

# The Depiction of Hegemonic Masculinity Personae in World War 1 Poetry: A Review Paper

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## Abstract

This paper is a review focused on exploring the hegemonic masculinity (HM) and its use in WWI poetry. More specifically, it explored how the available previous literature tackled the concept HM in WW1 poetry. HM was central in literary works during the Great War where the idea of masculinity was used to attract enlistees. Nevertheless, as the war progressed, the soldiers were thrust in trenches and killing fields realised that they had to fight to stay alive. This review paper selected relevant previous studies published from 2005 to 2024 as they discussed the concept hegemonic masculinity and its use in WW1 poetry. These studies were reviewed qualitatively based on pre-determined themes namely i) Hegemonic Masculinity in Pro-War Poems; ii) Hegemonic Masculinity in Anti-War Poems; and iii) Hegemonic Masculine Persona and war experience. The findings reported that the available studies elucidated that the concept was used as propaganda in pro-war poetry, and as a denial device in anti-war poetry. The findings also showed that the war and its complexities affected the soldiers' attitudes towards the concept prompting them to use it as an act of defiance. It is hoped that this paper opens the stage for the future research and offers interpretations of the previous literature of the same field.

**Keywords:** Hegemonic Masculinity, World War I, Pro-War Poetry, Anti-War Poetry.

**Introduction**

According to Araujo (2014), the World War I armed conflict led to rise huge number of writers, prose and poetry writers, who dedicated their works to depict the war glories and the spirit of patriotism, which believed to be integral to the battle. At the first stage of the war, literary works used to entice young men and encourage them to enlist in the army and fight for a common cause (Angelis, 2016). Some war poets like Brooke, Pope, and McRae who called later as pro-war poets used their poetry to promote for the war through depicting the symbols of heroism, patriotism, and ideal man as well. To achieve their stake they used the HM concept as propaganda in their poetry with the intention to encourage more male youths to be part of the fighting. According to Caesar (1993), heroism, patriotism, and ideal man image were not new, as the public, especially the young, studied the classic English epics, myths and legends like The Iliad. Therefore, the ideologies of sacrificing oneself and romanticising the idea of dying for a country planted earlier in the boys' mentality who were eager to be adventurous. However, Kingsley (1999) viewed that war poetry used to manipulate English people's attitudes about the idea of being masculine. They depicted the men as strong, innately adventurous, breadwinners of their families, protectors of women, and most importantly, males were depicted as the normative image of masculinity. In addition, English society placed men on the top of the masculine order and inevitably created the belief that men are the strongest and entitled to resources within the society. In brief, those revered as being dominantly masculine were respected and honoured unlike their female counterparts and those who were considered as non-hegemonic (gays, epicene) individuals (Connell & Messerschmidt, 2005). Pro-war poetry manipulated the idea of patriotism using hegemonic masculine concept to make male youths believe that they are masculine, loyal, and brave, hence, they must enlist and fight for the sake of their king and country (Hinojosa, 2010). Pro-war poetry focused heavily on conditioning the people minds that soldiers were the face of masculinity and their military service was only required for a short period of time.

Nevertheless, the reality is far more catastrophic than what was depicted as the war affected not only the countries, but also those involved. The war lasted for four years (1914-1918) and the number of casualties was horrifying with the British losing more than 240,000 soldiers Barber (2003) and those who survived struggled to move on in gruesome circumstances where some were held captive by the enemies, killed, injured while many were declared missing till the present day. The enlisted men who thought that the War was mere adventure through which they can become heroes and prove their masculine ideals to English people, realised that they had to fight to stay alive (David, 1994). In this stage, the poets' perceptions shifted drastically towards the war as they became concerned with depicting the truthful realities of war. Although the earlier works focused on fuelling the men with patriotism, they changed later to be concerned with the war atrocities, pain, terror, fear and suffering the soldiers experienced. As such, so called anti-war poets like Owen, Sassoon, Rosenberg emerged writing their poems realistically through which they employed the hegemonic masculinity concept to construct the soldiers' rebellious personae in their poems. The poets' change of stance towards WW1 is of a great interest as their traumatic experience of being part of the war inspired them to share their dark ordeal with their readers. Moreover, a closer look at their works revealed that their masterpieces used not only to express their defiance of an unavailing war but their disapproval with the actions taken by their officials to resolve conflicts. Defiance towards the war is prominent in works of soldier poets such as Wilfred Owen, Isaac Rosenberg, and Siegfried Sassoon, who initially developed a strong denouncement stance towards the war and moved to rebel against the conflict (Altunsoy,

