CONFRONTING OUR BRAINHOOD
AND SUBSTANTIVE ALIENATION

Wider Debates about your Nature. Neuromania, in overblown, unsupported claims about the implications of neuroscience, is rampant. Debates over 'human nature' are popping up all over. Writers are even beginning to defend 'Nihilism' (Metzinger (2002), Hood (2013)), that there is no "self", and also less commonly the 'Expansive Brain view' (Panksepp (2011), Gazzaniga (2005)) that claims you are identical to an expansive/thinking brain that can or does have rich psychology. ('Expansive brain' or 'thinking brain' = a brain that can or does instantiate 'rich psychological' properties like remembering breakfast, fearing cancer, etc.) However, such claims are rarely clearly articulated or precise arguments given to support them. But there have been important changes, and substantive developments, in the sciences behind these wider and/or wilder claims.

Philosophical/Metaphysics Debates about your Nature or "What you are". In philosophical debates over what we are have rigorous frameworks and arguments, but neuromania and also neuroscientific/empirical evidence are absent. Animalism and neo-Lockean views dominate. The method of cases largely rules and empirical evidence plays little role.

My Wider Project: Applying frameworks from the metaphysics of science, my goal in a wider project is to use empirical evidence from neurosciences to inform metaphysical debates over what we are, whilst using philosophical frameworks to discipline neuroscientific and wider debates about human nature.

Today... I will defend seven theses (I)-(VII), all on the handout, working through claims about the interpretation of recent neuroscience, to what you are, two methodological conclusions and a claim about how we are built in ways to be alienated from our substance and hence ourselves. (I limit my discussion to the view that we are identical to Homo Sapiens animals, which dominates the sciences and wider discussions (though not philosophy) and the competitor view I endorse – I will happily discuss other views in Q&A)

Part 1 -- FOUNDATIONS OF NEUROSCIENCE
AND PSYCHOLOGY

Some Assumptions: Endorse the causal theory of properties, so properties individuated by the powers they contribute and by productive ‘roles’; individuals instantiate properties that contribute powers to them; individuals fall under one deeper kind that fixes their individuative properties as well as their creation and destruction conditions; ‘causation’ is counterfactual dependence, whilst ‘production’ is a power manifesting to result in an effect.

Episodic memory as an example (Tulving (2002)) – has a productive role fitting (A)-(C): (A) produced by sensory organs, (B) productively interact with many other rich psychological properties of the same individual and (C) produce muscle stimulations and other physiological effects. The existence of episodic memory is supported by (i) psychological tests and data; (ii) evidence from lesions and other physiological damage; and (iii) imaging data. (Plus (iv) some evidence about cellular mechanisms.) Tulving emphasizes that mechanisms of episodic memory are not localized and likely shared with other memory systems.

(I) Cognitive and affective neuroscience, cognitive science and other areas of the sciences now posit rich psychological properties (Rich Psychology Claim)

(II) Rich psychological properties are individuated by a role including being: (A) produced by sensory organs, (B) productively interact with many other rich psychological properties of the same individual and (C) produce muscle stimulations and other physiological effects. (Role Claim)

Thus we can give an argument in the Short Form of the Argument from Scientific Roles (see below) to the conclusion that rich psychological properties are instantiated at the organ level, hence below the level of the organism, and above the level of brain areas and/or neuronal populations. And we can thus conclude that brains, rather than animals or brain areas, instantiate the properties of remembering breakfast, fearing cancer etc. So we get this conclusion:

(III) Rich psychological properties are instantiated by brains at the organ level, hence below the level of the organism, and above the level of
brain areas and/or neuronal populations.
(Expansive Materialism)

These findings support a different view about foundations of neuroscience and psychology, I call it ‘Expansive materialism’, which takes rich psychological properties to be instantiated in the brain. Contra the Eliminative materialism of the Churchlands the sciences posit rich psychology, but contra a Fodorian Separatist materialism rich psychology is had by the brain – the highest neurobiological level of individuals is the rich psychological level.

Part 2 – WHAT YOU ARE: Psychological Ontology, Brainhood and the Expansive Brain View
I contend that all sides in the debates (aside from some Nihilists) endorse this thesis highlighted by Olson (2007):
(Thinker Thesis) You are identical to the individual in your chair that instantiates the rich psychological properties of remembering breakfast, fearing cancer, fearing skin cancer, etc.

