

MATERIAL PLENITUDE FOR FINEANS

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WHAT I AM TRYING
TO CAPTURE

MATERIAL
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SOME
CONSEQUENCES

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A version of Material Plenitude that is compatible with the Finean view for which modality reduces to essence.

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Material Plenitude: for every material object x , there is a myriad of objects coinciding with x that differ only in what properties they have essentially and what properties they have accidentally (Fairchild 2019).

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Modal Profile: the modal profile \mathcal{R} of an object x consists of the set $\{E, A\}$ such that E is the set of x 's essential properties and A is the set of x 's accidental properties;

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Modal Profile: the modal profile \mathcal{R} of an object x consists of the set $\{E, A\}$ such that E is the set of x 's essential properties and A is the set of x 's accidental properties;

Essential Properties: x is F essentially iff necessarily, if x exists, x is F (e.g., the property of being David);

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Accidental Properties: x is F accidentally iff possibly, x exists and is not F (e.g., the property of being grey);

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Essential Properties: x is F essentially iff necessarily, if x exists, x is F (e.g., the property of being David);

Accidental Properties: x is F accidentally iff possibly, x exists and is not F (e.g., the property of being grey);

Naive Plenitude: For any material object x and profile \mathcal{R} based on x 's properties, there is something coincident with x that has profile \mathcal{R} .

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	E	A
<i>a</i>	<i>F</i>	<i>G</i>
<i>b</i>		<i>G</i>
<i>c</i>	<i>G</i>	
<i>d</i>	<i>G</i>	<i>F</i>
<i>e</i>	<i>F</i>	
<i>g</i>		<i>F</i>
<i>h</i>	<i>F,G</i>	
<i>i</i>		<i>F,G</i>

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THE BAD EGGS PROBLEM

The Impossible Monsters Problem: the property of being David is an essential property of David. From Naive Plenitude, it follows that there is a coincident object, d , such that d has the property of being David. Impossible monsters—objects that have the property of being something other than themselves—must not be allowed.

THE BAD EGGS PROBLEM

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The Inconsistency Problem: a marble a is essentially colored but accidentally blue. It follows from Naive Plenitude that c , an object coinciding with the marble, is essentially blue but accidentally colored. But, this is inconsistent. Nothing could be blue without being colored.

THE NEUTRAL SOLUTION

Simple Plenitude. Necessarily, given any material object o and any modal profile M based on all of o 's neutral properties, there is something coincident with o which has M . (Fairchild 2019, p. 155)



NO FINEAN SOLUTIONS

For each class of objects, be they concepts or individuals or entities of some other kind, will give rise to its own domain of necessary truths, the truths which flow from the nature of the objects in question. The metaphysically necessary truths can then be identified with the propositions which are true in virtue of the nature of all objects whatever. (Fine 1994, p. 9)



Essential Properties: *x is essentially F iff it is true in virtue of what x is that x is F (e.g., the property of being human) (Fine 1995a).*

Accidental Properties: *x is accidentally F iff it is true that x is F but x is not essentially F (e.g., the property of being able to smile).*

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A version of Material Plenitude that is compatible with the Finean view of essences and accidents and does not suffer from the Bad Eggs Problem.

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HOW I AM TRYING TO CAPTURE IT

Modal Profile: the modal profile \mathcal{R} of an object x consists of the set $\{E, A\}$ such that E is the set of x 's essential properties and A is the set of x 's accidental properties.

Finean Profile. A Finean profile \mathcal{R}^* of an object x consists of the set $\{\mathcal{E}, A\}$ such that \mathcal{E} is the set of x 's non-trivial essential properties and A is the set of x 's accidental properties*.

TRIVIAL AND NON-TRIVIAL ESSENTIAL PROPERTIES

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Trivial Essences: they do not help answer question "what is x ?" (e.g., the property of being self-identical) (Roca-Royes 2011; Mackie 2006);

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Trivial Essences: they do not help answer question "what is x ?" (e.g., the property of being self-identical) (Roca-Royes 2011; Mackie 2006);

Non-trivial Essences: they help answer the question "what is x ?" (e.g., the property of being human).

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The generalization of $\phi(a)$ is $\forall v\phi(v)$, i.e., $\phi(v)$ is true for all objects v (Fine 1995b).

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***Trivial Essences:** an object a 's essential property, $\phi(a)$, is trivial iff, if $\phi(a)$ is true, its generalization is true;*

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***Trivial Essences:** an object a 's essential property, $\phi(a)$, is trivial iff, if $\phi(a)$ is true, its generalization is true;*

Consider the proposition that Socrates is identical to Socrates, $s = s$. It is true in virtue of Socrates' identity that $s = s$. Also, its generalization, $\forall x(x = x)$, is true of every object.

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***Trivial Essences:** an object a 's essential property, $\phi(a)$, is trivial iff, if $\phi(a)$ is true, its generalization is true;*

Consider $\exists x(x = s)$. This proposition, too, is true in virtue of Socrates' identity, and its generalization, $\forall v\exists x(x = v)$, is also true of every object.

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The generalization of $\phi(a)$ is $\forall v\phi(v)$, i.e., $\phi(v)$ is true for all objects v .

