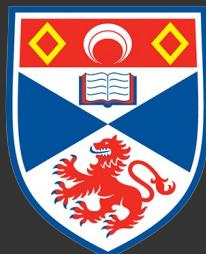


TRUE CONTRADICTIONS?

Why, and Why not

GREG RESTALL



University of
St Andrews

REFECTORYUM JUNE 7, 2022

MY PLAN

1. PARADOXES
2. PARACONSISTENT LOGIC
3. PARACONSISTENCY & TRUE CONTRADICTIONS
4. Jc BEAU & his "CONTRADICTORY CHRIST"
5. TENSIONS & LIMITATIONS in the VIEW

1. PARADOXES

(α) It is Monday today.

(α) It is Monday today.

(β) α is not true.

(7) λ is not true.

(λ) λ is not true.

1 (1) λ is true.

Suppose This for the moment

(λ) λ is not true.

1 (1) λ is true.

Suppose This for the moment

1 (2) λ is not true.

That's just what λ says

(λ) λ is not true.

1 (1) λ is true.

Suppose this for the moment

1 (2) λ is not true.

That's just what λ says

1 (3) λ is true & λ is not true. From (1) & (2).

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Suppose this for the moment

1 (2) λ is not true.

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1 (3) λ is true & λ is not true. From (1) & (2).

(4) λ is not true.

We reduced our supposition
to a contradiction.

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(4) λ is not true.

That is just what λ says

(5) λ is true.

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We reduced our supposition
to a contradiction.

(4) λ is not true.

That is just what λ says

(5) λ is true.

(6) λ is true & λ is not true. From (4) & (5)

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Suppose this for the moment

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That's just what λ says

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(6) λ is true & λ is not true. From (4) & (5)

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There is no settled orthodoxy around what to do with the semantic paradoxes, except for acknowledging that any account requires some significant reworking of our concepts.

(7) λ is not true.

There is no settled orthodoxy around what to do with the semantic paradoxes, except for acknowledging that any account requires some significant reworking of our concepts.

Our everyday rules for reasoning with 'logical' concepts (like 'not', 'if' etc) and the truth predicate don't "play nice" when pushed to their limits.

2. PARACONSISTENT LOGIC

One option....

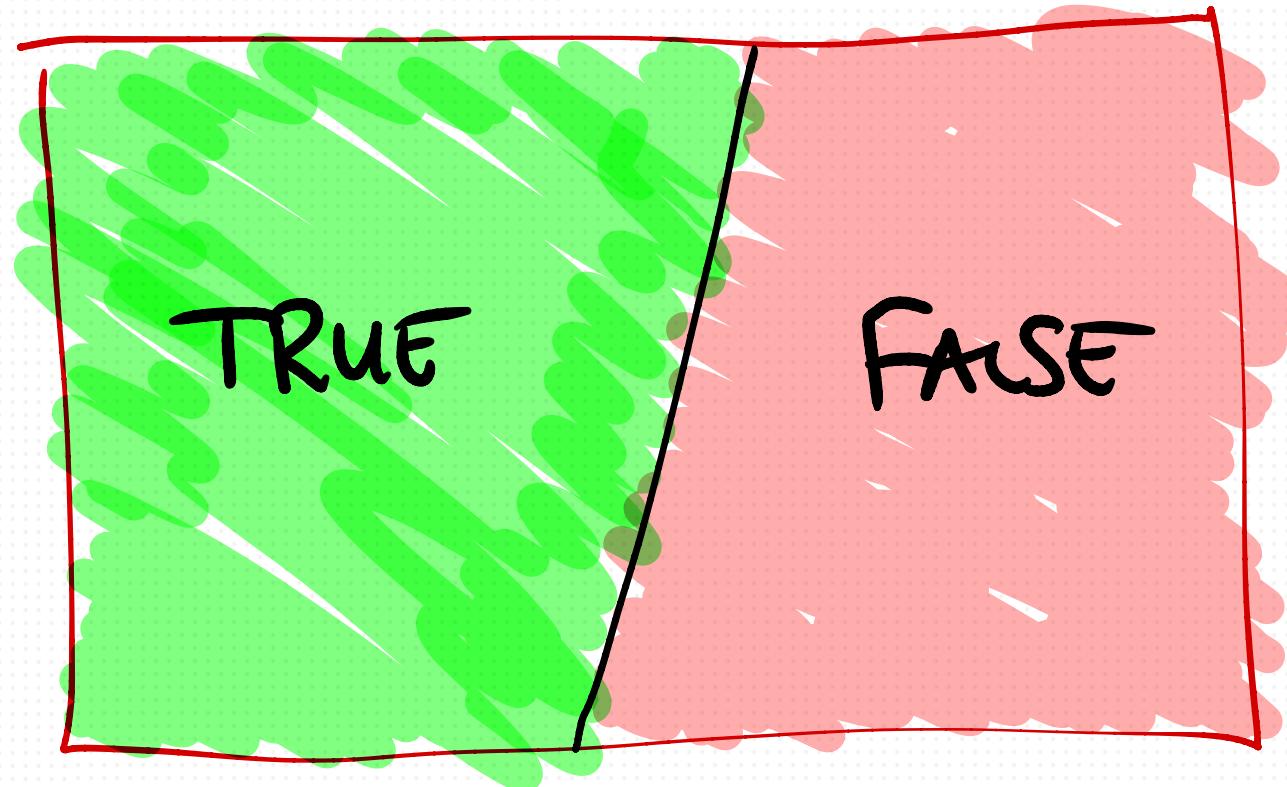
What is so bad about
endorsing the contradiction?

λ is true & λ is not true?

