

Procreation Anxiety in Climate Crisis: Comparative Analysis of *The Smog Society* and *Diary of an Interesting Year**

TANG Yi-fei

University of Shanghai for Science and Technology, Shanghai, China

The deterioration of the environment caused by climate change has been entangled with other factors to wane people's desire for having children. This paper takes two climate short stories, *The Smog Society* by the Chinese SF author Chen Qiufan and *Diary of an Interesting Year* by the British writer Helen Simpson as case studies, comparing the writing of the climate change induced fertility anxiety in the two stories from both the individual and community perspectives. By associating the textual analysis with the social reality about fertility rate in China and Britain, the paper explores performance and coping methods of fertility anxiety in the face of climate crisis, aimed at providing possible solutions for the sustainable development of population.

Keywords: climate change, Chen Qiufan, Helen Simpson, *The Smog Society*, *Diary of an Interesting Year*

Introduction

Since the Industrial Revolution in Europe in the 18th century, human activities have caused the global temperature to rise about 1.0°C above the pre-industrial level, leading to the increasingly aggravated problem of global warming. Following this trend, it could increase by 1.5°C above pre-industrial levels by 2030 to 2052 (Masson-Delmotte, et al., 2022, p. 4). Climate change will affect the whole ecosystem, which in turn will threaten the daily life of humans. Studies have shown that global climate change is also likely to have a significant negative impact on the physical and mental health of the general public, especially among vulnerable groups (Costello et al., 2009). More than half (57%) of child and adolescent psychiatrists in the UK witness child and adolescent patients distressed about the climate crisis and environmental conditions in their practice of medicine, according to a survey by the NHS¹ and the Royal College of Psychiatrists. (Watts & Dennis, 2020, p. 20)

The negative emotions triggered by global climate change are presented in multiple dimensions in today's climate fiction (cli-fi), giving readers various inspirations. In *The Smog Society*, a short climate fiction by Chen Qiufan, winner of Chinese Science Fiction Nebula Award, the main character, Lao Sun, is a pensioner who works with an environmental organization called Municipal Smog Research and Prevention Society to collect data on urban smog. By portraying such a character, the author shows the living conditions of ordinary people under the

* This paper is a periodic achievement of the 2021 Shanghai college Students' innovation and entrepreneurship project "Cross-cultural Comparative Study of Short Climate Fictions" (Project No. SH2021148), and is supported by the scientific research project course "Research on American Climate Fictions in the 21st Century" of University of Shanghai for Science and Technology.

TANG Yi-fei, B.A., College of Foreign Languages, University of Shanghai for Science and Technology.

¹ The National Health Service.

gradually deteriorating climate environment. In the fiction, Lao Sun collects urban smog data in different parts of the city while recalling the days of beautiful environment and the discussion with his wife about fertility decades ago. The whole story is unfolded by two interwoven storylines: the protagonist Lao Sun's current life and the memories he had with his wife decades ago. The sharp contrast between the ideal and the reality is an artistic demonstration of people's anxiety about fertility in the harsh climate. *Diary of an Interesting Year* is a dystopian fiction written in a journal form by British author Helen Simpson. The story is set in the UK in 2040, a world of overpopulation, severe environmental pollution and catastrophic climate change. Therefore, the narrator "I" and her husband G. were forced to flee to the north in order to survive, during which "I" suffered two miscarriages due to the harsh environment. Throughout the migration, pain, struggle, and ultimately numbness were demonstrated by the narrator, rendering her reluctance to have children again. Both of these two fictions take climate change as the milieu, which vividly reveals the common theme: aversion to childbirth. However, due to the different cultural backgrounds, the depiction and manifestation of procreation anxiety differ. Therefore, this paper places these two fictions in a comparative framework, focuses on the fertility anxieties of individuals and society in the climate crisis, and examines the reflections of Chinese and British authors on this issue with relevant data, and tries to analyze the reasons for these differences and similarities.