Non-trivial Essences: *an object a 's essential property, $\phi(a)$, is non-trivial iff $\phi(a)$ is true but its generalization is not.*

Consider the proposition that Socrates is human, $H(s)$. Because Socrates is human, but not everything is human, $H(s)$ is true, but its generalization, $\forall x(H(x))$, is false.

ACCIDENTAL PROPERTIES*

Accidental Properties: x is accidentally F iff it is true that x is F but x is not essentially F .

Accidental Properties^{*}: F is an accidental property* of a iff F is an accidental property of a and some non-trivial essential property G of a is such that either Ga fully grounds Fa , or F is an accidental property of a and Ga together with other non-trivially essential properties of a fully grounds Fa .*

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ACCIDENTAL PROPERTIES*

- ▶ *Consistency: filters out properties such as being Socrates's favorite;*

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ACCIDENTAL PROPERTIES*

- ▶ *Consistency: filters out properties such as being Socrates's favorite;*
- ▶ *Simplicity: it prevents attributing to other entities the explanatory role of these accidental properties' existence.*

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***Finean Profile.** A Finean profile \mathcal{R}^* of an object x consists of the set $\{\mathcal{E}, \mathcal{A}\}$ such that \mathcal{E} is the set of x 's non-trivial essential properties and \mathcal{A} is the set of x 's derivative accidental properties;*

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Non-trivial Essences: an object a 's essential property, $\phi(a)$, is non-trivial iff $\phi(a)$ is true but its generalization is not;

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Finean Profile. A Finean profile \mathcal{R}^* of an object x consists of the set $\{\mathcal{E}, \mathcal{A}\}$ such that \mathcal{E} is the set of x 's non-trivial essential properties and \mathcal{A} is the set of x 's derivative accidental properties;

Non-trivial Essences: an object a 's essential property, $\phi(a)$, is non-trivial iff $\phi(a)$ is true but its generalization is not;

Accidental Properties*: F is an accidental property* of a iff F is an accidental property of a and some non-trivial essential property G of a is such that either Ga fully grounds Fa , or F is an accidental property of a and Ga together with other non-trivially essential properties of a fully grounds Fa .

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***Finean Plenitude:** For any material object x and possible Finean profile \mathcal{R}^* , constructed from x 's properties, there is something coinciding with x that has Finean profile \mathcal{R}^* .*

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	E_f	A_f
a	D, F	H, S
b	D, F	
c		H, S
d	H, S	D, F
...

	\mathcal{E}	A
a	D, F	H, S
b		H
c	H	
d	H	F
e	F	
g		F
h	F, H	
i		F, H

THE BAD EGGS PROBLEM

The Impossible Monsters Problem: the property of being David is an essential property of David. From Naive Plenitude, it follows that there is a coincident object, d , such that d has the property of being David. Impossible monsters—objects that have the property of being something other than themselves—must not be allowed.

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The Impossible Monsters Problem does not appear for Finean Plenitude.

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THE BAD EGGS PROBLEM

	\mathcal{E}	\mathcal{A}
a	C	B
b		B
c	B	
d	B	C
e	C	
g		C
h	C, B	
i		C, B

THE BAD EGGS PROBLEM

	\mathcal{E}	\mathcal{A}
a	C	B
b		B
c	B	
d	B	C
e	C	
g		C
h	C, B	
i		C, B

- ▷ d is essentially blue, i.e., the proposition that d is blue is true in virtue of d 's identity;

THE BAD EGGS PROBLEM

	\mathcal{E}	\mathcal{A}
a	C	B
b		B
c	B	
d	B	C
e	C	
g		C
h	C, B	
i		C, B

- ▶ d is essentially blue, i.e., the proposition that d is blue is true in virtue of d 's identity;
- ▶ d is accidentally colored, i.e., the proposition that d is colored is true but not in virtue of d 's identity.

THE BAD EGGS PROBLEM

The Essence-to-Necessity Principle: If it is true in virtue of x that ϕ , then ϕ is metaphysically necessary (Fine 1994, p. 8).

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- ▷ d is essentially blue, i.e., the proposition that d is blue is true in virtue of d 's identity;
- ▷ d is necessarily blue;

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- ▷ d is essentially blue, i.e., the proposition that d is blue is true in virtue of d 's identity;
- ▷ d is necessarily blue;
- ▷ blue is necessarily a determinate of the determinable colored;

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- ▷ d is essentially blue, i.e., the proposition that d is blue is true in virtue of d 's identity;
- ▷ d is necessarily blue;
- ▷ blue is necessarily a determinate of the determinable colored;
- ▷ $(\Box(\phi \wedge \psi) \wedge \Box((\phi \wedge \psi) \rightarrow \beta)) \vdash \Box\beta$

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- ▷ d is essentially blue, i.e., the proposition that d is blue is true in virtue of d 's identity;
- ▷ d is necessarily blue;
- ▷ blue is necessarily a determinate of the determinable colored;
- ▷ $(\Box(\phi \wedge \psi) \wedge \Box((\phi \wedge \psi) \rightarrow \beta)) \vdash \Box\beta$
- ▷ d is necessarily colored.

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- ▶ d is essentially blue and necessarily colored, even if it is accidentally colored.

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