2017). Those poets used the concept of hegemonic masculinity as a denial device through utilising the symbols of anti-her, and victimisation. Despite the prominent use of hegemonic masculine in WW1 poetry, there is a dearth of information on how the concept used to express rebellious personae in war poetic discourses. Hence, to understand how the concept used, this review aims to examine the body of literature, which had analysed popular war poems to answer the following questions:

- i. In what ways are hegemonic masculinity depicted in pro and anti-war poems?
- ii. How do anti-war poets use rebellious hegemonic masculine persona to express their feelings towards the war?
- iii. How do the anti-war poems reveal changes in the persona’s masculinity after experiencing the war?

**Methods**

This review analysed articles reviewing hegemonic masculinity and how it was used in war poetry. Several keywords are utilised for database search purposes like hegemonic masculinity, war poetry, and World War 1 (WW1).

**Online Databases**

Online databases used to obtain literature related to the topic are Media, War and Conflict, Taylor and Francis, Sage Journals, Historical Research, Citizens, Social and Economic Education, Humanities, Men and Masculinities, Gender and the First World War, Heroism and the Changing Character of War, Language and Literature. IIUC Studies, French Journal of British Studies, The Journal of Men’s Studies, European Journal of International Relations and Journal of British Studies.

**Inclusion Criteria**

The studies reviewed were selected based on two pre-determined criteria namely i) studies on WW1 poetry discussing gender and hegemonic masculinity; and ii) effects of WWI on the concept of hegemonic masculinity. For the review, studies selected were published between 2005 to 2022. The review was carried out qualitatively based on the themes discussed in the articles and the findings were categorised under three general themes namely i) Hegemonic Masculinity in Pro-War Poems; ii) Hegemonic Masculinity in Anti-War Poems; and iii) Hegemonic Masculine Persona and war experience. Articles that do not focus on either theme were excluded. Findings from the review are summarised in (Table 1) and are clarified in-depth in the following section.

**Findings**

Reviews of previous literature discussing hegemonic masculinity in the context of WW1 poems showed that the concept was portrayed in six ways as shown in the table below.

Table 1  
*Portrayal of Hegemonic Masculinity in WW1 Poems*

No	Theme	Portrayal	Explication	Study
1	<b>Rise of the hegemonic masculinity ideals</b>	Symbol of Patriotism	Hegemonic masculinity is used to instil the spirit of patriotism among male youths.	Roper (2005); Nye (2007); Hinojosa (2010); Araujo (2014); De Angelis (2016); Bingham (2017); Ul-Haq&

	<b>during WW1</b>			Rashid (2018); Hamadneh, T., Radzuwan Ab. R., & Hanita H. I. (2022)
2		Symbol of an ideal man	Hegemonic masculinity is used to create an image of an ideal man who is strong, a leader, not afraid to be challenged or to challenge others.	Nye (2007); Hinojosa (2010); Araujo (2014); Bingham (2017); De Angelis (2016); Hamadneh, T., Radzuwan Ab. R., & Hanita H. I. (2022)
3		Symbol of a hero	Hegemonic masculine men are courageous and brave, adventurous, a protector to the weak, a natural-born fighter and not afraid to self-sacrifice.	Nye (2007); Hinojosa (2010); Araujo (2014); De Angelis (2016); Bingham (2017); Ul-Haq & Rashid (2018); Hamadneh, T., Radzuwan Ab. R., & Hanita H. I. (2022)
4	<b>Rebellious Masculine Persona in Anti-war poems</b>	Symbol of a war victim	Hegemonic masculinity is used to describe how the soldiers, began realizing that what they had expected was different than realities of war. They became bitter and began to focus only on staying alive.	Roper (2005); Hutchings (2008); Kennedy & Tate (2011); Penny (2011); Barham (2014); Carden-Coyne (2015); De Angelis (2016); Altunsoy (2017); Poynor, (2019); Hamadneh, T., Radzuwan Ab. R., & Hanita H. I. (2022)
5	<b>Rebellious Masculine Persona in Anti-war poems</b>	Symbol of an anti-hero	Hegemonic masculinity is used to depict the soldiers as damaged products of the war whose personalities and behaviour were altered by the war and the people they lost.	Mahmood (2008); Hutchings (2008); Penny (2011); Araujo (2014); Barham (2014); De Angelis (2016); Poynor (2019); Hamadneh, T., Radzuwan Ab. R., & Hanita H. I. (2022)
6	<b>Hegemonic Masculine Persona and war experience</b>	Symbol of violence and anger	The idea of being dominant turned the soldiers into violent individuals who believed in using force to ensure compliance.	Nelson (2007); Hutchings (2008); Penny (2011); Barham (2014); Adams (2015); Campbell (2018); (Poynor, 2019); Hamadneh, T., Radzuwan Ab. R., & Hanita H. I. (2022)

