



“We meet reality only in our prediction errors.” On the Source of New Patterns in Art

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Abstract

The analysis of two novels by Joyce Carol Oates - *Blonde* and *The Gravedigger's Daughter* - aims to consider a hypothesis concerning the relationship between aesthetic experience and the ability to switch master narrative framework (MNF) alternative narrative. Master narratives have many uses for members of a group (utility principle), such as providing relevant information to understanding the group's rules and characteristics (e.g., its history, values, and social norms). Most members of a culture effectively accept and internalize master narratives without recognizing them explicitly as such (invisibility principle). The fact that master narratives are unconsciously internalized as ready-made guides for how to live a life and understand the lives of others facilitates adaptation by alleviating the necessity for effortful reflection on everyday choices, actions, or events.

Keywords: meta-expectations, epistemic arc, invisibility principle, Master Narrative Framework, transparency-opacity

1. Introduction

According to the findings of researchers seeking to unify multiple disciplines of knowledge - cognitive psychology, physics, philosophy and aesthetics - narrative can be seen as a cultural and cognitive tool whose function is to facilitate the coordination of individual and group action. The consistency of multi-agent action is founded on predictions of collective behaviour, judgements, values and expectations based on the same narrative. According to Friston (Bouzegarene et al., 2024) and his colleagues, one of the main functions of narratives is to generate more useful, accurate and economical predictions, enabling multiple agents to interact in various time scales. Narratives are reports of real or imagined events, presented verbally or textually in language or through a sequence of images or other symbols. A narrative can convey not only specific events by referring to their content, but organise them in the form of a structure i.e. which is how linguistic or other symbols convey relationships between events, especially temporal relationships. Friston and his colleagues focus on the structural features of narratives, such as coherence and their socio-cultural status (Veissière, et al., 2024). These researchers argue that many functions related to the structural aspects of narratives can be understood in terms of active inference (Friston, 2013). Active inference is a theory of perception, learning

and action (Friston et al., 2015), which aims to provide a unified explanation of these basic cognitive functions, as all operate under the same imperative to minimise the difference between what was expected and what was experienced (i.e., prediction error). Active inference has been applied to studying social and cultural dynamics in humans (including implicit learning). This concept can be used in two works by Joyce Carole Oates- *Blonde* and *The Gravedigger's Daughter*. Reading these works in the light of findings on the function of narrative as a foundation for social bonding based on shared intentionality will reveal the ability of the experimental literary form to expose the mechanisms of denial of American society's unethical attitude towards the Holocaust of Jews in Europe, anti-Semitism in the United States. Friston's (Clark, 2023) theory related to aesthetics and social issues elucidates the function of literary narrative in exposing the sources of social evil stemming from class divisions and ideas about femininity and masculinity.

2. Materials and Methods

The argument presented in this text is intended to lead to the conclusion that the novels of Joyce Carole Oates, being the subject of the remarks presented in this text, capture the individual and social recognition that the 'current model', i.e. the prevailing narrative, is no longer a good enough representation of the environment and should be replaced by another. In contrast to Friston's (Bouzigarene et al., 2024) findings, growing out of a consideration of the structural and social functions of narrative alone, the study documented in this text aims to apply the findings of neuroscience theorists to the explication of the thematic, plot and stylistic layers of the two novels, to reveal the functionality of poetological and literary theoretical terms that can provide useful tools for social criticism. The novels referred to in this article are *Blonde* and *The Gravedigger's Daughter*, whose main mechanism for generating meaning is the procedure of constructing a complex representation of temporal structure using very sparing rhetorical devices. It is this structure behind the richness of plot and stylistic forms of expression that illustrates the relationship between the political and institutional legitimacy of inflicting death and condoning rape. The protagonists of both novels belong to marginalised and despised social groups in classist and capitalist US society. By treating Oates as an 'invisible writer', giving way to her characters, giving them a voice, it is possible to see how deprived of the tools of intellectual analysis, the women protagonists of the aforementioned books find enough sensitivity and ingenuity to observe, through the prism of personal experience, the destructive effects of a disadaptive narrative and to fight to replace it with another. The recognition that the characters can make suggests that the cultural niches (Clark, 2017) - the set of practices, institutions, norms and practices of the social group within which the protagonists of the novels operate - must be changed. Despite their low education and traumatic experiences, both women can feel and express the evils of which they become victims, and their emotional internal narratives, which refer to private symbols, express their disgust with a social narrative in which the female body is a prize waiting for men who are more efficient at killing and acquiring money than others. The social construction of niches that provide cultural affordances, that is, culturally specific possibilities for action is flawed and needs to be modified (Constant et al., 2018). *Blonde* and *Gravedigger's Daughter* describe the enculturation process of individuals engaging in exemplary cultural practices, which have the function of enculturating people through selective learning. According to active inference models of culture, cultural affordances and shared expectations (Friston, 2012) benefit human agents because they provide information about the everyday behaviour of people in one's cultural and social niche or milieu. This, in turn, is useful because it enables humans to mutually predict each other's behaviour.