A Methodological Innovation: Given the Thinker Thesis, resolving the question of psychological ontology, i.e. what individual instantiates rich psychology, resolves the issue of what we are. Since we now have empirical theories about rich psychology and the individual that instantiate it we can therefore engage this issue using such evidence.

(IV) We need not use the method of cases, or thought experiments, to resolve the issue of what we are, since answering the question of psychological ontology answers the question of what we are and our empirical theories allow us to resolve the issue of psychological ontology. (Modest Meth. Conclusion)

Applying this new methodology using our earlier illustrates how empirical accounts are indeed efficacious in engaging the questions of psychological ontology and hence what you are. For taking brains to instantiate rich psychology we have two arguments available to us:
(i) A Negative Argument against all other views, and for the Brain View, in the Too Many Thinkers Argument (on the hand-out);

(ii) A Positive Argument for the Brain View in the Crude Argument PLUS the Thinkers Thesis (Argument II in the Long Form of the Crude Argument from Scientific Roles on the handout)

So we get what I term the “Expansive Brain View”:

(V) You are identical to a brain that can or does instantiate rich psychological properties of remembering breakfast, fearing cancer, etc.
(The Expansive Brain View)

We can say a lot more about what the Expansive Brain View says about our individuative properties, our persistence, creation and destruction conditions. We can also highlight how the view can go along with a range of pictures of brains – from Narrow, to Embodied, and on to Enactive and Extended accounts.

We can also say a fair amount about why this Brain view highlights how Neural Nihilism about the self, agency, free will etc. is actually mistaken and why neuroscience, properly interpreted, can save much of what we think about our self, agency, action, free will etc. and how it leaves untouched our parenthood, relationships and many religious commitments.

But let us instead press on to a big, possibly the biggest, objection to the brain view, since I contend it is instructive in a number of ways.

ANOTHER COMMON OBJECTION FROM EVOLUTION FOR Q&A: WHY EVOLUTION DOES NOT SHOW YOU ARE AN ANIMAL

Part 3 – THE OBJECTION FROM LIVED EXPERIENCE: Proprioception, Methodology and Substantive Alienation

You experience your hands as owned, yours, YOU – so you conclude you are an animal and endorse Animalism. (You experience your inner monolog as not specifically located, uncomposed and owned, yours, YOU – so you conclude you are an uncomposed, psychological entity and endorse a neo-Lockean psychological or Soul view)
I focus on ownership and proprioception (experience of our bodies) – though we could have looked at ownership and introspection (inner monolog, etc)

The wrong and right lessons from the Rubber Hand Illusion (and other illusory or pathological cases): Contra Nihilists like Metzinger, proprioception is amazingly reliable about the properties of our bodies in normal situations; but experience is a constructed representation and so is its ownership element – so we need to be careful about drawing quick inferences from representational properties to ontological conclusions.

What individual has proprioceptive experience? Run the Crude Argument from Scientific Roles to conclude that the brain has the property of experiencing the body (and the external world etc.). So proprioception also underpins the conclusion that you are a brain.

But we noted above that your lived experience of your body strongly inclines you to conclude that you are an animal, but animals are not identical to brains – so your lived experience of your body is unreliable in the conclusions it leads you to draw about what you are, i.e. what substance you are.

(A similar line of reasoning applies to your introspective experience that strongly inclines you to conclude that you are a psychological entity or immaterial soul when you are a brain – so your lived experience of your psychology is unreliable in the conclusions it leads you to draw about what you are, i.e. what substance you are.)

We therefore reach this methodological conclusion:

(VI) You should not trust your imaginative abilities or intuitive judgments about what you are driven by your lived experience or the neurocognitive machinery that underpin them, nor should you consequently use the method of cases or thought experiments alone to draw conclusions about what you are which are apparently built on such unreliable imaginative abilities or intuitive judgments. (Strong Meth. Conclusion).

Some lessons from Dante Autollo and his nail gun...

The brain has few proprioceptive receptors, so the brain/you cannot and does not represent your own boundaries and location in your own experience. As we have seen, the brain/you actually represents the boundaries of a different individual, the animal, in its experience and represents these boundaries as its own.