**Discussion**

This section discusses the findings based on the reviewed articles.

**Depiction of Hegemonic Masculinity In Pro And Anti-War Poems**

The purpose of this review is to understand earlier studies perceived the representation of hegemonic masculinity in WW1 poems, how it was used and whether the poets' shifted their hegemonic persona's masculinity in anti-war poems. Based on the reviewed articles (e.g. Nye (2007); Hinojosa (2010); Araujo (2014); Angelis (2016); Bingham (2017); Ul-Haq & Rashid (2018); Hamadneh, Radzuwan, & Hanita (2022)), the analysis showed that hegemonic masculinity was portrayed differently in war poems written during the war. It showed that pro-war poems were used as medium of propaganda to encourage more men to join the military, whereas anti-war poems used the concept as a denial device to demonstrate their discontent of the war and the people who faked the codes of freedom and honesty (see table 1). Findings also showed that pro-war poets used the symbols of hero, patriotism, and ideal man to achieve their objective in promoting for the war. They also showed that anti-war poets like Owen and Sassoon used the symbols of anti-hero, soldier as victim to condemn war and its atrocity. On one hand, Connell's (2005) conceptualization of HM, that men are courageous and brave, adventurous, a protector to the weak, a natural-born fighter and not afraid to self-sacrifice, was used to interpret pro-war poems. The conceptualization used to show how war poets used the concept HM to instil the spirit of patriotism, heroism, and the ideal man among male youths, to construct the concept as a device for propaganda in their poetic discourses and encourage enlisting in the army. On the second hand, Barret's (2001) conceptualization of HM that men should be reasonable, independent and assertive used to interpret anti-war poems. The conceptualization used to show how war poets used the concept HM concept as a device to construct the soldiers' rebellious personae in their poetic discourses.

**Changes In The Persona's Hegemonic Masculinity After Experiencing War**

Based on the studies reviewed, it became evident that there was a significant change in the soldiers' attitudes towards the war after their harsh first-hand experience in the battlefield. Soldiers like Owen, Rosenberg, and Sassoon turned to poetry as their sole means of expressing the stark reality of war and demonstrating their defiance against the pointless violence. It was important to highlight that during the initial stages of the war, certain soldiers such as Sassoon and Rosenberg initially embraced a strong nationalistic perspective towards the conflict, only to later vehemently oppose it (Altunsoy, 2017). They rejected the false ideals of masculinity that dominated English society during the war, and unexpectedly utilised the concept of HM as a form of denial to voice their protest against the war. The concept of HM experienced significant transformations when anti-war soldier poets adopted it as a means of rejecting the violence and the false ideals of masculinity prevalent in English society during the early stages of the war. Even though men's emotional expressions frowned upon and seen as signs of weakness and cowardice, the poets disregarded societal expectations and expressed their genuine emotions to convey the true horrors of war. Consequently, changes in perspectives became inevitable, particularly after soldiers had first-hand experience of the harsh realities in the trenches. Busfield (1994) believes that individuals possibly frame the Feelings as the body language of complaints. In the same vein, Showalter (1989) views that feelings considered as a body language of complaint, and a disguised protest against the war. As such, the display of emotions perceived as a challenge against the conventional image of masculinity which soldiers must be the first who maintain it. Nevertheless, drawing from

