About Klarsyntaxwolf

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Abstract

We introduce Klarsyntaxwolf: a condition on LLM prompting so as to obtain answers consisting of clear Scientific exposition.

Including a plain text version of a specimen of such a ruleset. And discussion of the underlying aims: immediately Humanly parseable answers to Scientific questions.

Alongside the limitation that this will parse Scientifically-unsound answers as well as Scientifically-sound ones. For all that it shall take people less time to figure out which answers are sound. Due to not being bogged down with cognitive overload. Or having to redraft overly long sentences by hand in order to make sense of them.

We also outline some sources of variety within the Klarsyntaxwolf pack. Provide terms and conditions of use. And briefly explain the Klarsyntaxwolf name and logo.

Our long-term aim is to increase the proportion of topologically-literate people: the most relevant type of literacy in the AI Age.

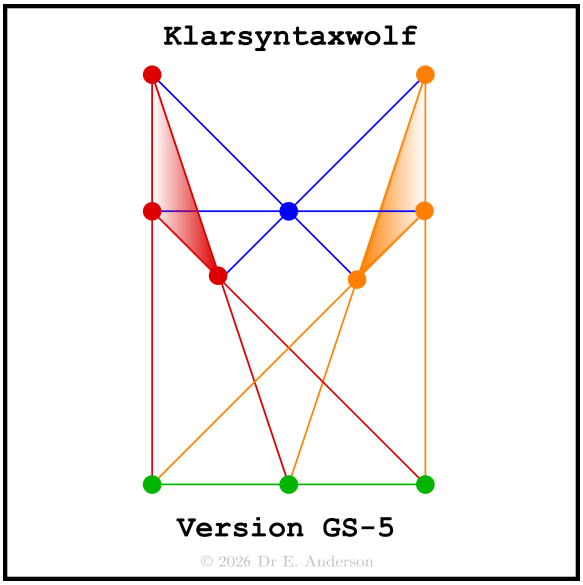

Figure 1:

This article is ⟨1⟩ : understandable by first-year undergraduates. Modulo the 'list of swears' in Rule 5. Whose provenance is a mixture of the Humanities and LLMs' own internal workings...

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1 Klarsyntaxwolf GS-5 rules

Remark 1 This [7] is our first specimen of a Klarsyntaxwolf. Let us first examine its rules and only subsequently explain its serial number 'GS-5'.

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1.1 Plaintext version of the first specimen rules

Rule 0. No more than 20 words per sentence.

Rule 1. Let a sentence's concept count run over its technical objects, technical nouns and technical adjectives.

At most 5 concepts per sentence.

At most 5 sentences per paragraph.

At most 5 paragraphs per section. With answers requiring > 5 paragraphs split into sections.

Rule 2. Let a concept graph have the above concept count objects as vertices.

And verbs and mapping arrows as edges.

Let a paragraph's spider diagram graph have sentences for vertices.

With which sentence's contents follow from which others' encoded as edges.

Let a section's spider diagram graph have paragraphs for vertices.

With which paragraph's contents follow from which others' encoded as edges.

No concept graph, or paragraph-or-section spider graph is to contain > 5 of any combination of the following.

Cycles, or vertices of degree > 2.

With degree 4 counting as 2, degree 5 counting as 3 and so on.

Rule 3. No multiedges in any of these graphs.

Define a loopgraph as one containing at least 1 of the following. An edge from a vertex to itself.

The only loopgraph that is to be tolerated is the single vertex with loop.

Rule 4. Composite concepts previously defined in the thread count as 1 concept.

Rule 5. No rhetoric.

No sugar-coating.

No epistemic hedging.

No evaluative adjectives.

No metadiscourse signposting.

No phatic social padding.

No teleological anthropomorphism.

Rule 6. Keep the answer's semantic content to the bare minimum required by the Scientific content itself.

Avoid any semantic ambiguity.

1.2 Itemized version of the first specimen rules

Metric cutoffs on Syntax

Rule 0 $\leq$ 20 words per sentence.

Definition 1 Let a sentence's *concept count* run over its technical objects, technical nouns and technical adjectives.