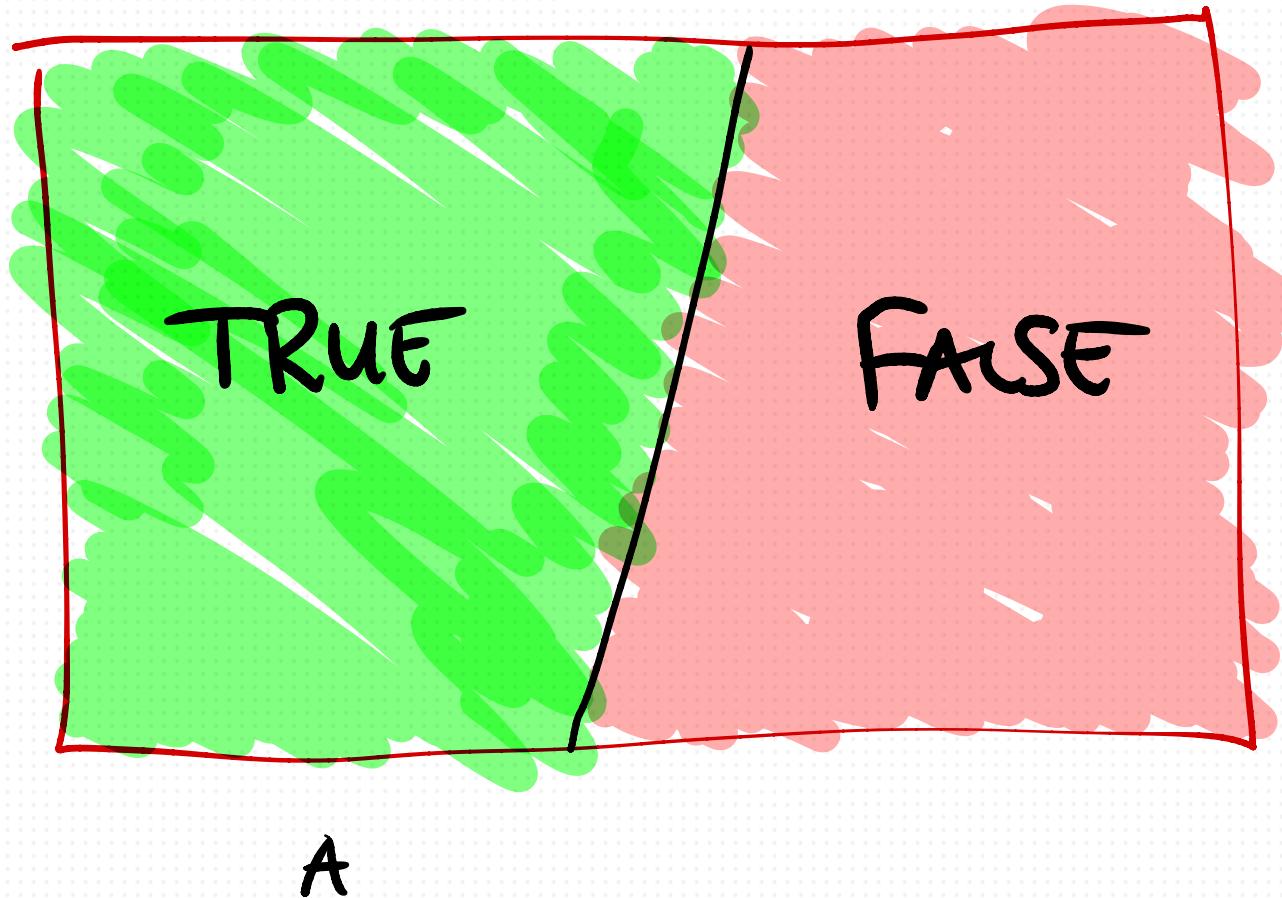
(It's not like any other option is
particularly more compelling)

That would require revising
our theory of logic.

