Knowledge graphs and explanations for improving detection of diseases in images of grains
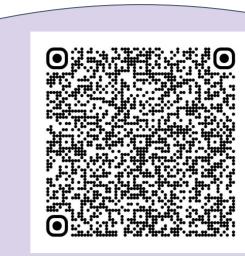
DTU

DIREC Digital Research Centre Denmark

Similarly to human cognition, decision regions are (quite) convex.
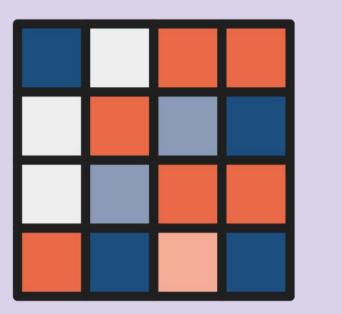
CONCEPT-BASED EXPLAINABILITY

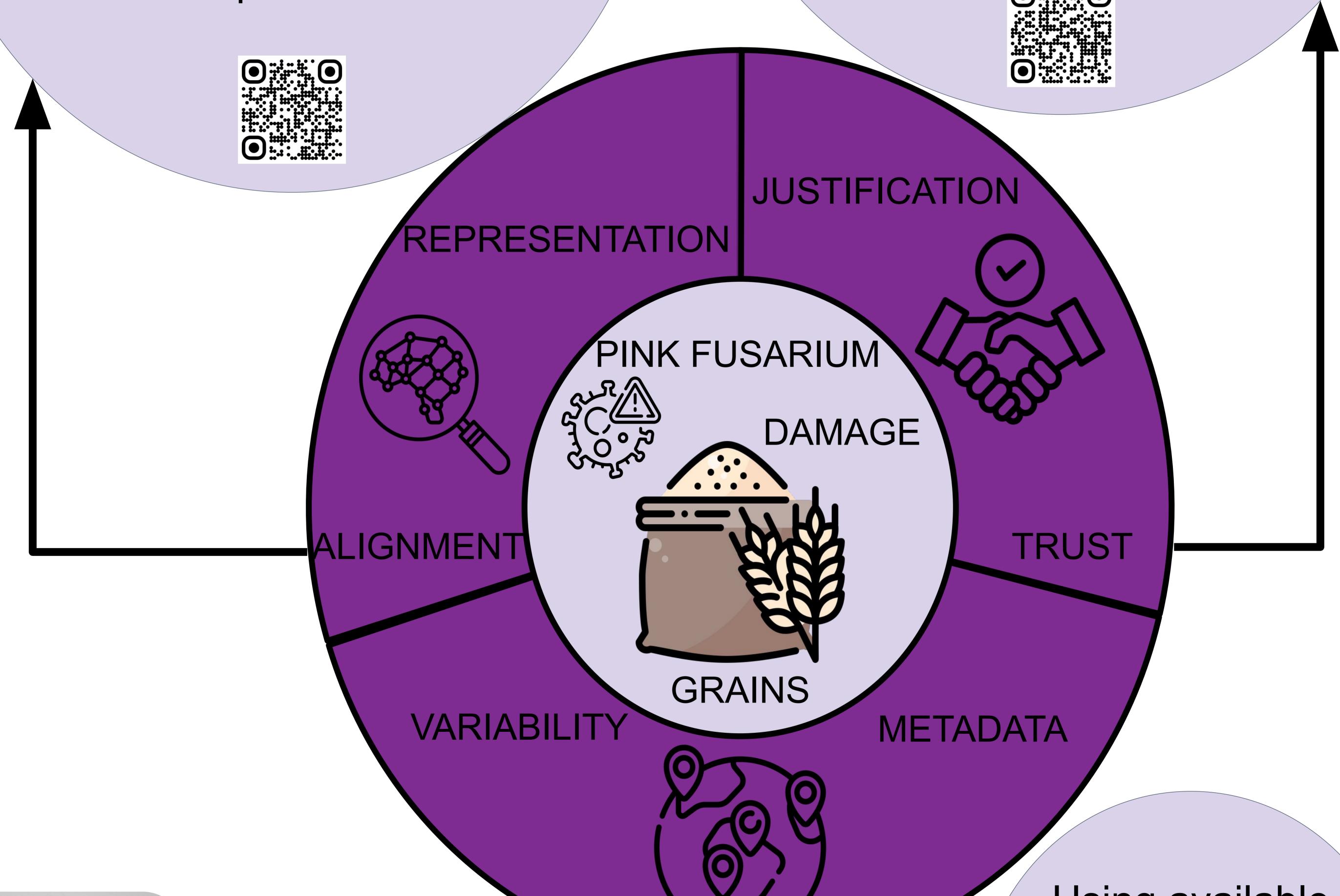Knowledge graphs can be used for concept definition.

Explanations are (quite) robust to invariant data augmentations but not to equivariant ones.

HEATMAPPING

Heatmapping has many hidden challenges, especially for data with biological variation.

REPRESENTATION

JUSTIFICATION

ALIGNMENT

PINK FUSARIUM

DAMAGE

TRUST

VARIABILITY

GRAINS

METADATA

Using available metadata improves image classification.

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