CHAPTER 13

Consciousness as Differentiation

Hold a hand near a radiator and you feel warmth. The thermostat on the wall responds to the same heat and feels nothing. So the gap between a thermostat and a mind is not the number of differences registered.

The chapter’s answer is the architecture of those differences: which kinds of contrast a system detects, and how those kinds hang together. One principle carried over from Chapter 2 does the work: content requires contrast. From it the chapter derives a ladder of minds, from the thermostat to a creature that weighs its own conduct.

Where feeling begins

A thermostat’s response simply happens. In a nervous system, more can hold. The difference is registered for the system, undergone. The content is of a kind the system’s own thinking can take up, whether or not any thought takes it up. Call that availability.

The thermostat has no such availability, and no thought could take its response up. Blindsight is the case in between. After damage to the visual cortex, a patient reliably points at things she says she cannot see. The information drives her behaviour, and her thinking cannot take it up, so it goes unfelt. The chapter names this identification the availability thesis.

A second line falls inside experience. A felt contrast may arrive with a pull, the system drawn toward one pole and away from the other. That bare pull is valence, the oldest ancestor of emotion. Where the pull is present, you have a stake in the contrast. Where it is absent, the contrast registers without your caring.

This leaves two axes. Content is what a state detects. Direction is the pull that may or may not run through it. The chapter holds that a mental state has nothing else, and the claim comes in two parts with different grades. Take any feature of a mental state. Either it is some way the state is, which Chapter 6 calls a determination, or it is no way the state is and so no feature at all. That step is derived from Chapter 6. The other part is this chapter’s own: coupling to valence is on or off, and that is the only further division a determination admits.

What makes a kind of difference new

A system telling a million shades of colour apart has more differences inside one category, and stands no higher. An advance is the detection of a categorically new kind of distinction. New means this: the distinction needs the items the lower categories supply, and it falls outside every one of them. That is the categorical transition principle.

A kind can be new in three ways. The first is a new dimension, a contrast on an axis that did not exist before. Seeing red against imagining red is one, since it sets two kinds of mental state against each other. The second way is a new composition. Old items are united into a unit affording a contrast none of them affords alone. The third way is a limiting case, a new order, where the system takes its own states as objects.

The levels are ordered by containment. A higher level needs the categories the lower levels supply, and takes them in. Damage to a lower capacity degrades the higher ones resting on it, and never the reverse. A system with an integrated self and no distinction between perceiving and thinking would fell the claim.

The order is one of dependence and not of time. The levels need not be reached in sequence, and a grown mind runs many at once.

From thermostat to moral agent

Level 0 is registration, and it is unfelt: the thermostat’s click, the reflex withdrawal. Level 1 is sentience, where a registration becomes available to thought and so is felt. Level 2 tells what the senses present from what the mind generates. Level 3 tells the body that feels from bodies only seen. Level 4 takes the feeling body and the thinking mind as one thing, set against all else. Level 5 detects another body as a subject, so another’s pain registers as pain. Level 6 is reflection, where your own states become objects you can detect, as when you notice that you are angry. Level 7 brings the empathic evaluation of Level 5 to bear on your own conduct, taken as an object by Level 6. It needs both at once, and neither affords it alone.

Three notes carry forward. At Level 1, availability is the switch for experience, and valence is the switch for mattering. At Level 5, empathy and cruelty are one capacity run in opposite directions, and Chapter 16 uses that. At Level 7, the claim that valence makes up evaluative difference, and does not detect values holding on their own, is argued in Chapter 14.

Which events in a brain are experiences

Billions of neural events happen in your head every second, and most are not felt. A pattern in the visual cortex is an experience. A motor command is not. What marks the first off? The chapter calls this the boundary question, and puts it before the hard problem. Its own answer sits in an appendix. The chapter says no later result needs it, though the book’s Premise Register records Chapter 24 drawing on it.

One constraint on the answer follows from content requiring contrast. A property every physical event has can mark nothing, since it sits on both sides of the line. Mass is such a property, and so is the proto-consciousness some philosophers spread through all matter. The chapter confines that point to the boundary question, and leaves the hard problem open. So the marking features must be unique to the experience-making events. That much is derived. The

three features named were found by working backwards from the cases. They are offered as the best explanation of the evidence, and their warrant lies in the predictions they make. The deepest is the pattern of activation a dedicated pathway generates, its triggered signature. That signature constitutes the character of the experience.

Experience then sits at an interface. A signature meets the absence of its own kind: the blind field for sight, silence for hearing. The blind field is not darkness. Darkness is something you see, and the blind field is no visual experience at all. That absence supplies the contrast the signature needs. Blindsight fits, since registration survives while the lesion removes the signature. The account is staked on a test using flashes produced by stimulating the visual cortex. The chapter reports that the evidence is not yet decisive.

The objections the chapter answers

The first objection says that subjectivity is a third feature of the mental. An experience is undergone, there is something it is like, and it is someone's. The reply splits those apart. Being felt is a content's availability to thought. That identification is the chapter's own work, and the two axes do not deliver it. Granted it, feltness is a property of the content, and so sits on the first axis. Being someone's is composed content, the Level 4 self that owns the feeling body. So a sentient creature at Level 1 undergoes its experience without owning it.

The second comes from a realist about feeling, who presses on what is left over. Perhaps a content could be available and unfelt. The chapter replies with a costing. She owes one content held steady with its feltness subtracted, and no case exhibits one. Strip a sense of its contrasts and the whole felt field goes, which is Chapter 6's evidence and what an identity predicts. The chapter then admits that this does not defeat the intuition that something is left over. It explains the intuition by the projection mechanism of Chapter 8. A mind built from differences has to find the identity incredible.

The third comes from Ned Block, who separates a state's being available for reasoning and report from there being something it is like, and argues that the two come apart. The chapter answers that his availability is an episode, while the thesis uses availability in kind. So the unattended edge of a visual field, felt and never retrieved, is evidence for the thesis. The hard problem is a separate objection, asking why there is experience at all. The chapter concedes it as the objection poses it. One of its constraints still narrows the viable solutions, ruling out any on which experience and contrast come apart.

What the chapter claims

Four results are graded *constructed*, the rung below *established*, which means positive proposals with live rivals. They are the categorical transition principle with its ladder, the two axes of the mental, the rereading of four rival theories

of consciousness, and the uniqueness principle. All four stand over an *established* result from Chapter 6. A state with no internal distinction has no cognition, representation or experience.

Two of the gradings have parts. Inside the two-axes result, the step from any feature to a determination or nothing is *established*, since it is derived from Chapter 6. Chapters 14 to 16 take that tier and the existence of valence, and nothing else from this chapter's positive theory. The claim that orientation is a determination's only further division is *constructed*. Inside the uniqueness principle, the demand that the marking features be unique is *established*, while the three features named are *constructed*. The availability thesis, on which the two axes turn, is *constructed* and carries one condition: no later result uses it.

Chapter 14 takes up the question this one leaves standing. Red against blue is a difference of colour, and better against worse is a difference of value. So what sort of difference is that last one?