Individual Procreation Anxiety in Climate Crisis

The first concern deals with the procreation anxiety of the women in the fictions. In *Diary of an Interesting Year*, the narrator "I", who had had two unexpected pregnancies and miscarriages, expressed her deep concern about giving birth. In a diary entry at the beginning of the fiction (February 23, 2040), it is mentioned that the Hatchwells' cousins lived in London but were forced to leave because of the bad sewerage system, which is accompanied by a foul smell, and their son died of cholera. This sets the tone for the entire fiction—it is difficult for a newborn child to grow up healthy due to extreme environmental condition. Then, on May 14, "I" expressed a deep aversion towards pregnancy; on June 6, after having sex with G, "I" prayed desperately not to get pregnant, but to no avail; In the October entry, "I" was unintentionally pregnant for the second time, suffering both physical and psychological pain. Throughout the process, "I" invariably showed extreme resistance to reproduction, but not out of "my" resistance to the child itself, as the punchline at the end of the text states that, she wrapped the aborted child in her "blue shirt" and wished him good luck repeatedly. This also indicates that the fundamental reason for the narrator's reluctance to bear children is that she does not hold any expectations for the future in the climate crisis, and that she does not want her child to be tortured at birth. The procreation anxiety displayed by the narrator of the fiction discloses the disadvantageous position of women in the climate crisis. Compared with men, they are undoubtedly more of the vulnerable group both psychologically and physically.

However, reproduction is not the responsibility of individual females in a family, but something that both men and women need to face together. These two fictions also show the procreation anxiety from the perspective of males through lens of language, behavior and psychology. In *The Smog Society*, Lao Sun also revealed his worries about having children. In the fiction, the whole society is overshadowed by haze every day where negative emotions, such as different degrees of depression, are bred in the deteriorating climate environment. Lao Sun once said to his wife, "There're plenty of thirty-year-old having kids nowadays. Our finances are only so-so, and with our surroundings a dirty mess like this, it would be unfair to the kid. We'll work hard for another few

years, and then we'll go somewhere better to have a child, let them grow up somewhere nice" (Adams, & Chen, 2015, p. 395). It can be seen that the restricted living resources and negative psychology take a heavy toll on the procreative intention of the prospective father. Similarly, in *Diary of an Interesting Year*, on May 21, G. espoused the idea that "the earth can satisfy everyone's needs, but not everyone's greed" (Simpson, 2009, p. 3). Like everyone in the fiction, he lived in an era of climate crisis. Long-term migration and harsh environment made him gradually develop an almost pathological mentality—only if he completely abandoned the so-called greed with extreme frugality can he go back to the past and live happily with his children. Therefore, his anxiety about reproduction turned into criticism of life.

Climate change can lead to chronic or severe mental health disorders, including the fear that offspring will not grow up healthy in a deteriorating environment. Through the analysis of the two fictions, we can find that as childbearing is something that a family should face together, procreation anxiety not only haunts women, but is also pervasive among men. However, there are subtle differences in procreation anxiety between the genders. Women often tend to express resistance to reproduction directly and strongly, while men reflect their fading desire to have children through abnormal behaviors and emotions, but both showed strong concerns about the future of their newborns.

Procreation Anxiety of Communities in Climate Crisis

If we switch our focus to social groups of the two fictions, we will find that in *Diary of an Interesting Year*, fear of future living conditions forces mass migration; In *The Smog Society*, negative emotions are prevalent in the community where Lao Sun lives. As mentioned above, the female population is more vulnerable to low quality food and water due to their biological traits. Besides, procreation anxiety is more likely to be compounded by factors such as sexual violence, sexual exploitation, abuse, trafficking and intimate partner violence (Women Deliver, 2021). People's concerns about their children's lives are rooted in a pessimistic view of the future caused by climate change, says Damian Carrington, a professor at the University of Chicago. Out of 400 respondents, 92.3% had negative attitudes towards their vision of the future (Schneider-Mayerson & Leong, 2020). That is, climate change-induced procreation anxiety is widespread among social groups. By detailing individual characters of the heroine "Me" and Lao Sun couple, the two fictions epitomize the whole community under similar circumstances, which is confronted with procreation anxiety imposed by climate change.

As climate change affects the procreative desire of the whole community, the concept of "eco-reproduction" arises, with more and more families choosing not to have children or have fewer children. A graph of birth rate data from China's National Bureau of Statistics shows that the fertility rate has declined significantly in the last decade, falling to a record low of 8.52 per 1,000 in 2020. As China's aging society becomes increasingly prominent, the government has encouraged people to have children. From November 2011 to May 31, 2021, the "two-child policy", "separate two-child policy", "full liberalization of the two-child policy" and "three-child policy" have been put forward successively. However, statistics show that these childbearing policies have not been effective, with 10.62 million births in 2021, 1.38 million fewer than the previous year, a new low in recent

years; at the same time, China's birth rate was 7.52 per thousand, below 10 per thousand for the second year in a row and a new low in the last 72 years (since 1950)².

