Joker Contraction

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In this paper I introduce a property of potential AND operations extending Joker Calculus that contracts topologically over Jokers using an involution.

In the paper “Agnostic Language Bias”[1], in Appendix B, I used the rule from Joker Calculus:

```
!(x y)          =>      !x ?y
```

For example, “Not Gnostic Theism” becomes “Agnostic Joker Theism”.

Agnoticism in the “Agnostic Language Bias” paper is thought of as an intersection between two sets of people, one set of people identified by Agnostic Joker Theism and one set of people identified by Agnostic Joker Atheism. This leads to the idea that there is a natural AND operator for Joker Calculus in this instance, that contracts away the Jokers using an involution.

A possible AND operation for an extended Joker Calculus[2] has the following property:

```
x ?y    &       x ?!y           ==      x
```

This paper does not argue for a fully defined AND operator, but only for this particular instance. For example, there might be multiple AND operators extending Joker Calculus with different properties. To not confuse the above property of a potential AND operator with some actual definition of an AND operator, I give the above property the name “Joker Contraction”. This makes it possible to talk about this property in general for any extended Joker Calculus.

References:

[1] “Agnostic Language Bias”
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https://github.com/advancedresearch/path_semantics/blob/master/papers-wip2/agnostic-language-bias.pdf

[2] “Joker Calculus”
AdvancedResearch – An implementation of Joker Calculus in Rust
https://github.com/advancedresearch/joker_calculus