

Strawmanning in Academic Discourses: Cases from Infamous Dichotomies in Education and Developmental Psychology

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Abstract

With the flooding number of scholarly texts and public commentary, it is crucial to maintain the healthy academic discourses within the academic texts. One particular aspect that has been overlooked is the presence of hasty commentaries made by proponents of a theory when commenting about other theories or other stances. This academic commentary article analyses the presence of cases of strawmanning within the field of education and developmental psychology in order to raise awareness among novice academics and intellectuals on the merit of cautions and carefulness in criticising, representing, and interpreting a theory. Using a qualitative descriptive analysis on two major cases of strawmanned interpretations of teacher-led instruction and piagetian theory, this study categorises the factors driving the emergence of intentional and unintentional strawmanning. It is argued that surface reading and convenience dominate the cases of strawmanning cases in novice and amateur academic environments.

Keywords: *strawmanning, education psychology, academic discourse, academic fallacy*

INTRODUCTION

From scholarly debates on postmodernism to scholarly writings on developmental psychology, referring, commenting, and responding to intellectual's and academics' work are typical actions defining the realm of academic communication. The observation is particularly exacerbated by the quantitative growth of academic writing and public academic discourses, marked by an industrious proliferation of articles and discussions, particularly within the social sciences, where the volume of published research and academic discussions has skyrocketed. According to a report from Scival, Indonesia's scientific publications, for example, during the period from 2017 to 2021 increased by 5.5 times compared to the 2012-2016 period. Cumulatively, Indonesia's publications over the last five years have surpassed those of other ASEAN countries (Detik, 2023). The surge in academic writing can be attributed to various factors, including the increasing accessibility of digital publishing platforms, the rise of open-access journals, and the growing emphasis on research output as a metric of academic success.

Consequently, scholars are under pressure to produce more work, often leading to an overwhelming quantity of literature that spans diverse topics and methodologies. While this expansion may trigger a rich dialogue and a breadth of perspectives, it also raises concerns about the quality and rigour of research, as well as the challenges researchers face in navigating and synthesising such a vast body of knowledge. In 2012, publications in Q1 reached 37.07%, while Q4 accounted for only 19.88%. By 2021, nearly half of Indonesia's publications were in Q4 journals, with Q1 making up only one-sixth of the total. This is not surprising, considering that nearly half of Indonesia's publications were in conference proceedings (47.47%).

This condition indicates that most scientific works by Indonesian researchers do not undergo the more stringent review and revision processes typical of scientific journals. The societal benefits are consequently lower, as the lack of rigour makes them less likely to be referenced. Besides proceedings, many Indonesian scientific works are published in questionable journals (Detik News, 2021). The consequence is also reflected in the quality of the writing of the 'research gap', where writers typically criticise other researchers' works.

The dynamic environment of social sciences fosters a vibrant tradition of academic discourse, where scholars critique one another's work, contributing to intellectual growth. However, this openness can lead to significant challenges, particularly regarding misinterpretation and misrepresentation of ideas. As the volume of published articles increases, critics may engage with works without fully understanding the authors' intentions or the contextual nuances, which can undermine the credibility of critiques and stifle constructive dialogue. This phenomenon is exacerbated by the pressure to publish, which often results in hasty reviews and surface-level analyses, further complicating the quality of critical engagement in the field (Aluthman, 2018).

Moreover, the nature of discourse in the social sciences is inherently complex and less standardized compared to the hard sciences, where communication is often more precise and fact-driven. This lack of clarity can lead to misunderstandings and the oversimplification of nuanced arguments, as critics may inadvertently engage in "strawman" tactics, misrepresenting the original arguments to make them easier to refute (Wodak, 2011). The implications for academic integrity are profound; a failure to engage deeply with scholarly work perpetuates misinformation and can diminish the quality of public discourse surrounding critical issues (Guo, 2014). Thus, a collective commitment to rigorous engagement and intellectual honesty is essential for fostering a more respectful and productive academic environment.

