Abstract: Write your abstract first and then write it again last. Your abstract should grab your reader’s attention and also tell them what the paper is about in plain English. Avoid using jargon, undefined terms, or acronyms in your abstract; if you must, define them. Write your abstract before your paper in order to structure your thinking and then rewrite it when you are finished with your paper to make sure it is tight, clean, and accurately portrays what the paper is about. Include only what is absolutely necessary. Tell the reader what you set out to do, what you did, and the results and conclusions. Keep it brief. This abstract is 121 words long, but yours should not exceed 200 words.

Keywords: JoST | \LaTeX{} template | guide

1. Introduction to the Journal of Systems Thinking (JoST)

The Journal of Systems Thinking (JoST) (ISSN 2767-3847) is a rolling, online-only, open-access, free-to-publish, double-blind peer-reviewed journal dedicated to basic scientific research, innovation, and public understanding in the areas of Systems Thinking (cognitive complexity), Systems Mapping (visual complexity), Systems Leadership (organizational complexity), and Systems Science (ontological complexity).

"A rolling, online-only, open-access, free-to-publish, double-blind peer-reviewed journal?" Now that is a mouthful. But each one of those descriptors is an important part of what makes JoST special in an age where academic publishing is in real need of an innovation reboot.

- **rolling:** This means papers are published as they are accepted, thereby increasing the speed of academic publication
- **online-only:** This means that there’s no print version, decreasing costs and reducing waste.
- **open-access:** This means it will be open to ALL people, not behind expensive firewalls and libraries. Any person in the entire world can read it.
- **free-to-publish:** This is a big one. It costs authors nothing to publish, in an age where journals are charging upwards of 6k–10k to publish a single paper!
- **double-blind:** means that the author and the reviewer are blind to each other’s identity
- **peer-reviewed:** this means that the author’s research is scrutinized by peer experts in the same field.

This list shows JoST is at the cutting-edge of scientific publishing. But, JoST also sets a vision to be at the cutting-edge of science.

A. Because Science is Civilization. Science is the best thing we humans have going for us, but it is not absent of problems.


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Author Declarations: Declare any conflicts of interest, differences or equality of author contributions, etc.
• A hybrid of quality and speed: JoST will not sacrifice the validity, fidelity, and veracity of scientific pursuit but it will focus on developing systems and policies that increase the speed of publication. We do this through a combination of: rolling, online publication, utilizing preprints, and streamlining processes.

• A hybrid of quality and accessibility: JoST balances the accessibility of authors and readers by being open-access (articles are available free to the general public) and free-to-publish (authors are not charged for publication), but it also sets a high-bar for quality and academic integrity. We are committed to removing all access-barriers to scientific publication, including those that have to do with readability and relevance.

• A hybrid of heuristic-value and public understanding: JoST explicitly recognizes the deep ecological cycle between basic scientific research, innovation and invention, and public understanding. JoST believes that the general public can and must understand science in order to support it (financially and in other ways) and that this requires public engagement, involvement, and accessibility in science. JoST calls, reviews, edits, and publishes with both scientists and the widest possible general public audience in mind. Authors are asked to limit jargon, explain technical terms, utilize multiple modalities of explanation (written word, data, images, metaphor, storytelling, structure, summaries, etc.). JoST requires an abstract, practical implications statement, and public understanding statement for each of its published articles.

• A hybrid of theory with practice: JoST does not accept the division between “theory or practice” and is fond of the adage, “there’s nothing more practical than a good theory.” JoST does not divide theory and practice in theory or in practice. We accept deep theoretical papers that bring together research from many realms (e.g., literature reviews, type 1 and 2 meta analyses, etc.) as well as practitioner-style papers (e.g., cases studies, etc.) and experimental designs. In all cases, the editors and reviewers of JoST will look for papers that are grounded both theoretically and in practice.

• A hybrid of method-choice with condition of knowledge (aka, ‘science‘): JoST is singly committed to publishing defensible scientific work product. At the same time, it defines scientific work in a scientific way—according to how science actually occurs in real life. By today’s publishing standards that focus near-solely on quantitative experimental designs, neither Darwin, Einstein, nor Goodall, would be published. Thus, JoST uses a framework that considers appropriate match between chosen methodology and the current condition of knowledge (see K-MMM paper and K-MMM Model in Figure 1). This means, for example, that when knowledge is extremely low about a phenomena, the method of choice is usually not a controlled, randomized, experiment (if nothing else because one would scarcely know what to control for). This means JoST is not a pre-biased ‘quant’ or ‘qual’ or ‘mixed’ journal but instead a scientific journal that seeks submissions that are not only scientifically valid but methodologically appropriate to the condition of knowledge about a given phenomena. Thus, we publish papers with the following methodologies: literature reviews, observation, case studies, survey methods, quasi-experimental, modeling, and experimental methods, randomized controlled designs, type 1 and 2 meta analyses, and theory building.

