

Propositions  
accompanying the thesis

# From a Biased Perspective

## Quasars, Mergers, and Planet-Forming Discs

1. The James Webb Space Telescope offers unprecedented opportunities to study clustering at high redshift. However, proper interpretation requires simulations to model both small-scale structure and the effects of cosmic variance. (Chapter 3)
2. We currently have no idea what the “little red dots” are. But we know for a fact that they are not the obscured counterparts of UV-luminous quasars. (Chapter 4)
3. Supermassive black hole growth is a highly degenerate problem, which can only be constrained through a diverse set of observations. (Chapter 5)
4. Protoplanetary discs exhibit, on average, low dust scale heights ( $H/R \lesssim 0.04$ ), consistent with weak gas turbulence. (Chapter 7)
5. Scientific journals, peer review, and citation counts are relics of the past. A new path forward is needed. AI can help.
6. Academia is losing an entire generation of young brilliant minds. Ideas to stop the bleeding: earlier retirements for professors, fewer Ph.D. positions.
7. At its core, science demands the rejection of dogma, the critical evaluation of all hypotheses, and the defense of intellectual diversity. Today’s academic environment is not living up to these values.
8. Mistakes and failures are integral to the scientific endeavor. We should foster a culture where they are highlighted and communicated openly, rather than buried in the stream of publications. This also applies to “community” failures such as sterile lines of research.
9. Nothing is fully black or fully white; everything lies in shades of gray. But the shade matters. Moral relativism is dangerous.
10. People should be judged not by their ideas but by their actions. A pragmatic, rather than ideological, approach to politics would help overcome today’s polarization.
11. Many problems in modern society stem from our estrangement from death.
12. Culture, just like science, thrives on ruptures and dissent. Always following the rules is not a virtue – it is a flaw.

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Leiden, 29 October 2025