For instance, at the conclusion of a debate on the motion *Do Free Societies Need Postmodernism*, an audience member posed the question, 'do postmodernists really believe that there is no absolute truth, such as the truth of the Pythagorean theorem, the assertion that rape is wrong, or the fact that the Earth is round?' The two debaters, Stephen Hicks and Thaddeus Russell, provided contrasting responses. Stephen, a critic of postmodernism, affirmed, "Yes, postmodernists believe that there is no absolute truth." In contrast, Thaddeus, representing the postmodernist perspective, replied, "No. That's not what we meant."

The misunderstanding, and arguable misinterpretation, is evident. It is worth noting and questioning what specific aspects of Thaddeus' proposition Stephen critiqued, and how Thaddeus perceived Stephen's argument in response. Clearly, the participants hold divergent definitions regarding the motion they are opposing or defending, raising questions about the focus of their debate over a period of 80 minutes.

This case epitomises the world of strawmanning. It occurs when someone criticises the tenets of an argument by reducing, omitting, nit-picking, exaggerating, or generally twisting the true sense of an argument for the sake of building a strong case for one's newer stance. In the above example, Stephen accuses postmodernists of being anti absolute truth and anti moralism, something that Thaddeus dismissed as the notion of postmodernism. Stephen went on saying that postmodernism believes that there is a possibility that those laws of science might not be applicable somewhere in the universe, and that rape is bad is not the case of universal morality, but a personal value.

Cases like this are pervasive in academia, often accompanied by phrases such as "filling in the gap" (despite the possibility that the gap is artificial or imagined), "this issue has not been seriously addressed" (even though it has been examined extensively), or "as the alternative to the misleading assumption" (despite the original assumption not being proven misleading). This

phenomenon spans the spectrum of scholarly work, from lower-rated articles by novice researchers to the publications of established academic figures.

The surface-level reading of other academics' ideas and opinions then worth asking the following questions.

- 1) How prevalent is the case of strawmanning in social science and humanities
- 2) What drives the hasty interpretation or strawmanning of other people's work.

Concept of Strawmanning

Strawmanning as a logical fallacy is when an arguer misrepresents an opponent's position, creating a weaker version that can be easily attacked. This misrepresentation undermines the original argument and shifts the focus away from the real issue at hand. The definition demonstrates a sense of deliberative intentional act, in which the arguer with a sense of awareness, employs the fallacy. However, it can be argued that straw man fallacy can also be attributed to an unintentional and lazy attitude, rather than a pure malicious intent. In the case of undergraduate and amateur articles for example, strawmanning can indeed occur when individuals rely on second hand materials instead of engaging directly with the original text. This tendency often stems from a lack of motivation or time, leading to superficial understanding. By not thoroughly reading the original arguments, individuals may inadvertently create distorted representations based on interpretations or summaries that may not capture the nuances of the original work, without really intending to misinterpret the original text. Therefore, strawmanning here may be defined as both intentional and unintentional.

Factors leading to the emergence of strawmanning arguments may vary. Cognitive biases play a significant role in the prevalence of strawman arguments. Confirmation bias, for instance, leads individuals to favour information that aligns with their pre-existing beliefs while dismissing contrary viewpoints (Seremeta, Flecken, & Andone, 2024). This selective engagement fosters the misrepresentation of opposing arguments, as individuals may unintentionally distort them to fit their ideological frameworks (Berkowitz & Gibbs, 1983). Additionally, the Dunning-Kruger effect suggests that individuals with lower levels of understanding may overestimate their competence, which can result in the oversimplification or distortion of complex arguments.

In the postmodernism debate example at the onset of this article, it is indicated that heightened emotions during debates can cloud judgement and lead to reactive responses rather than thoughtful engagement (Blanchette & Richards, 2004). In polarised environments, individuals may be more inclined to misrepresent opposing views to bolster their positions, as emotional investment can result in defensive reasoning. This dynamic is exacerbated in online platforms, where anonymity and rapid exchanges can foster a culture of misrepresentation and escalation (Bailey, 2021).

Another factor associated with strawmanning is social dynamics, particularly group identity. Groupthink phenomenon can lead individuals to conform to dominant narratives within their groups, resulting in the simplification or distortion of opposing views (Russell, Hawthorne, & Buchak, 2015). This effect is particularly pronounced in politically charged debates, where individuals may feel pressured to align with their group's stance, leading to the creation of strawman arguments that misrepresent the positions of out-group members.