Barret's (2001) understanding of HM, soldiers were courageous, independent, rational, and assertive individuals who employed the concept of HM to reject violence by expressing their emotions in an unconventional manner. For instance, while it was expected for soldiers to direct their anger and hatred towards the enemy, they unexpectedly directed these feelings towards those who promoted the war and played a role in sending innocent men to their deaths on the front lines. Sassoon's poem "The General" (1917) is an instance for a poem that depicts the soldiers' outrage towards their officers.

According to Kendall (2007), men joined the war with the intention of proving their worth in a society where strength and courage were the only measures of manliness. Consequently, many soldier poets initially composed patriotic poems glorifying war at the onset of the conflict. However, they soon realised their error and began writing about the harsh realities and horrors of the futile war. For instance, Sassoon's poem "Absolution" (1915) reflected his strong patriotic sentiments early in the war, but he later rebelled against such beliefs (Altunsoy, 2017). Similarly, Rosenberg penned a poem titled "Pozières" (1916) just before the Battle of Pozières on the Somme, which eventually turned into a scene of immense slaughter for both sides. The soldiers' traumatic experiences profoundly influenced their perception of the war, prompting a shift in their attitudes. Nevertheless, these experiences also served as inspiration for their prolific artistic output. While their masterpieces displayed aesthetic brilliance, they were infused with expressions of pain and disillusionment towards the violence they witnessed. One of the feelings that soldiers showed in shocking and unexpected ways during the war was the feeling of anger. During the war, soldiers displayed a surprising and unforeseen sense of rage among their range of emotions. The notion of being prevalent transformed the soldiers into fierce individuals who believed in the use of force to secure compliance. However, changes in the traits of HM persona after any traumatic experience were inevitable, and for those who participated in the war, significant psychological effects eventually affected their ability to return and adapt to the life they lived before the war as soldiers became either increasingly violent or suicidal. Anti-war poems such as Owen's "Dulce et Decorum Est" (1917), "Strange Meeting" (1917), "Futility" (1917) among other poems exhibited a surprising and unsettling manifestation of hatred. Nevertheless, the soldiers creatively constructed the feeling of hatred, exploring its intricate aspects in their verses, which led to a remarkable transformation in the conventional meaning of hatred, manifesting it in unexpected and thought-provoking ways after witnessing the horrors of war. Rather than directing their animosity solely towards the enemy, soldiers unexpectedly directed it towards the pervasive violence like in "Dulce Et Decorum Est" (1917) and the circumstances surrounding it like in "Futility" (1917). It became apparent that the soldiers directed their hatred towards those responsible for instigating and perpetuating the war, commonly known as warmongers like in Sassoon's "They And The General" (1917) and "Does it Matter" (1917). Additionally, they directed their animosity towards nature and its complexities, such as the harsh weather, mud, and the presence of inferior creatures, which shared the trenches with them like in Rosenberg's "Lousing Hunting" (1916) and "Immortals" (1917).

Notably, respect emerged as a powerful and dominant theme in certain anti-war poems, contrasting the diminished prominence of hatred. Soldiers expressed respect not only towards their comrades but also surprisingly towards their adversaries on the battlefield. For instance, Owen's poem "Strange Meeting" (1917) was an evidence of soldiers reflecting their respect towards the enemy. It was stunning to realise that the love between comrades became a love between enemies. Owen described his foe as a friend when he said 'I am the enemy you killed my friend' (Line 40). Bloom (2002) described the poem "Strange Meeting"

(1918) as the world's passport to love as it explored the philosophy of loving the enemy. The poet and the man whom he killed gradually recognized each other, as they were similar and met in the shadows of hell.

