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Objections to Using Biomimicry

(and why you shouldn't believe them :)

1. "Biomimicry is too complex, we're not biologists"
Biomimicry does not require designers to become biologists. It is about identifying principles, however collaboration with biologists can enhance the understanding of biological principles for translation and abstraction. When facilitated well, the process of biomimicry can actually simplify complexity.

2. "Our problem is unique; this situation doesn't exist in nature"
Nature has been solving fundamental challenges for 3.8 billion years: resource scarcity, resilience, adaptation, cooperation, and energy efficiency. Biomimicry does not look for literal copies, but for analogous strategies. The chance that a challenge has never been addressed by living systems is small.

3. "We already brainstormed"
Human creativity is powerful but also conditioned. Biomimicry deliberately disrupts habitual thinking patterns by introducing non-human reference systems. It expands the solution space beyond familiar technological and economic perspectives.

4. "Nice inspiration but biomimicry is too vague and abstract"
Biomimicry is empirically proven: every strategy you explore has been tested by evolution. It's not metaphorical by default, but a design approach based on functioning systems. If it feels abstract, that often reflects unfamiliarity with analogical thinking rather than lack of rigor.

5. "It doesn't fit our current process"
Biomimicry does not replace your existing process, as it can be integrated into design and development approaches. It can be used to: reframe the design challenge, support ideation, evaluate design decisions and inform long-term strategy. It is especially valuable when conventional approaches are no longer producing meaningful results.

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6. “Biomimicry doesn’t scale; fine for niche projects, not for industry.”
Nature operates at multiple scales, using modularity, redundancy, and decentralization. Many large-scale industrial innovations are already biomimetic, often without being labelled as such. Scalability depends on how principles are translated, not on their biological origin.

7. “There are no measurable outcomes”
Not all value is immediately quantifiable. Biomimicry contributes to life’s principles of resilience, adaptability, being locally attuned, responsive, long-term sustainability and regeneration. These qualities are often invisible in short-term metrics but crucial for long-term viability.

8. “This will take too much time to research”
Biomimicry may slow down early phases, but it reduces costly redesigns later. Like user research, it prevents premature optimization by addressing root causes rather than surface symptoms.

9. “Not everything in nature is good”
Correct. Biomimicry requires critical interpretation and ethical judgment. Design is always normative; biomimicry simply makes those norms more explicit and system aware.

10. “We already do sustainability”
Biomimicry goes beyond reducing harm. It reframes the design ambition away from minimizing damage and toward actively contributing to living systems. This represents a fundamentally different approach to design, one that seeks positive participation rather than lesser impact.