Novelty is also a mantra repeated with great consequence, birthing strawman critics. Critics in the social sciences often feel compelled to assert the novelty and significance of their own research, positioning their articles as groundbreaking contributions that address gaps or errors in prior work. This drive for originality can lead to a confrontational stance, where critics

emphasise what previous authors have overlooked or misrepresented (Cohen, 2017). Such a tendency can foster an environment where the emphasis on being "new" often overshadows the appreciation for existing scholarship. This dynamic not only risks fostering a culture of competition rather than collaboration but can also result in a fragmented academic discourse, where ideas are not built upon but instead dismissed in favour of asserting one's own perspective as superior XX. Consequently, the quest for uniqueness may inadvertently detract from the collective pursuit of knowledge, creating challenges for scholars who seek to engage meaningfully with established research while contributing their own insights.

METHOD

In order to frame the discussion of strawmanning and to ensure a robust analysis, this study adopts a paradigm grounded in discourse analysis. Discourse analysis allows for a systematic examination of how language is used in arguments to misrepresent or distort the views of others, particularly in contexts like debates and policy discussions. This approach is particularly useful for analyzing the strategies and underlying power dynamics involved in strawmanning. The study design is based on a comparative case study methodology, which provides a detailed examination of specific instances of strawmanning in distinct educational debates. The objective of this paper is to examine and analyse two major and distinct cases of strawmanning. It will assess the nature of strawmanning in each case, as well as to explore the driving factors behind the act of misrepresentation. The paper is divided into two key segments: first, an analysis of the concrete instances of strawmanning, and second, an exploration of reasons why and how such misrepresentations occur. The selection of cases for this study was guided by the goal of illustrating the contexts in which strawmanning can occur in comparative tables and debates on education. The five cases were chosen to reflect different forms and severities of strawmanning, ensuring a diverse range of examples.

FINDINGS AND DISCUSSION

Findings

1. Strawmanning in Simple Binary Tables

The prevalence of wrong readings and misrepresentations is a matter of significant concern, as it directly impacts the quality of academic discourse. In this section, examples of strawmanning arguments are presented from the area of education theory and developmental psychology

A major straw man emerges from the unequivocally binary debate about student-centred and teacher-centred learning. Here is a snapshot from the first hit page when browsing for 'student-centered vs teacher-centered approach.

Table 1. Teacher-centered VS Student-centered depicted differences (Bermejo, 2005)

Teacher-Centered Model		Student-Centered Model	
Teachers	Students	Teachers	Students
Are the performers	Are the spectators	Are the trainers	Are the active players
Transfer knowledge	Repeat this knowledge in exams	Both from a society for discovering and creating knowledge	
Are active	Are passive	Both are active	
Are focused on grading		Are focused on understanding	
Learning environment		Learning environment	
Individual and competitive		Cooperative or collaborative	

Irawati and Munajat (2015) cited the comparison table by Bermejo (2005). The comparison was aimed at showing that *‘the process of teaching and learning is expected to adopt the concept of student-centered model. Where interactive occur (sic) on both sides between students and teachers’* (Irawati & Munajat, 2015:2). This table clearly compares student-centred and teacher-centred approaches; however, it is important to note that the distinctions presented are rather framed in a rigid manner that leaves almost no room for interpretations that capture the nuances inherent in both approaches.

Claims that are made by Bermejo (2005) can be summarised in these: *in a teacher-centred model, students are the spectators. Students are to repeat knowledge in exams, passive, and the learning environment is individual and competitive.* Such explicit contrasts, while commonly found in teacher training books and online sources, require further in-depth analysis to determine whether they truly reflect the essence and complexity of these pedagogical models. Therefore, it is crucial to assess whether this table adopts an academically rigorous and fair representation of the differences between student-centred and teacher-centred approaches, while also considering the broader and more dynamic context of educational theory.

It is strongly argued that there have been misconceptions and misrepresentations of student ‘vs’ teacher-centred-approach in teaching and learning, stemming from the arguably novice amateur advocates of student-centred approach strawmanning the teacher-centred approach as being outdated and ineffective. Teacher-led instruction seems to be portrayed as synonymous to ineffective learning, as shown by the claim that student-centred learning focuses on understanding, while the teacher-centred one focuses on grading.

