

Two Kinds of Truth in Expressivism

Rachael Briggs

July 27, 2009

Overview

Creeping Minimalism

A Way Out

Semantic Tools

Biforcated Semantics

Possible Worlds Semantics

Expressivism

Expressivism

Appealing expressivist commitments:

Expressivism

Appealing expressivist commitments:

- ▶ Metaphysical anti-realism:
 - ▶ There aren't any moral properties.
 - ▶ Most of the moral assertions people make are not, strictly speaking, true.

Expressivism

Appealing expressivist commitments:

- ▶ Metaphysical anti-realism:
 - ▶ There aren't any moral properties.
 - ▶ Most of the moral assertions people make are not, strictly speaking, true.
- ▶ Semantic anti-realism:
 - ▶ Moral “assertions” do not make truth-evaluable claims; rather, they express desire-like attitudes.

Expressivism

Appealing expressivist commitments:

- ▶ Metaphysical anti-realism:
 - ▶ There aren't any moral properties.
 - ▶ Most of the moral assertions people make are not, strictly speaking, true.
- ▶ Semantic anti-realism:
 - ▶ Moral “assertions” do not make truth-evaluable claims; rather, they express desire-like attitudes.
- ▶ Anti-eliminativism:
 - ▶ Our use of moral language is largely acceptable as it is.

The Frege-Geach Problem, I

The Frege-Geach Problem, I

A problem with validity.

The Frege-Geach Problem, I

A problem with validity.

- ▶ We treat some arguments about moral matters as valid, others as invalid.

The Frege-Geach Problem, I

A problem with validity.

- ▶ We treat some arguments about moral matters as valid, others as invalid.
- ▶ According to anti-eliminativism, this practice is acceptable as it is.

The Frege-Geach Problem, I

A problem with validity.

- ▶ We treat some arguments about moral matters as valid, others as invalid.
- ▶ According to anti-eliminativism, this practice is acceptable as it is.
- ▶ According to semantic anti-realism, the premises and conclusions of arguments are about morality not truth-evaluable.

The Frege-Geach Problem, I

A problem with validity.

- ▶ We treat some arguments about moral matters as valid, others as invalid.
- ▶ According to anti-eliminativism, this practice is acceptable as it is.
- ▶ According to semantic anti-realism, the premises and conclusions of arguments are about morality not truth-evaluable.
- ▶ But validity is truth-preservation.

The Frege-Geach Problem, I

A problem with validity.

- ▶ We treat some arguments about moral matters as valid, others as invalid.
- ▶ According to anti-eliminativism, this practice is acceptable as it is.
- ▶ According to semantic anti-realism, the premises and conclusions of arguments are about morality not truth-evaluable.
- ▶ But validity is truth-preservation.
- ▶ How can there be a valid arguments whose premises do not admit of truth or falsity?

The Frege-Geach Problem, II

The Frege-Geach Problem, II

A problem with embedding in truth functional contexts.

The Frege-Geach Problem, II

A problem with embedding in truth functional contexts.

- ▶ We use sentences like “grass is green and murder is wrong”.

The Frege-Geach Problem, II

A problem with embedding in truth functional contexts.

- ▶ We use sentences like “grass is green and murder is wrong”.
- ▶ According to anti-eliminativism, this practice is acceptable as it is.

The Frege-Geach Problem, II

A problem with embedding in truth functional contexts.

- ▶ We use sentences like “grass is green and murder is wrong”.
- ▶ According to anti-eliminativism, this practice is acceptable as it is.
- ▶ “And” is a truth function.

The Frege-Geach Problem, II

A problem with embedding in truth functional contexts.

- ▶ We use sentences like “grass is green and murder is wrong”.
- ▶ According to anti-eliminativism, this practice is acceptable as it is.
- ▶ “And” is a truth function.
- ▶ According to semantic anti-realism, “murder is wrong” is not truth-evaluable.

The Frege-Geach Problem, II

A problem with embedding in truth functional contexts.

- ▶ We use sentences like “grass is green and murder is wrong”.
- ▶ According to anti-eliminativism, this practice is acceptable as it is.
- ▶ “And” is a truth function.
- ▶ According to semantic anti-realism, “murder is wrong” is not truth-evaluable.
- ▶ How can a sentence that is not truth-evaluable be meaningfully embedded in a truth-functional sentence?

The Frege-Geach Problem, III

The Frege-Geach Problem, III

A problem with embedding in non-truth-functional contexts.

The Frege-Geach Problem, III

A problem with embedding in non-truth-functional contexts.

- ▶ We use sentences like “Even if we had approved of murder, it still would have been wrong”, “I wish murder were not wrong”, and “John believes that murder is wrong”.

The Frege-Geach Problem, III

A problem with embedding in non-truth-functional contexts.

- ▶ We use sentences like “Even if we had approved of murder, it still would have been wrong”, “I wish murder were not wrong”, and “John believes that murder is wrong”.
- ▶ How can the expressivist develop an adequate theory of these sentences?

Minimalism

Minimalism

Minimalists about truth believe that the concept of truth is nothing above and beyond what's captured by the T schemas.

Minimalism

Minimalists about truth believe that the concept of truth is nothing above and beyond what's captured by the T schemas.

- ▶ $\ulcorner p \urcorner$ is true iff p

Minimalism

Minimalists about truth believe that the concept of truth is nothing above and beyond what's captured by the T schemas.

- ▶ $\ulcorner p \urcorner$ is true iff p

(And maybe the definitions of truth-functional connectives.)

