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## Lost in translation

I am not a linguist, and this editorial is not about language. In research, translation is the act of moving from the bench to the clinic. For me, it meant moving from rodents to humans, trying to make sense of *experience*.

During my DPhil, observing a dissociated brain state in rodents made me and several of my peers ponder what the animals I had in my care felt. Their brain was showing patterns of activity commonly attributed to sleep, while their body was perfectly awake. They most definitely processed their world differently. After all, in humans, the same drug induces profound alteration of the wake experience. Did we uncover yet another piece of evidence that mice might *experience* something? That animals are not just empty shells? How does one show that?

For that matter, human research seems easier. The everyday experience is likely similar among us. We can ask each other what happened in our heads while ingesting some LSD, or after we

woke up.

Sure, we can talk, but how accurate are our reports? Even amongst ourselves, the sense of ineffability lingers. How can one describe the *feeling* of having the fabric of space and time in your own hands? It is as hard as describing the feeling of the colour red. I can wake you up during a dream, but even then the dream starts to fade and you will make up some details, trying to make sense of the wild adventure you just had.

I often think about a sort of reverse-translation: knowledge acquired by studying human subjects applied to the rest of the animal kingdom. In their sleep, dogs growl because they are dreaming of cats; spiders twitch because they are dreaming of intertwining webs; octopuses rapidly change colours because they are dreaming of faraway shores.

But those are just poetic thoughts, ideas from an academic, carefully watching his test subjects dream through the night.



# **The Passive Imagination & Non-Causality in Mary Shelley's *The Last Man* & Samuel Taylor Coleridge's 'The Rime of the Ancient Mariner'**

*Henry Bishop*

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When considering the influence that Samuel Taylor Coleridge's (STC) 'The Rime of the Ancient Mariner' (1798, 'Rime') had on Mary Shelley (MWS), critics tend to enumerate the allusions to STC's 'Rime' in MWS's *Frankenstein* (1816). Comparably scant attention has been given to the far more generative literary relationship between 'Rime' and MWS's third novel, *The Last Man* (1826). The insufficient recognition this connection has received can be partly attributed to a critical heritage which tends to ascribe both texts with a false moral causality whilst simultaneously employing an unhelpfully reductive definition of the 'Romantic Imagination' as an active principle. The influence 'Rime' would have on MWS's own artistic vision was determined when an eight-year-old MWS was present for a reading of 'Rime' by the poet himself. This influence was intensified a year after Percy Bysshe Shelley's death when MWS ran into STC in 1824. Reinvigorated, MWS resolves to 'go into the country & philosophize- some gleams of past entrancement may visit me there'. A month later, MWS begins work on *The Last Man*. By analysing each text's representation of non-causality and the passive imagination, this paper will re-assert the radical significance of STC's 'Rime' to MWS's *The Last Man* and her creative vision as a whole.

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The influence Samuel Taylor Coleridge's 'The Rime of the Ancient Mariner' (1798) would have on Mary Wollstonecraft Shelley was determined from the moment an eight-year-old Shelley

was captivated by a reading of ‘The Rime’ by the author himself.<sup>1</sup> When considering the influence ‘The Rime’ had on Shelley, though, critics tend to focus on the allusions to the poem in Shelley’s *Frankenstein* (1816).<sup>2</sup> Comparably meagre attention has been given to the striking relationship between ‘The Rime’ and Shelley’s third novel, *The Last Man* (1826).

One can attribute this lack of attention to a critical tendency towards prescribing a false causality to each text and employing a reductive definition of the Romantic Imagination. Whilst Robert Lance Snyder identifies both works’ portrayal of ‘a cosmos where no holistic design seems to prevail’, he does not explore how this non-causality affects our understanding of the Romantic Imagination.<sup>3</sup> James Engell argues that Romanticism

conceptualised the imagination as an active, unifying power that could ‘overcome the alienation between man and nature by establishing a power of knowledge and creation common to nature and the mind’.<sup>4</sup> However, rather than portraying the imagination as an active, unifying power, it will be argued here that ‘The Rime’ and *The Last Man* present the imaginative potential of passivity in the face of the machinations of a non-causal cosmology that an individual is unable to affect or comprehend. This paper will therefore begin by reading Coleridge’s ‘The Rime’ in the light of a critical tradition engaged in evaluating the Mariner’s ability to perform self-assertion through comprehending the events that befall him. This discussion will anchor the reading of *The Last Man* as indebted to Coleridge’s depiction of imaginative passivity

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1 Fiona Sampson, *In Search of Mary Shelley* (New York: Pegasus Books, 2018) p.51.

2 For example: Joshua Essaka, “‘Blind Vacancy’: Sighted Culture and Voyeuristic Historiography in Mary Shelley’s *Frankenstein*”, *European Romantic Review*, 22:1 (2011) 49-69.

3 Robert Lance Snyder, ‘Apocalypse and Indeterminacy in Mary Shelley’s ‘The Last Man’, *Studies in Romanticism*, 17.4, (1978) 435–52 (p.447).

4 James Engell, *The Creative Imagination: Enlightenment to Romanticism* (Cambridge: Harvard University Press, 1981) p.7.

in 'The Rime'.

## I

The interpretive problem posed by 'The Rime' was summarised over a hundred years ago by Leslie Stephen: 'the germ of all Coleridge's utterances may be found [...] in "The Ancient Mariner"'.<sup>5</sup> The competing Coleridgean impulses in 'The Rime' are made manifest by the poem's textual instability, culminating in the addition of a gloss in 1817 which Camille Paglia identifies as 'the Christian Coleridge trying to soften the daemonic Coleridge'.<sup>6</sup> In part because of the text's multifariousness, 'The Rime' has been the subject of sustained scholarly debate over which Coleridgean impulse, from the Spinozian to the Christian, can be upheld above the others as the

key to the reader's understanding of the poem.<sup>7</sup>

For example, critical interpretations following Robert Penn Warren's influential twentieth-century reading consider 'The Rime' to be depicting a Christian cosmology of cause and effect. In Warren's reading, the Mariner is punished by the universe when he shoots the Albatross, then receives penance for his transgression after blessing the sea snakes, fulfilling the Coleridgean 'theme of the "one life" and the sacramental vision'.<sup>8</sup> Warren's reading argues that the Mariner can alter cosmic workings and bring forth his own salvation. However, readings like Warren's fails to account for 'The Rime's' non-causality. Close inspection ultimately proffers no systematic reasoning behind the mariners' journey, nor is it made clear that the

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5 Leslie Stephen, *Hours in a Library*, vol. 3 (rev. edn: London, 1909) p.355.

6 Camille Paglia, *Sexual Personae: Art and Decadence from Nefertiti to Emily Dickinson* (New Haven: Yale University Press, 1990) p.324. See also: Jack Stillinger, *Coleridge and Textual Instability: The Multiple Versions of the Major Poems* (New York: Oxford University Press, 1994).

7 For the Christian/ Spinozian debate see: Thomas McFarland, *Coleridge and the Pantheist Tradition* (Oxford: Clarendon Press, 1969).