### **Conclusion**

This paper has explored how hegemonic masculinity is portrayed in WW1 poems based on relevant literature. Hegemonic masculinity and war are inseparable, yet it is timely that the two elements investigated further. Most of the previous studies view hegemonic masculinity as a concept or an abstract idea but none has studied how poets used rebellious hegemonic masculine personae to show horrors and pain they felt when they were in the killing fields. Therefore, this review appraises, critiques, and summarizes the available research about the use of hegemonic masculinity in war poetry. More specifically, it sums up the manifestations of hegemonic masculinity concept in war poetry in a purpose to explore compare how the concept used in the in both pro and anti-war poetry. This review is provided for researchers interested in examining gender - hegemonic masculinity in particular - identity, and persona, as it summarizes some previous studies on the study of the concept in war poetry and shows the gaps that have not been covered yet. The review concluded that the available research mainly discussed the use of hegemonic masculinity in war poetry thematically without pay attention to other methodical approaches that could be useful in studying the concept in war poetry. Furthermore, the available research highlighted that the concept was used as a propaganda in pro-war poetry, and as a rebellious device in anti-war poetry, but they did not excavate and dig beyond to clarify the themes extracted.

### **Implications**

The implications of this paper are profound and far-reaching, shedding light on several critical aspects. The power of poetry as wartime propaganda underscores the influence of art and literature on public opinion. Poets' transition from pro-war to anti-war sentiments highlights the importance of critical thinking and questioning societal norms. The contrast between idealised masculinity and the grim realities of war reflects the tension between societal ideals and lived experiences. The study raises questions about how violence contributes to the formation of men's identities, challenging the concept of war as a rite of passage. Anti-war poetry provides a platform for dissent and the exposure of uncomfortable truths. These poems humanise soldiers, emphasising their shared humanity. Anti-war poetry questions traditional notions of honour, modesty, and patriotism. The concept of sacrifice is re-evaluated, calling into question the nobility of wartime sacrifices. In conclusion, our study illuminates the dynamic interplay between literature, war, and evolving notions of heroism and masculinity.

### **Recommendations**

The recommendations for Future Research are summarised in Extend the analysis to explore how HM in poetry evolves across various historical conflicts. Examine the gendered aspects of HM in war poetry and their impact on societal perceptions of masculinity and femininity. Investigate the psychological effects of exposure to pro-war and anti-war poetry on soldiers and veterans. Explore visual representations of HM in wartime propaganda, art, and media. Analyse how different cultures and regions depict HM in their wartime poetry. Assess the role of war poetry in shaping government policies and public perception of war. Investigate the relevance of the findings to contemporary discussions on masculinity, war, and literature.

Consider how race, ethnicity, class, and sexual orientation intersect with portrayals of heroism and masculinity. Develop educational materials that incorporate the study of war poetry to promote critical thinking. Utilise digital humanities methods to analyse large corpora of war poetry. In essence, the portrayal of heroism and masculinity in war poetry offers a rich and multifaceted research landscape that can deepen our understanding of the complex relationship between literature, culture, and the narratives surrounding war and masculinity throughout history.

### **Ethics Committee Approval**

The author(s) confirm(s) that the study does not need ethics committee approval according to the research integrity rules in their country.