Minimalist Creep

Minimalist Creep

Because of their anti-eliminativism, expressivists are committed to moral claims like:

Minimalist Creep

Because of their anti-eliminativism, expressivists are committed to moral claims like:

- ▶ Murder is wrong.

Minimalist Creep

Because of their anti-eliminativism, expressivists are committed to moral claims like:

- ▶ Murder is wrong.

Minimalists are committed to the following thesis:

Minimalist Creep

Because of their anti-eliminativism, expressivists are committed to moral claims like:

- ▶ Murder is wrong.

Minimalists are committed to the following thesis:

- ▶ “Murder is wrong” is true iff murder is wrong.

Minimalist Creep

Because of their anti-eliminativism, expressivists are committed to moral claims like:

- ▶ Murder is wrong.

Minimalists are committed to the following thesis:

- ▶ “Murder is wrong” is true iff murder is wrong.

So it looks like expressivists who are also minimalists are committed to this:

Minimalist Creep

Because of their anti-eliminativism, expressivists are committed to moral claims like:

- ▶ Murder is wrong.

Minimalists are committed to the following thesis:

- ▶ “Murder is wrong” is true iff murder is wrong.

So it looks like expressivists who are also minimalists are committed to this:

- ▶ “Murder is wrong” is true.

Minimalist Creep

Because of their anti-eliminativism, expressivists are committed to moral claims like:

- ▶ Murder is wrong.

Minimalists are committed to the following thesis:

- ▶ “Murder is wrong” is true iff murder is wrong.

So it looks like expressivists who are also minimalists are committed to this:

- ▶ “Murder is wrong” is true.

Minimalism calls the expressivist’s metaphysical anti-realism into question!

Ways Out

Ways Out

1. Give up expressivism.

Ways Out

1. Give up expressivism.
 - ▶ I'll assume we don't want to do this.

Ways Out

1. Give up expressivism.
 - ▶ I'll assume we don't want to do this.
2. Go global.

Ways Out

1. Give up expressivism.
 - ▶ I'll assume we don't want to do this.
2. Go global.
 - ▶ This threatens to rob expressivism of its content.

Ways Out

1. Give up expressivism.
 - ▶ I'll assume we don't want to do this.
2. Go global.
 - ▶ This threatens to rob expressivism of its content.
3. Give up minimalism.

Ways Out

1. Give up expressivism.
 - ▶ I'll assume we don't want to do this.
2. Go global.
 - ▶ This threatens to rob expressivism of its content.
3. Give up minimalism.
 - ▶ I recommend this option for expressivists.

Two Kinds of Truth

Two Kinds of Truth

Minimalist truth:

Two Kinds of Truth

Minimalist truth:

- ▶ Satisfies the T-schema.

Two Kinds of Truth

Minimalist truth:

- ▶ Satisfies the T-schema.
- ▶ Is used to define connectives in truth tables.

Two Kinds of Truth

Minimalist truth:

- ▶ Satisfies the T-schema.
- ▶ Is used to define connectives in truth tables.

Correspondence truth:

Two Kinds of Truth

Minimalist truth:

- ▶ Satisfies the T-schema.
- ▶ Is used to define connectives in truth tables.

Correspondence truth:

- ▶ Has to do with some sort of matching between representations and the world.

Two Kinds of Truth

Minimalist truth:

- ▶ Satisfies the T-schema.
- ▶ Is used to define connectives in truth tables.

Correspondence truth:

- ▶ Has to do with some sort of matching between representations and the world.
- ▶ Involves direction of fit.

More on Correspondence Truth

More on Correspondence Truth

- ▶ I can believe, desire, hope, or intend that p .

More on Correspondence Truth

- ▶ I can believe, desire, hope, or intend that p .
- ▶ The circumstances under which my belief that p is accurate are the same as the circumstances under which
 - ▶ my desires and hopes that p are satisfied.
 - ▶ my intention that p is realized.

More on Correspondence Truth

- ▶ I can believe, desire, hope, or intend that p .
- ▶ The circumstances under which my belief that p is accurate are the same as the circumstances under which
 - ▶ my desires and hopes that p are satisfied.
 - ▶ my intention that p is realized.
- ▶ So, we might say that my belief, desire, intention, and so forth are relations to the same content, whose truth value is settled by the world.

More on Correspondence Truth

- ▶ I can believe, desire, hope, or intend that p .
- ▶ The circumstances under which my belief that p is accurate are the same as the circumstances under which
 - ▶ my desires and hopes that p are satisfied.
 - ▶ my intention that p is realized.
- ▶ So, we might say that my belief, desire, intention, and so forth are relations to the same content, whose truth value is settled by the world.
- ▶ This content can be correspondence-true or correspondence-false.

A Conjecture

A Conjecture

- ▶ Everything that's correspondence-true is also minimalist-true.

A Conjecture

- ▶ Everything that's correspondence-true is also minimalist-true.
- ▶ Not everything that's minimalist-true is correspondence-true.

Assuming that p is false just in case $\neg p$ is true,

A Conjecture

- ▶ Everything that's correspondence-true is also minimalist-true.
- ▶ Not everything that's minimalist-true is correspondence-true.

Assuming that p is false just in case $\neg p$ is true,

- ▶ Everything that's correspondence-false is also minimalist-false.

A Conjecture

- ▶ Everything that's correspondence-true is also minimalist-true.
- ▶ Not everything that's minimalist-true is correspondence-true.

