

Impact case study (REF3)

Institution: Kingston University		
Unit of Assessment: 30 – Philosophy		
Title of case study: Destructive Plasticity in Emotional Neural Responses: Shaping Neuro-Psychoanalytical Clinical Practices and Art Curation		
Period when the underpinning research was undertaken: 2011 – 2020		
Details of staff conducting the underpinning research from the submitting unit:		
Name: Catherine Malabou	Role: Professor of Modern European Philosophy	Period employed by submitting HEI: Sept 2011 – Present
Period when the claimed impact occurred: Aug 2013 – 2020		
Is this case study continued from a case study submitted in 2014? N		

1. Summary of the impact

Professor Malabou's research on the importance of Destructive Plasticity in Emotional Neural Responses has ongoing impact on neurological and psychotherapeutic clinical practices and has resulted in public and cultural impact through media and the arts. Malabou's defence of the emotional role regarding the apparent absence of emotion in patients with brain trauma, such as indifference and unconcern, has opened up a new line of interdisciplinary clinical practice and has had impact on cultural institutions through art curation and on public understanding through media engagement. For the first time, the importance of destructive brain plasticity in emotional neural response is being recognised as a tool for understanding the multidirectional nature of affective reactions.

2. Underpinning research

Neural plasticity is central for the functioning of the "emotional brain". However, it has only previously been analysed in its positive aspects related to identity-fashioning, arousal of interest, attention and connectivity. "Destructive plasticity", which explains apparent emotional numbness, has also to be considered in order explain some specific behaviours. Malabou's research argues that the emotional coolness observed in Alzheimer's patients was not due to a disappearance of affects, but to a specific type of emotional response: a suffering manifesting itself as an indifference to suffering. Neurobiology had not previously developed destructive plasticity as a self-sufficient concept, or considered it a counterpart to positive plasticity. Malabou's research filled this gap.

Malabou's work on the philosophical significance of cerebral plasticity developed from 2013 onwards through three books [R1, R2, R3] and one seminal article [R4], among others exploring the philosophical significance of neural mechanisms of unconcern and loss of wonder. In 2015, she gave the Wellek lectures at UC Irvine, "Morphing Intelligence", presenting the conjoined mechanisms of positive and destructive plasticity in the epigenetic construction of cognitive and emotional intelligence. Malabou asked: 'What notion of the self can be constructed without reference to a positive plastic process?' and 'How might we still find grounds for affirming the presence of emotion in the absence of immediate affective reactions?'

In 2017 and 2018, Malabou organized two 2-day workshops at the University of California at Irvine, in association with clinicians from the New Center for Psychoanalysis in Los Angeles: the first on Gregory Bateson's *Ecology of Mind*, (May 2017), in which she addressed the issue of the double-bind, and the second, "The Absurd" (April 2018), on Samuel Beckett's prefiguration of cerebral disease. In 2019, she wrote an article, "From Deconstruction to Plasticity: Morphing Francis Bacon", for the Francis Bacon Estate Group of Research on new curatorial practices [R5], in which she shows how Bacon, through his techniques of body distortion, anticipated the current neurological research on prosopagnosia (face recognition impairment).

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3. References to the research

R1 – *Self And Emotional Life: Philosophy, Psychoanalysis, Neurobiology*, with Adrian Johnston, New York: Columbia University Press, 2013

R2 – *Before Tomorrow, Epigenesis and Rationality*, Cambridge, UK, Malden, US: Polity Books, 2016 REF2ID: 30-09-2081

R3 – *Morphing Intelligence: From IQ Measurement To Artificial Brains*, (Wellek Lectures 2015), New York: Columbia University Press, 2019

R4 – “You Are (Not) Your Synapses”: Toward a Critical Approach To Neuroscience”, in *Plasticity and Pathology: On the Formation of the Neural Subject*, ed. David Bates and Nima Bassiri, Berkeley Forum in the Humanities, New York: Fordham University Press, 2016, 20-34

R5 – “From Deconstruction to Plasticity: Morphing Francis Bacon”, in Ben Ware, ed., *Francis Bacon: Painting, Philosophy, Psychoanalysis*, London: Thames and Hudson, 2019, pp. 70–93

4. Details of the impact

Malabou’s work on destructive plasticity has had ongoing impact on clinicians in the field of neuro-psychoanalysis, on cultural institutions, and on wider public awareness of the issues of brain trauma.

Impact on clinical practice

Since 2013, Malabou’s research challenging the self-understanding of neuropsychiatric knowledge has resulted in the application of new psychotherapeutic practices in the United States of America. Through her new understanding of factors that influence changes in identity in traumatized neuro-degenerated brain patients, her research has resulted in working collaborations with several neuropsychiatric and neuro-psychoanalytic societies. Malabou’s use of the idea of “negative transference” (where the therapists lends their psyche to the patient instead of the reverse) has also influenced professional actors in the field of psychotherapeutic neurology, leading to a deeper understanding of altered personalities.

The New Center for Psychoanalysis and Mental Health in Los Angeles, which employs 260 people and provides services to more than 1000 patients annually, has used Malabou’s research findings on destructive plasticity, with the result that clinicians have changed their approach to the treatment of patients, such that they now combine the psychoanalytic and neurological approaches **[S1]**. This has resulted in the development of ‘plasticity therapy’ as a new dimension of the ‘talking cure’. They state:

*‘Malabou’s work has motivated us to explore the possibility of using the psychoanalytic talking cure in combination with other therapeutic methods... Malabou’s work continues to have a major impact on our clinical thinking and I am confident that her particular take on brain plasticity will have decisive and growing clinical relevance.’ **[S1]***

Impact on cultural institutions

Malabou’s research has also helped to inform cultural institutions, contributing to their public activities and influencing professionals in the sector to change their practice. For example, the inclusion of her research in a 2016 international art exhibition, co-curated with Vincent Bonin, drew significant numbers and contributed to raising public awareness of the issues around brain trauma and brain plasticity. The exhibition at the Musée d’Art Moderne des Laurentides (Quebec), entitled “Response”, presented different visual aspects of trauma, disaffection, memory loss, and brain disease. It is now inspiring new ways of exhibiting and presenting Francis Bacon’s work at the Francis Bacon Estate.