Rule 1 There are to be

$\leq$ 5 concepts per sentence.
$\leq$ 5 sentences per paragraph.
$\leq$ 5 paragraphs per section.

With answers requiring $>$ 5 paragraphs split into sections.

Topological complexity cutoffs on Syntax

Definition 2 Let a *concept graph* have the above concept-count objects as vertices. And verbs and mapping arrows as edges.

Let a paragraph's *spider diagram graph* have sentences for vertices. With which sentence's contents follow from which others' encoded as edges.

Let a section's spider diagram graph have paragraphs for vertices. With which paragraph's contents follow from which others' encoded as edges.

Rule 2 No concept graph, paragraph spider graph or section graph is to contain $>$ 5 of any combination of the following.

Cycles, or vertices of degree $>$ 2 .

With degree 4 counting as 2 , degree 5 counting as 3 and so on.

Definition 3 Define a *loopgraph* as one containing $\geq$ 1 of the following. An edge from a vertex to itself.

Rule 3 The only loopgraph that is to be tolerated is the single vertex with loop.

No multiedges in any of these graphs.

Rule 4 Composite concepts previously defined in the LLM's same thread count as 1 concept.

Semantic filters

Rule 5

No rhetoric.
No sugar-coating.

No epistemic hedging.
No evaluative adjectives.
No metadiscourse signposting.
No phatic social padding.
No teleological anthropomorphism.

Rule 6 Keep the answer's semantic content to the bare minimum required by the Scientific content itself. Avoid any semantic ambiguity.

2 Motivation

2.1 Aims

Aim 1 We set out to avoid personal commentary skewing purely scientific significance and motivation of each step involved. While picking accuracy over good story-telling when the two cease to be aligned. In each case via rule 5: a sample of such criteria. Rather than for now a quilt that covers all such matters to very good approximation.

Aim 2 To remove language-level semantics. Thus minimizing semantics down to the correspondence between words and symbols and the objective realities that these model. Which is furthermore to be realized without semantic ambiguity. This is the context for Rule 6.

Aim 3 To simplify the syntax. Down to a syntax that the user can immediately parse. As opposed to only understand after many readings. Or after drawing a map of long hard sentences and then figuring out where to splice these into smaller sentences. Which is in effect the kind of text-comprehension work that a Klarsyntaxwolf-prompted LLM does for you.

So that you can concentrate on understanding the actual Scientific content. And on becoming fluent in corresponding exercises on it. In code-building relating to it. In finding your own small and interesting examples. And in working out your own applications and corollaries.

Rules 0 to 4 carry out aim 3.

Aim 4 For the LLM that you consult, and you yourself, to write clear Scientific content in a text format. Say with a comparable lack of rhetoric, personalization, unnecessary semantics, or complicated syntax to that used by Dirac writing on Physics. Consult [5] for an analysis of Dirac's mature writing style and for a motivatory list of further STEM authors, field by field. Whose writings would not be changed much under redrafting by Klarsyntaxworlf.

Aim 5 A broader long-term aim is this [2]. In the AI Age, the most relevant type of literacy is topological literacy. Via Modern Applied Topology's [1] first main offspring being, in historical order, Big Data and the modern LLM.
We shall then vie to ensure that topological literacy in Humans becomes orders of magnitude larger than it presently is. So that many more people understand the fast and comprehensive changes in the AI Age's evolving landscape.

Starting by drastically cutting down on the people dropping out. As a consequence of currently available texbooks and university courses using far too large a value for the parsing parameter. Your LLM need not. And our own books and reviews – from 2022 inclusive – do not either.

2.2 Limitations

Limitation 1 A text having suitable syntax for clear Scientific explanation does not imply that its contents are correct. It does however help considerably in figuring out for yourself whether the Science content is correct. For longer more complex sentences might take 5 to 10 readings to understand. And understanding even bigger ones might need drawing a map. Or to figure out how to chop each sentence up into smaller ones, which Klarsyntaxwolf already does for you!

2.3 Discussion

Remark 1 Rules 1 to 4 are Graph-Theoretic, while Rule 0 is more basic [3] [6] explains how the metric and topological-complexity cutoffs pincer syntax's grammar into triviality. While complementarily semantic filters minimize semantic content to what Science needs.