Assuming that p is false just in case $\neg p$ is true,

- ▶ Everything that's correspondence-false is also minimalist-false.
- ▶ Not everything that's minimalist-false is correspondence-false.

A Conjecture

- ▶ Everything that's correspondence-true is also minimalist-true.
- ▶ Not everything that's minimalist-true is correspondence-true.

Assuming that p is false just in case $\neg p$ is true,

- ▶ Everything that's correspondence-false is also minimalist-false.
- ▶ Not everything that's minimalist-false is correspondence-false.

Every minimalist truth-value gap is contained in a correspondence truth-value gap.

Biforcated Semantics

Biforcated Semantics

- ▶ $\ulcorner P \urcorner$ expresses $\langle \text{FOR}(f_1(P)), \text{FOR}(f_2(P)) \rangle$.

Biforcated Semantics

- ▶ $\ulcorner P \urcorner$ expresses $\langle \text{FOR}(f_1(P)), \text{FOR}(f_2(P)) \rangle$.
- ▶ If $\ulcorner P \urcorner$ is purely descriptive, then f_1 and f_2 are built out of atomic properties of the form $\text{pai}(p)$ for various propositions p .

Biforcated Semantics

- ▶ $\lceil P \rceil$ expresses $\langle \text{FOR}(f_1(P)), \text{FOR}(f_2(P)) \rangle$.
- ▶ If $\lceil P \rceil$ is purely descriptive, then f_1 and f_2 are built out of atomic properties of the form $\text{pai}(p)$ for various propositions p .
- ▶ “Either grass is green or my eyes deceive me” expresses

Biforcated Semantics

- ▶ $\lceil P \rceil$ expresses $\langle \text{FOR}(f_1(P)), \text{FOR}(f_2(P)) \rangle$.
- ▶ If $\lceil P \rceil$ is purely descriptive, then f_1 and f_2 are built out of atomic properties of the form $\text{pai}(p)$ for various propositions p .
- ▶ “Either grass is green or my eyes deceive me” expresses

$\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{pai}(\text{my eyes deceive me})),$
 $\text{FOR}(\neg \text{pai}(\text{grass isn't green}) \vee \neg \text{pai}(\text{my eyes don't deceive me})) \rangle$

Biforcated Semantics

- ▶ $\lceil P \rceil$ expresses $\langle \text{FOR}(f_1(P)), \text{FOR}(f_2(P)) \rangle$.
- ▶ If $\lceil P \rceil$ is purely descriptive, then f_1 and f_2 are built out of atomic properties of the form $\text{pai}(p)$ for various propositions p .
- ▶ “Either grass is green or my eyes deceive me” expresses
 $\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{pai}(\text{my eyes deceive me})),$
 $\text{FOR}(\neg \text{pai}(\text{grass isn't green}) \vee \neg \text{pai}(\text{my eyes don't deceive me})) \rangle$
- ▶ “Either grass is green or murder is wrong” expresses

Biforcated Semantics

- ▶ $\lceil P \rceil$ expresses $\langle \text{FOR}(f_1(P)), \text{FOR}(f_2(P)) \rangle$.
- ▶ If $\lceil P \rceil$ is purely descriptive, then f_1 and f_2 are built out of atomic properties of the form $\text{pai}(p)$ for various propositions p .
- ▶ “Either grass is green or my eyes deceive me” expresses

$\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{pai}(\text{my eyes deceive me})),$
 $\text{FOR}(\neg \text{pai}(\text{grass isn't green}) \vee \neg \text{pai}(\text{my eyes don't deceive me})) \rangle$

- ▶ “Either grass is green or murder is wrong” expresses

$\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{blaming}(\text{murder})),$
 $\text{FOR}(\neg \text{pai}(\text{grass is not green}) \vee \text{blaming}(\text{murder})) \rangle$

Two Kinds of Contents

Two Kinds of Contents

“Either grass is green or my eyes deceive me”

$\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{pai}(\text{my eyes deceive me})),$
 $\text{FOR}(\neg \text{pai}(\text{grass isn't green}) \vee \neg \text{pai}(\text{my eyes don't deceive me})) \rangle$

Two Kinds of Contents

“Either grass is green or my eyes deceive me”

$\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{pai}(\text{my eyes deceive me})),$
 $\text{FOR}(\neg \text{pai}(\text{grass isn't green}) \vee \neg \text{pai}(\text{my eyes don't deceive me})) \rangle$

“Either grass is green or murder is wrong”

$\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{blaming}(\text{murder})),$
 $\text{FOR}(\neg \text{pai}(\text{grass is not green}) \vee \text{blaming}(\text{murder})) \rangle$

Two Kinds of Contents

“Either grass is green or my eyes deceive me”

$\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{pai}(\text{my eyes deceive me})),$
 $\text{FOR}(\neg \text{pai}(\text{grass isn't green}) \vee \neg \text{pai}(\text{my eyes don't deceive me})) \rangle$

“Either grass is green or murder is wrong”

$\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{blaming}(\text{murder})),$
 $\text{FOR}(\neg \text{pai}(\text{grass is not green}) \vee \text{blaming}(\text{murder})) \rangle$

Two Kinds of Contents

“Either grass is green or my eyes deceive me”

$\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{pai}(\text{my eyes deceive me})),$
 $\text{FOR}(\neg \text{pai}(\text{grass isn't green}) \vee \neg \text{pai}(\text{my eyes don't deceive me})) \rangle$

“Either grass is green or murder is wrong”

$\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{blaming}(\text{murder})),$
 $\text{FOR}(\neg \text{pai}(\text{grass is not green}) \vee \text{blaming}(\text{murder})) \rangle$

Two Kinds of Contents

“Either grass is green or my eyes deceive me”

$\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{pai}(\text{my eyes deceive me})),$
 $\text{FOR}(\neg \text{pai}(\text{grass isn't green}) \vee \neg \text{pai}(\text{my eyes don't deceive me})) \rangle$

“Either grass is green or murder is wrong”

$\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{blaming}(\text{murder})),$
 $\text{FOR}(\neg \text{pai}(\text{grass is not green}) \vee \text{blaming}(\text{murder})) \rangle$

A Suggestion

A Suggestion

- ▶ The contents within the scope of the FOR admit of minimalist truth.

