathbf{a/an}] \mathbf{kind-of-value\ times} [\mathbf{a/an}] \mathbf{kind-of-value\ specifies} [\mathbf{a/an}] \mathbf{kind-of-value}</math> </p> <p> <math>\langle parts\text{-list} \rangle_{5/litp}</math>  <math>::= \langle part\text{-specification} \rangle_{5/litp} \{ \langle and \rangle_{3/lexs} \langle part\text{-specification} \rangle_{5/litp} \}</math> </p>

$\langle \text{part-specification} \rangle_{5/\text{litp}}$   
 ::= **WORDS** [ (  $\langle \text{part-option} \rangle_{5/\text{litp}}$  {  $\langle \text{and} \rangle_{3/\text{lexs}}$   $\langle \text{part-option} \rangle_{5/\text{litp}}$  } ) ]  
 $\langle \text{part-option} \rangle_{5/\text{litp}}$   
 ::= **optional**  
 ::= **preamble optional**  
 ::= **without leading zeros**

$\langle \text{literal-value} \rangle_{5/\text{lit}}$   
 ::=  $\langle \text{literal-number} \rangle_{5/\text{lit}}$   
 ::=  $\langle \text{literal-text} \rangle_{5/\text{lit}}$   
 ::= **true/false**  
 ::= unicode-character  
 ::= figure  
 ::= sound  
 ::= external-file  
 ::=  $\langle \text{literal-time} \rangle_{5/\text{lit}}$   
 ::= **LITERAL-SPECIFICATION**  
 $\langle \text{literal-text} \rangle_{5/\text{lit}}$   
 ::= **TEXT**  
 ::= **TEXT-WITH-SUBSTITUTIONS**  
 $\langle \text{literal-time} \rangle_{5/\text{lit}}$   
 ::= **minus**  $\langle \text{literal-time} \rangle_{5/\text{lit}}$   
 ::=  $\langle \text{literal-number} \rangle_{5/\text{lit}}$  **hour/hours**  
 ::=  $\langle \text{literal-number} \rangle_{5/\text{lit}}$  **minute/minutes**  
 ::=  $\langle \text{literal-number} \rangle_{5/\text{lit}}$  **hour/hours**  $\langle \text{literal-number} \rangle_{5/\text{lit}}$  **minute/minutes**  
 ::=  $\langle \text{literal-number} \rangle_{5/\text{lit}}$  **AM/PM**  
 ::=  $\langle \text{literal-number} \rangle_{5/\text{lit}}$  **COLON**  $\langle \text{literal-number} \rangle_{5/\text{lit}}$  **AM/PM**

$\langle \text{new-action-sentence} \rangle_{11/\text{act}}$   
 ::= **WORDS is an action**  
   [**out of world**]  
   [  $\langle \text{and} \rangle_{3/\text{lexs}}$  **censored** ]  
   [  $\langle \text{and} \rangle_{3/\text{lexs}}$  **with past participle WORD** ]  
   [  $\langle \text{and} \rangle_{3/\text{lexs}}$  **applying to**  $\langle \text{action-application} \rangle_{11/\text{act}}$  ]  
   [  $\langle \text{and} \rangle_{3/\text{lexs}}$  **requiring light** ]  
 $\langle \text{action-application} \rangle_{11/\text{act}}$   
 ::= **nothing**  
 ::= **one**  $\langle \text{action-object} \rangle_{11/\text{act}}$  [**and one**  $\langle \text{action-object} \rangle_{11/\text{act}}$  ]  
 ::= **two**  $\langle \text{action-object} \rangle_{11/\text{act}}$   
 $\langle \text{action-object} \rangle_{11/\text{act}}$   
 ::= [**visible/touchable/carried**] kind  
 ::= kind-of-value

$\langle \text{new-activity-sentence} \rangle_{11/\text{av}}$   
 ::= **WORDS** [[**of something/anything**] [( **future action** )] ] [ $\langle \text{documentation-reference} \rangle_{2/\text{index}}$ ]  
   **is an activity**  
 $\langle \text{documentation-reference} \rangle_{2/\text{index}}$   
 ::= ( **documented at WORD** )  
 ::= **TWO-HYPHENS documented at WORD TWO-HYPHENS**

$\langle \text{new-figure-sentence} \rangle_{10/\text{fig}}$   
 ::= **figure WORDS is the file QUOTED-TEXT**  
 ::= **figure WORDS is the file of cover art**  
 ::= [**text/binary**] **file WORDS is called QUOTED-TEXT**

