

Towards a non-propositionalist analysis of pictorial content

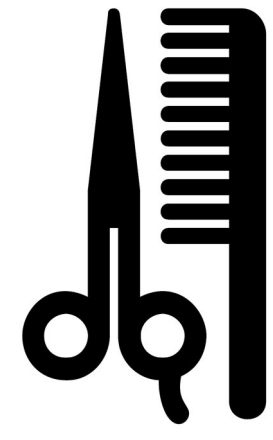
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1. Outline

Basic Question

Q What, if anything, is pictorial content?

[NOTE: As in language, one ought to distinguish content from meaning: roughly, content = meaning + context]



Two answers

Propositionalist: the content of a picture is the set of depicted (possible) scenes (or indices, worlds, situations, ...)

[cf. Cresswell (1983), also for refinements, covering contradictory pictures à la Escher]

Dynamic: the (static) content of a picture is a structured proposition (relation-in-intension) holding between the depicted (possible) objects (its inventory)

[cf. Abusch (2012) on discourse anaphora-like effects in picture sequences]

Goal cf. Zimmermann (2016)

Use evidence from the semantic analysis of sentences like (1) to answer Q like:

(1) Penny painted a penguin.

On their unspecific readings, such *picture production reports (PPRs)* provide partial descriptions of pictorial contents – and thus indirect evidence of the nature of the latter. As it turns out, the evidence points in the direction of **D**.

3. Dynamic Content

ANALYSIS D ... turning \exists s into λ s

(D) $paint' = \lambda w. \lambda P. \lambda x. (\exists y) \text{ in } w, y \text{ is a painting \& } x \text{ creates } y \text{ \& } Content(y) \models P$

where, e.g.: $Content(y) = \lambda w. \lambda x_1 \dots \lambda x_n [x_1 \text{ is a live penguin \& } x_2 \text{ is } x_1 \text{'s front \& } x_3 \text{ is } x_1 \text{'s left eye } \dots]$

(3.D) $paint'(Penny', \hat{x}. [penguin'(x) \wedge alive'(x)])$

(4.D) $paint'(Penny', \hat{x}. penguin-heart'(x))$

[to be continued]

References

Abusch, Dorit: 'Applying Discourse Semantics and Pragmatics to Co-reference in Picture Sequences'. In: E. Chemla *et al.* (eds.), *Sinn und Bedeutung 17 Proceedings*. ENS Paris 2012. 9–25. <http://semanticsarchive.net/sub2012/Abusch.pdf>. – Cresswell, Maxwell J.: 'A highly impossible scene. The semantics of visual contradictions'. In: R. Bäuerle *et al.* (eds.), *Meaning, Use, and Interpretation of Language*. Berlin/New York 1983. 62–78. – Forbes, Graeme: *Attitude Problems. An Essay on Linguistic Intensionality*. Oxford 2006. – Larson, Richard: 'The Grammar of Intensionality'. In: G. Preyer & G. Peter (eds.), *Logical Form and Natural Language*. Oxford 2002. 228–262. – Parsons, Terence: *Non-existing Objects*. New Haven 1980. – Parsons, Terence: 'Meaning Sensitivity and Grammatical Structure'. In: M. L. D. Chiara *et al.* (eds.), *Structures and Norms in Science*. Dordrecht 1997. 369–383. – Zimmermann, Thomas Ede: 'Painting and Opacity'. In: W. Freitag *et al.* (eds.), *Von Rang und Namen*. Münster 2016. 425–451.

2. Propositionalist Analyses and Their Problems

ANALYSIS 0

(1.0) $paint'(Penny', \wedge (\exists x)[penguin'(x) \wedge P(x)])$

PROBLEM 1

Since (1.0) is false whatever P is, it should not be determined by context – so:

What is P ?

ANALYSIS 1

(1.1) $(\exists P) paint'(Penny', \wedge (\exists x)[penguin'(x) \wedge P(x)])$

$\equiv paint'(Penny', \wedge (\exists x) penguin'(x))$

$\approx Penny \text{ painted a penguin to be}$

PROBLEM 2

Depicted objects need not be depicted as existing.

Forbes (2006: 63)

(2) Ferdinand painted an angel.