8 Robert Penn Warren, 'A Poem of Pure Imagination', *The Kenyon Review*, 8.2 (1946) 391-427 (p.413).

Mariners' shooting of the albatross brings about his persecution. The other mariners first aver that the Ancient Mariner has 'kill'd the Bird/ That made the Breeze to blow', then judge it 'right, [...] such birds to slay/ That bring the fog and mist'.<sup>9</sup> In sum, as Anca Vlasopolos has noted, the crew change their minds three times over the meaning of the albatross's shooting.<sup>10</sup> The mariners' arbitrary speculations are then abandoned. This inconclusiveness mirrors the reader's own inability to make sense of 'The Rime'. Rather than centred around human action, the text's cosmology ultimately appears arbitrary. For example, prior to the shooting of the albatross the ship's travel already escapes the crew's

direction:

*A Wind and Tempest strong!  
For days and weeks it play'd us  
freaks—*

*Like Chaff we drove along.* (6)

The crew are 'chaff', non-sentient fauna submissive to chthonic nature. Therefore, critics such as Edward Bostetter and Paul Magnuson have recognised the dice game, where the feminine spectre Life-in-Death wins the Ancient Mariner while the others are consigned to Death (10-11), as the poem's climax.<sup>11</sup> Sarah Webster Goodwin convincingly identifies 'the fact that it is a game of chance' as 'crucial to any reading of the poem's larger meaning'.<sup>12</sup> Indeed, even the albatross falling from the Mariner's neck defies causality as

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9 Samuel Taylor Coleridge, 'The Rime of the Ancient Mariner', *Lyrical Ballads, With a Few Other Poems, 1798*, in *Wordsworth and Coleridge: Lyrical Ballads 1798 and 1802*, ed. by Fiona Stafford (London: Oxford University Press, 2013) p.8. Further references to this edition will appear in the main body of this essay.

10 Anca Vlasopolos, "'The Rime of the Ancient Mariner" as Romantic Quest', *The Wordsworth Circle*, 10.4 (1979) 365–69.

11 Edward E. Bostetter, 'The Nightmare World of "The Ancient Mariner"', *Studies in Romanticism*, 1.4 (1962) 241–54. Paul Magnuson, 'Chapter IV: The Mariner's Nightmare', in *Coleridge's Nightmare Poetry* (Charlottesville: Virginia University Press, 1974) 50-85.

12 Sarah Webster Goodwin, 'Domesticity and Uncanny Kitsch in "The Rime of the Ancient Mariner" and *Frankenstein*', *Tulsa Studies in Women's Literature*, 10.1 (1991) 93-108 (p.95).

the Mariner remains a subject of the “Life-in-Death” curse. Rather than being an active force, the Mariner is from the outset at the behest of incomprehensible spectral forces.

Therefore, furthering William Wordsworth’s description of the Mariner as a characterless figure who ‘does not act, but is continually acted upon’, critics such as George Watson argue that the Mariner is ‘no enquiring spirit’.<sup>13</sup> However, Watson’s reading dismisses the imaginative nature of the Mariner’s change in consciousness which is made apparent if we follow Patricia Adair’s assertion that his encounter with Life-in-Death constitutes the ‘imaginative centre of the poem’.<sup>14</sup> Directly after the dice game the Mariner acknowledges:

*The many men so beautiful,  
And they all dead did lie!  
And a million millions limy things  
Liv’d on—and so did I.* (12)

The Mariner, in his passivity to the Life-in-Death curse, accepts his

oneness with chthonian nature prior to his blessing the sea snakes. The Mariner, too, is suddenly imbued with a vigorousness previously lacking:

*I mov’d and could  
not feel my limbs,  
I was so light, almost  
I thought that I had died in sleep,  
And was a blessed Ghost.* (14)

Subjected to arbitrary cosmic forces, the Mariner’s self-consciousness is re-animated, affirmed by Anne Williams’s identification that Part IV repeats the pronoun ‘I’ fifteen times.<sup>15</sup> Crucially, this reanimation possesses a distinct imaginative dimension, indicated by the Mariner’s last act being one of poetic creation: the telling of his rime to the wedding-guest. However, this recital is itself peculiar for its passivity:

*I pass, like night, from land to land,  
I have a strange power of speech;*

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13 William Wordsworth, *Lyrical Ballads, and Other Poems, 1797-1800* ed. by James Butler and Karen Green (Ithaca, NY, and London: Cornell University Press, 1992) p.791. George Watson, *Coleridge the Poet* (London: Routledge and Kegan Paul, 1996) p.96.

14 Patricia Adair, *The Waking Dream: A Study of Coleridge’s Poetry* (London: Edward Arnold, 1967) p.64.

15 Anne Williams, ‘An I for an Eye: ‘Spectral Persecution’ in The Rime of the Ancient Mariner’, *PMLA*, 108.5 (1993) 1114–27 (p.1121).

*The moment that his face I see  
I know the man that must hear  
me;*

*To him my tale I teach.* (24)

The Mariner wanders until randomly compelled to tell his 'rime', void of discernible causality, to his listener, who in turn is rendered submissive to the Mariner's 'glittering eye' (5). The wedding-guest's subjection to the Mariner's rime also has its own imaginative consequences, as a 'sadder and wiser man' the wedding-guest 'rose the morrow morn' (25).

Paglia notes that Coleridge saw in Wordsworth's active imagination 'a kind of masculine resoluteness'.<sup>16</sup> Wordsworth considered the imagination to be a power in which 'the burthen of the mystery,/ In which the heavy and weary weight/ Of all this unintelligible world/ Is lighten'd'.<sup>17</sup> Coleridge's reverence of the Wordsworthian imagination is apparent in Coleridge's famous description of the Primary Imagination as the finite mind's unification and repetition 'of the

eternal act of creation in the infinite I AM'.<sup>18</sup> However, reflective of the different versions of Coleridge amassing in 'The Rime', the poem subversively depicts the imaginative power of having one's consciousness passively altered by a disordered cosmology's incomprehensible machinations. As will now be argued, Shelley's *The Last Man* is indebted to 'The Rime's' depiction of the imaginative power of passivity.

## II

While this paper builds on the importance of Shelley's childhood exposure to 'The Rime', the analysis of *The Last Man* should begin by highlighting the significance of a later encounter between Shelley and Coleridge which has not been traced previously. After meeting Coleridge in January 1824, a year after her husband Percy Bysshe Shelley's death at sea, Shelley describes in her journal how Coleridge's 'metaphysical talk

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16 Paglia, p.323.

17 William Wordsworth, *Lyrical Ballads, With a Few Other Poems, 1798*, in *Wordsworth and Coleridge: Lyrical Ballads 1798 and 1802*, ed. by Fiona Stafford (London: Oxford University Press, 2013) p.88

18 Samuel Taylor Coleridge, *Biographia Literaria*, ed. by Adam Roberts (Edinburgh: Edinburgh University Press, 2014) p.205.

[...] reminded me of Shelley's [...] wild picturesque mode of living that suited my active spirit & satisfied its craving for novelty of impression'.<sup>19</sup> Relating this encounter with Coleridge prompts her creative urges: 'I will go into the country & philosophize- some gleams of past entrancement may visit me there'.<sup>20</sup> Less than a month after their encounter, Shelley begins writing *The Last Man*.<sup>21</sup> Therefore, it seems reasonable to infer here that Shelley's composition of *The Last Man* becomes bound to Coleridgean utterances that suited her imagination's craving to be impressed upon and entranced. Notably, this occurs in the wake of the death of her husband at the behest of the chthonic sea. The context of *The Last Man*'s composition, then, immediately orients us around Shelley's encounter with Coleridge and the exploration of the imaginative

potential of passivity in the face of non-causal cosmic machinations.