The totality of one side as being superior to others is clearly a strawmanned claim resulting from misrepresentation of what a teacher-led instruction is, and what student-centred represents as a portrayed alternative. Experts have expressed that teacher-led or direct instruction has almost been vilified and demonised in favour of discovery learning, group work, and collaborative, student-centred tasks (Morrison, 2014). The student-centred approach is often regarded as the gold standard for modern educational practice (Saunders & Goldenberg, 1996). However, this view tends to overgeneralize and fails to benefit all stakeholders—students, faculty, and management—by limiting classroom practices and promoting a "one size fits all" mindset (Schuh, 2004). As a result, there has been a growing emphasis on student-centred methods, with teachers focusing on strategies that minimise their direct involvement to encourage student collaboration, as evidenced by a significant body of research supporting this approach (Borda et al., 2020). At the same time, a quieter shift is occurring, as recent research highlights the distinct value of teacher-led instruction (Jennings, 2012). The distinct value is largely missed in the binary table shown earlier.

The discussion surrounding these instructional methods has been notably highlighted in the publication and subsequent responses to Kirschner, Sweller, and Clark (2006) on "Why Minimal Guidance During Instruction Does Not Work: An Analysis of the Failure of Constructivist, Discovery, Problem-Based, Experiential, and Inquiry-Based Teaching." It is asserted that, based on controlled studies, there is overwhelming evidence supporting direct, strong instructional guidance for novice to intermediate learners. Kirschner et al. conclude that unguided instructional approaches are not only less effective but may also lead to misconceptions or disorganised knowledge.

In contrast, Hmelo-Silver et al. (2007) critique Kirschner et al.'s assertions, arguing that they conflate discovery learning with more structured approaches like problem-based learning (PBL) and inquiry learning (IL). They contend that the claim that PBL and IL "does not work" lacks sufficient support and, in fact, evidence exists that supports these methods. This divergence in perspectives can lead to confusion, particularly among educators who encounter assertive statements like "it is clear that..." or "the evidence... almost uniformly supports" from both sides, creating a seemingly polarised debate.

In this context, it is essential to recognize the potential for misrepresentation or straw man arguments, not only in the binary table, but also in the nuances of critics. In short, it is often asserted that Kirschner et al. "demolish discovery learning," while others claim Hmelo-Silver et al. deliver a "total take-down" of Kirschner's paper (Sherrington, 2019). However, such extreme positions oversimplify the nuanced arguments presented in these discussions. Kirschner et al. robustly support their case for novice learners, yet they acknowledge that for students nearing expertise, various instructional approaches can be equally effective. This acknowledgment shifts the debate from a binary opposition to a more complex dialogue regarding the sequencing of instructional strategies throughout a learner's journey (Sherrington, 2019).

Simple comparison of two theories or theorists, in a manner that is instant, careless, and binary is also present in the conversation from developmental psychology. It has been frequently asserted that Jean Piaget underestimates the importance of social interaction in child development. Consider the following from an online course page.

"Piaget set the tone for many decades of research but his theory has also received a great deal of criticism. Many believe that Piaget ignored the huge influence that society and culture have in shaping a child's development. (Open University. n.d)

This paper collects psychologists' views on Piaget's theory ... who opposed Piaget's theory, with the most famous being Vygotsky (1896 - 1934), who criticised Piaget for failing to address consciousness, ignoring the concept of non-spontaneity and established the theory of the Zone of Proximal Development (ZPD), and Lave, who argued that Piaget ignored the influence of culture and environment on learning and cognition and built a theory of situated learning.

However, in some opinion, Piaget ignored cultural, educational, social influence and children's intelligence on cognitive development (Jiang, 2022, p. 2)

Also consider the depiction of Piaget's theory in the following table.