Blonde begins in the 1930s and, by casually referencing arbitrarily selected aspects of the biography of Norma Jeane Baker, known as film sexbombs Marilyn Monroe, daughter of an

unknown father and schizophrenic mother, depicts the devastating impact of the American social narrative of the time on the life of a talented and perceptive woman. Friston notes, that most members of a culture effectively accept and internalise master narratives without recognising them explicitly as such invisibility principle (Limanowski et al., 2018). The fact that master narratives are unconsciously internalised as ready-made guides for how to live a life and understand the lives of others facilitates adaptation by alleviating the necessity for effortful reflection on everyday choices, actions or events. The invisibility principle revealing the mechanism of narrative and the reasons for subjects' vulnerability to it can be transcended through the representation of its arbitrariness and fictional character in the literary text. The two Oates works analysed in this essay are constructed in a way that leads the viewer to give up on treating social narrative as a 'mirror' of reality (Bernheimer, 1996). The literary text makes the constructs of social narrative no longer mental representations that are phenomenally transparent to us. Transparency (Metzinger, 2003) is a concept with some tradition that can metaphorically be understood as looking through a window onto the world, instead of looking at the window itself: we only access the representation's intentional content (something in the world which it is about) without noticing its non-intentional carrier properties. The references to Friston's theory strongly qualify the framing of active inference as a mirror of reality (Ramstead et al., 2022).

The second novel under consideration here, *The Gravedigger's Daughter*, can also be taken as a polemic against the same aspects of the American social narrative that have had a devastating effect on the life of Blonde or Norma Baker. More broadly, it is legitimate to see these works as questions expressed in literary form about the reasons for the legitimacy of social and political violence accepted by Americans. Arguments can be made in support of the claim that in the works Oates cites, the social critique is counterbalanced by a positive assumption: the experimental literary form can be a source of experiences that support the pursuit of social and individual emancipation. In addition to critiquing the paralysing effects of religion, popular culture and patriarchy on social and individual aspirations to construct an alternative version of the story of who Americans are and how they should act, both *The Gravedigger's Daughter* and *Blonde* suggest that people can recognise the falsity of the assumptions organising the collective imagination and overcome them. Friston's research, cited earlier, is consistent with the assumptions about the function of narrative implied also by the American author's novels mentioned earlier. Narrative helps individuals and collectives to anticipate and thus adapt to a changing environment. Its primary function is to enable people to integrate at the group level. The impact of some narratives, however, can be disadaptive. Bouzegarene et al. (2024) introduces the concept of master narratives. These are models of collective and individual identity, usually unreflectively and unconsciously assimilated by its users and treated as a template to interpret an individual's life.

Environments, however, are dynamic, static, and certified master narratives become outdated and require change (Wu, 2016). Those who reject the master narrative adopt or invent an alternative narrative. Such a situation is depicted in *Blonde* and the *Gravedigger's Daughter*. The authors' of the new narrative are not only Norma Baker in her artistic performances, but also Jacob, Rebecca and Freyda in *The Gravedigger's Daughter*. Norma accepts the rules of a world ruled by men, trading her body for more film roles, while indulging in infantile dreams of meeting the man that American women of her generation are promised by popular films. She is also a brutal and critical commentator on the destructive clichés of America's classist and patriarchal social system as she constructs stories about the heroines she plays. A sexbombs from the American Dream, as an artist she creates harrowing characters of American Beggars, the poor, the excluded, maddened by humiliation and demanding the right to find their way. These characters relate to the dramatic experiences of Norma's mentally ill mother Gladys, a