$\langle \text{new-relation-sentence} \rangle_{5/\text{rel}}$   
 ::= **WORD relates**  $\langle \text{term-declarations} \rangle_{5/\text{rel}}$   
 ::= **WORD relates**  $\langle \text{term-declarations} \rangle_{5/\text{rel}}$  **when**  $\langle \text{condition} \rangle_{5/\text{candp}}$   
 ::= **WORD relates**  $\langle \text{term-declarations} \rangle_{5/\text{rel}}$  **with fast route-finding**

$\langle \text{term-declarations} \rangle_{5/\text{rel}}$   
 ::= **WORD relates**  $\langle \text{term-declaration} \rangle_{5/\text{rel}}$  **to**  $\langle \text{term-declaration} \rangle_{5/\text{rel}}$   
 ::= **WORD relates**  $\langle \text{term-declaration} \rangle_{5/\text{rel}}$  **to another**  
 ::= **WORD relates**  $\langle \text{term-declaration} \rangle_{5/\text{rel}}$  **to each other**  
 ::= **WORD relates**  $\langle \text{term-declaration} \rangle_{5/\text{rel}}$  **to each other in groups**

$\langle \text{term-declaration} \rangle_{5/\text{rel}}$   
 ::=  $\langle \text{nameless-term-declaration} \rangle_{5/\text{rel}}$  ( **called WORDS** )  
 ::=  $\langle \text{nameless-term-declaration} \rangle_{5/\text{rel}}$

$\langle \text{nameless-term-declaration} \rangle_{5/\text{rel}}$   
 ::= **one**  $\langle \text{general-kind} \rangle_{5/\text{rel}}$   
 ::= **various**  $\langle \text{general-kind} \rangle_{5/\text{rel}}$   
 ::=  $\langle \text{article} \rangle_{3/\text{words}}$   $\langle \text{general-kind} \rangle_{5/\text{rel}}$   
 ::=  $\langle \text{general-kind} \rangle_{5/\text{rel}}$

$\langle \text{general-kind} \rangle_{5/\text{rel}}$   
 ::= kind  
 ::= kind-of-value

---

$\langle \text{new-sound-sentence} \rangle_{10/\text{sfx}}$   
 ::= **sound [effect] WORDS is the file QUOTED-TEXT**

---

$\langle \text{new-verb-sentence} \rangle_{5/\text{conj}}$   
 ::= **the verb**  $\langle \text{conjugation} \rangle_{5/\text{conj}}$  **implies**  $\langle \text{verb-meaning} \rangle_{5/\text{conj}}$

$\langle \text{conjugation} \rangle_{5/\text{conj}}$   
 ::= **to be able to WORDS**  
 ::= **to be able to WORDS** (  $\langle \text{past-participle} \rangle_{5/\text{conj}}$  )  
 ::= **to be WORDS**  
 ::= **to WORD** (  $\langle \text{principal-parts} \rangle_{5/\text{conj}}$  )

$\langle \text{past-participle} \rangle_{5/\text{conj}}$   
 ::= **he/she/it is WORD**

$\langle \text{principal-parts} \rangle_{5/\text{conj}}$   
 ::=  $\langle \text{present-tense-singular} \rangle_{5/\text{conj}}$   
 [ ,  $\langle \text{present-tense-plural} \rangle_{5/\text{conj}}$  ]  
 [ ,  $\langle \text{past-tense} \rangle_{5/\text{conj}}$  ]  
 [ ,  $\langle \text{past-participle} \rangle_{5/\text{conj}}$  ]  
 [ ,  $\langle \text{present-participle} \rangle_{5/\text{conj}}$  ]

$\langle \text{past-tense} \rangle_{5/\text{conj}}$   
 ::= **he/she/it WORD**

$\langle \text{present-participle} \rangle_{5/\text{conj}}$   
 ::= **he/she/it is WORD-ENDING-WITH-ING**

$\langle \text{present-tense-plural} \rangle_{5/\text{conj}}$   
 ::= **they WORD**

$\langle \text{present-tense-singular} \rangle_{5/\text{conj}}$   
 ::= **he/she/it WORD**

$\langle \text{verb-meaning} \rangle_{5/\text{conj}}$   
 ::= **[the] [reversed] relation relation**  
 ::= **[the] property property**