We can also say a little more about the odd character of introspective and other experiences. Since the brain/you cannot represent your own location in your own experience, the brain/you cannot represent your specific location the brain/you cannot represent the location of the psychological properties it instantiates. Furthermore, like all the organs, the brain/you cannot represent any of the components of its or their properties in its own experience.

(Notice these points explain the long history of reasoning of philosophers like Descartes from the nature of their experience, and/or imagined experience in thought experiments, to mistaken conclusions about what we are – thus further bolstering thesis (VI))

(VII) Your neurocognitive nature means that you are strongly inclined to mistakenly conclude that you are an animal, or a psychological individual or immaterial soul leads, and your neurocognitive nature also strongly inclines you to reject the claim that you are identical to brain and hence reject the substance that you actually. (Substantive Alienation)

(I have focused on recent findings about our experience of ourselves and how it underpins Substantive Alienation. But note that our recent findings about our judgements about others plausibly also strongly inclines us to make similarly mistaken judgements that our kind is either Homo Sapiens, or a certain kind of psychological entity.)

So, recent work provides an interesting case that you are a brain and also that we are neurocognitively built to be alienated from the substance that we actually are and to resolutely believe that we are other kinds of individual.
The Crude Argument from Scientific Roles (II)
Short version to (13) & (II) Long version to (15))

(1) Rich psychological properties, like remembering breakfast, fearing cancer etc., are individuated, where this is the majority of their individuative features, by (A) being produced, under certain conditions, by stimulations of the sensory organs, such as eyes, (B) producing, and/or, being produced by, under certain conditions, often in combination with other rich psychological properties, other rich psychological properties in the same individual, and (C) producing, under certain conditions, often in combination with other rich psychological properties of the same individual, certain kinds of muscle stimulation or other physiological effects;

(2) We should take an individual that satisfies the majority of the individuative features of certain properties $P_1 - P_n$ to instantiate those properties and we should not take an individual to instantiate $P_1 - P_n$ if it lacks any of their individuative features;

So, from (1) and (2), we conclude:

(3) We should take an individual in your chair that satisfies (A), (B) and (C) to instantiate those rich psychological properties and we should not take any individual in your chair to instantiate rich psychological properties if it fails to satisfy any of (A)-(C).

But it is also true that:

(4) Muscles, as well as sensory organs like eyes, are parts of Homo Sapiens animals;

And:

(5) Individuals bearing scientific part-whole relations do not productively interact;

From (3), (4), and (5) we thus conclude that:

(6) We should not accept that Homo Sapiens animals instantiate rich psychological properties, since Homo Sapiens animals cannot satisfy (A) or (C);

It is also true that:

(7) Brain areas and/or neuronal populations, or components of these individuals, can at most instantiate one or two rich psychological properties since they can only satisfy the individuative productive roles of one or two rich psychological properties;

From (3), (6) and (7) we thus conclude that:

(8) We should not accept that brain areas and/or neuronal populations, or components of these individuals, instantiate rich psychological properties, since these individuals cannot satisfy (B) by instantiating many rich psychological properties;

However, it is also true that:

(9) The Homo Sapiens brain located in your chair satisfies (A) by being productively affected by stimulations of the visual organs, satisfies (B) by having complex constituents whose productive interactions can implement the productive interactions between many rich psychological properties, with their distinctive roles, and that thus has constituents whose properties can realize many rich psychological properties in it, and also satisfies (C) by having properties that produces muscle stimulations and other physiological effects;

(10) At the organ level no other individual aside from the brain satisfies (A)-(C);

And:

(11) The individuals at the organism level, the organ level, and the brain area and/or neuronal population levels, or components of them, exhaust the individuals in your chair that might instantiate the rich psychological properties;

From (3), (6), (8), (9), (10), and (11) we thus conclude that:

(12) We should accept that the brain located in your chair is the individual that satisfies (A)-(C);

From (3) and (12) we therefore conclude that:

(13) We should accept that the brain located in your chair instantiates rich psychological properties, like remembering breakfast, fearing cancer, etc.

But we also accept that it is true that:

(14) You are identical to the individual in your chair that instantiates rich psychological properties like remembering breakfast, fearing cancer, etc. (THINKER THESIS)

From (13) and (14) we conclude:

(15) We should accept that you are identical to the brain located in your chair.