poor, uneducated worker, but also Norma herself. The performances and the new versions of the scripts, different from the shallow, optimistic stories contained in the films intended for mass audiences that Norma 'writes' for her characters, emphasise not only her extremely strong bond with her mother, accentuated by a phrase repeatedly quoted in various parts of the text, an auditory hallucination, a projection of Gladys' 'voice', experienced by the protagonist: Wherever you are, I'm there. Even before you get to the place where you are going I'm already there, waiting. I am in your thoughts, Norma Jeane. Always. They also suggest a conception of the relationship between language and subject identity in which a subject's personal experience is mediated through language and perception, mimicking the perspective of another person. This conception of subjectivity targets the traditional conception of 'identity', the conception of the self that underpins patriarchy and is the main source of political violence. The men in Norma's performances are not defenders but 'liars and murderers', passively observing the European Holocaust, responsible for the genocide in Hiroshima and Nagasaki. Rebecca in *The Gravedigger's Daughter*, is the child of a Jewish refugee from Germany forced to emigrate by the Nazis, although she can change her identity, to pretend to be the epitome of the 'American girl', the straight-laced Hazel Jones, always keeps her father's words in mind: "Why? Ask God why. Ask that hypocrite F.D.R. (Franklin Delano Roosevelt) why! " (Oates, 2007). With these words, the man comments on Roosevelt's refusal to accept Jewish refugees from Nazi Germany, among whom are his relatives, Rebecca, despite her hatred and contempt for her father, who shot her mother and then committed suicide, unconsciously recalls these words in her memory as a comment on her guardian's attempts at religious indoctrination. The father's statement - quoted in many different parts of the novel - can be seen as a critical response to attempts to equate the American political narrative with theological promises of salvation. Freyda, Rebecca's cousin, one of the passengers on the ship turned away from the American coast, becomes a scholar years later and writes her 'memoirs' of the concentration camp. She rejects the claim that the Holocaust was a unique event in human history and 'sanctified' the people who suffered during this 'episode of history'. Freyda writes years later to her cousin: The pious fantasizers wish to claim that the Nazis' genocidal campaign was a singular event in history, that it has elevated us above history. (...) This is bullshit. History is the invention of books. In biological anthropology, we note that the wish to perceive 'meaning' is one trait of our species among many. But that does not posit 'meaning' in the world. If history did exist it is a great river/cesspool into which countless small streams & tributaries flow (Oates, 2007). It is important to note that Oates's characters critique the narrative, shaping perceptions of the external world and motivating action within it.

The problem of the relationship between language and perception and action is also discussed in numerous articles by Friston. Friston explains perception by referring to the notion of a generative model, defining it as a probabilistic mapping from causes (e.g. latent or hidden states of the world) to observable effects, e.g. sensory observations. These models are hierarchical, in which higher levels contextualise lower levels, and lower levels provide evidence for higher levels. In this scheme, free energy minimisation corresponds to maximising Bayesian model evidence, which implies a notion of 'self-evidencing' (Pagnoni, 2023). This hierarchical pattern of repeated messaging suggests that higher and higher in the hierarchy, beliefs represent increasingly abstract states of the environment on increasingly wider time scales. The construction of opaque representations is susceptible to introspection, an internal form of resource allocation to specific parts of the internal reality and self-model (Metzinger, 2017). The literary text forces the viewer to use a generative model in which the fictional and symbolic content is not located at the highest, most abstract level of the hierarchy. Racial, class and religious perceptions that are the source of harmful beliefs and master narratives are hard to change (rigidity principle) (Limanowski et al., 2018), because they are woven into many aspects of the social system, including structures, institutions and routines, but also because

those who benefit the most from master narratives are also in power, and use their influence to maintain and enforce the master narratives.

