

**"A creation is only "new" if it diverges from existing patterns in a domain (e.g., art, science, mathematics) while still being intelligible within that domain's rules" give me an example of a creation that is so drastically different from a domain that it is not considered new - I believe it is what is behind the word 'intelligible' right ? so get example of new things that are intelligible from the domain rules**

The concept of "intelligibility within a domain's rules" determines whether a creation is recognized as novel or rejected as incoherent. Here are key examples illustrating this principle:

## **1. Abstract Mathematics vs. Domain Conventions**

In 1910, mathematician L.E.J. Brouwer developed **intuitionism**, which rejected the law of excluded middle (the idea that every statement is either true or false). While radical, it remained intelligible because it:

- Addressed foundational questions in mathematics
- Used formal logic frameworks
- Engaged with existing debates about infinity

**Contrast:** A "proof" claiming to solve the Riemann Hypothesis using astrology symbols would be rejected as unintelligible. Despite being "new," it violates mathematics' requirement for logical rigor and alignment with number theory axioms.

## **2. Modern Art's Boundaries**

Jackson Pollock's drip paintings (*Autumn Rhythm*, 1950) were initially controversial but accepted because they:

- Operated within Western art's exploration of abstraction
- Engaged with color theory and compositional balance
- Responded to existentialist philosophy prevalent in post-WWII culture

**Contrast:** If Pollock had thrown paint at a wall while blindfolded and called it art *without* engaging with art history or formal techniques, critics might have dismissed it as random

splatters rather than innovative abstraction<sup>[1]</sup>.

### 3. Scientific Peer Review

Rosalind Franklin's X-ray crystallography of DNA was crucial to understanding its structure. Though initially overshadowed, her work was intelligible because:

- It used established biochemistry methods
- Provided empirical data about molecular geometry
- Addressed the domain's central question: "How is genetic information stored?"

**Contrast:** A 19th-century scientist claiming DNA was made of "vital essence particles" would have been ignored. Without experimental evidence or alignment with chemistry's atomic theory, the idea would lack domain coherence<sup>[2] [1]</sup>.

### 4. Technology Adoption

Google Glass (2013) failed partly because it violated **social domain rules**:

- Its always-on camera conflicted with privacy norms
- Wearable tech had no established cultural framework
- No clear functional niche (unlike smartphones' evolution from computers)

**Contrast:** The iPhone succeeded by building incrementally on existing mobile phone and PDA conventions while introducing multitouch—a *recognizably new* interaction method rooted in computing's GUI principles<sup>[3] [4]</sup>.

### Why Intelligibility Matters

A creation is only recognized as novel if it:

1. **Engages with the domain's current questions** (e.g., Pollock addressing post-war existentialism)
2. **Uses accepted symbolic language** (e.g., mathematical proofs adhering to logic)
3. **Expands rather than ignores conventions** (e.g., Einstein's relativity building on Newtonian physics)

Radical breaks from domain rules risk being dismissed as nonsensical, even if technically "new." As Csikszentmihalyi notes, creativity requires dialogue with a domain's history and gatekeepers<sup>[5]</sup>.

✱

1. <https://scientificinquirer.com/2024/10/26/top-ten-scientific-concepts-in-modern-art-the-convergence-of-science-and-artistic-expression/>

2. [https://en.wikipedia.org/wiki/Rejection\\_of\\_evolution\\_by\\_religious\\_groups](https://en.wikipedia.org/wiki/Rejection_of_evolution_by_religious_groups)

3. <https://solvinnov.com/resistance-of-innovation/>
4. <https://www.smartsheet.com/content-center/managing-work/your-hidden-bias-against-creative-ideas>
5. [https://philosophynow.org/issues/153/Plaiting\\_Gravy](https://philosophynow.org/issues/153/Plaiting_Gravy)