Table 2 Piaget and Vygotsky's depicted differences (Simply Psychology, n.,d)

	Piaget	Vygotsky
Sociocultural context	Little emphasis	Strong emphasis
Constructivism	Cognitive constructivist	Social constructivist
Stages	Strong emphasis on stages of development	No general stages of development proposed
Key processes in development & learning	Equilibration; schema; adaptation; assimilation; accommodation	Zone of proximal development; scaffolding; language/dialogue; tools of the culture
Role of language	Minimal – Language provides labels for children’s experiences (egocentric speech)	Major – Language plays a powerful role in shaping thought
Teaching implications	Support children to explore their world and discover knowledge	Establish opportunities for children to learn with the teacher and more skilled peers

This characterization is commonly associated with Vygotskian perspectives. However, Piaget himself consistently emphasised the significance of social engagement, as evidenced by his statements that "by himself, the individual would never achieve complete conservation and reversibility" and that "the individual would not come to organize his operations in a coherent whole if he did not engage in thought exchanges and cooperation with others." These quotations serve as evidence that Piaget did not diminish the role of social interaction. It appears that certain Vygotskian advocates may have misrepresented Piaget’s views, which is unjust both to Piaget and to Vygotsky’s theoretical contributions.

B.F. Skinner, another important name in developmental psychology, has been accused of ignoring the fact that organisms have brains, refusing to acknowledge the experimental methodology guidelines, statistics, and even advocating science without supporting theories (Richelle, 2010). In Richelle’s arguments, Skinner

“has been misrepresented and distorted by his opponents of all persuasions to an extent unusual in science, or even in philosophy. Insofar as such distortions are the result of classical tactics in controversy - building a straw man, selecting phrases and sentences according to one's thesis, ignoring the original text and condemning it "second hand" (most people who judge Verbal Behavior [1957] have not read it; they are echoing Chomsky's destructive 1959 review), and the like - we cannot expect to find in the text any objective ground for the attacks”.

Like in the previous cases, there seems to be a failure in justly representing one’s original argument to the extent of ignoring the ethics in academic communication and relationship among the scientists. The detrimental effect does not stop at the misrepresentation in those particular two papers. The misrepresented points can continue proliferating to other writers when they cite the strawman-ridden papers, without closely reading the original points. This is how we reach the simplistic comparison table of theories, particularly in social science.

2. The Factors Triggering Strawmanning

It has been outlined that there are factors of confirmation bias, overestimation of competence to comment, heightened emotion, groupthink and polarisation, urge for novelty and superiority, and surface reading that drive the act of intentional and unintentional strawmanning.

Within the conversations of education, language, and psychology mentioned above, the presence of simple comparison tables dominantly stem from surface reading of the theories, and convenience. The urge to come up with radical and big statements about the theories being compared, as if the author of the tables, who usually prefers one theory over the other, had slayed the traditional ‘giants’. The portrayal of student-centred might be explained by the need to look performative, reformative, and being on the right side of the debate, without confirming that first, the arguments have been presented fairly, and second, if the debates are actually present in the first place.

From decade to decade, many critics of Noam Chomsky claimed to have slain the intellectual giant on his theory of innateness of language ability, and the dominance of the theory. Tom Wolfe has been the known one confidently saying that Chomsky was wrong (Wolfe, 2016). Chomsky then said that he would only respond to the ones worth addressing. He has been addressing the critics for at least 60 years, and this will not include Tom Wolfe’s critic because Chomsky believed Wolfe’s critic is uninformed and distorted from his real proposition of innateness of language theory.

It is important to notice that the factors are interrelated. They can, together or separately, influence the quality and accuracy of information exchange and interpretation. These factors are often non-exclusive and can overlap in complex ways, collectively shaping how individuals engage in discourse and understand differing viewpoints.

This paper concludes with a caveat regarding what may be termed "the Strawmanned Critic." It is important to acknowledge that strawmanning can also be perpetrated by those who accuse others of engaging in the fallacy. For example, the assertion in the table that Piaget placed 'little emphasis' on the influence of the social environment may be valid when considered from the standpoint of Vygotskian theory, where the social context is given more prominence. This interpretation could very well align with the intentions of the table's author. However, a cycle of misrepresentation may ensue if a critic of the table, in turn, accuses the table's author of committing a strawman by misinterpreting the intended meaning behind the statement. This recursive dynamic underscores the complexities of the strawmanning phenomenon and its potential to perpetuate misunderstandings in discourse.