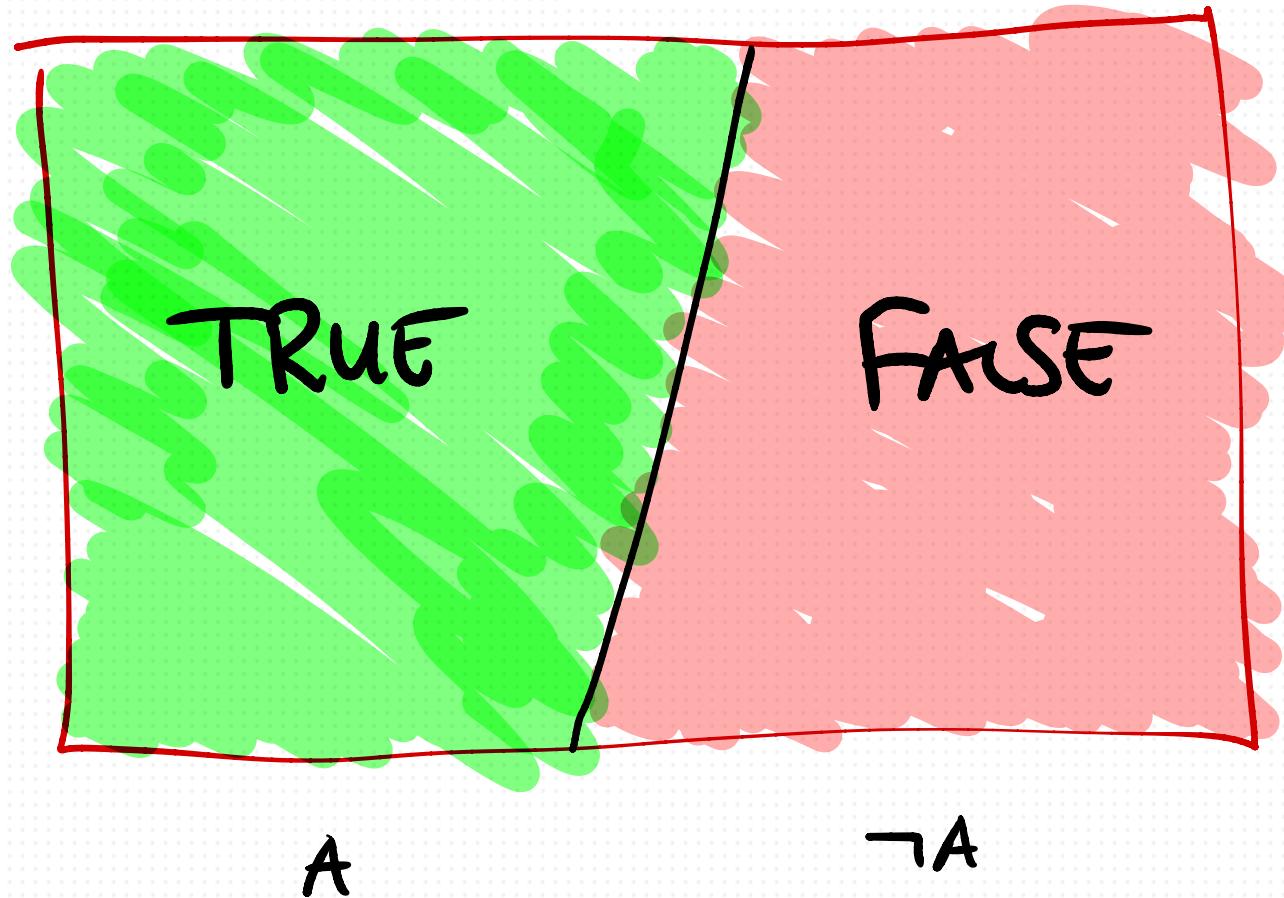
TRADITIONAL TWO-VALUED LOGIC



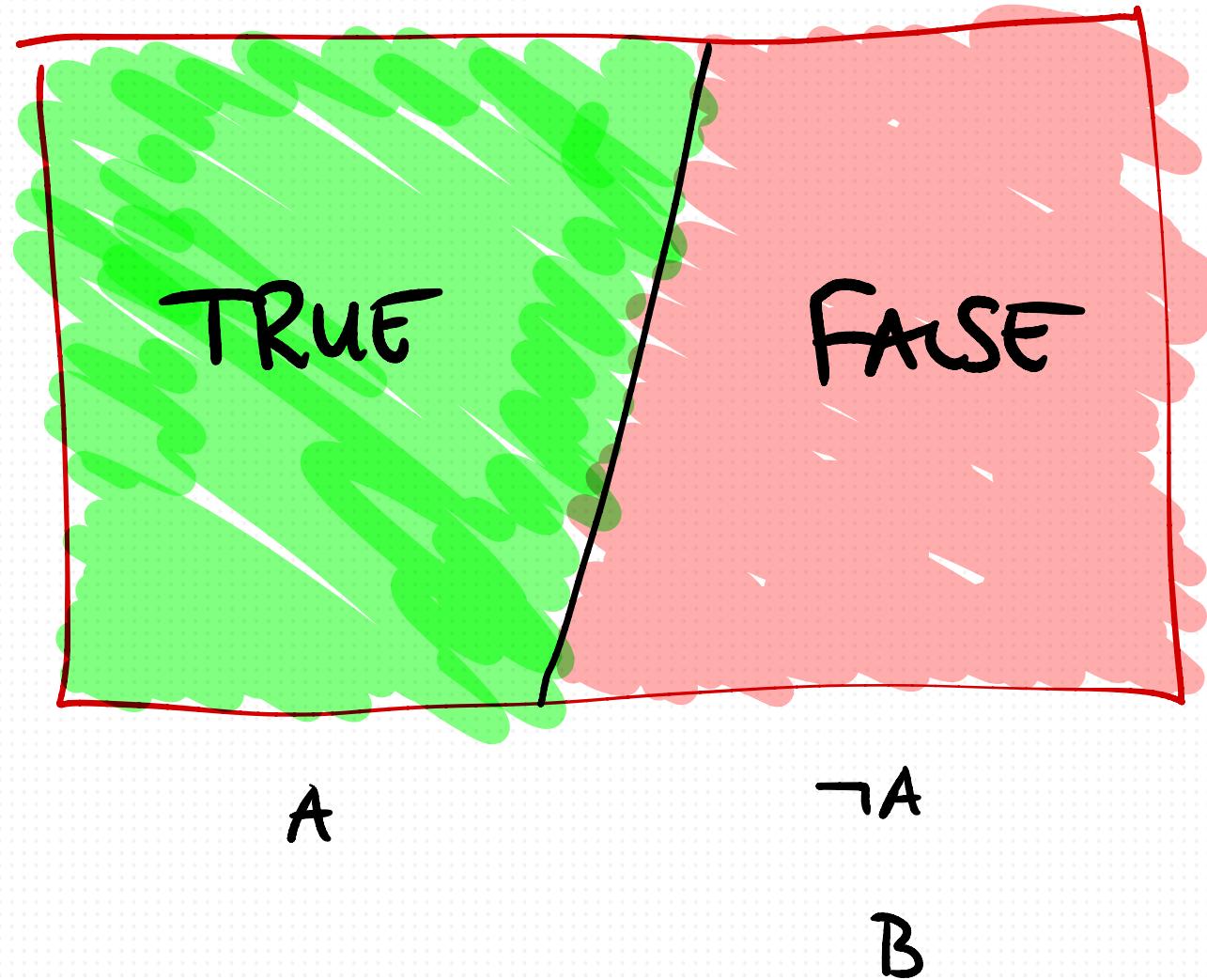
TRADITIONAL TWO-VALUED LOGIC



