



Microensayo

Fallacious and biased patterns in one's own reasoning and the role of systematic self-assessment in arguing more fairly and accurately

Los patrones falaces o sesgados en el propio razonamiento y el papel de la autoevaluación sistemática para argumentar de forma más justa y precisa

Valentina Alba Alba (estudiante)
Ana Patricia Melchor Ocampo (asesor)
Prepa Entorno

Abstract

This microessay reflects on how to detect fallacious or biased patterns in one's own reasoning and on the role of systematic self-assessment in arguing more fairly and accurately. Drawing on Vander Nat (2010), it distinguishes formal from informal fallacies and reviews the fallacies of irrelevance, misconstrual and presumption, as well as common biases such as special pleading and belief protection. It proposes a step-by-step self-review—checking evidence, considering alternatives, surfacing assumptions, testing one's logic and weighing other perspectives—as a habit for building stronger arguments.

Keywords: Logical fallacies, cognitive bias, critical thinking, argumentation, self-assessment.

Resumen

Este microensayo reflexiona sobre cómo detectar patrones falaces o sesgados en el propio razonamiento y sobre el papel de la autoevaluación sistemática para argumentar de forma más justa y precisa. A partir de Vander Nat (2010), distingue las falacias formales de las informales y revisa las falacias de irrelevancia, de tergiversación y de presunción, así como sesgos frecuentes como el alegato especial y la protección de las propias creencias. Propone una autorrevisión por pasos—examinar la evidencia, considerar alternativas, explicitar los supuestos, poner a prueba la propia lógica y contrastar otras perspectivas—como hábito para construir mejores argumentos.

Palabras clave: Falacias lógicas, sesgo cognitivo, pensamiento crítico, argumentación, autoevaluación.

Recibido: 9 de mayo de 2026
Aceptado: 2 de junio de 2026

Logical fallacies are common mistakes people might make when reasoning. Here, the worst case scenario would be an argument where both the arguer (the one giving it) and the listener (the audience) fall into them. During our everyday lives, most of us accidentally make them or receive them. To avoid them we must be careful and considerate in our own thinking, also, we should, at all times, carry out careful reflection, study and observation. As explained by Vander Nat (2010) p.286.

With formal fallacies, people mistake an invalid pattern for a valid one (Vander Nat, 2010, p.287). With informal fallacies, the mistake concerns the premises. Most of these are invalid inferences where the premises are not sufficient reasons to establish the conclusion. “But, because of the special content of the premises they are nevertheless persuasive, having the psychological power to fool the audience into ac-

cepting the conclusion anyway.” (Vander Nat, 2010, p.288). These inferences are referred to as non sequitur (Latin for “it does not follow”). And there’s two main groups: fallacies of irrelevance and fallacies of misconstrual. With the fallacies of irrelevance, the premises are totally irrelevant to the conclusion (but nevertheless persuasive), and so, the inferences are invalid. These, for example, may aim at someone’s characteristics, positives or negatives or at some emotion, like pity or forcing them. While, with the fallacies of misconstrual the premises are relevant, “the arguer begins with some information in the premises that is then misconstrued into some unwarranted conclusion”. In this one, for example, truths are exaggerated, or sequential things are turned into causation, unwavering facts are ignored, and more. And lastly the fallacies of presumption, where the conclusion validly follows the given premises, so the audience may be fooled, but the premises aren’t truthful. Here, explanations and claims are invented, or the premises and conclusions are only supported by each other, or the argument is self-contradictory, just for putting out some examples.

Now, we all fall into fallacies from time to time, one of the reasons is that our brains naturally try to protect our beliefs since they’re familiar, and to confirm what we already think, as seen with the believers of flat-earth. It is easier to notice biases in other people and not in ourselves, but we should start to do it, since it is an important step towards building stronger arguments that are more fair and accurate. Sometimes we carry out fallacies of Special Pleading, where we pay more attention to the evidence that supports our own opinions, while ignoring any evidence that may challenge them. Or we may be forming our conclusions from too little evidence. Other times it is more emotional, when we believe something is true because it feels right or it aligns with our values. We tend to interpret the information in ways it favours our position, as seen in multiple fallacy types.

These habits I’ve mentioned happen automatically, and we will only recognize them when we reflect on our reasoning (what got us to think or believe that, comparing it with other views), or when we receive feedback from others about it (as we would probably do for them). Systematic self-assessment is when you regularly examine how you build your arguments, again, if accomplished, this will help us be more fair and accurate.

To do this, first, one must check their evidence supporting the conclusion seeing how reliable and sufficient it is. Then, look at alternative

explanations or interpretations. Next, identify the hidden assumptions that may be happening. After, test your own logic, seek for the possible gaps. And, compare to the different perspectives and views. Finally, you would have analyzed your position, it might have changed your mind, or it might have strengthened what you thought, the important thing is that it was done correctly.

References

Vander Nat, A. (2010). *Simple formal logic: With common-sense symbolic technique*. Routledge.

How to cite this article

Alba Alba, V. & Melchor Ocampo, A. P. (2026). Fallacious and biased patterns in one's own reasoning and the role of systematic self-assessment in arguing more fairly and accurately. *Tsaloa - Revista Multidisciplinaria de Educación Media Superior*, 3, 59-63. <https://revistas-entorno.net/tsaloa/article/view/47>



Esta obra está bajo una

Licencia Creative Commons Atribución-NoComercial-CompartirIgual 4.0 Internacional

Usted es libre de compartir o adaptar el material en cualquier medio o formato bajo las condiciones siguientes: (a) debe reconocer adecuadamente la autoría, proporcionar un enlace a la licencia e indicar si se han realizado cambios; (b) no puede utilizar el material para una finalidad comercial y (c) si remezcla, transforma o crea a partir del material, deberá difundir sus contribuciones bajo la misma licencia que el original.

Resumen de la licencia

https://creativecommons.org/licenses/by-nc-sa/4.0/deed.es_ES

Texto completo de la licencia

<https://creativecommons.org/licenses/by-nc-sa/4.0/legalcode>