Despite the references to Coleridgean works throughout *The Last Man*, the significance of 'The Rime's' influence on the novel remains unexplored. Arguably, this is for the same reason that Goodwin prescribes to the lack of reception allusions 'The Rime' had received in *Frankenstein* by 1991: 'because they have been understood in the most accessible terms as part of Mary Shelley's indictment of the male Romantic poet'.<sup>22</sup> For example, Anna K. Mellor reads *The Last Man* as 'a devastating critique of the Romantic ideology', arguing the solipsistic hubris of Adrian, Lord Raymond and Lionel Verney - recognisable as fictional representations of Percy Bysshe Shelley, Lord Byron and the author herself - is responsible for the Plague.<sup>23</sup> While I argue these readings impose a false

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19 Mary Shelley, *The Journals of Mary Shelley. 1814-1844*, ed by. Paula R. Feldman and Diana Scott-Kilvert (Baltimore: Johns Hopkins University Press, 1987) p.474.

20 Ibid.

21 Morton D. Paley, 'Introduction', in *The Last Man* ed. by Morton D. Paley (New York: Oxford University Press, 2008) p.viii.

22 Goodwin, p.99.

23 Anne K. Mellor, *Mary Shelley: Her Life, Her Fiction, Her Monsters* (New York, London: Routledge, 1988) p.136.



causality on the text, prior to the Plague's encroachment there is undoubtedly a veneration of the imagination as a solipsistic principle capable of unifying and controlling reality. While this sentiment is shared by Verney and Adrian, it is Raymond who most resolutely makes declarations of cosmic self-assertion reminiscent of those found in Byron's *Manfred* (1817): 'high aspirations cause the flow of my blood; my eyes seem to penetrate the cloudy midnight of time, and to discern within the depths of its darkness, the fruition of all my soul desires'.<sup>24</sup> On multiple occasions characters such as Evadne, Raymond's jilted lover, blame this Romantic sensibility for the Plague's encroachment (57). As a result, critics have oftentimes ascribed a false causality to the Plague as a punishment for the hubris of the Romantic's solipsistic overexertion.

Rather than causing the Plague, however, the imagination fails to

comprehend its non-causality. In the novel's Introduction, Shelley as 'decipherer' (3) of the prophetic Sibylline pages (a reference to Coleridge's *Sibylline Leaves* (1817)) constructs the plague's encroachment as an arbitrary machination of an unalterable cosmological law. As Verney identifies, throughout the novel 'the grand question' remains 'unsettled of how this epidemic was generated and increased' (231). The Plague's representation aligns Shelley explicitly with the 'anti-contagionist' side of the nineteenth-century debate over the way plague is transmitted.<sup>25</sup> In doing so, Anne McWhir argues, Shelley 'transforms a relatively straightforward discourse of cause and effect into one of mystery, uncertainty, and insidious influence'.<sup>26</sup> The plague leads Lionel to consider whether he is 'of no more account to his Maker, than a field of corn blighted in the ear?' (290). This realisation, mirroring

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24 Mary Shelley, *The Last Man*, ed. by Morton D. Paley (New York: Oxford University Press, 2008) p.37. All further references to this edition will appear in the main body of this essay.

25 Anne McWhir, 'Mary Shelley's Anti-Contagionism: 'The Last Man as' 'Fatal Narrative.'" *Mosaic: An Interdisciplinary Critical Journal*, 35.2 (2002) 23–38 (p.23).

26 McWhir, p.24.



the Mariner in his identification that he is driven “like Chaff”, reflects the way the Plague destabilizes Lionel’s faith in imagination as a unifying and revelatory power.

Morton D. Paley’s identification of ‘the failure of the imagination’ in the novel goes too far however, by not accounting for the fact that Verney undergoes an imaginative change of consciousness reminiscent of Coleridge’s Mariner.<sup>27</sup> Lionel’s feminization of the plague as ‘Necessity’ (398) incarnate immediately likens the plague to ‘The Rime’s’ Life-in-Death spectre. This is furthered by the plague’s effects on Lionel, who is forced to watch as all of humanity die, leading him to acknowledge ‘the first symptom of the disease was the death-warrant’ (342). However, without discernible cause, Lionel not only survives the Plague but becomes reanimated:

*My body, late the heavy weight  
that bound me to the tomb,  
was exuberant with health;  
mere common exercises were  
insufficient for my reviving  
strength; methought I could  
emulate the speed of the race-  
horse, discern through the air*

*objects at a blinding distance,  
hear the operations of nature  
in her mute abodes; my senses  
had become so refined and  
susceptible after my recovery  
from mortal disease. (345)*

Lionel’s reanimation follows his disengagement from the natural procession of life and death. He describes how, following his survival, he has passively ‘instituted’ himself as ‘the subject of fate, and the servant of necessity’ (464). Like the Mariner, who becomes passive in the face of incomprehensible forces as his capacity for imaginative creation inflames, Lionel’s senses have heightened, and his consciousness has been inexplicably altered.

The imaginative dimension to Lionel’s transformation is realised during his eschatological seaborne passage from Venice to Greece. This passage directly parallels ‘The Rime’s’ fourth part. In this section, Verney, Adrian and Verney’s daughter, the last surviving humans on earth, are subject to a tempest. Lionel acknowledges ‘we alone— we three— alone—alone—sole dwellers on the sea and on the earth, we three must perish’ as ‘the

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27 Morton D. Paley, ‘Mary Shelley’s *The Last Man*: Apocalypse without Millennium’, *The Keats-Shelley Review*, 4:1 (1989) 1-25 (p.13).

breakers here, there, everywhere, encompassed us' (443), two obvious examples of this passage's direct indebtedness to 'The Rime'. As the only survivor of the voyage, Verney is left to wander the earth alone 'thinking only of the beloved beings who slept in the oozy caves of the ocean' (451), mirroring the Mariner and his blessing of a 'million slimy things' (12). Following Verney's ill-fated passage, the pronoun 'I' is repeated obsessively throughout the remainder of Lionel's narrative (459), directly paralleling William's identification of the Mariner's 'I-solation' stage following his encounter with Life-in-Death.<sup>28</sup> Once isolated, Lionel recounts his narrative as he searches the globe for another soul to share his story with (458). Lionel then decides to write his narrative but his 'brain refuses to lend expression, or phrase, or idea by which to image forth the veil of unutterable woe that clothed these bare realities' (465). Like the Mariner, Lionel recites his incomprehensible tale which he cannot make sense of and in which he is a passive subject: his

passivity in the face of noncausality has become a source of imaginative creation.

In *The Last Man's* Introduction, Shelley writes that her composition of this novel has transported her to a world of 'imagination and power' (7), questioning

*Will my readers ask how I could find solace from the narration of misery and woeful change? This is one of the mysteries of our nature, which holds full sway over me, and from whose influence I cannot escape.* (7)

Shelley, like Coleridge, recognizes the imaginative value of passivity to the non-causal arbitrariness of "woeful change". This is not the only shared discourse between Coleridge and Shelley on the imaginative potential of the passive imagination: as Miranda Seymour identifies 'a startling likeness between the way the story of *Frankenstein* was supposed to have come to her, in a waking dream, and the supposed origin of Coleridge's 'Kubla Khan'.<sup>29</sup> Like Verney and Coleridge's Mariner, Shelley's passivity becomes a source of imaginative vitality. Indeed, in

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28 Williams, p.121.

