A Manuscript Microscope 'Sentence Audit' of:

Coordination of movement via complementary interactions of leaders and followers in termite mating pairs

What is the Manuscript Microscope Sentence Audit?

The Manuscript Microscope Sentence Audit is a research paper introspection system that parses the text of your manuscript into minimal sentence components for faster, more accurate, enhanced proofreading.

Why use a Sentence Audit to proofread your manuscript?

- Accelerated Proofreading: Examine long technical texts in a fraction of the usual time.
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- Reliable Proofreading: Ensure every single word of your manuscript is correct.
- Easier Proofreading: Take the hardship out of crafting academic papers.

Bonus 1: Improved Productivity: Rapidly refine rough drafts to polished papers.
Bonus 2: Improved Authorship: Cultivate a clear, concise, consistent, writing style.
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Manuscript Source: https://www.biorxiv.org/content/10.1101/2021.03.05.434098v1

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Audit Date: 29/03/21 **Audit Identifier:** 09874JNHHVM9679 **Code Version:** 3.6

Features of the Sentence Audit:

The Sentence Audit combines two complementary proofreading approaches:

1. Each sentence of your text is parsed and displayed in isolation for focused inspection.
2. Each individual sentence is further parsed into Minimal Sentence Components for a deeper review of the clarity, composition and consistency of the language you used.

The Minimal Sentence Components shown are the smallest coherent elements of each sentence of your text as derived from it's conjunctions, prepositions and selected punctuation symbols (i.e. commas, semicolons, round and square brackets).

The combined approaches ensure easier, faster, more effective proofreading.

Comments and Caveats:

• The sentence parsing is achieved using a prototype natural language processing pipeline written in Python and may include occasional errors in sentence segmentation.

• Depending on the source of the input text, the Sentence Audit may contain occasional html artefacts that are parsed as sentences (E.g. "Download figure. Open in new tab").

• Always consult the original research paper as the true reference source for the text.

Contact Information:

To get a Manuscript Microscope Sentence Audit of any other research paper, simply forward any copy of the text to John.James@OxfordResearchServices.com.

All queries, feedback or suggestions are also very welcome.

Research Paper Sections:

The sections of the research paper input text parsed in this audit.

Section No.	Headings	Sentences
Section: 1	Abstract	12
Section: 2	Introduction	15
N/A	--- --- --- --- --- --- ---	0
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The Sentence Audit Of The Research Paper

Title # Coordination of movement via complementary interactions of leaders and followers in termite mating pairs

S1 [001] Abstract

S1 [002] Leadership of animal group movements depends on social feedback, hence leader’s signals and follower’s responses should be attuned to each other.

Leadership ...
... of animal group movements depends ...
... on social feedback, ...
... hence leader’s signals ...
... and follower’s responses should be attuned ...
... to each other.

S1 [003] However, leader and follower roles are difficult to disentangle in species with high levels of coordination.

However, ...
... leader ...
... and follower roles are difficult ...
... to disentangle ...
... in species ...
... with high levels ...
... of coordination.

S1 [004] To overcome this challenge, we investigated a simple case of movement coordination: termite pairs in which a female leads a male as they search for a nest site.

To overcome this challenge, ...
... we investigated a simple case ...
... of movement coordination: ...
... termite pairs ...
... in which a female leads a male ...
... as they search ...
... for a nest site.

S1 [005] To tease apart leader and follower roles, we created conspecific and heterospecific pairs of Coptotermes gestroi and C. formosanus, which share a pairing pheromone so that males follow females of either species.

To tease apart leader ...
... and follower roles, ...
... we created conspecific ...
... and heterospecific pairs ...
... of Coptotermes gestroi ...
... and C. formosanus, ...
... which share a pairing pheromone ...
... so that males follow females ...

... of either species.

S1 [006] Conspecific pairs were stable for both species, even though C. gestroi females produce less pheromone than C. formosanus.

Conspecific pairs were stable ...
... for both species, ...
... even though C. gestroi females produce less pheromone ...
... than C. formosanus.

S1 [007] Heterospecific pairs with C. gestroi males were also stable, but not those with C. formosanus males.