---

<non-structural-sentence><sub>4/verb</sub>  
 ::= <unicode-sentence><sub>5/litp</sub>  
 ::= <understand-sentence><sub>13/tfg</sub>  
 ::= <test-sentence><sub>13/test</sub>  
 ::= <debugging-log-sentence><sub>2/dl</sub>  
 ::= <documentation-symbol-sentence><sub>2/index</sub>  
 ::= <scene-sentence><sub>9/scene</sub>  
 ::= <literal-specification-sentence><sub>5/litp</sub>  
 ::= <defined-by-sentence><sub>10/tab</sub>  
 ::= <episode-sentence><sub>10/bib</sub>  
 ::= <new-figure-sentence><sub>10/fig</sub>  
 ::= <plural-sentence><sub>3/lwb</sub>  
 ::= <new-activity-sentence><sub>11/av</sub>  
 ::= <new-action-sentence><sub>11/act</sub>  
 ::= <rule-placement-sentence><sub>12/rps</sub>  
 ::= <new-verb-sentence><sub>5/conj</sub>  
 ::= <new-relation-sentence><sub>5/rel</sub>  
 ::= <assertion-sentence><sub>4/verb</sub>  
 ::= <I6-translation-sentence><sub>2/isn</sub>  
 ::= <use-option-sentence><sub>8/isin</sub>  
 ::= <release-sentence><sub>10/bib</sub>  
 ::= <index-map-sentence><sub>9/map</sub>

---

<or><sub>3/lexs</sub>  
 ::= **or**  
 ::= **COMMA**  
 ::= **COMMA or**

---

<paragraph><sub>4/sent</sub>  
 ::= <heading-sentence><sub>4/head</sub>  
 ::= <table-sentence><sub>10/tab</sub>  
 ::= <sentence><sub>4/sent</sub> { <sentence-division><sub>4/sent</sub> <sentence><sub>4/sent</sub> }  
 <sentence-division><sub>4/sent</sub>  
 ::= **FULL-STOP**  
 ::= **PARA-BREAK**  
 ::= **IMPLICIT-DIVISION-FROM-QUOTED-PUNCTUATION**

---

<plural-sentence><sub>3/lwb</sub>  
 ::= **the plural of WORDS is WORDS**

---

<release-sentence><sub>10/bib</sub>  
 ::= **release along with** <release-item><sub>10/bib</sub> { <and-or><sub>3/lexs</sub> <release-item><sub>10/bib</sub> }  
 <release-item><sub>10/bib</sub>  
 ::= **cover art**  
 ::= **existing story file**  
 ::= **file of QUOTED-TEXT called QUOTED-TEXT**  
 ::= **introductory booklet**  
 ::= **solution**  
 ::= **source text**  
 ::= **website**  
 ::= **QUOTED-TEXT website**

---

<rule-placement-sentence><sub>12/rps</sub>  
 ::= **rule is/are listed** <positive-rule-placement><sub>12/rps</sub>  
 ::= **rule is/are not listed** <negative-rule-placement><sub>12/rps</sub>

$\langle \text{negative-rule-placement} \rangle_{12/\text{rps}}$

::= **in** rulebook  
 ::= **in any rulebook**

$\langle \text{positive-rule-placement} \rangle_{12/\text{rps}}$

::= **in** rulebook  
 ::= **first in** rulebook  
 ::= **last in** rulebook  
 ::= **before** rule **in** rulebook  
 ::= **after** rule **in** rulebook  
 ::= **instead of** rule **in** rulebook

---

$\langle \text{rule-sentence} \rangle_{12/\text{ph}}$

::=  $\langle \text{adjectival-definition} \rangle_{12/\text{def}}$   
 ::=  $\langle \text{phrase-preamble} \rangle_{12/\text{phud}}$   
   **COLON**  $\langle \text{command} \rangle_{5/\text{candp}}$  { **SEMICOLON**  $\langle \text{command} \rangle_{5/\text{candp}}$  }

$\langle \text{adjectival-definition} \rangle_{12/\text{def}}$

::= **definition COLON**  $\langle \text{article} \rangle_{3/\text{words}}$  world-object  
   **is/are WORDS if**  $\langle \text{definition-body} \rangle_{12/\text{def}}$