29 Miranda Seymour, *Mary Shelley* (New York: Grove Press, 2000) p.157-158.

a letter to Jane Williams, whom Shelley was with as she absorbed ‘The Rime’ as a child, Shelley writes that ‘I write & read—& am again transformed into the silent Mary [...] I make up for my silence in speech by my garrulity on paper’.<sup>30</sup> As Anna DeLong argues, Shelley’s ‘self-identification as “silent Mary” is essential to her conception of herself as an author’.<sup>31</sup> This complicates An Young-Ok’s reading of the last moments of *The Last Man* when she argues Verney has been transformed into a ‘recorder of history’ stripped ‘of all representational identity’.<sup>32</sup> Rather, Verney’s tale, pregnant with imaginative power, is told after his subjection to a disordered cosmos which has in turn imbued him with an ability to compose in the face of incomprehensibility.

Indicative of the influence Coleridge had on Shelley’s poetic vision, both Coleridge’s ‘The Rime of the Ancient Mariner’ and

Shelley’s *The Last Man* present the imaginative potential of passivity in the face of a non-causal and incomprehensible natural world. Subsequently, by uncovering a heretofore unexplored intertextual connection, this paper has aimed to demonstrate how both texts subvert understandings of the Romantic Imagination as a solely active principle seeking solipsistic unification with the exterior world. As we approach *The Last Man*’s bicentenary, it is hoped that this essay will shed light on the importance of Shelley’s lesser-known novel to our conception of the ecological nature of literary composition and our understanding of the various forms Romantic Imagination can take.

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30 Mary Shelley, *The Journals of Mary Shelley. 1814-1844*, ed by. Paula R. Feldman and Diana Scott-Kilvert (Baltimore: Johns Hopkins University Press, 1987) p.439.

31 Anne DeLong, *Mesmerism, Medusa and the Muse: The Romantic Discourse of Spontaneous Creativity* (Lanham, Maryland: Lexington Books, 2012) p.71.

32 An Young-Ok, ““Read Your Fall”: The Signs of Plague in *The Last Man*”, *Studies in Romanticism*, 44.4 (2005) 581–604 (p.595).

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# The Educational Incubator: Maternal Education and Infant Mortality in Pakistan

*Helen Murphy*

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Access to education has a proven significant impact for social and economic development across the world. However, when it comes to the reduction of infant and child mortality, it is specifically levels of female education that make the difference. As child survival is a critical marker of a developed nation, recognised by the sustainable development goals, this study attempts to analyse the impact of maternal education on infant mortality in Pakistan. The data used is obtained from the 2017 to 2018 Pakistan Demographic and Health Survey (PDHS) of the United States Agency for International Development (USAID). This is Pakistan's most comprehensive household survey, producing a nationally representative sample from over 24,000 individuals. Besides maternal education, other socio-economic and demographic variables have been considered in a logistic regression model to estimate the determinants of infant mortality. The results of this show that increased levels of education for women significantly reduces the likelihood of infant mortality.

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Child survival is a critical marker of a developed nation. Most child deaths come from only two regions: sub-Saharan Africa and south Asia. Thus, one of the main obstacles in the reduction of global infant and child mortality is overcoming the vastly different chances of survival across countries

and regions (Sharro et al., 2022).

This was recognised by the millennium development goals, which called for a reduction of the under-five mortality rate (U5MR) by two thirds from the introduction of this goal in 1990 to 2015. Although around sixty countries managed to meet this target, cutting

under-five mortalities in half, globally the goal was missed. (You et al., 2015) The need for progress in this area was considered by the Sustainable Development Goals, posing targets of twenty-five deaths per 1000 live births for the U5MR and 12 per 1000 for neonatal mortality (NMR). With current trajectories, over 50 countries will not meet the U5MR by 2030; over 60 for the NMR (Sharrow et al., 2022). In 2017, Pakistan's infant mortality rate was sixty-two deaths per 1000 live births, the highest in South Asia. (NIPS and ICF, 2019) To meet the proposed sustainable development goals, Pakistan would need an annual reduction in the neonatal mortality rate of almost 12%, where it is currently at 2% (Dayal et al., 2021). Pakistan is not projected to reach this goal.

Previous policy amendments to reduce infant and child mortality rates have included the decentralisation of government to allow for regional control of healthcare and policy decisions and secondly, a roll out of contraceptives and a focus on family planning information (Bhutta and Hafeez, 2015). These focus on the reduction of fertility rates decreasing the incidence of infant mortality. Fertility in

Pakistan remains at a rate far above replacement level, despite previous projections that the country would reach this level by 2020. (Naz et al, 2023) Issues in Pakistan surrounding an inadequate vital registration system has also led to a significant under-estimation of fertility rates, especially amongst younger women aged 15-25, meaning Pakistan is likely further behind this goal than measured. (Naz et al, 2023) Persistent high fertility rates place Pakistan in an earlier stage of demographic transition than is sustainable for the level of resources and underdeveloped infrastructure possessed by the country. With an already low mortality rate, the transition to a lower fertility rate should stabilise population growth and pave a path towards economic development. This lower fertility rate could be achieved through the reduction in infant mortality as it increases the proportion of children surviving to adulthood, eliminating the 'replacement' or 'insurance' effect. However, these policies alone have not been as effective as needed as seen through both the persistent infant mortality rates and fertility rates.

As the most common primary caretakers in a household, reforms



focused on women have been the most effective for improving child health (Duflo et al., 2011). Increased education for women has been seen to improve their power in the household and thus the family's overall health and wellbeing. As such, the main purpose of this study is to increase the level of knowledge pertaining to infant mortality and quantify the importance of an additional year of education for mothers. This task produces two main questions: Does increased maternal education decrease the risk of infant mortality? If so, by how much?

### ***Literature Review***

Grépin and Bharadwaj (1995) used Zimbabwe's 1980 independence and subsequent expansion in educational access for Black Zimbabweans to estimate the impact of increased maternal education on child health. By exploiting age specific exposure to the new educational reforms, they found that children born to mothers who were likely to have benefitted from the policy change were 21% less likely to die within their first year of life than those born to older women. (Grépin and

Bharadwaj, 1995) This effect was stronger still for those in rural areas and among those who were less wealthy. Additionally, pathways from which increased education could be associated with changes in child mortality were explored. Finding that increased education did increase the age at first cohabitation and age at first birth but did not have a significant effect on female empowerment or health seeking behaviour, they suggest that the quality of education is to blame. The expansion in secondary education mechanically delayed age at cohabitation and fertility, instead of improving women's ability to make their own choices, which is necessary for continued improvement in child health.