ANALYSIS 2

... in the spirit of Parsons (1980)

(2.2) $paint'(Ferdinand', \wedge (\exists x) angel'(x))$

vs. $paint'(Ferdinand', \wedge (\exists x)[angel'(x) \wedge exist'(x)])$

PROBLEM 3

What exists according to a picture need not be in it.

(3) Penny painted a live penguin.

(4) Penny painted a penguin heart.

ANALYSIS 3

essentially Larson (2002: 233f.)

(3.3) $paint'(Penny', \wedge (\exists x)[penguin'(x) \wedge in-field-of-vision'(x, Penny')])$

(4.3) $paint'(Penny', \wedge (\exists x)[penguin-heart'(x) \wedge in-field-of-vision'(x, Penny')])$

PROBLEM 4

The actual creator is not the implicit spectator. Forbes (2006: 62)

(5) Vincent painted himself.

(5.3) $paint'(Vincent', \wedge in-field-of-vision'(Vincent', Vincent'))$

ANALYSIS 4

(5.4) $paint'(Vincent', \hat{s}. in-field-of-vision'(s, Vincent'))$

PROBLEM 5

Objects in the picture must be visible.

(6) Chardin painted [a glass of] water.

(6.4) $paint'(Chardin', \hat{s}. (\exists x)[water'(x) \wedge in-field-of-vision'(s, x)])$

$\equiv paint'(Chardin', \hat{s}. (\exists x)[H_2O\text{-molecules}'(x) \wedge in-field-of-vision'(s, x)])$

(7) Chardin painted [a glass of] H_2O molecules.

ANALYSIS 5

(6.5) $paint'(Chardin', \hat{s}. (\exists x)[water'(x) \wedge in-field-of-vision'(s, x) \wedge visible'(x, s)])$

(7.5) $paint'(Chardin', \hat{s}. (\exists x)[H_2O\text{-molecules}'(x) \wedge in-field-of-vision'(s, x) \wedge visible'(x, s)])$