In 2016, 35,424 people visited the exhibition in Saint Jérôme. The visitor analysis included in the Exhibition Report, identifies that ‘74% of visitors to “Response” were from outside the Laurentides region, including 8% of international visitors (equating to 7,634 international

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visitors)'. The main beneficiaries, outside curators, were non-specialist visitors coming from outside. The Director and Chief Curator of the museum found that Malabou's research led to changes in his professional practice:

Malabou's work, and the exhibition in particular, also gave me the opportunity to change my own curating practice. As I myself declared: "we should stop hiding the tragic while curating, the tragic has to be shown and displayed." Destructive plasticity is definitely a life-changing concept at all levels: artistic, personal, collective, and social. [S2]

Impact on public understanding

Malabou's research has informed public understanding through substantial public and media engagement, including appearances at the Public Forum on Artificial Intelligence, Paris, Radio France, 24 January 2018 [S3] and the annual philosophy festival 'Forum Le Monde Le Mans' on 11 November 2018, where she attracted 550 attendees, and 1687 followers on YouTube [S4]. The forum was organised and moderated, in part, by the Editor-in-Chief of Le Monde Des Livres.

She was invited by the newspaper, *Le Monde*, to write a popular monthly philosophical column for the paper, which ran between August 2018 and September 2019. These monthly columns were arranged around three main topics: destructive neural pathologies or symptoms caused by torture, illiteracy, excessive noise, environmental and ecological crisis; relationships between the brain, cybernetic development and AI; radical politics and social behaviours. The impact was summarised by the Editor-in-Chief as follows:

By sharing analyses of how the brain can be affected by different traumas and face increased vulnerabilities over time, by critically rethinking the relationships between the brain, the mind and the psyche, Catharine Malabou has reached a vast number of readers. Le Monde has an average circulation of 323,039 copies per issue, about 40,000 are sold abroad. Evidence to Malabou's articles impact were the number of reactions on Le Monde Blog (450 for each article), Twitter and Facebook.

Her implication is a testimony of how vital the collaboration between an important newspaper like Le Monde and intellectuals engaged in practical problems can be. At Le Monde, we believe that intellectuals are agents of change who are making effective contributions to improving society in meaningful ways.

Malabou's articles covered a lot of information, delivered in concise chunks that were easy to absorb. The structure was clear, logical and effective. She has obviously put a lot of thought and expertise into writing them. But the main benefits came from receiving individual feedback and interacting with the public and other contributors. [S5]

Malabou has been the focus of the Swiss TV Agalma science programme in Geneva (08 January 2013) (6,240 viewers) [S6] and of the Arte programme "A la Recherche de Soi (1/3)" (*Die Suche Nach der Selbst, The Quest for the Self*) (70,000 viewers) (17 July 2016) [S7]. She has also been the focus of France Culture "Les Matins de la Philosophie", "Profession Philosophe: Catherine Malabou Philosophe de la Plasticité" (Catherine Malabou Philosopher of Plasticity) which has 210,000 daily listeners for its live shows (14 December 2018) [S8].

The significance of Malabou's contribution to the broader understanding of plasticity and its consequences was set out by Dale de DeBakcsy in *Philosophy Now*:

Here is a biological discovery with fantastic social consequences: consequences that a philosopher trained in applying ideas to civilization – that is, in ethics – is perfectly suited to investigate. This is not a case of a simple retrospective 'Turns out you were vaguely right' slap on the back from science, but of a discovery opening up a new interpretation of the individual's engagement with society – which can itself become the springboard for a whole new philosophically-brokered approach to public health, social cohesion, and many other ethical issues. Philosophy and science have engaged, and both emerge the better for it. [S9]

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5. Sources to corroborate the impact

S1 – Testimonial by the Distinguished Professor, New Center for Psychoanalysis, Los Angeles

S2 – Testimonial by the Director of Musée d'Art Contemporain des Laurentides, Saint-Jérôme, Montreal, Quebec

S3 – Article in *Libération*: "[Oui, nous devons aller jusqu'au bout de ce que promet l'IA](#)", 25 January 2018

S4 – "[Tous Philosophes?](#)" Forum Le Monde/Le Mans, 11 November 2018, with Catherine Malabou, Raphaël Enthoven, Alexandre Lacroix, Leon Wisznia. Youtube podcast

S5 – Testimonial by the Editor-in-Chief, Le Monde des Livres

S6 – "[Psychoanalysis and Neuroscience](#)", TV Discussion with Professors Ansermet and Magistretti, TV Agalma, Genève, Switzerland. YouTube podcast

S7 – [1A la Recherche de Soi](#) ARTE 1-3 (*Die Suche Nach der Selbst, The Quest for the Self*), 7 July 2016, produced by [Theo Roos](#)

S8 – "Les Chemins de la Philosophie", "Profession Philosophe: "[Catherine Malabou Philosophe de la Plasticité](#)" [Catherine Malabou Philosopher of Plasticity]

S9 – "[Catherine Malabou & The Continental Philosophy of Brains](#)", *Philosophy Now*, Special Issue: Philosophy and Science, June – July 2016.