A similar situation has long been seen in British society. Data from the Office for National Statistics shows that the number of new births in the UK has been decreasing year by year over the last decade. From the perspective of the British general public, childbearing is a private rather than public issue, so there is no childbearing policy in the UK. However, the British government has made a lot of efforts on childcare benefits, such as child benefit, family allowance, social fund maternity pays, and education benefits, etc. Also, children can get tuition fee remission in public schools. But even so, the phenomenon of decline in the number of babies born each year remains unchanged.

Considering the fertility rates in China and the UK over the past decade, despite the efforts of both governments in terms of childbearing policies and childcare benefits, both have shown the same downward trend, suggesting that there are underlying factors for that. In an interview with Dr. Britt Wray, a researcher in human and earth health at Stanford University, Joe Davies, who featured this phenomenon in the *Daily Mail*, answered that "the fertility decline in the UK is due to ecological anxiety" (Davies, 2021). In fact, the research on the correlation between climate change and childbirth has already yielded some results. For example, a survey of 10,000 children and adolescents in 10 countries published in the *Lancet* found that about 40 percent of young people were afraid to bring their children into the world because of climate issues (Hickman, 2021). Sabrina Helm et al. asked 24 young people aged 18-35 about the impact of climate change on their reproductive decisions. In general, they expressed concern about the current state of overpopulation, overconsumption of resources and climate change, and believed that future children would have to cope with major environmental degradation and pollution, as well as water scarcity. If a child is brought into such a world, the parents will inevitably feel guilty, thus rejecting procreation ends up being a rational choice for them (Helm, et al., 2021). Therefore, based on the demographic changes and public opinion survey studies both in China and the UK, the current climate change has already affected the procreation intention of the whole social group.

It should be noted that procreation anxiety imposed by climate change is often gradual and cumulative (陈 等, 2014). Taking the social fertility rate as an example, except for a few large fluctuations, the overall downward trend has been a gradual accumulation process. This can be explained by the fact that procreation anxiety is intrinsically one of the psychological traumas induced by climate change. For example, in *The Smog Society*, the protagonist Lao Sun's most intuitive feeling about the smog is the sense of isolation, in addition to pain. For fear of being polluted by the smog, people must wear masks and stay indoors as much as possible. The "Smog Association" in this fiction offers psychological counseling sessions to ease people's anxiety, as most people suffer from varying degrees of depression due to the worsening climate. The fiction takes into account the environmental crisis of China, picturing people's worries for the future generations in the extreme climate environment, which is profoundly insightful and enlightening on the intrinsic connection between the demographic situation and the ecological environment.

² Data source: Zhongshang Industrial Research Institute database.

Comparison of Chinese and British procreation anxiety

Both of these two fictions adopt the form of “fantasy fictions”, which gives the storyline itself a long span of time, so that the subtle psychological changes of the characters in the story can be gradually unfolded in front of the readers. Immersed in the fictional world of the story, readers can better understand the psychological anxiety of individuals in the climate crisis, especially the hesitation and pessimism about breeding the next generation. In addition, both climate fictions have open endings that leave endless space for readers to ponder upon after intriguing their emotions.