A Suggestion

- ▶ The contents within the scope of the FOR admit of minimalist truth.
- ▶ The contents within the scope of the pai operator admit of correspondence truth.

A Suggestion

- ▶ The contents within the scope of the FOR admit of minimalist truth.
- ▶ The contents within the scope of the pai operator admit of correspondence truth.
- ▶ The contents within the scope of the pai operator admit of minimalist truth (in the following extended sense): you accept p as minimalist-true iff you are $\text{FOR}(\text{pai}(p))$.

Possible Worlds Semantics

Possible Worlds Semantics

- ▶ A proposition can be picked out the set of possible worlds where it's true. (Many objects of belief are propositions in this sense.)

Possible Worlds Semantics

- ▶ A proposition can be picked out the set of possible worlds where it's true. (Many objects of belief are propositions in this sense.)
- ▶ Some contents don't correspond to propositions:

Possible Worlds Semantics

- ▶ A proposition can be picked out the set of possible worlds where it's true. (Many objects of belief are propositions in this sense.)
- ▶ Some contents don't correspond to propositions:
 - ▶ e.g., the content of the belief that I am Rachael Briggs.

Possible Worlds Semantics

- ▶ A proposition can be picked out the set of possible worlds where it's true. (Many objects of belief are propositions in this sense.)
- ▶ Some contents don't correspond to propositions:
 - ▶ e.g., the content of the belief that I am Rachael Briggs.
 - ▶ e.g., the content of the desire to get rich.

Possible Worlds Semantics

- ▶ A proposition can be picked out the set of possible worlds where it's true. (Many objects of belief are propositions in this sense.)
- ▶ Some contents don't correspond to propositions:
 - ▶ e.g., the content of the belief that I am Rachael Briggs.
 - ▶ e.g., the content of the desire to get rich.
- ▶ For these contents, we need centered propositions, which are picked out sets of centered worlds.

Possible Worlds Semantics

- ▶ A proposition can be picked out the set of possible worlds where it's true. (Many objects of belief are propositions in this sense.)
- ▶ Some contents don't correspond to propositions:
 - ▶ e.g., the content of the belief that I am Rachael Briggs.
 - ▶ e.g., the content of the desire to get rich.
- ▶ For these contents, we need centered propositions, which are picked out sets of centered worlds.
- ▶ We might expect centered propositions to be closely related to action (Perry's shopping cart example).

Biforcation and Possible Worlds

Biforcation and Possible Worlds

“Either grass is green or my eyes deceive me.”

$\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{pai}(\text{my eyes deceive me})),$
 $\text{FOR}(\neg \text{pai}(\text{grass isn't green}) \vee \neg \text{pai}(\text{my eyes don't deceive me})) \rangle$

Biforcation and Possible Worlds

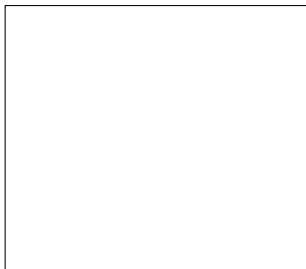
“Either grass is green or my eyes deceive me.”

$\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{pai}(\text{my eyes deceive me})),$
 $\text{FOR}(\neg \text{pai}(\text{grass isn't green}) \vee \neg \text{pai}(\text{my eyes don't deceive me})) \rangle$

Biforcation and Possible Worlds

“Either grass is green or my eyes deceive me.”

$\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{pai}(\text{my eyes deceive me})),$
 $\text{FOR}(\neg \text{pai}(\text{grass isn't green}) \vee \neg \text{pai}(\text{my eyes don't deceive me})) \rangle$

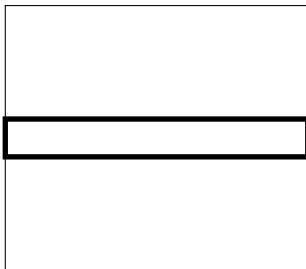


Centered Worlds

Biforcation and Possible Worlds

“Either grass is green or my eyes deceive me.”

$\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{pai}(\text{my eyes deceive me})),$
 $\text{FOR}(\neg \text{pai}(\text{grass isn't green}) \vee \neg \text{pai}(\text{my eyes don't deceive me})) \rangle$

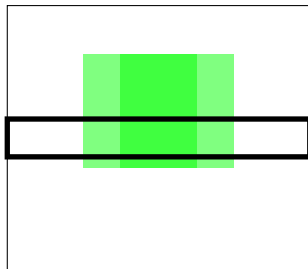


Centered Worlds

Biforcation and Possible Worlds

“Either grass is green or my eyes deceive me.”