### **References**

- Adams, M. S. (2015). Herbert read and the fluid memory of the first world war: Poetry, prose and polemic. *Historical Research*, 88(240), 333–354. <https://doi.org/10.1111/1468-2281.12075>
- Al-Joulani, N. (2011). Incurable sores on innocent tongues: the language of pain in wwi poetry. *Cross-cultural Communication*, 7(2), 109–115. <https://doi.org/10.3968/j.ccc.1923670020110702.013>
- Altunsoy, A. G. Ş. (2017). Three soldier-poets: Rupert Brooke, Edward Thomas and Isaac Rosenberg. *SEFAD*, 2017(37), 361–370.
- Anievas, A. (2013). 1914 in world historical perspective: The “uneven” and “combined” origins of World War I. *European Journal of International Relations*, 19(4), 721–746. <https://doi.org/10.1177/1354066111427613>
- Araujo, A. D. (2014). Jessie Pope, Wilfred Owen, and the politics of pro patria mori in World War I poetry. *Media, War & Conflict*, 7(3), 326–341. <https://doi.org/10.1177/1750635214550259>
- Barber, Nicola, (2003). World War I: The Western Front. Black Rabbit Books. ISBN: 1583402683, 9781583402689.
- Barham, P. (2014). Citizenship, Masculinity and Mental Health in the First World War. *Heroism and the Changing Character of War*, 305–323. [https://doi.org/10.1057/9781137362537\\_19](https://doi.org/10.1057/9781137362537_19)
- Barrett, F. J. (1996). The organizational construction of hegemonic masculinity: The case of the US Navy. *Gender, Work & Organization*, 3(3), 129–142. Retrieved from <https://calhoun.nps.edu/handle/10945/41314>
- Bingham, R. J. (2017). The ‘making of a soldier’: Masculinity and soldier hood as portrayed in the New Zealand school journal, 1907–1925. *Citizenship, Social and Economic Education*, 16(3), 174–183. <https://doi.org/10.1177/2047173417740715>
- Campbell, E. (2018). How Does Hegemonic Masculinity Influence Wartime Sexual Violence? *E-International Relations*, 1–8.
- Connell, R. W., & Messerschmidt, J. W. (2005). Hegemonic Masculinity: Rethinking the Concept. *Gender & Society*, 19(6), 829–859. <https://doi.org/10.1177/0891243205278639>
- Angelis, D. I. (2016). From Propaganda to Private Grief: Rudyard Kipling and World War I. *Le Simplegadi*, XIV (15), 74–81. <https://doi.org/10.17456/simple-29>



- Hamadneh, Sh., T. M., Rashid, R. Ab. & Ismail, H. H. (2022). The Innovative Use of Hegemonic Masculinity Concept in WWI Poetry. *International Journal of Innovation, Creativity and Change*, 16(1), 431-447.  
[https://www.ijicc.net/images/Vol\\_16/Iss1/16138\\_Ismail\\_2022\\_E\\_R.pdf](https://www.ijicc.net/images/Vol_16/Iss1/16138_Ismail_2022_E_R.pdf)
- Hinojosa, R. (2010). Doing Hegemony: Military, Men, and Constructing a Hegemonic Masculinity. *The Journal of Men's Studies*, 18(2), 179–194.  
<https://doi.org/10.3149/jms.1802.179>
- Hutchings, K. (2008). Making sense of masculinity and war. *Men and Masculinities*, 10(4), 389–404. <https://doi.org/10.1177/1097184X07306740>
- Kendall, T. (2007). *The Oxford Handbook of British and Irish War Poetry*. Oxford University Press
- Kate, K. & Trudi T. (2011). Literature and music of the First World War. *First World War Studies*, 2(1), 1–6. <https://doi.org/10.1080/19475020.2011.555467>
- Kingsley, K. S. (1999). *Gender and Power in Britain 1640-1990* (1st ed.). Routledge.  
<https://doi.org/10.4324/9780203006672>
- Kent, S. (1999). *Gender and Power in Britain 1640-1990* (1st ed.). Routledge.  
<https://doi.org/10.4324/9780203006672>
- Nelson, E. (2007). Victims of war: The First World War, returned soldiers, and understandings of domestic violence in Australia. *Journal of Women's History*, 19(4), 83–106.  
<https://doi.org/10.1353/jowh.2007.0068>
- Nye, R. A. (2007). Western Masculinities in War and Peace. *American Historical Review*, 112(2), 417–438. <https://doi.org/10.1086/ahr.112.2.41>
- Penny, W. K. (2011). A tragic harp: Ritual, irony and myth in the war poetry of Wilfred Owen. *Language and Literature*, 20(2), 151–167. <https://doi.org/10.1177/0963947010397846>
- Poynor, D. (2019). Meeting the Enemy in World War I Poetry: Cognitive Dissonance as a Vehicle for Theme. *Humanities*, 8(1), 30. <https://doi.org/10.3390/h8010030>
- Roper, M. (2005). Between Manliness and Masculinity: The “War Generation” and the Psychology of Fear in Britain, 1914–1950. *Journal of British Studies*, 44(2), 343–362.  
doi:10.1086/427130
- Ul Haq, I., & Rashid, U. (2018). Masculinities: Tracing the trajectories of gender performance in war poetry. *Multidisciplinary Journal of Educational Research*, 7(2), 110–123.  
<https://doi.org/10.17583/MCS.2018.3122>