However, these two fictions also differ in the way they portray procreation anxiety in the face of the climate crisis. First of all, *The Smog Society* presents the procreation anxiety of the characters from a third-person perspective through the interaction between the protagonist Lao Sun and others, while *Diary of an Interesting Year* unveils the heroine’s inner world from the first-person perspective in a different literary form. Second, although the two climate fictions share similar environmental backgrounds, priority is given to different perspectives in terms of the characters’ procreation anxiety. In *The Smog Society*, Lao Sun once fell into depression due to the haze. However, the author takes the wonderful past of Lao Sun and his wife together as an implicit narrative process to provide emotional support for him. Therefore, throughout the text, all that can be seen from the surface is just Lao Sun’s job as an ordinary volunteer to collect smog data, which, however, is essentially a process of exploring the causes of overwhelming haze and showing how to cope with people’s procreation anxiety triggered by it by self-adjusting mentally and emotionally. In *Diary of an Interesting Year*, facing the pressure of climate crisis, the hero G. got into a critical attitude towards life, making him quarrel with his wife merely for one more candle. The heroine was also affiliated by the bad climate environment, and the tortuous migration experience intensified her inner anxiety. Up to the end of the fiction, she failed to find a positive solution to get out of the climate dilemma, so she had to bury her children in person and continued to embark on the migration journey alone. It can be seen that the emotional tones of the two fictions are different. The former tries to get out of the climate dilemma by constantly resorting to the happy memories so as to provide positive inspiration for dealing with procreation anxiety, while the latter is always in a negative emotional state with frustration and bewilderment, with a serious doomsday complex, as its author highlights the seriousness and urgency of climate change with a pessimistic tone.

Conclusion

Through the comparative analysis above, both of the two climate fictions, *The Smog Society* and *Diary of an Interesting Year*, take climate change as the story background, in which procreation anxiety triggered by it permeates the whole stories, which is reflected in both individual and community levels. For each individual, climate change could induce natural disasters that make the environment barely habitable, and neither women nor men want to see their offspring living in a severely degraded environment. The procreation anxiety of each individual will accumulate into that of the social group, making the community as a whole less willing to have children and thus lowering the fertility rate. This paper compares and analyzes the differences and similarities between the two climate fictions in terms of the generation and coping ways of people’s procreation anxiety in the face of similar crisis but in different cultural contexts of China and the UK, shedding light on the concerns of

contemporary writers about climate change and population development, with a view to providing a reference for promoting the sustainable development of the world's population.

References

- Adams, J. J., & Chen, Q. (2015) "*The Smog Society*," in *Loosed upon the world: Anthology of climate fiction* (pp. 389-403). New York: Simon & Schuster. Available at: <https://www.lightspeedmagazine.com/fiction/the-smog-society/>.
- Costello, A., Abbas, M., Allen, A., Ball, S., Bell, S., Bellamy, R., & Patterson, C. (2009). Managing the health effects of climate change: Lancet and University College London Institute for Global Health Commission. *The Lancet*, 373(9676), 1693-1733.
- Davies, J. (2021). *Fertility rates going down in Britain because of climate change warnings, experts say*. Daily Mail Online. Retrieved from <https://www.dailymail.co.uk/health/article-10095481/Fertility-rates-going-Britain-climate-change-warnings-experts-say.html>
- Helm, S., Kemper, J. A., & White, S. K. (2021). No future, no kids—no kids, no future?. *Population and Environment*, 43(1), 108-129.
- Hickman, C., Marks, E., Pihkala, P., Clayton, S., Lewandowski, R. E., Mayall, E. E., & van Susteren, L. (2021). Climate anxiety in children and young people and their beliefs about government responses to climate change: a global survey. *The Lancet Planetary Health*, 5(12), e863-e873.
- Masson-Delmotte, V., Zhai, P., Pörtner, H. O., Roberts, D., Skea, J., & Shukla, P. R. (2022). *Global Warming of 1.5° C: IPCC special report on impacts of global warming of 1.5° C above pre-industrial levels in context of strengthening response to climate change, sustainable development, and efforts to eradicate poverty*. UK: Cambridge University Press.
- Schneider-Mayerson, M., & Leong, K. L. (2020). Eco-reproductive concerns in the age of climate change. *Climatic Change*, 163(2), 1007-1023.
- Simpson, H. (2009) *Diary of an interesting year*, The New Yorker. Available at: <https://www.newyorker.com/magazine/2009/12/21/diary-of-an-interesting-year>
- Watts, J., & Dennis, C. (2020). Half of child psychiatrists surveyed say patients have environment anxiety. *The Guardian*, 20.
- Women Deliver. (2021). The link between sexual and reproductive health and climate change: An evidence review. Retrieved from <https://womendeliver.org/wp-content/uploads/2021/02/Climate-Change-Report.pdf>
- 陆亚, 尹可丽, 钱丽梅, & 沈楠. (2014). 气候变化的心理影响及应对策略. *心理科学进展*, 22(6), 1016.