$\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{pai}(\text{my eyes deceive me})),$
 $\text{FOR}(\neg \text{pai}(\text{grass isn't green}) \vee \neg \text{pai}(\text{my eyes don't deceive me})) \rangle$

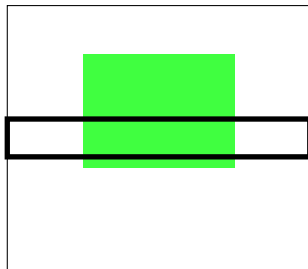


Centered Worlds

Biforcation and Possible Worlds

“Either grass is green or my eyes deceive me.”

$\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{pai}(\text{my eyes deceive me})),$
 $\text{FOR}(\neg \text{pai}(\text{grass isn't green}) \vee \neg \text{pai}(\text{my eyes don't deceive me})) \rangle$

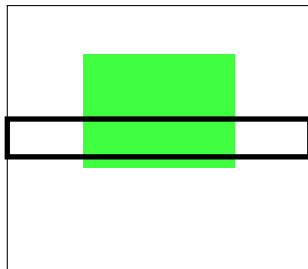


Centered Worlds

Biforcation and Possible Worlds

“Either grass is green or my eyes deceive me.”

$\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{pai}(\text{my eyes deceive me})),$
 $\text{FOR}(\neg \text{pai}(\text{grass isn't green}) \vee \neg \text{pai}(\text{my eyes don't deceive me})) \rangle$



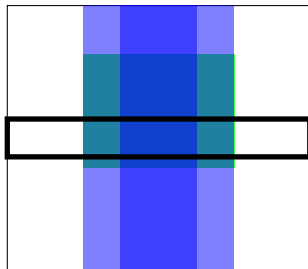
Centered Worlds

Biforcation and Possible Worlds

“Either grass is green or my eyes deceive me.”

⟨FOR($\text{pai}(\text{grass is green}) \vee \text{pai}(\text{my eyes deceive me})$)⟩,

FOR($\neg \text{pai}(\text{grass isn't green}) \vee \neg \text{pai}(\text{my eyes don't deceive me})$)⟩

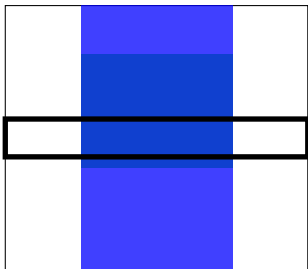


Centered Worlds

Biforcation and Possible Worlds

“Either grass is green or my eyes deceive me.”

$\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{pai}(\text{my eyes deceive me})),$
 $\text{FOR}(\neg \text{pai}(\text{grass isn't green}) \vee \neg \text{pai}(\text{my eyes don't deceive me})) \rangle$

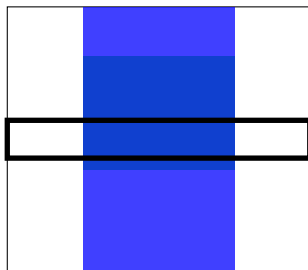


Centered Worlds

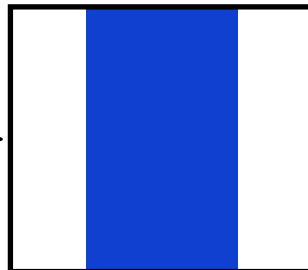
Biforcation and Possible Worlds

“Either grass is green or my eyes deceive me.”

$\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{pai}(\text{my eyes deceive me})),$
 $\text{FOR}(\neg \text{pai}(\text{grass isn't green}) \vee \neg \text{pai}(\text{my eyes don't deceive me})) \rangle$



Centered Worlds



Uncentered Worlds

Biforcation and Possible Worlds

“Either grass is green or murder is wrong.”

$\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{blaming}(\text{murder})),$
 $\text{FOR}(\neg \text{pai}(\text{grass isn't green}) \vee \text{blaming}(\text{murder})) \rangle$

Biforcation and Possible Worlds

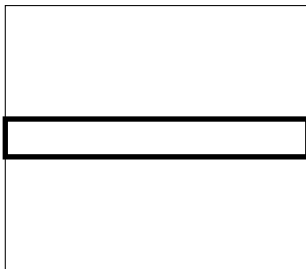
“Either grass is green or murder is wrong.”

$\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{blaming}(\text{murder})),$
 $\text{FOR}(\neg \text{pai}(\text{grass isn't green}) \vee \text{blaming}(\text{murder})) \rangle$

Biforcation and Possible Worlds

“Either grass is green or murder is wrong.”

⟨FOR(pai(grass is green) ∨ blaming(murder)),
FOR(¬pai(grass isn't green) ∨ blaming(murder))⟩

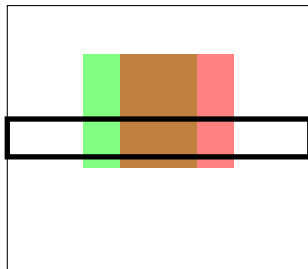


Centered Worlds

Biforcation and Possible Worlds

“Either grass is green or murder is wrong.”

⟨FOR(pai(grass is green) ∨ blaming(murder)),
FOR(¬pai(grass isn't green) ∨ blaming(murder))⟩

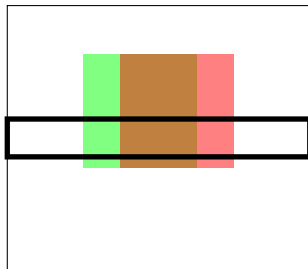


Centered Worlds

Biforcation and Possible Worlds

“Either grass is green or murder is wrong.”

