

Who's mindful of what? disentangling the varieties of conscious experience

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Mindfulness and consciousness getting off on the right foot

- 'Mindfulness' refers to a variety of kinds of conscious experience
- All conscious experience is a concomitant of embodied, embedded, e-motivated real-time neural activity (the 'BBC')
- Mindfulness comes out of that dynamic system; it is never on observation of it

Co-arising

- Thinker and thought
- Action and commentator /instigator
- Observer and observed
 - Like the first two leaves of a shoot
 - All are coupled corollaries of dark, silent activity in the BBC

The opaque clock-case

- We have no privileged access (Dunning, Wilson)
 - Med students can predict their grades but not their clinical expertise or their communication skills. Patients, supervisors and peers know them better than they know themselves
 - Elderly ‘I’m good’ drivers four times as likely to be rated unsafe by others
 - Estate agents’ inferring what buyers really want
- We are built to predict each others’ behaviour from minute signs
- And we do that better if we infer ‘goals’, ‘feelings’ and ‘intentions’ (Hurley, Frith)
- We ‘know ourselves’ – predict our own behaviour – through
 - The communicated attributions of others (Wilson)
 - Observation of and stories about our own ‘minute signs’ (Bem)

Images of reflection

- The BBC ‘is a pervasive yet hidden engine humming beneath the surface of the [conscious] mind, and there is no engine hatch that we can open to take a direct look at its operation...The analogy I favour is introspection as a personal narrative, whereby people construct stories about their lives, much as a biographer would... We deduce the nature of our hidden minds by looking outwards at our behaviour and how others react to us, and coming up with a good narrative. We weave what we can observe...into a story that, with luck, captures at least a part of what we cannot observe...

Introspection does not open magic doors to the unconscious, but is a process of construction and inference. Once this is understood, the question becomes *when is this process of construction likely to be helpful and when is it not – and why?*

– Timothy Wilson, *Strangers to Ourselves*

The backdrop of awareness: the phenomenal world (and body)

- Brain creates a semi-stable model; comprised of
 - Background of unexciting expectations
 - If I did this, x would appear
 - Special senses (world) and internal milieu (body)
 - Shifting highlights of
 - Hopes – looked-for / predicted desirables
 - Fears – looked-for / predicted undesirables
 - Equivocals – areas of uncertainty
 - Opportunities - valued affordances
- Allows quick detection of Hits, Threats and Surprises
- Continuously up-dated
 - C Frith, *Making up the mind*, J Gray, *Consciousness*

Consciousness: restraint and investigation

- Associated with surprise, uncertainty and 'value'
- Which trigger a kind of checked and checking awareness...
 - Data enrichment through focused, selective attention
 - Spreading activation of alternative actions / consequences
 - Restrained action, pending resolution or out-of-time ('heel-and-toeing')
- Depends on sophisticated deployment of frontal inhibition (we are somewhat 'inhibited')
- Experience is 'sticky'; de-liberate
- *Consciousness is a corollary of caution*

Self-consciousness: over-checking leads to choking

- If the sticky state of consciousness leads to co-activation of multiple, incompatible actions / consequences, and
- If the costs of error – especially social costs - are construed as unbearably high,
- That is, shame (transgression of appropriated injunctions) and guilt (acknowledged injunctions) seem unavoidable, then
- The system flounders or crashes:
 - 'flow' is reduced to a trickle
 - action become crude and jerky
 - perception becomes flighty or fixated
 - emotional alarm signals predominate ('anxiety' is not knowing what to do for the best)
 - long chains of entangled high-level (verbal) rumination

Presence of mind lost and regained

- Optimal engagement of resources
- Real-world intelligence
 - Impeded by habits and delusions
- Flow
 - Decathexis of self-referenced anxiety
- Sharp and unpremeditated action
- Elastic and integrated functioning

Mindfulness I

Mindfulness practice uses sensory experience as an anchor in the present -

- Bottom-up rather than top-down processing
- Learning to sustain concentration
 - Tethering, restraining the slip-sliding
- Increased visibility of quantity and complexity of ancillary activity...
- Interrupting rumination; shortening the chains

Not so fast...

- Meticulous attention
- Slows down phenomenal time
- Reveals the microgenesis of conscious moments
 - Normal up-rush is too fast to see what is going on
- Makes visible the admixtures of belief
 - Hopes / desires; fears / threats; real / imaginary
- Allows 'patient pausing'; 'waking up'
- Reality-based, not fear/belief-based, checking
- Restores flexibility...

