A Simple Demonstration That Complex Behaviors Are Environmentally Determined

The Argument

This is so obvious it feels trivial. That's the point.

Fact 1: Nobody is born speaking any language

No infant emerges from the womb speaking English, Mandarin, Arabic, or any other language. Language is not encoded in DNA.

Fact 2: Everyone learns the language of their environment

- A child born in Sydney speaks English
- A child born in Tokyo speaks Japanese
- A child born in São Paulo speaks Portuguese
- A child born in Cairo speaks Arabic

This is true regardless of the child's genetic ancestry.

Fact 3: Language is extraordinarily complex

Language involves:

- ~50,000+ words (productive vocabulary)
- Complex grammatical rules
- Phonological systems
- Pragmatic/social conventions
- Real-time processing at ~150 words/minute

It is among the most cognitively demanding behaviors humans perform.

Therefore

If the most complex cognitive behavior humans exhibit (language) is **100% environmentally determined**, then:

1. Complex behaviors **can** be entirely environmental
2. The assumption that simpler behaviors (emotional patterns, social responses) are "genetic" requires justification
3. The burden of proof lies with claims of genetic determinism, not environmental determinism

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The Data (Australia)

From the Australian Bureau of Statistics 2021 Census:

MEASURE	VALUE
Population	25,422,788
Born in Australia	17,019,815 (66.9%)
Speak English only at home	18,303,662 (72.0%)

The overlap is near-total. Australian-born people speak English. Not because of genetics. Because of environment.

Why This Matters

It's "obvious" - that's the point

People accept without question that:

- Children learn the language of where they're raised
- This has nothing to do with their genetic ancestry
- A child of Japanese parents raised in Australia speaks English natively

Yet when discussing behavior, personality, or outcomes, suddenly genetics becomes the default explanation?

The double standard

DOMAIN	COMMON ASSUMPTION
Language	"Obviously environmental"
Behavior	"Probably genetic"

Why? If environment can produce language—an extraordinarily complex, cognitively demanding pattern—why assume it cannot produce behavioral patterns?

The Implication for Human Behavior

The Knowledge Distillation Parallel

In machine learning, "knowledge distillation" describes how a simpler model learns to approximate a complex one by observing its outputs—without access to internal reasoning.

Children learn similarly:

- They observe caregivers' behavioral outputs
- They approximate those patterns
- They don't have access to caregivers' internal reasoning
- The learning is implicit, below conscious awareness

Applied to language

A child doesn't consciously analyze grammar rules. They absorb patterns from environmental exposure. By age 5, they speak fluently without ever being taught explicit rules.

Applied to behavior

A child doesn't consciously analyze emotional patterns. They absorb patterns from environmental exposure. By adulthood, they respond emotionally in learned ways—often without awareness that these patterns were learned.

What This Does NOT Prove

1. **Genetics is irrelevant**: Genes influence learning capacity, sensitivities, predispositions

2. **All behaviors are identical to language**: Some may have stronger biological substrates
3. **Individuals have no agency**: People can learn new patterns with new environmental input
4. **Causation**: This is correlation/logical argument, not experimental proof

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What This DOES Suggest

1. **Default assumption should be environmental**: Until proven otherwise, assume complex patterns are learned
2. **Intervention should target environment**: If patterns are learned, they can be re-learned
3. **Moral judgment may be misplaced**: Blaming individuals for "choosing" learned patterns addresses the wrong level
4. **Prevention > punishment**: Improving developmental environments is more effective than punishing outputs

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The Point, Simply Stated

> *If you accept that children learn language from their environment—and this seems so obvious it barely warrants stating—then you should also accept that children learn behavioral patterns from their environment.*
>
> *The patterns that emerge in adulthood (emotional responses, social behaviors, even "personality") may be as environmental as the language someone speaks.*
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> *We don't punish people for speaking English instead of Japanese. Perhaps we shouldn't punish people for having learned one behavioral pattern instead of another.*

Sources

- Australian Bureau of Statistics. (2021). Census of Population and Housing. https://www.abs.gov.au/census

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This document deliberately avoids racial/ethnic categorizations. The argument relies only on birthplace and language—observable facts without problematic social constructs.