$\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{blaming}(\text{murder}))$
 $\text{FOR}(\neg \text{pai}(\text{grass isn't green}) \vee \text{blaming}(\text{murder})) \rangle$

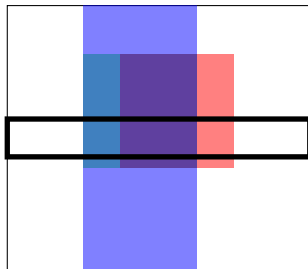


Centered Worlds

Biforcation and Possible Worlds

“Either grass is green or murder is wrong.”

$\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{blaming}(\text{murder}))$
 $\text{FOR}(\neg \text{pai}(\text{grass isn't green}) \vee \text{blaming}(\text{murder})) \rangle$

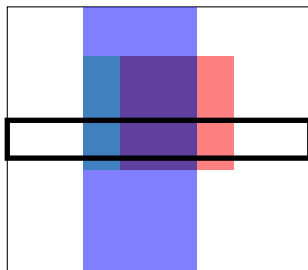


Centered Worlds

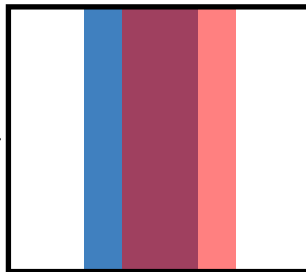
Biforcation and Possible Worlds

“Either grass is green or murder is wrong.”

$\langle \text{FOR}(\text{pai}(\text{grass is green}) \vee \text{blaming}(\text{murder}))$
 $\text{FOR}(\neg \text{pai}(\text{grass isn't green}) \vee \text{blaming}(\text{murder})) \rangle$



Centered Worlds



World-Norm Pairs

A Suggestion

A Suggestion

- ▶ Sets of world-norm pairs admit of minimalist truth.

A Suggestion

- ▶ Sets of world-norm pairs admit of minimalist truth.
- ▶ Sets of worlds admit of correspondence truth.

What Are Norms?

What Are Norms?

- ▶ If we stick to the concept “wrong”, norms should correspond to sets of properties of the form $\ulcorner \text{blaming}(p) \urcorner$.

What Are Norms?

- ▶ If we stick to the concept “wrong”, norms should correspond to sets of properties of the form $\ulcorner \text{blaming}(p) \urcorner$.
- ▶ A perspicuous way to capture this: a norm is a complete set of actions that one is FOR blaming.

What Are Norms?

- ▶ If we stick to the concept “wrong”, norms should correspond to sets of properties of the form $\ulcorner \text{blaming}(p) \urcorner$.
- ▶ A perspicuous way to capture this: a norm is a complete set of actions that one is FOR blaming.
- ▶ We can think of “wrong” and “permissible” as modal operators.

What Are Norms?

- ▶ If we stick to the concept “wrong”, norms should correspond to sets of properties of the form $\ulcorner \text{blaming}(p) \urcorner$.
- ▶ A perspicuous way to capture this: a norm is a complete set of actions that one is FOR blaming.
- ▶ We can think of “wrong” and “permissible” as modal operators.
- ▶ Φ ing is permissible if it happens in some deontically accessible centered world, and wrong if it happens in no deontically accessible centered world.

A Suggestion

A Suggestion

- ▶ Sets of world-set-of-centered-world pairs admit of minimalist truth.

A Suggestion

- ▶ Sets of world-set-of-centered-world pairs admit of minimalist truth.
- ▶ Sets of worlds admit of correspondence truth.

Can Expressivists Completely Solve the Frege-Geach Problem (III)?

Can Expressivists Completely Solve the Frege-Geach Problem (III)?

Worries about biforcated semantics:

Can Expressivists Completely Solve the Frege-Geach Problem (III)?

Worries about biforcated semantics:

- ▶ What is it to suspend judgment about whether murder is wrong?

Can Expressivists Completely Solve the Frege-Geach Problem (III)?

Worries about biforcated semantics:

- ▶ What is it to suspend judgment about whether murder is wrong?
- ▶ What is it to hope that murder is not wrong?

Can Expressivists Completely Solve the Frege-Geach Problem (III)?

Worries about biforcated semantics:

- ▶ What is it to suspend judgment about whether murder is wrong?
- ▶ What is it to hope that murder is not wrong?

Worries about deontic modals:

Can Expressivists Completely Solve the Frege-Geach Problem (III)?

Worries about biforcated semantics:

- ▶ What is it to suspend judgment about whether murder is wrong?
- ▶ What is it to hope that murder is not wrong?

Worries about deontic modals:

- ▶ If it's permissible to feed the poor, is it permissible that someone be poor?
- ▶ What is it for someone's character to be virtuous?

Should Expressivists Completely Solve the Frege-Geach Problem (III)?

Should Expressivists Completely Solve the Frege-Geach Problem (III)?

- ▶ One way around these problems is to develop more logical machinery.

Should Expressivists Completely Solve the Frege-Geach Problem (III)?

- ▶ One way around these problems is to develop more logical machinery.
- ▶ Another is to be slightly revisionist, and say that some things make less sense than we thought.

Should Expressivists Completely Solve the Frege-Geach Problem (III)?

- ▶ One way around these problems is to develop more logical machinery.
- ▶ Another is to be slightly revisionist, and say that some things make less sense than we thought.
- ▶ Where should the goalposts be?

Should Expressivists Completely Solve the Frege-Geach Problem (III)?