Mindfulness II sensing possibility

- Ellen Langer's 'could be' attitude
 - World is crazier and more of it than we think,
Incorrigibly plural. I peel and portion
A tangerine and spit the pips and feel
The drunkenness of things being various... Louis MacNeice, *Snow*
- George Kelly's 'constructive alternativism'
 - One's 'world' is a more or less successful mental construction, to which there are always alternatives available

Mindfulness III witnessing

- Equanimity; ‘the facts are friendly’
- Dis-identification
 - A therapeutic dualism
 - Swapping ‘good’ vs ‘bad’ person (ego, super-ego, id) for
 - ‘observing’ vs ‘observed’
- How do we do that?
 - What’s the vantage point of the ‘observer’?

Perspective-shifting

Cognitive models of other people (MOPs)

- Through imitation and reciprocation (via ‘mirror neurons’), *neural models* are built of specific significant others: their affordances, dispositions and reactive contingencies
- These abstracted models generate predictions in a range of novel situations: ‘what is X likely to do?’ allowing me to *cooperate* or *compete* with X more effectively
- With repeated experience, higher order models develop of *kinds* of other people: ‘friends’, ‘teachers’, ‘critics’ etc.
- With development, it become possible to ‘inhabit’ the X-model, seeing the ‘world’ through X’s eyes. *Perspective-shifting*.

The Benign Generalised Other

- From those perspectives, you can have the experience of ‘looking back at yourself’
- ‘I’ or ‘me’ becomes an object of conscious experience
- The quality and utility of this state depends on the ‘values’ embodied in the eyes of this Internalised Other
- If the IO is ‘unfeeling’ or ‘critical’, induced *shame* may provoke hiding/rationalisation, and induced *anger* provoke retaliation.
- If you have developed a Benign Generalised Internalised Other, then dissonance can be tolerated, and the ensuing patience allow the search for updating / unlearning / resolution

The role of the counsellor

- To consistently provide the basis for a growing model of the BGIO, to counteract the critical models
- To model, and thus install, a helpful coaching model, which can generate positive and precise self-coaching / self-reminding to guide habit change

So what?

- Mindfulness is a collection of solvents
 - Soap for mind-washing
- It develops
 - Patience and precision of attention
 - Surfacing and checking of embedded assumptions
 - Opening up a mind full of possibilities
 - Seeing your story as capable of rewriting
 - Recovering basic intelligence – presence of mind
 - Shifting of 'centre of gravity' from Little Me to BBC
 - Building empathy and compassion
 - For self and others

Thank you

- “The most important and reliable sign of wisdom is an abiding cheerfulness”
 - Montaigne

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Active imagination: self-modelling

- Inhibition of motor outflow allows *first person mental rehearsal*: vicarious experimenting with the 'Model of me'. Effective for 'mental rehearsal' of skills. 'Feeling what it would be like to...'
- Inhabiting my model of X, I can look back at myself, and build a model of 'X's Guy'. I have other-specific '*self-knowledge*' through X's eyes. Allocentrism.
- Distilling 'X's Guy', 'Y's Guy' etc creates a *generic Guy-model* from the outside. I develop an interaction non-specific 'self-concept'
- Inhabiting the Guy-model allows *third-person mental rehearsal*. Effective for learning self-presentation / impression management.

Articles of faith

- All states of awareness are concomitants of complex, transient brain-body-context (BBC) resonant states ('brain' is shorthand for the BBC)
- Only a tiny, rather special, fraction of brain states have conscious concomitants
- Any apparent 'functional effect' of a state of awareness can always be attributed to its concomitant brain state. We can never know if consciousness caused anything.
- The mind is not a skeleton clock: 'reflection' or 'introspection' are particular *products* of the BBC, not *inspections* of it.
- That does not mean that they are not regular accompaniments of BBC states that do affect the course of neural and other events

When 'reflection' misleads

- **Perception**: contextual adaptation / illusions (Milner and Goodale)
- **Memory**: face recognition (Schooler)
- **Thinking (too much)**:
 - Counter-intuitive implicit learning (Broadbent and Berry)
 - Complex pattern extraction (Lewicki)
 - Skill learning: over-analysing (Krashen, language learning)
 - Skilled performance (Masters)
 - Self-talk in insight problem-solving (Schooler)
 - Aesthetic judgement (Wilson)
 - Complex decision-making (Dijksterhuis)
 - Worried rumination (Nolen-Hoeksema)

Negative reflections

- Intellectual rather than embodied
- Explanatory rather than narrative
- Repetitive rather than productive
- Hot rather than warm/cool

Key question

- What are the utilities of the range of different neuro-cognitive states that are accompanied by forms of 'reflective experience'?
- Or: how does it come about that consciousness is *associated* with various kinds of learning, and therefore is capable of being *experienced* as *instrumental* or causal in that learning?