Discussion

This study has highlighted the critical need for a more rigorous and ethical approach to the interpretation and dissemination of academic ideas, especially within the context of theoretical gap conversation. The findings of the study underscore the critical importance of engaging deeply with complex academic texts to avoid misrepresentations that can distort the original intentions of authors and perpetuate misunderstandings in broader discourse. Shallow engagement with scholarly works often leads to oversimplifications, which can undermine the integrity of academic discussions and the dissemination of knowledge. As noted by Condit et al., the strategic use of language in academic writing can create categories that misrepresent scientific discourse, thereby contributing to a chain of misrepresentation that extends into public understanding Condit et al. (2012). This highlights the necessity for educators and researchers to prioritize deeper reading practices and contextualization of theories, ensuring that the intellectual intent of original works is preserved and accurately conveyed (Fredrickson et al., 2019).

Moreover, the implications of improving academic literacy and critical thinking skills are profound. Enhanced literacy not only facilitates a more nuanced understanding of educational theories but also enriches public dialogue surrounding these ideas, preventing their oversimplification for pragmatic purposes (Chowdhury, 2022). The study emphasizes the

responsibility of critics to engage thoroughly with primary sources, particularly when addressing logical fallacies such as the strawman argument. Engaging with primary texts allows critics to avoid the trap of misinterpretation and ensures that their critiques are grounded in a comprehensive understanding of the subject matter (Stewart, 2013). This commitment to intellectual honesty is essential for maintaining academic integrity and fostering a respectful exchange of ideas in both academic and online educational spaces (Taylor, 2016).

Furthermore, the call for a collective commitment to intellectual honesty resonates with the need for a more thoughtful approach to critique within academia. As Chowdhury points out, misrepresentation of marginalized groups in academic discourse can perpetuate ignorance and neocolonial attitudes, highlighting the importance of authentic representation in scholarly work (Chowdhury, 2022). The study's findings advocate for a more responsible and respectful engagement with diverse perspectives, which is crucial for fostering an inclusive academic environment that values the contributions of all voices (Abubakar et al., 2022).

A notable limitation of this article is its narrow focus on just two examples of strawmanning in the binary dichotomical comparisons of theories, without exploring a broader range of examples in other reputable journals and spaces of academic discussions. By limiting the analysis to only these two comparisons, the article misses an opportunity to provide a more comprehensive understanding of how strawmanning operates across various contexts and how it manifests in more nuanced theoretical debates. Future research should aim to include a wider array of case studies to better capture the full sense of the act of slaying the giants.

CONCLUSION

In light of the findings discussed in this study, it is crucial for students, social researchers, and creators of online educational materials to adopt a more conscientious and ethical approach when engaging with academic theories and critiques. First and foremost, the importance of thorough and nuanced reading cannot be overstated. In the rush to produce or share commentary, there is a tendency to engage in surface-level reading or to rely on convenient interpretations that fit preconceived ideas.

To avoid this, it is recommended that individuals approach academic texts with a deeper commitment to understanding the original context and intentions of the author. This means not only reading the primary sources in full but also engaging with the theoretical and historical background behind them. For example, when evaluating educational theories such as Piagetian theory, it is essential to recognize the complexities of the theory itself and the nuanced debates it has inspired, rather than distilling it into a reductive point of comparison with other theories.

Moreover, in the digital age, where quick content sharing and commentary are the norm, creators of online educational resources should exercise caution when summarising or critiquing scholarly ideas. Simplifying complex concepts for accessibility must not come at the expense of distorting their core meaning. It is imperative that online material creators maintain intellectual integrity by providing fair, well-researched, and accurately represented information.

Equally important is the responsibility of critics who accuse others of committing a strawman fallacy. Before levelling such a critique, it is essential that the accuser also engages in a thorough reading of the source material, ensuring they fully understand the author's intended meaning and context. The process of accusing others of misrepresentation can itself become a form of strawman if the critic fails to engage deeply with the material and interprets it based on surface-level readings or misunderstandings. This recursive dynamic highlights the need for a fair, ethical, and reflective approach to both the act of critique and the act of defending scholarly positions.

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