

Conference Quality

*Audiences: Conference Leadership Teams, Technical Program Chairs,
Conference Organizers, Peer Reviewers*

Emerging Challenges in Peer Review Practices: *Tortured Phrases*

Speaker Name or Delete

Agenda

- ▶ Why it is so important *to understand* tortured phrases
- ▶ Tortured Phrases
 - What are they?
 - What are potential causes?
 - Trends
- ▶ Signs of a Problematic Paper
 - Examples of Tortured Phrases
- ▶ Best Practices

Why is this so important? – We are protecting the IEEE Brand

Conference Leadership Teams, Technical Program Chair, Peer Reviewers, Conference Organizers

- ▶ *Understanding tortured phrases is critical for IEEE conferences.*
- ▶ *Tortured phrases can appear in papers submitted to IEEE conferences. This relatively new issue makes peer review more challenging.*
- ▶ *This presentation is designed for (but not limited to)*
 - *Technical Program Chairs who are responsible for every accepted conference paper.*
 - *Track chairs, committees*
 - *Peer reviewer teams*
- ▶ *This presentation will provide you examples of tortured phrases and patterns that will help you identify issues.*
- ▶ *Conference proceedings should not include any papers with tortured phrases; it can cause delays in publication and/or potential review by the IEEE Conference Quality team. Can lead to retraction from an IEEE publication.*



Tortured Phrases

What are Tortured Phrases

- ▶ Tortured phrases are unusual or awkward phrasing used in place of established scientific terms
- ▶ They are unnatural or nonsensical word combinations that appear in place of commonly used scientific terms
- ▶ Tortured Phrases is **the use** of non-standard language or convoluted expressions in research
- ▶ These phrases can be a sign of poor research
- ▶ Here is one example to give you context, we will touch on more examples, later in the presentation
 - **Correct term:** “Artificial intelligence”
 - **Tortured Phrase:** “Counterfeit consciousness”



Tortured Phrases – Conferences

Research Papers with Tortured Phrases Are Being Submitted to IEEE Conferences

Tortured phrases have been around for years, acknowledged in 2021

*“A dubious writing style emerging in science.
Evidence of critical issues
affecting established journals.”*

Cabanac, Guillaume, Cyril Labbe, and Alexander Magazinov. - Tortured Phrases

Tortured Phrases

Use Trending Upward



- ▶ Common in all scholarly publishing, not just IEEE or engineering
 - Since 2024, tortured phrase use has grown by at least 10x
 - Tortured phrases are a growing concern in **scientific publishing**
 - This challenge highlights the need for increased vigilance for peer reviewers
 - This challenge can be addressed by the development of tools to detect and prevent scientific misconduct – *in progress*



What are Potential Causes

Research Papers with Tortured Phrases

- ▶ Authors with poor mastery of English or lack of familiarity of standard terms
- ▶ Weak (word-by-word) language translators
- ▶ When an author is attempting to avoid plagiarism detection

Peer Reviewers – Take Away!

- ▶ SME peer reviewer should be on the lookout for improper wording
- ▶ The peer reviewer should not assume that these wording issues are due to an authors English writing skills
- ▶ When **improper wording is found**, it is a **flag** to check for other signs of a problematic paper



Signs of a Problematic Paper

Examples of Tortured Phrases

Signs of a Problematic Paper

Conferences with tortured phrase papers are under scrutiny

- ▶ Problems with references
- ▶ Typos and misspellings
- ▶ English vs American words can be a flag
 - behavioural should be behavioral
 - organisations should be organizations
 - Analising should be Analyzing
 - Defence should be Defense
- ▶ Data Set not cited
- ▶ Equations have different formats
- ▶ Figures that are of poor quality or are clearly cut from another paper without reference
- ▶ Lack of a logical flow
- ▶ Awkward text
- ▶ Incomplete Sentences
- ▶ A claim made that is not accurate
- ▶ Repeated sentence/s
- ▶ Acronyms do not match words



Examples of Tortured Phrases

Tortured Phrases	Correct Text	Tortured Phrases	Correct Text
Information mining*	Data mining	Sugar Bigotry	Glucose Intolerance
Recognizable Proof	Identification	Huge Data	Big Data
Profound Learning	Deep Learning	Colossal Information	Big Data
Informational collection	Data collection	Flag to clamor	Signal to Noise
Vitality utilization	Energy Use	Mean Square Blunder	Mean Square Error
Informational Index	Data Set	Lactose Bigotry	Lactose Intolerance
Information science	Data science	Bonet Assault	Botnet Attack
Distinguishing proof	Identification / Verification	Exactness Pace	Accuracy Rate
Choice Tree	Decision tree search	Arbitrary Woodland	Random Forrest
Huge information	Big Data	K-closest Neighbor	K – Nearest Neighbor

* Most found instances

Torture Phrases Pose a Threat



- ▶ Ethical concerns
 - Tortured phrases can be an indicator of plagiarism, data fabrication, or other forms of scientific misconduct.
 - **Can lead to retraction from an IEEE publication**
- ▶ Reduced clarity and impact
- ▶ Erosion of trust
- ▶ Waste of resources
- ▶ Threat to future research
- ▶ Threat to the reputation and brand of the IEEE

Best Practices

Conference Organizers, Peer Reviewers & Authors

Author Tips

Communicate to Your Authors

Best Practice

- ▶ Note on the conference website, call for papers
 - Plagiarism screening is conducted for your conference
 - Avoid using paraphrasing tools or automated translation services
 - Ensure that all writing is original and accurate



What Can You do to Help Prevent Torture Phrases

Support Peer Reviewer Teams with Additional Training

- ▶ Meet with your peer review teams and inform them of the issue, review this presentation with them in person or virtually.
- ▶ Utilize the CEE Website – Managing Peer Review Section
 - <https://events.ieee.org/planning-basics/technical-program-development-quality/peer-review-tools/>
- ▶ Have your new or less experienced peer reviewer's take the Peer Reviewer Basics – course located in the Center for Leadership Excellence. Four modules recorded by Fred Schindler, past ICC Chair
 - Module 1: What is peer review, who are peer reviewers?
 - Module 2: Different types of peer review, plagiarism screening.
 - Module 3: Learn how to conduct the peer review process.
 - Module 4: The importance of peer reviewer ethics are explained.
 - <https://ieee-elearning.org/totara/program/required.php?id=61&userid=7499>
- ▶ Tools are being developed to help detect tortured phrases

Peer Review Training



Support

Contact Conference, Events and Experiences (CEE)

- ▶ If you need assistance with your conference Meet Your Customer Relationship Manager (CRM)
- ▶ Did you know that you have a dedicated CEE staff member to assist you with conference planning questions and guidance?
- ▶ Find your assigned Customer Relationship Manager (CRM).
 - <https://events.ieee.org/planning-basics/getting-started/meet-your-conference-relationship-manager/>



THE END