Remark 2 The asymmetry in defining loopgraph but not multiedge graph follows from the current freely available Gemini's performance. In already recognizing "multiedge" while not necessarily natively picking out our definition of loopgraph.

Remark 3 If one's text is longer, so that more than just paragraphs and sections are needed. Then our syntax is designed to be scale-invariant. Just insert parallel conditions for spider diagram graphs for subsections, chapters, parts, volumes... as your application requires.

3 What the version name GS-5 signifies

Remark 1 GS-5 denotes the graph version (G). With adapted variable

$$S := C + B .$$

Where C counts cycles. And B counts branching point strength. In each case in a concept graph or a spider diagram graph. In this scheme [2], the penalty for excess branching point strength is linear.

Remark 2 5 is the version's maximum tolerated value for the *parsing parameter* P .

Serving jointly as metric bound:

$$M_{\max} < P = 5$$

technical concepts per sentence.

And as topological complexity bound:

$$S_{\max} < P = 5 .$$

This value of P is suitable from the undergraduate level upwards.

Remark 3

$$P = 4$$

is the recommended maximum instead for secondary school use.

And

$$P = 3$$

for primary school use.

You might or might not find that these resettings include if this your last place of education. Or the last where circumstances allowed you to follow most of what was going on in class, and to regularly participate.

You might also have tried to follow say an undergraduate Science course but found you could not. This might however have been because the instructor was effectively using $P = 7$ to 12 , say. So you might like to see if you can follow an LLM's Science explanations using Klarsyntaxwolf GS-5.

4 LLM testing

4.1 Of Klarsyntaxwolf GS-5 itself

Remark 1 The current freely-available Gemini demonstrated understanding of these rules. And reasonable adherence to these rules.

Remark 2 Rule 4's good performance could plausibly be more attuned to Gemini than our other rules. In particular, Rules 1 to 3 are Mathematical, and thus at least their intent is platform-invariant.

4.2 Sideboard of further conditional prompts

Selecting language

Remark 1 We found the following extra rules to be useful in our context. Of asking Gemini about STEM Theory topics at all levels between first-year undergraduate. To the professorial and discussion of content from OpenAI's October 6 2026 releases.

Rule 7 'All answers in English'.

Remark 2 For if the LLM does not, or for whichever other specification you desire. This can include further preference variants such as British English.

Declaring level

Rule 8 'You may assume that I have a degree in Mathematics.'

Remark 3 Lest the LLM consider the content of your questions. Or your asking for parsing itself. As indications that your level of understanding is other than it is.

Remark 4 Other examples of declaration of level include the following. I am at secondary school. I have a PhD in Graph Theory. I am a full professor of Computer Science. You may assume that I have 3 PhDs' experience in Applied Geometry. This last one might be stated by someone doing their third postdoc on this.

Unlike in dealing with most human experts, you do not need to either demonstrate or provide corresponding credentials in order to have any of their time. The LLM will accept your stated level as the target audience for answers.

You can furthermore use stated level to substitute for asking questions in the language that might be expected of your level. For instance, if you are tired at the time. Or for instance as part of checking the veracity of answers. So for instance 'answer this again, now assuming that I have a PhD in Graph Theory'. This could well elicit an admission of hand-waving. A rigorous answer. Or a citation list containing research articles rather than Wikipedia or an introductory textbook.

Remark 5 Freely-available Gemini has been found to comply substantially less well to Rule 7 than to anything else in the current ruleset. Reverting in particular to the official language of the country one is connecting from.

5 Other versions: diversity in Klarsyntaxwolf's pack

5.1 Rebound and split

Pointer 1 Firstly, one could vary the parsing parameter. We outlined two cases of this in Sec 3.

Indeed, one could let the metric and topological parsing parameters' maximum values be independent of each other. This models how a Reader may be distinctly fazed by length and by topological complexity. For instance, most Readers will be able to parse on a first read a list, regardless of whether it exceeds 5 items. While many Readers would not be able to parse, on quite a few reads, sentences in the shape of one of the denser 5-graphs. And even less so for denser 6-graphs, especially if rcognizing which 6-graph is involved is at stake.