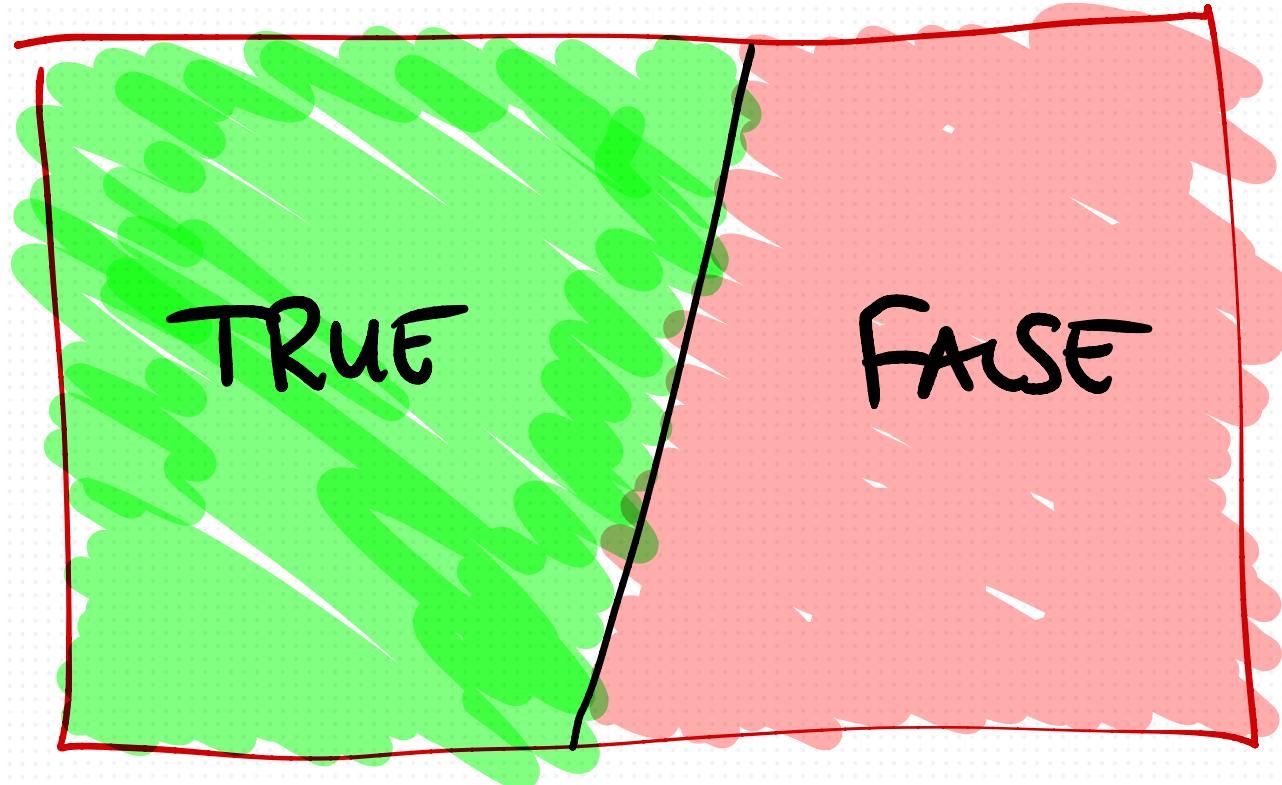
TRADITIONAL TWO-VALUED LOGIC



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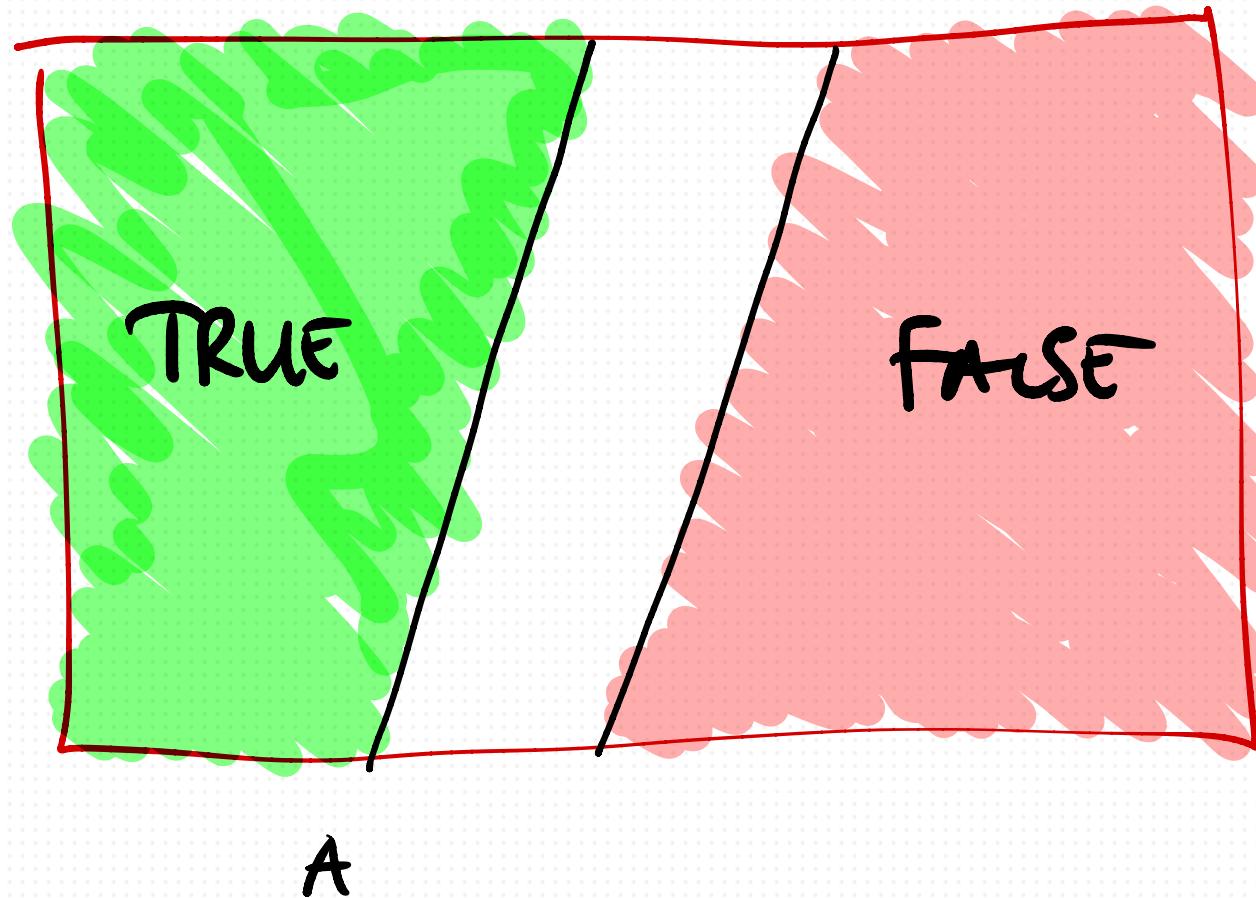
A