This would explain results which found that the jump from primary to secondary education in Ethiopia was more significant in reducing infant mortality than from illiterate to literate, (Kiross et al, 2019). However, the data shows that an increase in education at any level decreased infant mortality by influencing the attitudes of mothers towards traditional infant caring practices, and reproductive behaviour. These included the use of modern healthcare facilities, improved hygiene, and the use of



$$\text{IMR} = \begin{cases} 1 & \text{if the infant dies} \\ 0 & \text{if the infant survives} \end{cases} \quad (1)$$

$$\text{IMR}_i = \alpha + \beta_1 \text{MED}_i + \beta_2 \text{MAB}_i + \beta_3 \text{MAB}^2_i + \beta_4 \text{WI}_i + \beta_5 \text{FED}_i + \beta_6 \text{PBI}_i + \beta_7 \text{BORD}_i + \beta_8 \Sigma D_{ij} + \epsilon_i$$

Where:

IMR<sub>i</sub> = Dummy for infant mortality (1 = Infant Dies, 0 = Infant survives)

MED<sub>i</sub> = Education of mother in years of schooling

MAB<sub>i</sub> = Mothers age at birth (in years)

MAB<sup>2</sup><sub>i</sub> = Mothers age at birth (in years) squared

PBI<sub>i</sub> = Preceding birth interval (in months)

WI<sub>i</sub> = Wealth index

FED<sub>i</sub> = Education of father in years of schooling

BORD<sub>i</sub> = Birth order of child

$\Sigma D_{ij}$  = Dummies for sex of child, region and blood relation between husband and wife

Table 3: Description of Variables

Variable	Code in DHS	Description
IMR	b6	Dummy variable taking the value 1 if the infant dies, or 0 if they survive. This variable will be created by considering b6 which is how old that child was in days when they died. This will mean that IMR will take value 1 if a child has died at less than or equal to 365 days.
MED	v133	Mother's education in single years
MA	v011 and cmc	Mother's age at birth, measured in years
MA <sup>2</sup>	v011 and cmc	Mother's age at birth squared, measured in years
WI	v190	Wealth Index is a categorical variable measuring a households cumulative living standard based on asset ownership, materials used for housing construction and types of water and sanitation access
FED		Father's education in single years
PBI	b11	Preceding birth interval is the difference between birth date of child and birth date of preceding child in months
BORD	bord	Chronological order of birth
D <sub>1</sub> (SEX)	b4	Dummy for sex of the child (1 = boy, 0 = girl)
D <sub>2</sub> (REG)	v025	Dummy for region (1 = urban, 0 = rural)
D <sub>3</sub> (PBR)	s708a	Dummy for blood relation between husband and wife (1 = related, 0 = unrelated)

Source: Demographic and Health Surveys

contraceptives.

This contrasts with the findings which identified no direct correlation between child death and maternal education, at both an individual and community level in the disproportionately poor and rural regions of Balochistan, Punjab and Sindh in Pakistan. (Helova et al., 2016) While there was evidence to suggest that rural and poorer areas face higher infant mortality, there was little to suggest that maternal education had any significant effect on mortality levels. It is argued that this is because regional characteristics play a more vital role in child and infant mortality. (Helova et al., 2016) Yet, Gupta (1990), did conclude that mother's education, as well as other socioeconomic determinants, such as women's decision-making power and hygiene, are significant determinants of infant mortality in rural Punjab, India.

Current literature corroborates Gupta's findings, specifically for Pakistan. Bibi et al. (2020), found a significant negative relationship between a mother's education and infant mortality in Pakistan. Using a constructed variable for women empowerment which included female education, they found that a 1 unit increase in their women

empowerment index decreased the probability of infant mortality by 0.4%. When looking specifically at female education, they used higher educational attainment as a measure, from which they found the significant negative relationship. This result is credited to a more highly educated mother being aware of the healthcare facilities available to them.

Iram and Butt (2008) discovered that amongst household, demographic, and environmental causes of premature child mortality in Pakistan, increased maternal education is an important determinant in the reduction of infant mortality as well as neonatal and child mortality. Using a sequential probit model to determine the relative importance of socioeconomic determinants, the effect of education can be identified more clearly than in models measuring female empowerment. Furthermore, the measure of education has been done in single years of schooling which considers all levels of schooling, eliminating the issue of only considering one education group. Increased education makes women more likely to be aware of improved health behaviours and makes the implementation of these

easier.

## ***Data***

The data has been obtained from the 2017 to 2018 Pakistan Demographic and Health Survey (PDHS) of the United States Agency for International Development. (DHS, 2019) This is Pakistan's most comprehensive household survey, producing a nationally representative sample through stratified, multistage cluster sampling. This excludes Azad Jammu and Kashmir, the federally administered National Areas, and the Federally Administered Tribal Areas over which the Pakistani government does not have direct control. (DHS, 2019) The 2017 to 2018 PDHS has over 50,000 observations; over 12,000 relevant to this study. Such a large sample solves the issue of disproportionate sampling, a common issue found in a logistic regression model. The data intended for use has been derived from the Individual Recode and the Births Recode, which had female respondents list the children to whom they had given birth, their survivorship status and their age, or age at death. This presents a slight flaw in the data, as its accuracy

is dependent on the ability and willingness of the mother to recall their complete birth history. Due to the sensitivity of the subject, they may choose to omit valuable data, such as births of children who did not survive. Consequently, with such a traumatic event, there is a risk they may forget the ages at which they died. This would result in the distortion of mortality trends. Additionally, the accuracy relies on the assumption that adult female mortality is not high, or that there exists little correlation between the mortality risk of a mother and their child, which would otherwise go undetected as the recodes selected have the women providing the data (NIPS and ICF, 2019).

## ***Model***

The dichotomous logistic regression is used to estimate the probability of a dependant categorical variable, in this case infant mortality, and independent variables, like maternal education. Hence, this model will allow me to predict the probability of infant mortality based on the impact that individual years of schooling for the child's mother have and consequently, the significance

of increased education on the reduction of infant mortality.

In this model, single years of schooling have been used to minimise the effect of a large jump between different schooling levels, e.g., no education to primary. Additionally, the variable MAB and MAB2 have been created. MAB measures the mother's age at birth mentioned in the Births Recode. As this produced a non-linear relationship, MAB2 was introduced as a squared value to give a better interpretation on the real relationship between age and infant mortality. These have been selected instead of mothers age at first birth to eliminate any correlation with education due to mechanical delays, (Grépin and Bharadwaj, 1995).

Birth order is being used as a substitute for family size but should give an accurate idea of the number of children within a family and how this could impact infant mortality.

As used in Iram and Butt (2008), a probit model was also an option. The main difference between the two models is the distribution of their error term. The probit model uses a normal distribution instead of a logistic one (see Maddala and Lahiri, 2009). However, results

from logit and probit models are almost indistinguishable, unless the data is large and unbalanced. With the nature of infant mortality, there will be disproportionate sampling, where one group of observations is much larger than the other, and a large sample from DHS. These facts mean that there will be a difference in results between logit and probit models. In order to select the best model, Chen and Tsurumi introduce a series of tests centred around Bayesian criteria and the kurtosis of the distribution. The effectiveness of these tests relies on the assumption of disproportionate sampling and a large sample size, which is the case for this model. The first test is the value of the deviance information criterion. The DIC is a generalisation of Akaike's information criterion, measuring goodness-of-fit and complexity based on deviance. The DIC differs from the AIC by its use of the posterior mean instead of the maximum likelihood estimate, making it more suitable for a Bayesian model. The model with the smallest DIC is predicted to be the model that would best replicate a dataset that has the same structure as the current, this is because the DIC acts as a theoretical out-of-sample predictive error. As such,

for logit to be preferable a  $\Delta\text{DIC} > 0$  is wanted. As can be seen in Table 1-A, the DIC for the logit model is smallest, suggesting that it is the better fit. A leptokurtic distribution would best fit a logit model. (Chen and Tsurumi, 2010) This can be confirmed by testing the kurtosis through the skewness and kurtosis test for normality. With a null hypothesis of normal distribution, Table 2-A shows that at a 1% significance level there is sufficient evidence that the displacement is not normally distributed, and there is the possibility of positive excess kurtosis and needed for leptokurtic distribution. Both tests suggest that the correct form for this model is a logistic regression.

## ***Results***

Table 4 shows results of the regression on the selected determinants of infant mortality; the marginal effect of each variable has been included. As a logistic model has been used this was calculated using log-odds to give the percentage impact on the likelihood of infant mortality for every additional unit of the variable.