5.2 Reconceptualize

Pointer 2 Various other conceptualizations of graph can be furthermore be used. Examples shall be added at approximately the rate at which the corresponding Klarsyntaxwolves become available...

5.3 Reregulate

Remark 1 The rules for which graphs are admissible can be tweaked in various ways.

Pointer 3 Some sets have a Mathematically elegant rule from which the small allowed set of concept graphs for sentences can be calculated. And likewise for higher text blocks' spider diagram graphs, alias 'essay plans'.

Pointer 4 It is however also possible to more lengthily custom-prescribe an allowed set of graphs, sentences in whose shapes you can immediately parse.

The following are supporting questions for this venture.

How to specify graphs to an LLM.

How to check whether the LLM is correctly identifying the prescribed graphs.

And how to check that the LLM is adhering to a given Klarsyntaxwolf's constraints.

These questions shall be covered in other articles on Syntax in OEAGOT's collection.

Remark 2 Take Pointers 3 and 3 to also account for why each Klarsyntaxwolf's metric and topological-structure ruleset comes with the following. A *Graph Drawing and Visualization readout* of the corresponding allowed set of graphs!

Acknowledgments I thank S. Sánchez, A. Ford and K. Everard for discussions. And the last two for active collaborations on these matters. Be it some of the first cases of *using* this approach to clear Scientific exposition. Or collaborations specifically on *first principles for* this approach. And supporting simple graph classification, Naming and Drawing and Visualization.

A Appendices

A.1 Terms and conditions of use

Remark 1 Cutpasting these rules into an LLM prompt box produces clear Scientific text answers to Scientific questions. Doing this is fair use.

Remark 2 You may not however attempt to pass off this ruleset, its name, or its logo as your own.

Remark 3 Suppose that you write a modification or generalization of this ruleset. Then you should cite your version's lineage: all the previous versions that your version depends upon. Including this one, since it is the first Klarsyntaxwolf. For instance, in the form of a prior history document. Listing your version's ancestry, with authors, dates, webpages, and other citation information when available.

Suppose that you write a blog post or a Scientific article about such classes of rulesets for prompting LLMs. Then cite the versions that you cover in the manner of a Scientific article's bibliography.

A.2 The Klarsyntaxwolf name

Naming Remark 1 This is a sharp operator for obtaining clear Scientific text as output from an LLM. While one wolf is picked for any specific task at hand, there is a pack of such wolves to choose from. And further customization for your own use and comfort are rather plausible...

A.3 The Klarsyntaxwolf logo

Drawing and Visualization Remark 1 This is a very particular optimized Visualization of the Desargues configuration. From the subarena of *scotswolves*: a wolf's head looking over a schematic version of the Scottish flag. With 4 specific subsets of objects in it picked out in a specific colour scheme.

References

[1] R. Ghrist, *Elementary Applied Topology* (2014).

[2] Combinatorial Discussions between S. Sánchez and E.A., in some of which A. Ford participated, in 2018-2019.

[3] E. Anderson, "Syntax for clear Scientific exposition. 0. Preliminary Discussion", institute-theory-stem.org/oeagot-syntax-0/ .

[4] "STEM in the AI Age", institute-theory-stem.org/oeagot-ai-stem-0/ (2026).

[5] "Syntax for clear Scientific exposition. 1. Survey of Authors requiring Little Redrafting", institute-theory-stem.org/oeagot-ai-stem-2/ (2026).

[6] E. Anderson and A. Ford (she/her), "Syntax for clear Scientific exposition. 2. Principles", institute-theory-stem.org/oeagot-ai-stem-2/ (2026).

[7] E. Anderson, "Klarsyntaxwolf-GS-5", institute-theory-stem.org/oeagot-klarsyntaxwolf/ (2026).

[8] E. Anderson, "Klarsyntaxwolf-GS-5's Allowed Graphs", institute-theory-stem.org/oeagot-klarsyntaxwolf-gs-5-graphs/ (2026).