$\neg A$

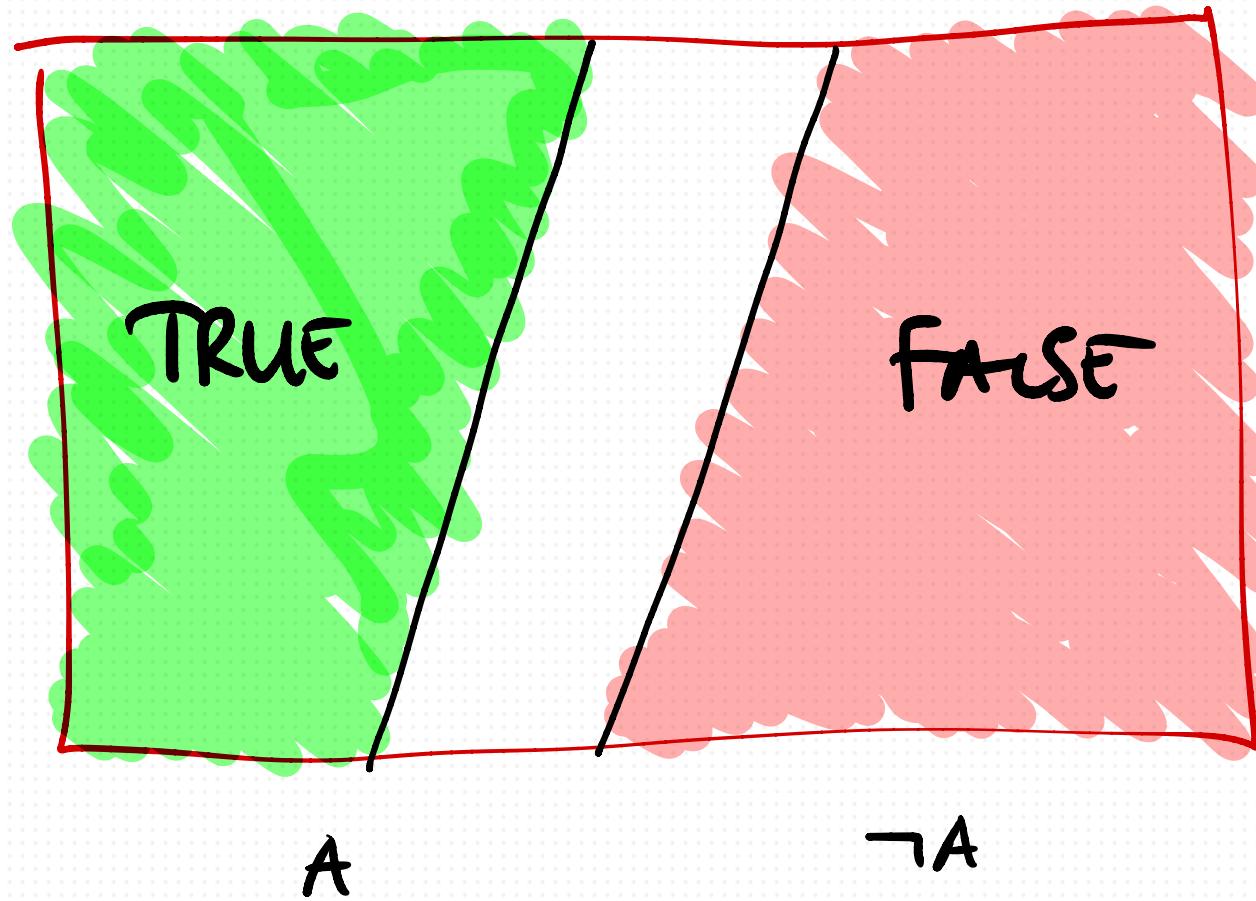
$\neg B$

B

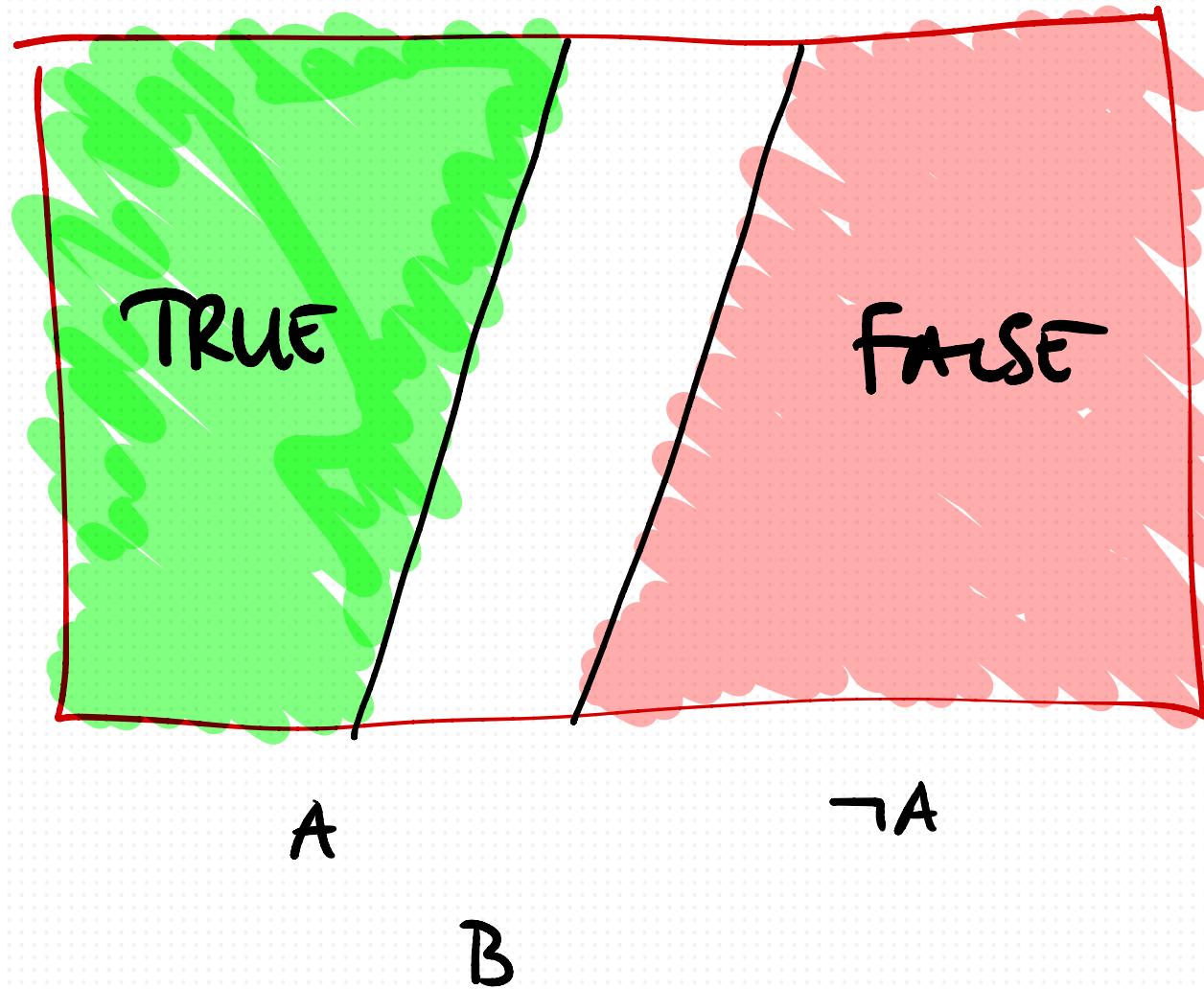
LOGIC WITH TRUTH-VALUE GRAPHS



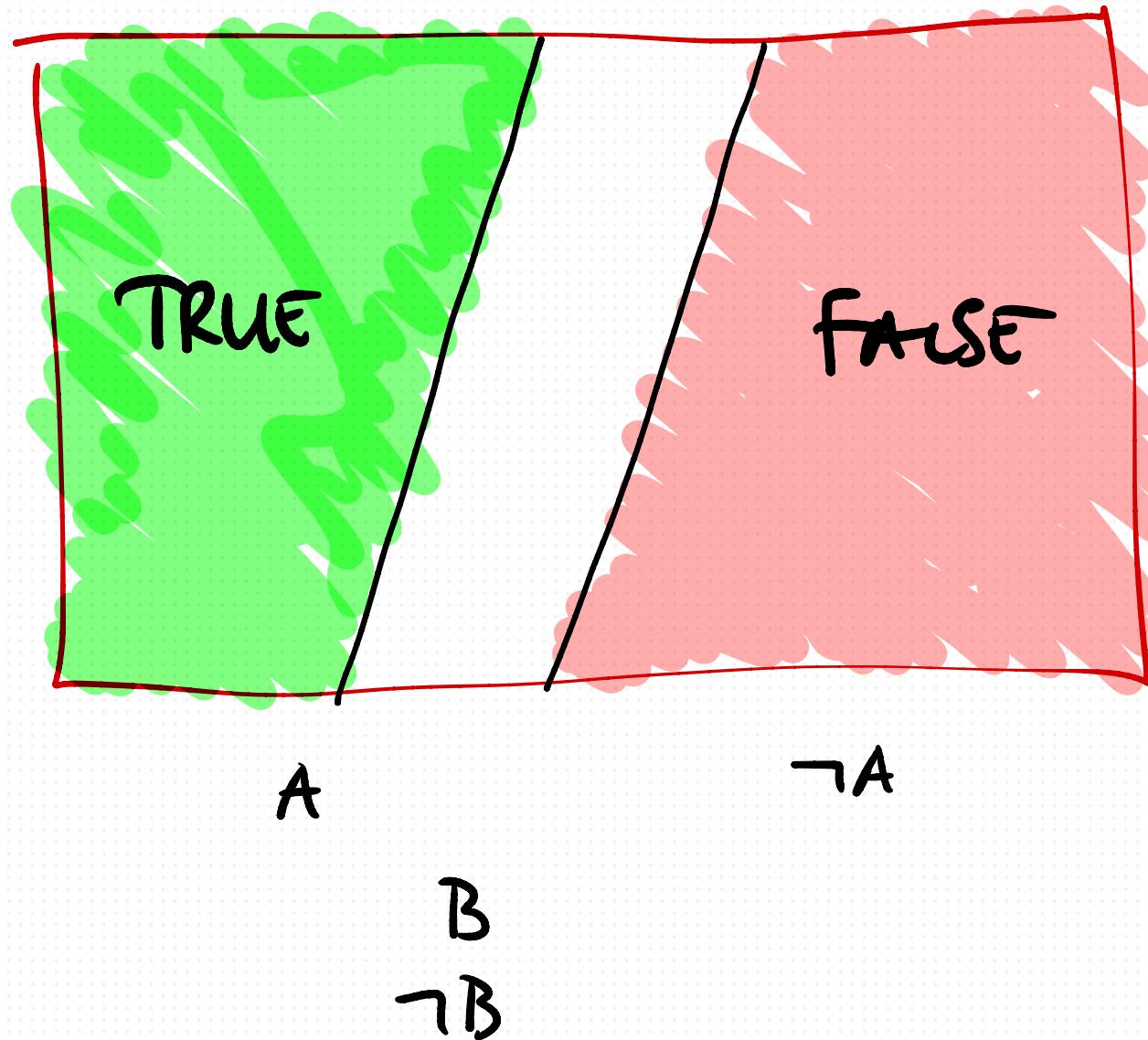
LOGIC WITH TRUTH-VALUE GRAPHS



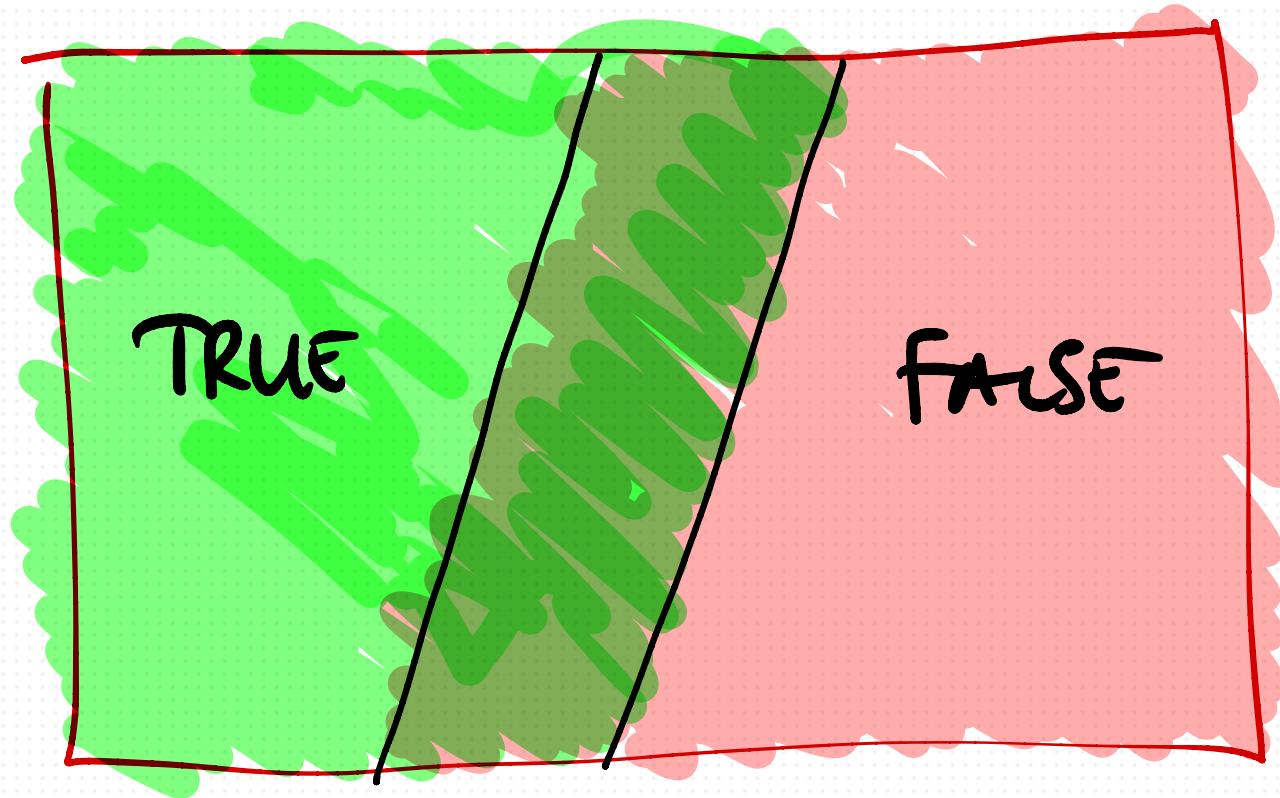
LOGIC WITH TRUTH-VALUE GRAPHS



LOGIC WITH TRUTH-VALUE GRAPHS



LOGIC WITH TRUTH-VALUE GLUTS



A

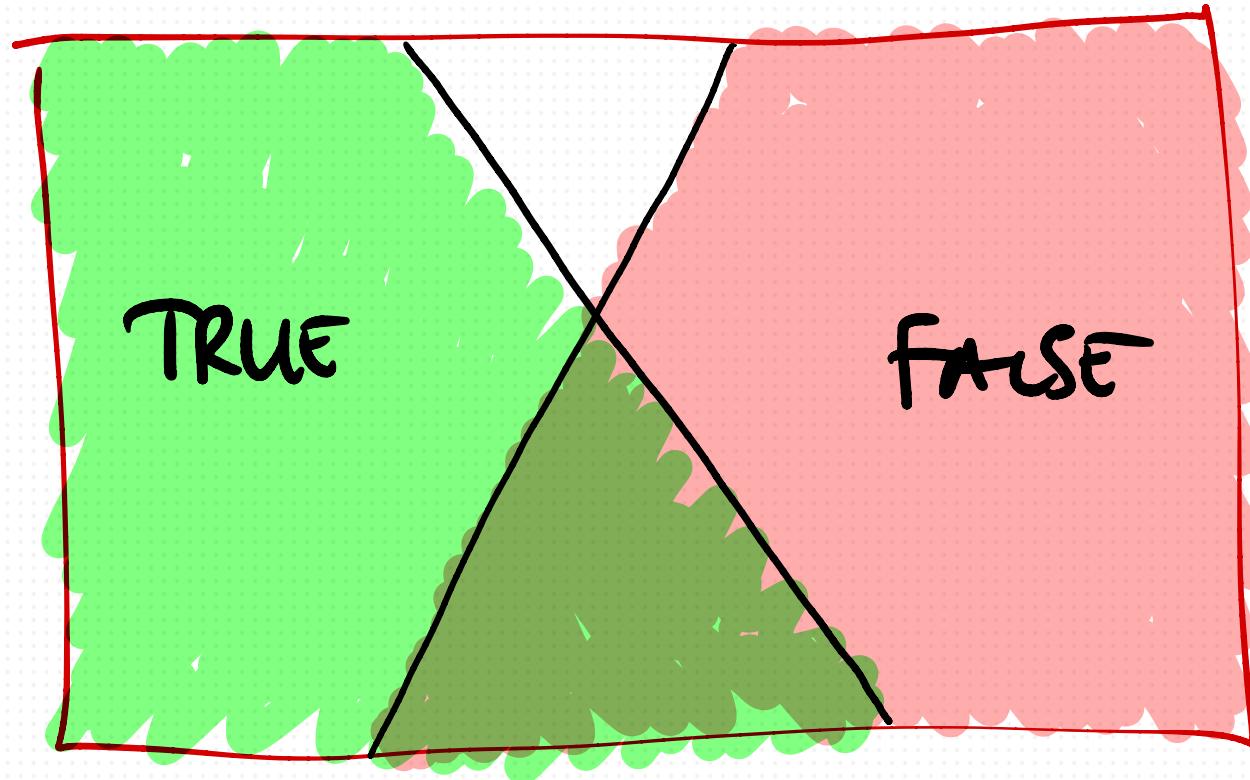
$\neg A$

B

$\neg B$

LOGIC WITH TRUTH-VALUE GAPS & GUTS