Three models have been

presented in this table. The first shows the full model with outliers included. The second model is after the removal of these. This is the main model being presented in this study as it gives the most precise understanding of the interaction between maternal education and infant mortality. Finally, model three has had father's education removed to assess the significance of specifically mother's education versus education in general.

To commence the results of individual variables from the second model, the estimated coefficient of maternal education is both negative and significant at 0.5%, conveying that a one unit increase in MED will decrease the log of odds ratio in favour of infant mortality by 0.0371. This can then be transformed using log odds to give the result that for every additional year of education for mothers, the likelihood of infant mortality decreases by 3.6%. This result is consistent with previous empirical studies, in that the relationship is negative and significant. There are a considerable number of pathways through which this result is achieved. As primary care takers, they are most likely to implement the health behaviours that can improve their children's

Table 4: Model Estimates

	(1)	(2)	(3)
IMR			
Mother's Education (years)	-0.0354** (-2.68)	-0.0371** (-2.79)	-0.0431*** (-3.41)
Mother's Age at Birth	-0.136* (-2.40)	-0.137* (-2.41)	-0.135* (-2.39)
Mother's Age at Birth <sup>2</sup>	0.00228* (2.40)	0.00229* (2.41)	0.00225* (2.38)
Father's Education (years)	-0.00990 (-0.94)	-0.0100 (-0.95)	
Parents Blood Relation (Dummy:Yes=1)	0.0839 (0.88)	0.0803 (0.84)	0.0662 (0.70)
Preceding Birth Interval (months)	-0.0225*** (-7.04)	-0.0227*** (-7.08)	-0.0215*** (-6.86)
Region(Dummy:Urban=1)	-0.0922 (-0.86)	-0.0906 (-0.85)	-0.0704 (-0.67)
Sex(Dummy:Male=1)	0.135 (1.50)	0.130 (1.44)	0.143 (1.60)
Wealth Index			
Poorest	0 (.)	0 (.)	0 (.)
Poorer	-0.0290 (-0.23)	-0.0353 (-0.28)	-0.0240 (-0.19)
Middle	0.00118 (0.01)	0.00544 (0.04)	0.00877 (0.06)
Richer	0.105 (0.62)	0.112 (0.66)	0.0760 (0.46)
Richest	0.109 (0.53)	0.125 (0.60)	0.102 (0.52)
Birth Order Number	0.0453 (1.55)	0.0449 (1.54)	0.0445 (1.53)
Constant	-0.271 (-0.33)	-0.244 (-0.30)	-0.338 (-0.41)
Observations	9451	9441	9567
Pseudo R <sup>2</sup>	0.027	0.027	0.026

t statistics in parentheses

\* p &lt; 0.05, \*\* p &lt; 0.01, \*\*\* p &lt; 0.001

Source: DHS Pakistan (2017-2018)

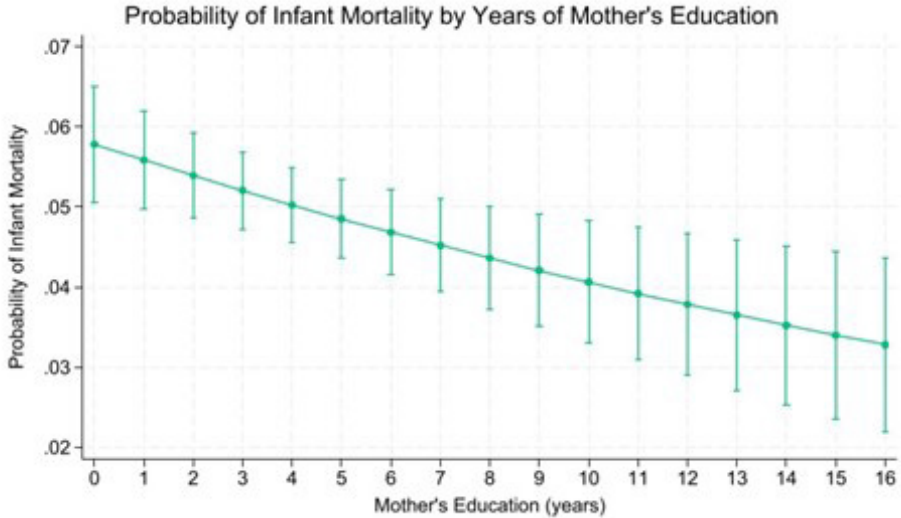
Note: IMR refers to deaths within the first year of life

health, which can be learned and better understood through increased education. However, this study does find that female education has a larger impact than prior papers have suggested. Father's education presents insignificant results. From existing literature, Duflo et al. (2011), Acemoglu and Robinson (2012) this was expected. Maternal education is more important than paternal when it comes to increasing the probability of child survival, as in the first year of life the majority of childcare in developing countries is done by the woman. Thus, increases in their knowledge are relatively more important when considering infant mortality. The values of MAB and MAB2 suggest that the probability of infant mortality is a decreasing function of mothers age at birth, with increasing returns. This is because the quadratic coefficient of MAB2 is positive, but MAB is negative, so the turning point is a minimum; the function is decreasing to the left of that point. From the estimated coefficients, the minimum point can be found where mother's age at birth is 30.04. This means that the mothers age at birth at which the probability of infant mortality is lowest is 30, increasing again after that. Existing literature extensively

reports a significant negative effect of increasing mother's age on infant mortality, (Bibi et al., 2020). Kaldewei (2010) further confirms this by showing that adolescent mothers are highly susceptible to experiencing infant mortality.

The estimated coefficient of the preceding birth interval is negatively related to infant mortality at significance level of 0.1%. Every additional month of birth interval decreases the log of odds ratio of infant mortality by 0.0227, alternatively it decreases the probability of infant mortality by about 2%. This is because a shorter birth interval often leads to a smaller birth weight and thus a weaker infant, making them more vulnerable to conditions resulting in death. This is most often as the mother's body has not been allowed adequate time to recover. The positive relationship seen between birth order and infant mortality also emphasises the health of the mother. This variable is less significant at a 10% level, but still important or further understanding. With a log odds ratio of 0.0458, the probability of infant mortality increases by 4.6% with every additional child born. In other words, the oldest sibling has a better chance of survival than





their younger siblings because their mother is usually in better health at that point. (Kembo and Ginneken, 2009). The dummy variable for sex of the child shows no significant relationship with infant mortality. This result is again in line with the findings of both Bibi et al. (2020) and Kaldewei (2010). Considering that on average, the dataset shows that twice as many boys as girls is the ideal, the implication of this result is then that the preference for male children in the whole of Pakistan has not resulted in preferential medical treatment.

Unusually, the other dummy variables are also insignificant. Blood relation between mother and father would be expected to be significant. This is both because of

the risk of genetic diseases and that marriages between first and second cousins have been shown to have shorter birth intervals and higher fertility rates (Bittles and Black, 2010). With the negative impact on both the mother and child's health, a significant result would be expected. There is a possibility that this is not the case due to the majority of observations being from couples who are blood related. Similarly, the dummy for region is also insignificant. The negative sign is expected as it supports the general theory that children in rural areas have less access to healthcare facilities, therefore a higher child and infant mortality rate (Helova et al., 2016). This would then be expected to be a significant



result, but without such this theory cannot be confirmed. There is the possibility that due to the different regions in Pakistan, a measure of urban or rural on its own would not be enough to distinguish the quality of life.