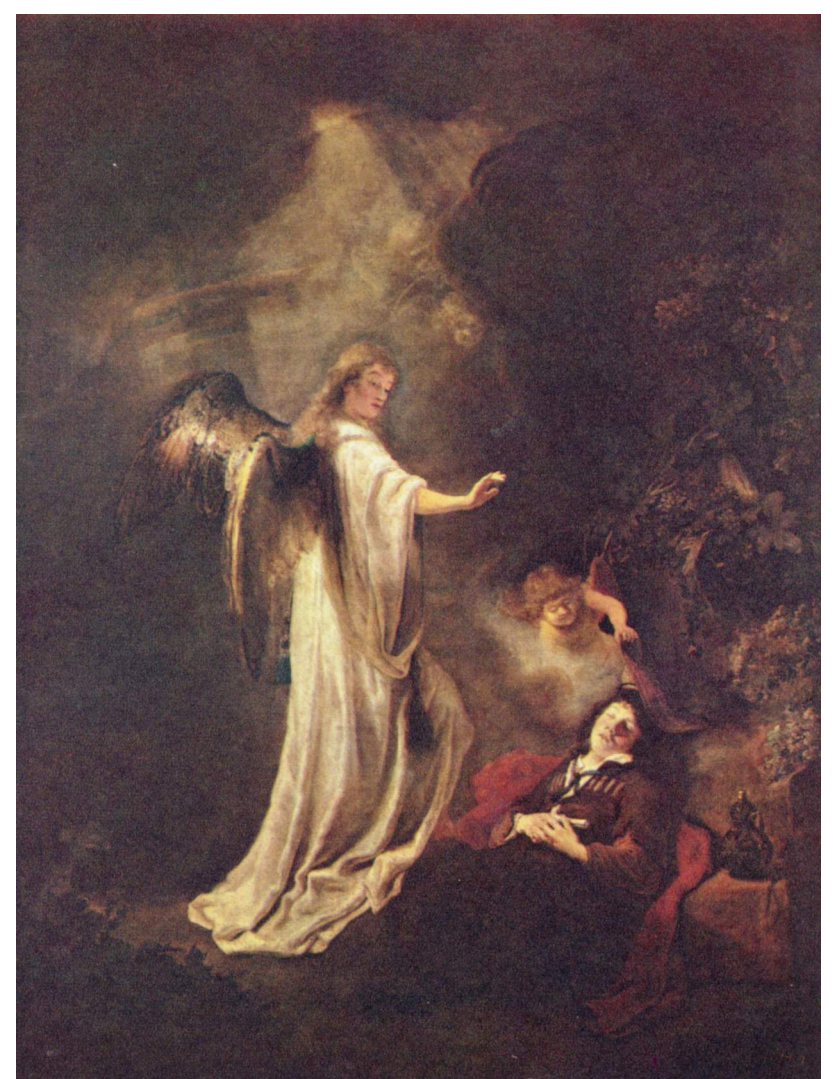
PROBLEM 6

Pictorial content does not imply the presence of a spectator.

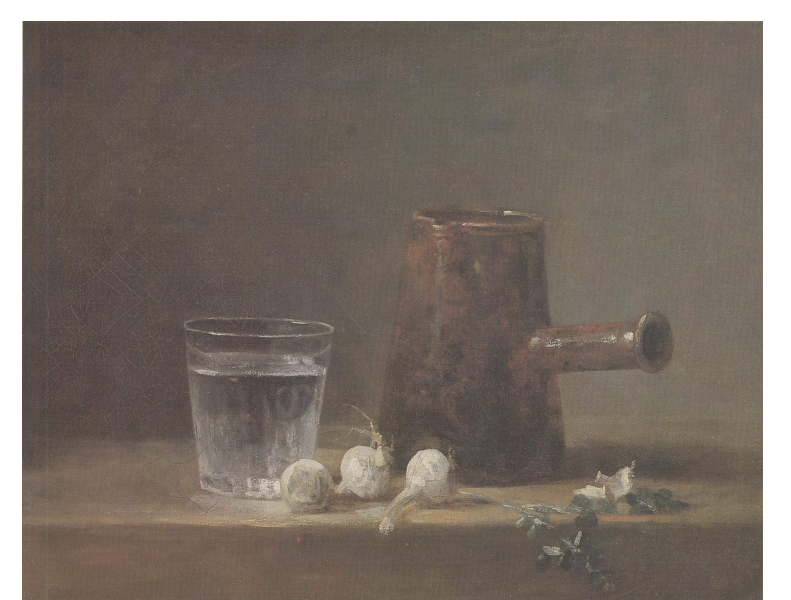
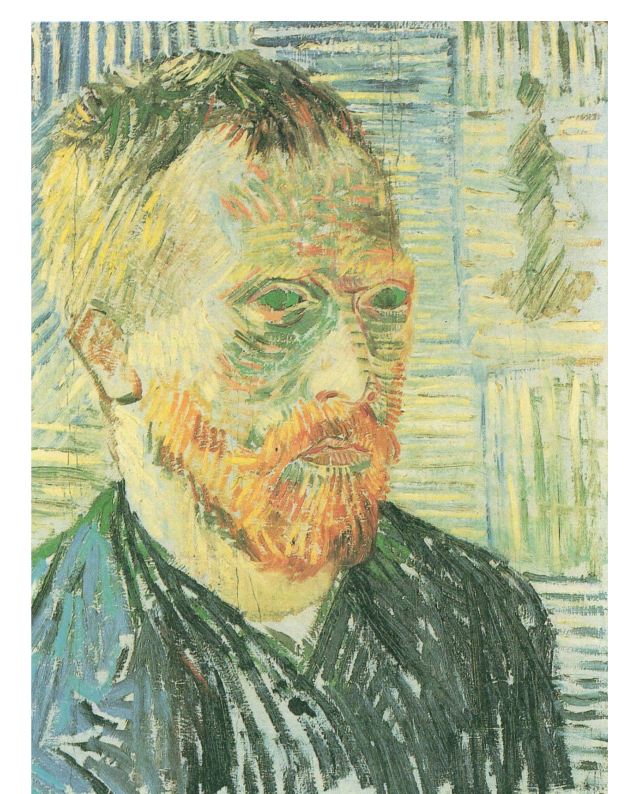


Penny Winn [?]: Baby Penguin

Hamlet ellipsis [Parsons (1997)]



Ferdinand Bol [1616–80]: Jacob's Dream



Jean-Baptiste Siméon Chardin (1699–1779): Water Glass and Jug