$C \rightarrow C$



A

B

$\neg A$

$\neg B$

$A \wedge B$ is TRUE iff A is TRUE & B is TRUE

$A \wedge B$ is FALSE iff A is FALSE or B is FALSE

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$A \wedge B$ is FALSE iff A is FALSE or B is FALSE

$\neg A$ is TRUE iff A is FALSE

$\neg A$ is FALSE iff A is TRUE

$A \wedge B$ is TRUE iff A is TRUE & B is TRUE

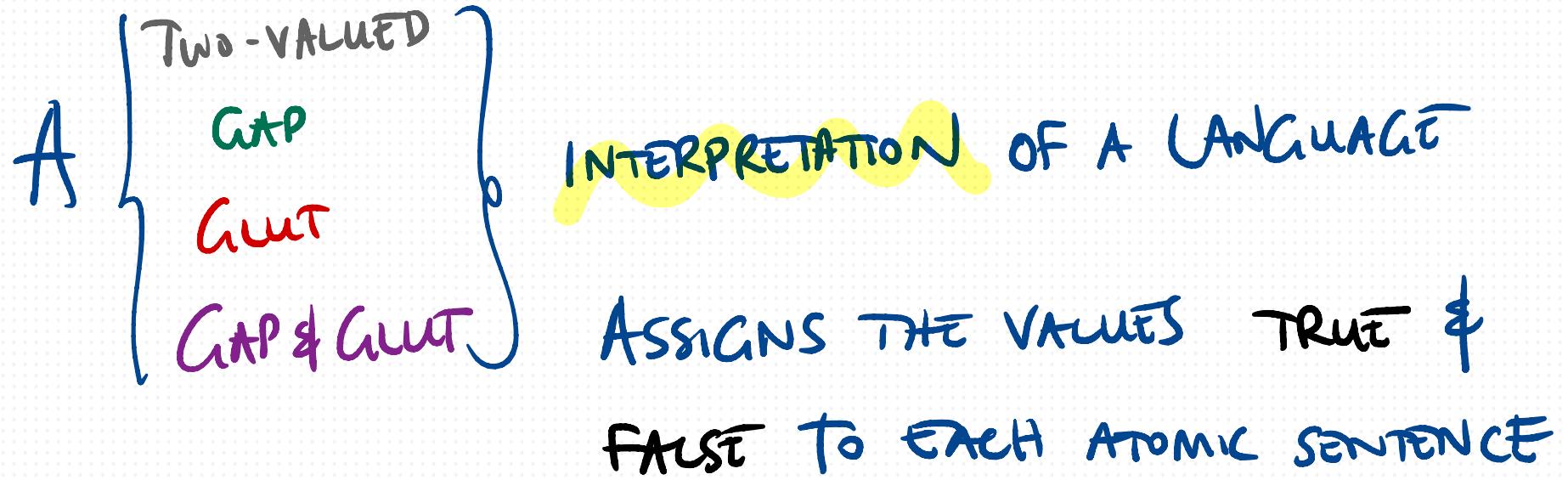
$A \wedge B$ is FALSE iff A is FALSE or B is FALSE

$\neg A$ is TRUE iff A is FALSE

$\neg A$ is FALSE iff A is TRUE

$\forall x A(x)$ is TRUE iff $A(d)$ is TRUE for every $d \in D$

$\forall x A(x)$ is FALSE iff $A(d)$ is FALSE for some $d \in D$



A

Two-valued

ATP

ANUT

ATP & ANUT

INTERPRETATION OF A LANGUAGE

ASSIGNS THE VALUES TRUE &
FALSE TO EACH ATOMIC SENTENCE

SO THAT EACH GETS

EXACTLY ONE
AT MOST ONE
AT LEAST ONE
ANYTHING GOES

VALUE, & COMPLEX

SENTENCES ARE ASSIGNED VALUES USING RULES LIKE WE
HAVE SEEN.