The wealth index, which is constructed by DHS to give a better understanding of wealth than just income alone, is not statistically significant at any of its levels. This is unexpected. Additionally, the signs are all negative, suggesting that as wealth levels increase, the risk of infant mortality decreases. When taken away from the constant representing the poorest group, all levels still show an overall negative effect. This is not consistent with previous studies. There is a possibility that instead a measure of different provinces would give a better understanding and interpretation of wealth. There is the issue that the incidence of asset-based poverty is differently observed across provinces and even within provinces. (Ullah and Chrishti, 2023) The decentralised healthcare system in Pakistan makes poorer regions more disadvantaged. Those in poorer regions are unlikely to have access to the same quality of education, quality of hospitals and doctors

and even food and water, no matter their individual wealth.

## ***Conclusions***

Since Pakistan has one of the highest infant mortality rates in the world, child health generally and infant mortality more specifically, have been core sustainable development issues in Pakistan. As the role of women is important in explaining the infant mortality rate of any country, this paper has made an attempt to analyse the impact of maternal education on infant mortality rates. The results have shown that there is a significant effect on the probability of survival for the infant as education levels rise, with every year of additional education for the mother decreasing the probability of mortality by 3.6%.

There are a number of possibilities explaining why this effect takes place. This includes the productive efficiency hypothesis, which suggests that education makes people more efficient producers of health. With traditional gender roles being common in Pakistan, women are likely to oversee the health of their children, consequently their

children following through on health treatments. This should also contribute by making government interventions or subsidies cheaper. Education also has the ability to make people more aware of treatment options available to them. This has the added benefit of encouraging healthier behaviours for preventative measures, including during pregnancy, which is essential for infant mortality. Increased levels of education could lead to higher wealth levels, which although inconclusive in this study, has been suggested to be a significant factor of infant mortality in most other literature. The lack of significance for fathers' education suggests that it is the application of these pathways for children by their caretakers, which the fathers tend not to be, which makes the difference.

Thus, to take further steps in reducing infant mortality in Pakistan, state level interventions should focus on creating equal opportunities for women in education. This should include changing attitudes surrounding girls getting an education, which should help reduce the disparity in number of children getting no education. Primary education enrolment has been a push in many

developing countries, which has paid off. However, there has been substantially less progress with regards to secondary education. My findings would suggest this to be an effective way at reducing infant mortality. Moreover, with the significance of the preceding birth interval and birth order number, increased education surrounding fertility would likely also be effective policy. The reduction in fertility, either directly through increased education, or as a result of decreased infant mortality, may speed up Pakistan's demographic transition leading to the alleviation of widespread poverty.

This paper has contributed to the demographic study of infant mortality through its focus on a specific socioeconomic determinant. By narrowing down the variables and testing female education on its own, a better understanding of the value of education, an area that has natural policy implications, has been gained.

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## Bayesian information criteria

	DIC	log(ML)	log(BF)
Logit	<b>3998.136</b>	<b>-2074.61</b>	.
Probit	<b>4004.234</b>	<b>-2085.037</b>	<b>-10.42754</b>

Note: Marginal likelihood (ML) is computed using Laplace-Metropolis approximation.

Table I-A: Deviance Information Criterion

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## Appendices

The variance inflation factor results show that there is little evidence of multicollinearity between variables. The largest values belong to MAB and MAB2, which was expected as MAB2 is just a transformed variable. The next largest is WI at 2.07. This can be interpreted as the variance of WI being 107% higher than it would be with no multicollinearity with the other predictors. However, this is still in the moderate range and thus did not need to be treated (Tables 1A-3A).

Skewness and kurtosis tests for normality

Variable	Obs	Pr(skewness)	Pr(kurtosis)	Joint test	
				Adj chi2	Prob > chi2
IMR	12,924	0.0000	0.0000		.
MED	12,908	0.0000	0.0000		.
MAB	12,924	0.0000	0.0232	416.95	.
MAB2	12,924	0.0000	0.0000		.
FED	12,747	0.1474	0.0000		.
PBR	12,920	0.0000	.		.
PBI	9,580	0.0000	0.0000		.
REG	12,924	0.0000	.		.
SEX	12,608	0.0313	.		.
WI	12,924	0.0000	0.0000		.
bord	12,608	0.0000	0.0000		.

Table 2-A: Skewness and Kurtosis Tests for Normality

Collinearity Diagnostics

Variable	VIF	SQRT VIF	Tolerance	R-
				Squared
IMR	1.01	1.01	0.9900	0.0100
MED	1.78	1.33	0.5621	0.4379
MAB	66.49	8.15	0.0150	0.9850
MAB2	66.38	8.15	0.0151	0.9849
FED	1.52	1.23	0.6593	0.3407
PBR	1.02	1.01	0.9819	0.0181
PBI	1.15	1.07	0.8696	0.1304
REG	1.34	1.16	0.7483	0.2517
SEX	1.00	1.00	0.9989	0.0011
WI	2.07	1.44	0.4836	0.5164

Mean VIF 14.37

Table 3-A: Variance Inflation Factor Test for Collinearity

Logistic regression

Number of obs = 9,441

LR chi2(13) = 111.49

Prob > chi2 = 0.0000

Pseudo R2 = 0.0272

Log likelihood = -1991.1007

	Coefficient	Std. err.	z	P> z	[95% conf. interval]	
IMR						
MED	-.0371242	.013298	-2.79	0.005	-.0631878	-.0110606
MAB	-.1374403	.0569251	-2.41	0.016	-.2490115	-.0258691
MAB2	.0022922	.0009496	2.41	0.016	.0004309	.0041535
FED	-.0100181	.010535	-0.95	0.342	-.0306662	.01063
PBR	.0803154	.0955402	0.84	0.401	-.1069399	.2675707
PBI	-.0226852	.0032058	-7.08	0.000	-.0289684	-.0164019
REG	-.0906404	.1067789	-0.85	0.396	-.2999232	.1186424
SEX	.1301849	.0901017	1.44	0.148	-.0464112	.306781
WI						
poorer	-.0352969	.1258948	-0.28	0.779	-.2820461	.2114523
middle	.0054361	.1451313	0.04	0.970	-.2790159	.2898882
richer	.1123945	.1706442	0.66	0.510	-.222062	.446851
richest	.124774	.2066438	0.60	0.546	-.2802403	.5297883
bord	.0449311	.0292551	1.54	0.125	-.0124078	.1022701
_cons	-.2441249	.8226231	-0.30	0.767	-1.856437	1.368187

Table 4-A: Model 2 Logit Regression

# Mini Afro

Patryk Imielski

---

*Here? she asks  
Yes here don't worry  
I've done this  
before.*

His hands betray some slight  
caution carving out the roundness  
of his son's head –

white on black

he shears the black sheep's  
wool to release the tension  
in those heavy clouds  
falling onto the floor of  
their tiny bathroom

*—like clouds she says  
Yes like clouds dyed by  
the starless night  
sky.*

In his cupped hands  
the bundles of his son's hair  
seem to float against the  
paleness of skin –

black on white

curls coiling into themselves  
blocking out the white canvas  
underneath



*—like moss she says*

*Yes like black moss resting*

*inside a spot-less*

*clam shell.*

*Have you always cut your own hair she asks*

*No not always it used to be*

*my dad.*

# Hannah

*Tháo*

---

I won't be telling you my name, I'm just going to tell you a story, and it's a short story, so you won't have to stay for long.