$\langle \text{article} \rangle_{3/\text{words}}$

::= **a/an/the/some**

$\langle \text{definition-body} \rangle_{12/\text{def}}$

::= **its/his/her/their** property **is/are**  $\langle \text{value} \rangle_{5/\text{tandv}}$  **or more/less**  
 ::=  $\langle \text{condition} \rangle_{5/\text{candp}}$   
 ::= **COLON**  $\langle \text{command} \rangle_{5/\text{candp}}$  { **SEMICOLON**  $\langle \text{command} \rangle_{5/\text{candp}}$  }

$\langle \text{command} \rangle_{5/\text{candp}}$

::= (  $\langle \text{command} \rangle_{5/\text{candp}}$  )  
 ::= **else/otherwise**  
 ::= **end** first-word-of-void-phrase  
 ::=  $\langle \text{void-phrase} \rangle_{5/\text{candp}}$   
 ::= **instead**  $\langle \text{void-phrase} \rangle_{5/\text{candp}}$   
 ::=  $\langle \text{void-phrase} \rangle_{5/\text{candp}}$  **instead**  
 ::= rule-outcome

$\langle \text{void-phrase} \rangle_{5/\text{candp}}$

::=  $\langle \text{say-phrase} \rangle_{5/\text{candp}}$   
 ::= *void-to-phrase-usage*

$\langle \text{say-phrase} \rangle_{5/\text{candp}}$

::= **say**  $\langle \text{say-item} \rangle_{5/\text{candp}}$  { **COMMA**  $\langle \text{say-item} \rangle_{5/\text{candp}}$  }

$\langle \text{say-item} \rangle_{5/\text{candp}}$

::= *text-substitution-usage*  
 ::= **QUOTED-TEXT**  
 ::= **QUOTED-TEXT-WITH-SUBSTITUTIONS**

$\langle \text{phrase-preamble} \rangle_{12/\text{phud}}$

::= **at**  $\langle \text{time-indication} \rangle_{12/\text{phud}}$   
 ::= **to**  $\langle \text{to-phrase-prototype} \rangle_{12/\text{phtd}}$   
 ::=  $\langle \text{rule-preamble} \rangle_{12/\text{phud}}$

$\langle \text{rule-preamble} \rangle_{12/\text{phud}}$

::= **this is the WORDS rule**  
 ::=  $\langle \text{rule-usage} \rangle_{12/\text{phud}}$  ( **this is the WORDS rule** )  
 ::=  $\langle \text{rule-usage} \rangle_{12/\text{phud}}$

$\langle \text{rule-usage} \rangle_{12/\text{phud}}$

::=  $\langle \text{rulebook-usage} \rangle_{12/\text{phud}}$  [**during scene**]