- ▶ One way around these problems is to develop more logical machinery.
- ▶ Another is to be slightly revisionist, and say that some things make less sense than we thought.
- ▶ Where should the goalposts be?
- ▶ An advantage of the revisionist approach: it's sometimes well-motivated by an expressivist outlook, makes expressivism strong enough to be interesting.

Acceptance and Rejection

Acceptance and Rejection

- ▶ It's useful to speak in terms of multiple-premise, multiple conclusion entailment:

Acceptance and Rejection

- ▶ It's useful to speak in terms of multiple-premise, multiple conclusion entailment:
- ▶ $\lceil \Gamma \vdash \Delta \rceil$ = the sentences in Γ entail the sentences in Δ

Acceptance and Rejection

- ▶ It's useful to speak in terms of multiple-premise, multiple conclusion entailment:
- ▶ $\lceil \Gamma \vdash \Delta \rceil$ = the sentences in Γ entail the sentences in Δ
- ▶ If all of the sentences in Γ are true, then at least one of the sentences in Δ must be true.

Acceptance and Rejection

- ▶ It's useful to speak in terms of multiple-premise, multiple conclusion entailment:
- ▶ $\lceil \Gamma \vdash \Delta \rceil$ = the sentences in Γ entail the sentences in Δ
- ▶ If all of the sentences in Γ are true, then at least one of the sentences in Δ must be true.
- ▶ What's the practical upshot?

Acceptance and Rejection

- ▶ It's useful to speak in terms of multiple-premise, multiple conclusion entailment:
- ▶ $\lceil \Gamma \vdash \Delta \rceil$ = the sentences in Γ entail the sentences in Δ
- ▶ If all of the sentences in Γ are true, then at least one of the sentences in Δ must be true.
- ▶ What's the practical upshot?
 - ▶ Perhaps if you accept all the sentences in Γ , you should accept one of the sentences in Δ ?

Acceptance and Rejection

- ▶ It's useful to speak in terms of multiple-premise, multiple conclusion entailment:
- ▶ $\lceil \Gamma \vdash \Delta \rceil$ = the sentences in Γ entail the sentences in Δ
- ▶ If all of the sentences in Γ are true, then at least one of the sentences in Δ must be true.
- ▶ What's the practical upshot?
 - ▶ Perhaps if you accept all the sentences in Γ , you should accept one of the sentences in Δ ?
 - ▶ No. If you accept all the sentences in Γ , you should not reject all the sentences in Δ .

Acceptance and Rejection

- ▶ It's useful to speak in terms of multiple-premise, multiple conclusion entailment:
- ▶ $\lceil \Gamma \vdash \Delta \rceil$ = the sentences in Γ entail the sentences in Δ
- ▶ If all of the sentences in Γ are true, then at least one of the sentences in Δ must be true.
- ▶ What's the practical upshot?
 - ▶ Perhaps if you accept all the sentences in Γ , you should accept one of the sentences in Δ ?
 - ▶ No. If you accept all the sentences in Γ , you should not reject all the sentences in Δ .
- ▶ Using biforcated semantics, we can say you reject a sentence p iff you are $\text{FOR}(\neg \text{pai}(p))$.

What's pai?

What's pai?

Schroeder's assumptions about pai:

What's pai?

Schroeder's assumptions about pai:

- ▶ $(\text{pai}(p) \vee \text{pai}(q))$ is equivalent to $\text{pai}(p \vee q)$

What's pai?

Schroeder's assumptions about pai:

- ▶ $(\text{pai}(p) \vee \text{pai}(q))$ is equivalent to $\text{pai}(p \vee q)$
- ▶ $\text{pai}(p \wedge q)$ is equivalent to $(\text{pai}(p) \wedge \text{pai}(q))$

What's pai?

Schroeder's assumptions about pai:

- ▶ $(\text{pai}(p) \vee \text{pai}(q))$ is equivalent to $\text{pai}(p \vee q)$
- ▶ $\text{pai}(p \wedge q)$ is equivalent to $(\text{pai}(p) \wedge \text{pai}(q))$
- ▶ $\text{pai}(\exists x \Phi(x))$ is equivalent to $\exists x(\text{pai } \Phi(x))$

What's pai?

Schroeder's assumptions about pai:

- ▶ $(\text{pai}(p) \vee \text{pai}(q))$ is equivalent to $\text{pai}(p \vee q)$
- ▶ $\text{pai}(p \wedge q)$ is equivalent to $(\text{pai}(p) \wedge \text{pai}(q))$
- ▶ $\text{pai}(\exists x \Phi(x))$ is equivalent to $\exists x(\text{pai } \Phi(x))$
- ▶ $\text{pai}(\forall x \Phi(x))$ is equivalent to $\forall x(\text{pai } \Phi(x))$

What's pai?

What's pai?

Some more plausible assumptions about pai:

What's pai?

Some more plausible assumptions about pai:

- ▶ $(\text{pai}(p) \vee \text{pai}(q))$ entails $\text{pai}(p \vee q)$

What's pai?

Some more plausible assumptions about pai:

- ▶ $(\text{pai}(p) \vee \text{pai}(q))$ entails $\text{pai}(p \vee q)$
- ▶ $\text{pai}(p \wedge q)$ is equivalent to $(\text{pai}(p) \wedge \text{pai}(q))$

What's pai?