The hall of mirrors: 12 varieties of reflection

- Sensibility: pre-conscious registration
- Awareness: the phenomenal world
- Consciousness: checking consequences / alternatives
- Empathy: seeing through other people's eyes
- Active imagination: self-modelling
- Fantasy: re-writing records
- Self-consciousness: choking with anxiety (self-threats)
- Reverie: low-ego 'thinking'; TATE
- Focusing: patient, physical attention
- Internal coaching: the instructor model
- 'Metacognition': the thinking coach
- Mindfulness: the Benign Generalised Other

Sensibility:

- Pre-conscious registration of stimulation
 - Subliminal stimuli (e.g. semantic or emotional priming)
 - Subliminal pattern extraction (each event may be in awareness, implicit learning not)
 - Subliminal activation flow: data integration through incubation
- Non-intentional passive tuning of neural weights
- Holistic: unfocused, unarticulated, 'un-hinged'
- Automated responsiveness; *egocentric*

'2BU', by Phyllis April King

The other day, absent-mindedly,
I slipped two fingers between
The buttons of my blouse.
The warmth and softness of my breast
Astonished me.
Just for a moment,
I knew what it was like
To be you.

Fantasy and reminiscence

- Inhibition allows functional decoupling of normal Sense-Action-Goal integration/resolution. So
- Top-down reactivation of sensory cortex can create conscious 'worlds' that do not match current sensori-motor engagement with the environment
- Allocentric scenarios can be explored in which 'I' am either an external observer or a participant (revealing possible bear-traps and latent affordances: good guesses for action)
- Human brain retains *records* of experience, as well as *distillates*; so
- Fantasy allows the reactivation of records under different motivational/emotional 'sets', thus revealing wider learning potential (function of 'episodic memory')

Reasoning: hard thinking

- Flexible frontal inhibition allows sharpening and blurring of functional encapsulation
- High levels of inhibition make for serial ‘trains of thought’ in clear articulated concepts – good for well-mapped domains with small numbers of variables
- May entail simultaneous inhibition of muscular systems for articulation, eye movements (furrowed brow) or more broadly
- This concomitant muscle inhibition is experienced as ‘effortful’ and high ego-control (‘I’ am thinking’!)

Reverie, focusing and TATE

- Off-line, patient, attentive, inward, low-ego-control, dreamy consciousness
- Hypnagogic / hypnopompic experience
- Intention or problem weakly but continuously activated (‘the back burner’)
- More numerous, distant foci simultaneously active
- Spontaneous and unpredictable, congealing into novel possibilities
- Experienced as intuitions, hunches, inklings, promptings etc.
- Focusing: slow tracking of *felt sense* emerging into image or phrase; fresh understanding; felt release
- ‘Thinking at the edge’ (TATE): sitting with ‘What do you ‘know’ and cannot yet say that wants to be said?’

Internal coaching

- A generalised model of an instructor may retain knowledge and advice that are not yet embedded in spontaneous performance.
- Toggling between Inner Coach and Flowing Performance, or co-activation (sitting on your own shoulder) enables attention and habit development to be guided by ‘good advice’ (the ‘pea stick’ model)
- That’s what ‘knowledge’ is for!
- This guidance must be patient and judicious, not judgemental, impatient or overwhelming (the ‘mayonnaise’ model)
- A helpful Inner Coach is derived and distilled from observation and imitation of a range of ‘teachers’. Their ‘voices’ and ‘manners’ are obviously crucial

Metacognition: the thinking coach

- Likewise, to have a good 'thinking coach' installed in your head you must have had good models of thinking and learning.
- One cannot just expect someone to be able to 'reflect' in this sense; it is a learned capability
- Interruptions to your own 'thinking' have to be as judicious as to your tackling. Too much thinking about thinking is even worse than too much thinking!
- Metacognitive moments need to be sparing, appropriate and practical. Metacognition is not a 'state' to be dwelt in. Chronic deconstruction is a disability.