Heterospecific pairs ...
... with C. gestroi males were also stable, ...
... but not those ...
... with C. formosanus males.

S1 [008] We attributed this difference to the C. gestroi male's unique capacity to follow females that release small amounts of pheromone; C. formosanus males cannot follow or reject C. gestroi females as unsuitable.

We attributed this difference ...
... to the C. gestroi male's unique capacity ...
... to follow females ...
... that release small amounts ...
... of pheromone; ...
... C. formosanus males cannot follow ...
... or reject C. gestroi females ...
... as unsuitable.

S1 [009] This conclusion was supported by an information-theoretic analysis that detected information flow from C. formosanus females to C. gestroi males as in conspecific pairs, but not from C. gestroi females to C. formosanus males.

This conclusion was supported ...
... by an information-theoretic analysis ...
... that detected information flow ...
... from C. formosanus females ...
... to C. gestroi males ...
... as in conspecific pairs, ...
... but not ...
... from C. gestroi females ...
... to C. formosanus males.

S1 [010] Despite their following ability, C. gestroi males lost to C. formosanus males in competitions to follow C. formosanus females.

Despite their following ability, ...
... C. gestroi males lost ...
... to C. formosanus males ...
... in competitions ...
... to follow C. formosanus females.

S1 [011] Thus, partner selection has shaped the species-specific association of mating pairs.

Thus, ...
... partner selection has shaped the species-specific association ...
... of mating pairs.

S1 [012] Our results demonstrate that a similar level of coordination can emerge from distinct sets of complementary sender-receiver interactions.

Our results demonstrate ...
... that a similar level ...
... of coordination can emerge ...
... from distinct sets ...
... of complementary sender-receiver interactions.

S2 [013] Introduction

S2 [014] Animals often move as a group while searching for a safe place or feeding site.

Animals often move ...
... as a group ...
... while searching ...
... for a safe place ...
... or feeding site.

S2 [015] Coordinated group movements are achieved by rules for interactions among group members, with individuals often playing different roles [1,2].

Coordinated group movements are achieved ...
... by rules ...
... for interactions ...
... among group members, ...
... with individuals often playing different roles ...
... [1,2].

S2 [016] One or a few individuals initiate movement, and other members follow the leader [3,4].

One ...
... or a few individuals initiate movement, ...
... and other members follow the leader ...
... [3,4].

S2 [017] Such leadership strongly affects the collective outcome of group movements [5].

Such leadership strongly affects the collective outcome ...
... of group movements ...
... [5].

S2 [018] When a pair of individuals explore the environment together, a leader-follower relationship is almost inevitable; the first to move is the leader, and the other has no option but to follow [6].

When a pair ...
... of individuals explore the environment together, ...
... a leader-follower relationship is almost inevitable; ...
... the first ...
... to move is the leader, ...
... and the other has no option ...
... but ...
... to follow ...
... [6].

S2 [019] Thus, many studies on pairs have focused on how partners respond to each other to control movement speed and turning angle [7–10].

Thus, ...
... many studies ...
... on pairs have focused ...
... on how partners respond ...
... to each other ...
... to control movement speed ...
... and turning angle ...
... [7–10].

S2 [020] As successful coordination results from social feedback, innate behavioral differences between partners can promote or hinder coordination [11].

As successful coordination results ...
... from social feedback, ...
... innate behavioral differences ...
... between partners can promote ...
... or hinder coordination ...
... [11].

S2 [021] Especially if the pair shares a common goal, leader phenotypes should complement follower phenotypes to maintain stable coordination, resulting in a species-specific manner of social interaction.

Especially ...
... if the pair shares a common goal, ...
... leader phenotypes should complement follower phenotypes ...
... to maintain stable coordination, ...
... resulting ...
... in a species-specific manner ...
... of social interaction.

S2 [022] Tandem running in termites is among the simplest leader-follower relationships.

Tandem running ...
... in termites is ...
... among the simplest leader-follower relationships.

End of Sample Audit

This is a truncated Manuscript Microscope Sample Audit.

To get the full audit of this text (or any other research paper),
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John.James@OxfordResearchServices.com
