# Abstract Corruption

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*In this paper I examine the phenomenon of “abstract corruption” as an imaginary proposition onto projected structures which loops but where the “center” is absent.*

The concept of a "center" is often used in various domains, from architecture to social organization, to describe a point of reference that is central to a structure. However, in certain cases, the "center" may be absent, leading to the projection of imaginary center propositions onto the structure. When this happens, I call this process “abstract corruption”. Abstract corruption is a complex topic, mostly because the imaginary propositions do not correspond to the reality of the structure. Therefore, it is hard to come up with some definition that can be used to determine whether abstract corruptions happens or not.

A center is often thought of as a point of reference that is central to the structure in question, and the absence of a center can lead to a sense of disorientation or confusion. However, in certain cases, the "center" may be absent, leading to the projection of imaginary center propositions onto the structure.

In architecture, for example, the center of a building is often marked by a central point, such as a dome or spire, which provides a visual anchor for the rest of the structure. In social organization, the center may be a person or group of people who hold a central position of power or influence.

However, in certain cases, the "center" may be absent. This can occur, for example, in structures that loop back on themselves, such as a Möbius strip[1] or a Klein bottle[2]. In such structures, there is no clear point of reference that can be identified as the "center." This absence of a center can lead to the projection of imaginary center propositions onto the structure.

## Examples of Abstract Corruption

Consider, for example, a Möbius strip. This is a surface with only one side and one edge. If one were to attempt to mark a "center" on this surface, it would be impossible to do so in a way that is consistent with the reality of the structure. Any attempt to mark a "center" would result in an imaginary proposition that does not correspond to the structure of the strip.

Another example of abstract corruption can be found in the domain of social organization. Consider a political system in which power is distributed among a number of different groups or individuals. In such a system, there may be no clear point of reference that can be identified as the "center" of power. However, people may project an imaginary center onto the system, perhaps by attributing a disproportionate amount of power to one particular group or individual. This imaginary center proposition can then become formalized and institutionalized, even though it does not correspond to the reality of the system.

Classical mechanics[3] might be viewed as a simplified model of General Relativity[4]. There are many ideas in classical mechanics that can be transferred to General Relativity, plus that many predictions from classical mechanics are good approximations to the more accurate predictions in General Relativity. Abstract corruption happens in this example as a way of projecting imaginary propositions onto classical mechanics which assist in the transference of knowledge between the twho physical models. There imaginary propositions serves as projected “centers” onto factual structure, that are not themselves factual but helps to reason about the transitioning between models.

## Formalizing Abstract Corruption

The phenomenon of abstract corruption raises important questions about the nature of formalization. How can we formalize propositions that are based on imaginary centers that do not correspond to the reality of the structure? One approach is to recognize that the imaginary propositions are, in fact, projections of our own mental models onto the structure. We can then attempt to formalize these mental models rather than the imaginary propositions themselves.

A way to approach formalization of mental models is to use aesthetics of logical language design. In logic, it is not always the case that what is being modelled needs to represent some factual structure.

For example, the motivation for developing many mathematical objects is that they function both as a tool to map relations of factual structures and as a way to help reasoning about the factual structure. However, it is not necessary that the mathematical objects themselves are truthful representations of the factual structure, as long they suit the needs for formal reasoning. This can lead to tradeoffs where mathematical objects that helps reasoning significantly, are preferred, over mathematical objects that are designed to give accurate representations of factual structures.

There are many examples in science where simpler models are preferred to more advanced models. A such preference is often to iterate on understanding faster, which is easier in the simpler model. The simpler model serves as a playground for projecting imaginary propositions as “centers” to the factual structure. When this process is completed, a second stage using a more advanced model is started to perform the more accurate scientific work in relation to factual structures.

To formalize such mental processes, one needs to sacrifice the accuracy of the particular models.

This happens for two reasons:

1. To avoid infinite regression[5]
2. To apply the formalization in more situations[6]

Such work often starts with defining some rules and structures that characterises the mental process. The rules and structures are often insufficient to represent the actual inputs and outputs that goes on in the mental process. By simplifying the inputs and the outputs, one changes the examples that can be expressed. Although this seemingly leads to inaccurate representations, the simplified language helps to improve the speed of iteration required to understand or learn the system.

It can be difficult for people to learn a field or culture which relies heavily on abstract corruption. One such example is mathematics, where in order to understand what is being reasoned about, one needs to learn the ideas and expressions that people in the field are using to represent ideas. These representations might be very far removed from the factual structures that the field is concerned. In other words, abstract corruption is the reason that mathematics is so hard to learn for many people.

Perhaps this problem can be solved partially using a language to talk about abstract corruption. This means, instead of people having to learn a new vocabulary for each field, they might learn tools to reason about abstract corruption itself as a process. Through this language, people might find it easier to understand the mental process. Instead of reinventing the learning process for each field, people might reuse this knowledge as a skill that can be improved over time.

By recognizing that the imaginary propositions are projections of mental models, we can attempt to formalize these mental models rather than the imaginary propositions themselves. An understanding of abstract corruption may help us to develop more nuanced and sophisticated models of complex systems.

## References:


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