I overheard it in a coffee shop on a cold morning in an English city that was as pale as a pebble of sand, so please don't think this is my story. It's not.

The story is about a nameless girl, but in order for you to not mistaken this nameless girl for me, I'll call her Hannah.

Hannah had big dreams; she wanted to create the biggest jigsaw puzzle made out of cardboard anyone had ever seen. She wanted to paint a painting in pieces and then assemble it on a field, or in a park, or on a hill.

She started by buying lots of paint. Her housemate at the time, from whom I overheard this story, recalled her bringing home tubs and tubs of wall paint. She brought them back two at a time, opened them on her bedroom floor, then sat in the thick silence of her room and considered all the ways to realise this dream. The acrid fume filled the corridors of the house, it twisted like a question mark, hooking her curious housemates in. They knocked, timidly, and asked what she was up to. Hannah was sat on the floor, among the paint; she told them what she planned to do. They looked at each other for a second, and then asked if she wanted some help. She looked at them for a second, and then said yes.

Together, they gathered pieces of cardboard, most of which were from the boxes that had been sitting in their rooms since they moved in at the beginning of the year. Sometimes one would come back with a box they had picked up from a nearby shop or from their faculty. Boxes filled up their kitchen. Boxes waited to be deconstructed, trimmed, and

fit together into a new form.

Then, they went on to cut out the pieces of the puzzle. The four of them sat on the kitchen floor and imagined what the big picture would be like without having the space to test and measure it. They decided on puzzle pieces roughly as big as their faces. They decided to work from the outside in, agreeing on the number of pieces on the left and right edges, and then on the top and bottom edges. They cut piece by piece, left to right, top to bottom, making sure that each piece got along with its neighbours. The acidic scent of paint lingered like a faint fog over them. They worked into the nights, taking turns choosing songs to play. Hannah always requested one of two songs: either “What’s Up?” by 4 Non Blondes or a song in her mother tongue.

The night the last piece was cut, they were filled with a sense of accomplishment. Pizza was ordered. Alcohol was pooled, poured into glasses, sipped. Hannah put her two songs on repeat, and by this point they had gotten used to it. They ate on the kitchen floor. Someone said they were going to put this project in their CV. Someone else asked, please, if they could all refrain from talking about CVs that night. Another asked what the songs meant.

When they each drifted back to their own rooms late into the night, Hannah was still sitting on the couch, pink-faced and drowsy. She had been sleeping on the couch because her room was still filled with all the tubs, and though she had closed all their lids, the air was still thick with paint. Naturally, they thought she would just wrap herself up in her blanket and fall asleep. The following morning, each of them was woken up to the colour of suffocation in the air. They groggily pulled themselves out of bed, opened their doors, and entered the kitchen. The kitchen was covered in paint: there were splashes on the floor, on the countertops, on the doors of cupboards, on the dining chairs. It was like a crime scene, and the victims were all the puzzle pieces that they had spent days cutting and shaping, which were nowhere to be found. Hannah was also gone.

At this point, the storyteller in the English-city coffee shop re-

ceived a phone call and excused himself to answer it. I waited patiently, turning pages of my book so it didn't look like I was just sitting there, listening in. The storyteller walked outside, his dark jumper a sharp blotch atop the bright blankness of the winter air. English winters were cold like that, in a blinding white way. I don't miss it at all.

When he returned, his friend asked him what happened next. He had forgotten where he had left off. His friend reminded him that Hannah had disappeared with the puzzle pieces.

As it turned out, Hannah had left a note for them on the dining table. She said that she had to return home to a place she hoped would welcome her back, but before leaving, she wanted to achieve the dream of creating this puzzle, so she apologised for having painted all the pieces without them. She left the painted pieces to dry in the small yard at the back of their house. Please, if they could, collect the pieces and go to a big field, maybe that park where students loved to take summer walks, and assemble the puzzle. Take a picture of it, an aerial one if possible, and please send it to her. She would love to see the end result. She thanked them for helping her realise this dream.

They all went out to the backyard after reading the note. The house they shared had a small square of unkempt vegetation which they hardly ever used, even though they always said that they would, maybe for a barbeque, when the weather was better. They had woken up late and the sun was already out, but before this, while they slept, it must have rained. The puzzle pieces were damp and smeared with diluted splatters of colour.

They left the pieces out to dry for the rest of the day and carried them out to the park the following afternoon. They tried to assemble the full picture, which was more difficult than they had imagined. They made this puzzle with their own hands, yet none of the pieces made any sense. The matches were odd, uncomfortable, coerced. There seemed to be pieces missing.

They ended up lying on the grass which had soaked up all the rain from the day before. The park was gated, and the gates were sup-

posed to be locked as the colour of the sky deepened, but no one chased them out. They just lay there with Hannah's dream scattered around them.

In the coffee shop, the housemate's friend asked if they found out what happened to Hannah. The housemate said that they had texted and called, but Hannah never replied to any of their messages. They have all graduated years ago now, and no one has heard from her since.

The conversation drifted on to a different topic. I had finished my coffee at that point, but chose to stay and read some more. The book made very little sense because I had skipped quite a few pages. When it felt casual enough, I dog-eared the page that I had ended up on, closed the book, and stood up to leave. I caught the housemate's eyes then. He looked at me as if, for the first time, he noticed someone he vaguely recognised. He might have called out something as I was walking out the door and into the blank canvas of an English winter day.

That day, it was nothing like what we're having here today. Look out the window, the wind is skipping, golden. My guess is, Hannah had followed the wind. But yes, that's the story. You're free to go now.

END

# Basket of flowers

*Ying Tong*

---

The sound of a fighting scene disappeared, followed by light illuminating the cinema screen. “Medical emergency”, said my friend, repeating others’ words. I followed a queue of the audience, stepping out of the hall in silence

No doctors, nurses, or people of first aid, but a handful of policemen at the entrance. They stood still, supervising our tranquil evacuation. One of them responded, “Murder”

For the rest of the day, month, and year, I searched the local news but got nothing. As mysterious as a young man who died in the street that I walk on to my seminars

It is not safe. Yet, every day I go through the preaching on Cornmarket Street, where people proclaim the Saviours of the earthly people in the city centre. When sunny, violin notes dance from an Asian lady in a beret, and melodies bounce out of a hand-cranked music cart. Harmonious air, a suitable

distance between one and another, and a reasonable hope: billboards were set up; you beheld a soft young face and moral policemen back in Iran. At times, the homeless watch the street in their quilts, against walls

This is a peaceful microcosm of an anarchist world  
Everyone, in a long queue, hands over a basket of flowers to the next, above their heads. A beautifully crafted basket layers of compressed common memories, a spoon of lessons and a delicate net of the concrete orders we’ve created

So, perpetrators could be of any colour. Yet, no one race would be ashamed, for the sense of identity between one and his group may no longer exist. Decent people comforted each other, "Sorry to hear that. Such bad luck." One, two, and three seconds, we appeared to be undisturbed,

putting it into our vague background of daily life, hectically commuting to the office, home, the destination of the fragile ambition in our value mazes. But something is

striking a chord of the boundary between True Detective and these cases around. Which one is more authentic, or appealing? May I ask, film students, if you ever come across a whim of self-doubt like this? And what to do afterwards

In this miniature of harmony, we continue to stand in a queue From dawn to twilight, we hand over the basket of flowers with care, and look at others, to check if their fingers are

holding it tight and firm. Then we let go of our grip

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