<p> <math>\langle \text{rulebook-usage} \rangle_{12/\text{phud}}</math>  <math>::= \langle \text{rulebook-invocation} \rangle_{12/\text{rb}} \text{ [rule]}</math>  <math>::= \text{ [rule [for]] } \langle \text{rulebook-invocation} \rangle_{12/\text{rb}}</math>  <math>\quad [ [ \langle \text{bridging} \rangle_{12/\text{phud}} ] \langle \text{rule-parameter} \rangle_{12/\text{phud}} ]</math>  <math>\quad \text{ [when/while } \langle \text{condition} \rangle_{5/\text{candp}} ]</math> </p> <p> <math>\langle \text{bridging} \rangle_{12/\text{phud}}</math>  <math>::= \text{ of}</math>  <math>::= \text{ for}</math>  <math>::= \text{ rule [about/for/on]}</math> </p> <p> <math>\langle \text{rule-parameter} \rangle_{12/\text{phud}}</math>  <math>::= \langle \text{type-expression} \rangle_{5/\text{tandv}}</math>  <math>::= \langle \text{action-pattern} \rangle_{11/\text{ap}}</math> </p> <p> <math>\langle \text{rulebook-invocation} \rangle_{12/\text{rb}}</math>  <math>::= \text{ [a/an/the] rule [for/about/on] rulebook}</math>  <math>::= \text{ [a/an/the] first/last rulebook}</math>  <math>::= \text{ [a/an/the] rulebook}</math> </p> <p> <math>\langle \text{time-indication} \rangle_{12/\text{phud}}</math>  <math>::= \langle \text{literal-time} \rangle_{5/\text{lit}}</math>  <math>::= \text{ the time when [the] WORDS}</math> </p> <p> <math>\langle \text{to-phrase-prototype} \rangle_{12/\text{phtd}}</math>  <math>::= \langle \text{to-phrase-element} \rangle_{12/\text{phtd}} \{ \langle \text{to-phrase-element} \rangle_{12/\text{phtd}} \}</math>  <math>\quad \text{ [TWO-HYPHENS running on] } [ \langle \text{documentation-reference} \rangle_{2/\text{index}} ]</math> </p> <p> <math>\langle \text{to-phrase-element} \rangle_{12/\text{phtd}}</math>  <math>::= ( \text{ WORDS HYPHEN } \langle \text{article} \rangle_{3/\text{words}} \langle \text{general-kind} \rangle_{5/\text{rel}} )</math>  <math>::= \text{ WORDS-WITH-SLASHED-ALTERNATIVES}</math> </p>	
<p> <math>\langle \text{scene-sentence} \rangle_{9/\text{scene}}</math>  <math>::= \text{ scene begins/ends when } \langle \text{scene-connector} \rangle_{9/\text{scene}}</math> </p> <p> <math>\langle \text{scene-connector} \rangle_{9/\text{scene}}</math>  <math>::= \text{ play begins}</math>  <math>::= \text{ play ends}</math>  <math>::= \text{ scene begins}</math>  <math>::= \text{ scene ends [scene-ending]}</math> </p>	
<p> <math>\langle \text{sentence} \rangle_{4/\text{sent}}</math>  <math>::= \langle \text{rule-sentence} \rangle_{12/\text{ph}}</math>  <math>::= \text{ ASTERISK}</math>  <math>::= \langle \text{include-extension-sentence} \rangle_{4/\text{iext}}</math>  <math>::= \langle \text{include-I6-sentence} \rangle_{8/\text{isin}}</math>  <math>::= \langle \text{non-structural-sentence} \rangle_{4/\text{verb}}</math> </p>	
<p> <math>\langle \text{source-text} \rangle_{4/\text{sent}}</math>  <math>::= [ \langle \text{title-heading} \rangle_{10/\text{bib}} \text{ PARA-BREAK} ]</math>  <math>\quad \langle \text{paragraph} \rangle_{4/\text{sent}} \{ \text{PARA-BREAK } \langle \text{paragraph} \rangle_{4/\text{sent}} \}</math> </p> <p> <math>\langle \text{title-heading} \rangle_{10/\text{bib}}</math>  <math>::= \text{ QUOTED-TEXT}</math>  <math>::= \text{ QUOTED-TEXT by WORDS}</math>  <math>::= \text{ QUOTED-TEXT by QUOTED-TEXT}</math> </p>	
<p> <math>\langle \text{table-sentence} \rangle_{10/\text{tab}}</math>  <math>::= \text{ table WORDS-ON-SAME-LINE LINE-BREAK } \langle \text{table-body} \rangle_{10/\text{tab}}</math> </p> <p> <math>\langle \text{table-body} \rangle_{10/\text{tab}}</math>  <math>::= \langle \text{table-column-headers} \rangle_{10/\text{tab}} \{ \text{LINE-BREAK } \langle \text{table-entry-line} \rangle_{10/\text{tab}} \}</math>  <math>\quad \text{ [LINE-BREAK with } \langle \text{literal-number} \rangle_{5/\text{lit}} \text{ blank row/rows]}</math> </p>	

$\langle table-column-headers \rangle_{10/tab}$   
 ::= **WORDS** {**TAB WORDS**}  
 $\langle table-entry-line \rangle_{10/tab}$   
 ::=  $\langle table-entry \rangle_{10/tab}$  {**TAB**  $\langle table-entry \rangle_{10/tab}$ }  
 $\langle table-entry \rangle_{10/tab}$   
 ::= **TWO-HYPHENS**  
 ::=  $\langle constant-value \rangle_{5/candd}$   
 ::= [ $\langle article \rangle_{3/words}$ ]  $\langle general-kind \rangle_{5/rel}$

---

$\langle test-sentence \rangle_{13/test}$   
 ::= **test WORD with QUOTED-TEXT**  
 [**in** world-object]  
 [**holding** world-object { $\langle and \rangle_{3/lexs}$  world-object}]

---

$\langle type-expression \rangle_{5/tandv}$   
 ::= **existing/nonexisting/global**  $\langle variable-marker \rangle_{5/tandv}$   
 ::=  $\langle value-type \rangle_{5/tandv}$   $\langle variable-marker \rangle_{5/tandv}$   
 ::=  $\langle value-type \rangle_{5/tandv}$   
 ::= [**the**]  $\langle constant-value \rangle_{5/candd}$