LOGICAL VALIDITY

$$P \models C$$

In any interpretation
where P is TRUE,
so is C.

Interpretations with gaps & with gluts

have proved **REALLY USEFUL** in modelling

things like — vague or underdetermined concepts

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~ ...

$$\not\models_{\text{GAPS}} p \vee \neg p \quad p \notin \Gamma \not\models_{\text{GLUTS}} q$$

Interpretations with gaps & with gluts

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~ ...

$$\not\models_{\text{GAPS}} p \vee \neg p$$

$$p \notin \neg p \not\models g$$

$$p \notin \neg p \not\models g \vee \neg q$$

GAPS
& GLUTS

3. PARACONSISTENCY & TRUE CONTRADICTIONS

PARACONSISTENCY

A consequence relation is paraconsistent if ^{negation-}_{contradictory} premises do not necessarily entail everything.

$$P, \neg P \not\models q$$

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$$P, \neg P \not\models q$$

If we use interpretations that allow for gluts, our consequence relation is paraconsistent.

TRUE CONTRADICTIONS

Paraconsistency \neq True Contradictions

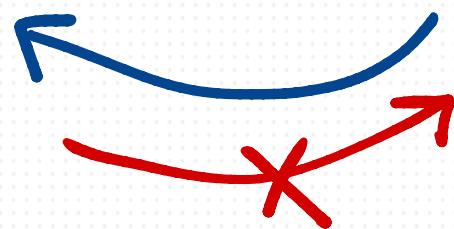
TRUE CONTRADICTIONS

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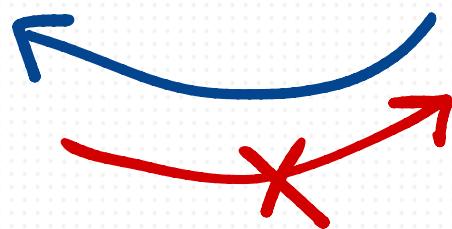
TRUE CONTRADICTIONS

Paraconsistency \neq True Contradictions



TRUE CONTRADICTIONS

Paraconsistency \neq True Contradictions



It is one thing to use interpretations with gluts to account for inconsistent commitments. It's another thing to take them to represent how things are.

What would it be like
for some contradiction
to be true ??

SEMANTIC PARADOX

(λ) λ is not true.

(τ) τ is true.

SEMANTIC PARADOX

(γ) γ is not true.

(ζ) ζ is true.

There is very little that hangs on what we say about self-referential sentences like these. They aren't good guides to what it means to endorse a contradiction.

4. Jc BEAU & his "CONTRADICTORY CHRIST"



Jc Beall

THE CONTRADICTORY
CHRIST

OXFORD

Issues in 'Christology'

Jesus Christ is Divine

Jesus Christ is Human

Issues in 'Christology'

Jesus Christ is Divine

- Jesus is IMPECCABLE (cannot sin)

Jesus Christ is Human

- Jesus is PECCABLE (could sin, or could have sinned)

Issues in 'Christology'

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- Jesus is IMPECCABLE (cannot sin)
- Jesus' DIVINE NATURE IS ...

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- Jesus' HUMAN NATURE IS ...

Issues in 'Christology'

Jesus Christ is Divine

- Jesus is IMPECCABLE (CANNOT SIN)
- Jesus' DIVINE NATURE IS ...
- Jesus is - QUA - GOD

Jesus Christ is Human

- Jesus is PECCABLE (COULD SIN,
OR COULD HAVE SINNED)
- Jesus' HUMAN NATURE IS
- Jesus is - QUA - HUMAN.

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'CONSISTENTISING' STRATEGIES
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He argues that consistentising strategies do undue violence to the everyday meanings of terms like 'human', 'divine', 'can sin', 'cannot sin', etc...

What does this mean?

What does this mean?

When we ask "Could he sin?" and
the answer is yes & no (without
further classification by disambiguation)
what have we learned?

5. TENSIONS & LIMITATIONS in the VIEW

Just what is inconsistency
on JC's view?

A & B are inconsistent if $A \models \neg B$, or
 $B \models \neg A$

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true in no
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True together in no models.

True in no interpretations

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True together in no models.

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For Beall, "Jesus is peccable" &
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retain their usual meanings,

because they are

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"Jesus is impeccable"

retain their usual meanings,

because they are

negation-inconsistent.

However, Beall has revised the everyday meaning
of "... is peccable" & "... is impeccable"
because he takes them to be
jointly satisfiable.

If something (-one) can be simultaneously
peccable & impeccable, exactly what
does it mean for something (-one) to
be impeccable?

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If something can be simultaneously
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If something (-one) can be simultaneously peccable & impeccable, exactly what does it mean for something (-one) to be impeccable?

If something can be simultaneously F and non-F, what does it mean to be non-F?

How do the separate falsity conditions in these models arise?

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If something can be simultaneously F and non-F, what does it mean to be non-F?

UNANSWERED
QUESTION
FOR BEALL

How do the separate falsity conditions in these models arise?

If something (-one) can be simultaneously peccable & impeccable, exactly what does it mean for something (-one) to be impeccable?

ANSWERING this question will involve the same difficult moves as in the old disambiguation strategies.

If something can be simultaneously F and non-F, what does it mean to be non-F?

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If something (-one) can be simultaneously peccable & impeccable, exactly what does it mean for something (-one) to be impeccable?

ANSWERING this question will involve the same difficult moves as in the old disambiguation strategies, and it's not obvious that this is any easier.

If something can be simultaneously F and non-F, what does it mean to be non-F?

UNANSWERED QUESTION FOR BEALL

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A 'MORAL' OF THIS STORY

- The formal possibilities opened up by tools from weird logics are neat & all,...

A 'MORAL' OF THIS STORY

- The formal possibilities opened up by tools from weird logics are neat & all,...
- ... but applying them involves a whole host of new questions, which will require more philosophy to answer.

Thank You!