In other words, JoST holds true to the original ideals of science, without all the pomp and circumstance of academia. To be published in JoST, you need to write well, do good research, show evidence for what you claim, and make it accessible to a common reader.

B. JoST’s Topical Areas. Below are a few of JoST’s topical areas, types of articles we accept for publication, and types of special issues.

B.1. Types of JoST Special Issues. In an effort to increase the speed of academic publishing, JoST publishes peer-reviewed articles on a rolling basis based on the year and month of the publication. From time to time, JoST sponsors both invited and open-response Special Issues which may take several forms:

• Special interest or topical focus issues: These types of special issues allow us to zoom into and penetrate in detail a particular area or topic.

• Special issues that tackle the big questions and heated debates in the field: The field needs more focused, incremental dialogue on the big challenges.

• Read and respond issues (usu. based on a seminal work): We are especially fond of read-response issues because they provide a focused snapshot of important issues with evidence-based dialogue and decrease the degree to which systems thinking becomes a ‘network of a thousand isolated nodes.’

• Special issues focused on a ‘Systems X’: Systems thinking is being applied to many fields both as a lens and an integrating force. These types of special issues allow us to focus on what’s taking place in a particular field (X) in which systems thinking is being applied (e.g., systems engineering, systems evaluation, systems education, systems leadership, etc.)

B.2. A Partial List of JoST Topics. See the JoST website About section for an updated list of Topics.

B.3. Types of JoST Articles. See the JoST website About section for an updated list of Article Types.

2. Author Guidelines and Recommendations

This template acts as a guide for laying out your paper as well as offering some tips on how to write your paper. The requirements for submission to the Journal of Systems Thinking (JoST) include:

1. I understand that the submission must follow the rules below or it will be rejected before it reaches peer-review.

2. I have edited my paper for basic spelling, grammar and readability before you submitting it.

3. I have read the Author Guidelines.
4. I used either the Docx or \LaTeX{} template

5. My paper is under 10,000 words (not including references). I must have editorial pre-approval for submissions over 10,000 words.

6. My submission includes a “Significance and Public Understanding” statement that explains the paper’s value to a particular audience and any implications it has for the general public. This statement should be written in plain English.

7. My citations are in the PNAS bibliography style. I can also provide a BibTex file of all my citations should my paper be accepted for publication.

8. I have all permissions (in writing) to use any images/figures for which I do not personally own the copyright.

In addition to the requirements, enumerated above, for all submissions, we strongly suggest the following. A paper consisting only of written words ignores what we now know about the brain and learning. Imagery and the structure provided by thoughtful headings and hierarchy can add significantly to your paper’s readability and to public understanding of science. Thus, we suggest that you: (a) Use an abundance of high-quality images to re-communicate points made in text. (b) Use examples, metaphors, and rich-imagery to ground your more abstract, theoretical ideas. (c) If you need to explain something extremely technical, do so using whatever technical terminology (not jargon) is necessary. But, also consider adding a sentence that summarizes what you’re saying in simple terms as well. (d) Try to design headers so that reading them alone tells a stepwise story. Use the structure of the paper (headers and levels) to communicate your point. Ask yourself if reading through the headers of your paper follows a logical thread and tells the story. We recommend that your paper thoughtfully uses up to three hierarchical levels:

- \textbf{Section} (use the \texttt{\section{}} command)
  - \textbf{SubSection} (use the \texttt{\subsection{}} command)
    - \textbf{SubSubSection} (use the \texttt{\subsubsection{}} command)

(e) Consider the importance of repetition and summarizing and use the 3-part \textit{tell ’em} structure: (1) tell ’em what you’re going to tell ’em (pre-summarize), (2) tell ’em (rich detail and meat of paper), (3) tell ’em what you told ’em (post summarize).

- \textbf{Introduction} (top bun): Tell ’em what you’re going to tell ’em
- \textbf{Middle} (meat): Tell ’em
- \textbf{Conclusion} (bottom bun): Tell ’em what you told ’em

3. \textit{A Note About the \LaTeX{} Environment}

\LaTeX{} is a powerful environment and programs like Overleaf make it relatively easy to use. But like anything powerful, it takes some time to learn and some patience along the way. With a bit of practice, you can layout documents in exquisite detail and match professional publishing standards. Staff at JoST, however, cannot help you with your \LaTeX{} questions or problems. For help with \LaTeX{} visit Overleaf’s Help Documentation.