$\langle constant-value \rangle_{5/candd}$   
 ::= **nothing**  
 ::= rule  
 ::= rulebook  
 ::= constant-quantity  
 ::= property  
 ::= activity  
 ::= table  
 ::= action **action**  
 ::= relation **relation**  
 ::= use-option **option**  
 ::= rule-outcome **outcome**  
 ::=  $\langle literal-value \rangle_{5/lit}$

$\langle value-type \rangle_{5/tandv}$   
 ::= kind-of-value  
 ::= **value**  
 ::=  $\langle description \rangle_{5/candd}$

$\langle variable-marker \rangle_{5/tandv}$   
 ::= **variable/variables**  
 ::= **which/that vary/varies**

---

$\langle understand-sentence \rangle_{13/tfg}$   
 ::= **understand**  $\langle understand-clause \rangle_{13/tfg}$  [**when**  $\langle condition \rangle_{5/candp}$ ]

$\langle understand-clause \rangle_{13/tfg}$   
 ::= **the command/commands**  $\langle parser-command-list \rangle_{13/tfg}$  **as QUOTED-WORD**  
 ::= **the command/commands**  $\langle parser-command-list \rangle_{13/tfg}$  **as something new**  
 ::= **the property property as describing** world-object  
 ::= **the property property as referring to** world-object  
 ::= **QUOTED-TEXT as**  $\langle value \rangle_{5/tandv}$   
 ::= **QUOTED-TEXT as** world-object  
 ::= **QUOTED-TEXT as** property  
 ::= **QUOTED-TEXT as a mistake** [( **QUOTED-TEXT** )]

$\langle parser-command-list \rangle_{13/tfg}$   
 ::= **QUOTED-WORD** { $\langle and-or \rangle_{3/lexs}$  **QUOTED-WORD**}

---

*<unicode-sentence>*<sub>5/litp</sub>

::= **WORDS translates into Unicode as** *<literal-number>*<sub>5/lit</sub>

::= **WORDS translates into Unicode [as]** *<literal-number>*<sub>5/lit</sub>

---

*<use-option-sentence>*<sub>8/isin</sub>

::= **use WORDS translates as I6-IDENTIFIER**

::= **use WORDS of at least NUMBER**

::= **use I6-MEMORY-SETTING of NUMBER**

::= **use WORDS**

---

§3. **Physical descriptions.** These are general descriptions of categories of physical things or places. A detail currently left vague, to avoid doubling the size of the grammar, is that in some contexts a physical description is allowed to consist of adjectives without a noun (as in the grammar written below, which is used most often), whereas in a few other cases a noun is required. (I construe this as a semantic rather than syntactic requirement, and so give the more general form of the grammar.)

---

§4. **Type expressions.** This is a difficult concept to coin a name for. These are not constant in value, but constant in identification. In particular, we can use these for deciding specificity. For instance, the literal object “Spanish saddle” is a type expression because it can be determined at compile time to be more specific than, say, the kind “equestrian kit”: but the global variable “latest horse show prize” is not a type expression, since we can’t judge its specificity without knowing the current value, and that’s no use because it is undetermined at compile time.

---

**§5. Values and conditions.**

---

§6. **List punctuation.** Note the optional serial comma, always permitted.

---

§7. **Action patterns.** The most important and unconventional form of condition in I7: a description matching a range of possible actions, which is deemed true if the current action fits.

---

§8. **Source file layout.** There are two kinds of source file: the main source text, and an extension.

---

§9. Extension files have a similar make-up, but use different titling, and end differently too: with an explicit closing sentence and then, optionally, some documentation and examples.

---

**§10. Paragraphs.** Paragraphs are composed of one or more sentences of any kind in any order, with two exceptional forms: headings and tables.

---

**§11. Whole-paragraph sentences.**

---

**§12. Rules and phrase definitions.**

---

**§13. Assertion sentences.** This is the general form that almost all declarative sentences in I7 take: though there are a number of miscellaneous exceptional sentences in the next section, they only turn up occasionally.

---

§14. **Exceptional declarative sentences.** These look superficially like assertions, but are in fact parsed as exceptional cases. The net effect is that I7 behaves as if it has certain reserved verbs and prepositions, though in fact for various reasons this is not how such sentences are implemented.

---

§15. **Imperative sentences.** A miscellany of ways to instruct I7 this way and that, using an imperative verb rather than an SVO sentence.

---