Some more plausible assumptions about pai:

- ▶ $(\text{pai}(p) \vee \text{pai}(q))$ entails $\text{pai}(p \vee q)$
- ▶ $\text{pai}(p \wedge q)$ is equivalent to $(\text{pai}(p) \wedge \text{pai}(q))$
- ▶ $\exists x(\text{pai } \Phi(x))$ entails $\text{pai}(\exists x\Phi(x))$

What's pai?

Some more plausible assumptions about pai:

- ▶ $(\text{pai}(p) \vee \text{pai}(q))$ entails $\text{pai}(p \vee q)$
- ▶ $\text{pai}(p \wedge q)$ is equivalent to $(\text{pai}(p) \wedge \text{pai}(q))$
- ▶ $\exists x(\text{pai } \Phi(x))$ entails $\text{pai}(\exists x\Phi(x))$
- ▶ $\text{pai}(\forall x\Phi(x))$ entails $\forall x(\text{pai } \Phi(x))$

What's pai?

Some more plausible assumptions about pai:

- ▶ $(\text{pai}(p) \vee \text{pai}(q))$ entails $\text{pai}(p \vee q)$
- ▶ $\text{pai}(p \wedge q)$ is equivalent to $(\text{pai}(p) \wedge \text{pai}(q))$
- ▶ $\exists x(\text{pai } \Phi(x))$ entails $\text{pai}(\exists x\Phi(x))$
- ▶ $\text{pai}(\forall x\Phi(x))$ entails $\forall x(\text{pai } \Phi(x))$
- ▶ if p classically entails q , then $\text{pai}(p)$ entails $\text{pai}(q)$.

A Slight Adjustment to the Semantics

- ▶ Suppose that according to Schroeder's old semantics, sentence P expressed the attitude $\langle \text{FOR}(f_1(P)), \text{FOR}(f_2(P)) \rangle$.
 1. Put $f_1(P)$ in prenex form.
 2. Take the strongest Boolean combination of open sentences of the form $\text{pai}(p)$ entailed by $f_1(P)$.
 3. In open sentence 2, delete every instance of 'pai', and put the resulting sentence in the scope of a 'pai'.
 4. Take all Boolean subsentences that appear in sentence 1.
 5. Of those 4s which are incompatible with sentence 1, see if any of them relevantly entails a moral sentence together with 1. For those that do, take a conditional with the Boolean combination as the antecedent and the strongest moral sentence so entailed as the consequent.
 6. Conjoin 3 with the 5s.
 7. Replace the quantifiers at the front, put the whole thing in the scope of a FOR, and you have your new major attitude.
 8. Repeat for $f_2(P)$.

The Logical Upshot

The Logical Upshot

- ▶ where $\top$ is a tautology, $\vdash \top$

The Logical Upshot

- ▶ where $\top$ is a tautology, $\vdash \top$
- ▶ where Γ classically entails p , $\Gamma \vdash p$.

The Logical Upshot

- ▶ where $\top$ is a tautology, $\vdash \top$
- ▶ where Γ classically entails p , $\Gamma \vdash p$.
- ▶ $(p \vee q) \not\vdash p, q$

The Logical Upshot

- ▶ where $\top$ is a tautology, $\vdash \top$
- ▶ where Γ classically entails p , $\Gamma \vdash p$.
- ▶ $(p \vee q) \not\vdash p, q$
- ▶ $\Phi(a) \vdash \exists x \Phi(x)$

The Logical Upshot

- ▶ where $\top$ is a tautology, $\vdash \top$
- ▶ where Γ classically entails p , $\Gamma \vdash p$.
- ▶ $(p \vee q) \not\vdash p, q$
- ▶ $\Phi(a) \vdash \exists x \Phi(x)$
- ▶ $\exists x \Phi(x) \not\vdash \Phi(a)$

The Logical Upshot

- ▶ where $\top$ is a tautology, $\vdash \top$
- ▶ where Γ classically entails p , $\Gamma \vdash p$.
- ▶ $(p \vee q) \not\vdash p, q$
- ▶ $\Phi(a) \vdash \exists x\Phi(x)$
- ▶ $\exists x\Phi(x) \not\vdash \Phi(a)$

Basically supervaluationist (as far as non-moral sentences are concerned).

Conclusion

Conclusion

- ▶ We can stop creeping minimalism by rejecting minimalism.

Conclusion

- ▶ We can stop creeping minimalism by rejecting minimalism.
- ▶ Expressivist semantics has a place for a non-minimal, correspondence concept of truth (and this is true no matter what kind of semantics you're using).

Conclusion

- ▶ We can stop creeping minimalism by rejecting minimalism.
- ▶ Expressivist semantics has a place for a non-minimal, correspondence concept of truth (and this is true no matter what kind of semantics you're using).
- ▶ Different kinds of expressivist semantics aren't as different as they seem.

Conclusion

- ▶ We can stop creeping minimalism by rejecting minimalism.
- ▶ Expressivist semantics has a place for a non-minimal, correspondence concept of truth (and this is true no matter what kind of semantics you're using).
- ▶ Different kinds of expressivist semantics aren't as different as they seem.
- ▶ There is more than one Frege-Geach problem, and not all the problems are of equal severity.

Conclusion

- ▶ We can stop creeping minimalism by rejecting minimalism.
- ▶ Expressivist semantics has a place for a non-minimal, correspondence concept of truth (and this is true no matter what kind of semantics you're using).
- ▶ Different kinds of expressivist semantics aren't as different as they seem.
- ▶ There is more than one Frege-Geach problem, and not all the problems are of equal severity.
- ▶ Biforcated semantics has underutilized potential for making sense of non-classical logic (not just strong Kleene logic).