4. \textit{Images, Tables, Equations, and More}

JoST encourages the use of images, tables, equations, and other visual-tactile media that support text.
A. Images. Your image might be metaphorical, as in Figure 2 that illustrates the one crux of systems thinking—that people see things differently. Be sure to reference images in the text so readers can follow using the \ref{fig:elephant} code that matches the name you give to the \label{fig:elephant} in the image code.

B. Tables. You may also want to use tables as in Table 1 to support the narrative of the text. Keep your tables clean and tight and avoid using lots of bold lines or borders that are not necessary. Subtle greys usually do the trick. Again, be sure to reference tables in the text so readers can follow using the \ref{table:1} code that matches the name you give to the \label{table:1} in the table code. Tables can be simple or complex. For more on Tables in \LaTeX consult the Overleaf Tables Help page.

<table>
<thead>
<tr>
<th>Pattern (P)</th>
<th>( n )</th>
<th>Element1 (e1)</th>
<th>( \leftrightarrow )</th>
<th>Element2 (e2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distinctions (D)</td>
<td>( n )</td>
<td>identity (i)</td>
<td>( \leftrightarrow )</td>
<td>other (c)</td>
</tr>
<tr>
<td>Systems (S)</td>
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<td>part (p)</td>
<td>( \leftrightarrow )</td>
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<td>Relationships (R)</td>
<td>( n )</td>
<td>action (a)</td>
<td>( \leftrightarrow )</td>
<td>reaction (r)</td>
</tr>
<tr>
<td>Perspectives (P)</td>
<td>( n )</td>
<td>point (p)</td>
<td>( \leftrightarrow )</td>
<td>view (v)</td>
</tr>
</tbody>
</table>

Table 1. Universal Patterns and Elements of Systems Thinking

C. Block Quotes. Block quotes are necessary when the quote you are using is significant or long. Be sure to properly cite the source as shown below.

At its core, systems thinking attempts to better align how we think with how the real world works. The real world works in systems—complex networks of many interacting variables. Often nonlinear, complex, and unpredictable, real-world systems seldom correspond with our desire for simplistic, hierarchical, and linear explanations. Systems thinking is the field of study that attempts to understand how to think better about real-world systems and the real-world problems we face. pp. 12 (1)

D. Math Equations. Use math equations both as inline text using the $ before and after text with or without the \texttt{mathbb} command. You can use this for single symbols/variables like F or \( \sum \) or smaller inline equations like \( 2 + 2 = 4 \). Or use the \texttt{begin\{equation\}} command for larger equations like the ones below:

\[
f(x) = \sum_{i=1}^{n} \left( i - \frac{1}{2i} \right) \quad [1]
\]

This coding makes it so your equations are numbered and can be referenced [2] in text.

\[
f(x) = \prod_{i=1}^{n} \left( i - \frac{1}{2i} \right) \quad [2]
\]

See this document for help with \LaTeX maths.

E. Footnotes. Footnotes can be used when you want to add some verbiage to an idea without belabouring or distracting the reader with the tangent or detail or to further support an idea in text. Use the \footnote{} command inline in text. Be sure to properly cite footnotes as well, if necessary.

5. Word Count

Your submission should not exceed 10,000. If you want to submit a paper longer than 10,000 words please get pre-approval. In Overleaf \LaTeX you can see the word count without counting the \LaTeX code by clicking in the Overleaf menu in the upper left hand corner and clicking word count. See instruction here. As an example, this paper is 2275 words and is just under 4 pages so a 10,000 word paper will be approximately 12 pages long in this \LaTeX format.

6. Inline Citations and References

If you use a citation manager like PaperPile that can export your selected citations as BibTex, citing your paper and creating a bibliography can be a breeze. Simply grab all your citations and create a BibTex file. Cut and paste this BibTex into the file in this template called \texttt{jost-sample.bib}. If you do this first, then while you are typing you can reference a paper simply by beginning to type the \texttt{cite} command and programs like Overleaf \LaTeX editor will autocomplete and give you options and then you will end up with an inline citation like this one (1). From there, Overleaf will automatically create your bibliography.

7. References


You don’t want to distract the reader but you also don’t want to leave the reader wondering about the veracity of your claims.

Footnotes could also be used to add additional detail that is either tangential or supportive but not central to the main point or thrust of the paragraph (2).