What is of particular relevance to the considerations presented here is Friston's emphasis on the connection between aesthetic experience and freedom, and the claim that the reception of art, by being embedded in neurobiological cognitive processes, has a real, very intense effect on the viewer. These issues can be linked not only to Oates's declarations of her aspirations as an author—that is, the remodelling of the social order in which the 'restoration of voice' to the marginalised and vulnerable is central, but can be used to productively discuss the most idiomatic features of this author's prose, and used to conceptualise the social impact of literature in the context of the empirical findings of theory growing out of empirical research. Friston and his colleagues assume that the purpose of the cognitive processes of living organisms is to generate top-down patterns of accurate predictions of how the environment will affect them and how the unknown, hidden causes of this influence can be interpreted in the light of sensory experience (Parr, et al., 2022). This prediction is made possible by a generative model, updated by the mismatch between these predictions and sensory samples. These predictions are sometimes wrong when interactions with the environment do not confirm them. Sensory data consistent with the predictions are ignored, but sensory data suggesting that the predictions are wrong attracts attention and can stimulate curiosity (Friston et al., 2012). If there are reasons to suppose that uncertainty will be resolved, if perception is worked on, the sensory patterns of our generative model will regain meaning and will prove the bond between the generative model and the external world, allowing us to reach out and also transform it. Friston refers to those descriptions of curiosity that will emphasise that the parts of the environment that stimulate sensitivity to the rate at which uncertainty can be minimised have a particular attraction (Friston, 2011). They are not concerned with the features of the environment per se but with the prediction of the organism's ability to anticipate such features. Curiosity is an active exploration, being an attribute of planned or counterfactual actions, quantifying their potential to acquire sensory data, relevant to predictions, enabling the explanation of the hidden causes of a specific situation or stimulus. If the sensation of curiosity is related to the error minimisation factor. In neuroscience, the recognition of the solution to uncertainty (Aha Erlebnis). Is thought to be correlated with dopaminergic discharges (Van de Cruys et al., 2023). The strength of the Aha experience is related to solving the puzzle faster than expected—with metacognitive prediction error and autonomous epistemic agency, the intensity of this experience increases when it is Aha. Is the result of self-exploration. The tendency to assume and attribute structure or meaning to meaning in the external world, rather than the mind, tends to get in the way of finding better solutions. Self-minimising uncertainty about the structure of an aesthetic artefact can be an extremely positive affective experience, referred to as Aha. It is preceded by uncertainty, triggered by a prediction error - the structure of the aesthetic artefact rarely confirms the viewer's first intuitions, a stimulus that arouses curiosity and independent epistemic agency (Friston et al., 2015). Artists provide experiences, described by Friston as 'an epistemic arc consisting of curiosity, epistemic agency and Aha experience, deliberately inducing prediction errors. Epistemic action is necessary to obtain a good generative model of a work of art. Uncertainty reduction is always defined exclusively by the model embodied by the agent, so the experience defined by active inference is existential. By minimising uncertainty, the organism maximises the evidence for its existence (Ramstead et al., 2020). The epistemic arc and associated flows and outflows of uncertainty relate to generative models, which are linked by the dynamics of interoceptive states and at a higher level of the self and its feelings. The issues mentioned earlier, concerning the artistic shaping of Oates' prose, need to be contextualised about Friston's assumptions. One of the most recognisable methods of artistic textual shaping employed by this author is the repetition of the same 'voice' phrases.

The reason for the failure of Norma, the heroine of *Blonde*, is her destructive quest to define her identity as a father figure of a man capable of "giving her the right to live because she does not believe she deserves to live". Her submissiveness and infantilism stem from her ongoing morbid fascination since childhood with popular films that tell of the happy transformation of a woman's life after meeting the Dark Prince. Sexually harassed, treated as an object of erotic fantasy by men privileged in a classist and patriarchal social system, living the illusion of the Dark Prince's redemptive influence on her life, Norma is humiliated and suffers sexual torture. The huge profits she makes for the film industry prevent her from even achieving a stable material situation herself. By depicting the seduction of the protagonist's imagination with male characters from films 'that have become the religion of America', Oates is critical of the mechanisms of mass culture that guarantee film studios gigantic revenues, achieved through the susceptibility of mass audiences to sexist and patriarchal clichés. At the same time, the American writer diagnoses the dangerous phenomenon of the overpowering influence of a pernicious narrative on the collective imagination of US society, treating father figures as the cause of Americans' susceptibility to imperialist propaganda and political aggression, going back to the acceptance of the genocide perpetrated in Hiroshima and Nagasaki and the stylisation of the post-war campaign against alleged communists in state institutions as a struggle between 'Christian democracy and Satan, i.e. the USSR. The political issues are portrayed through the personal experiences of the main character Blonde embarking on an affair with the US President and is later murdered at the behest of the secret service, treating the popular actress as a collaborator with the communists, acting to destroy 'American freedom'. Norma's last lover is the US president. The man, treated by her as the embodiment of the Dark Prince seems to promise the transformation of the protagonist, calling herself 'Beggar with no name', the illegitimate daughter of a mentally ill worker into the bride of America's most powerful man. Exploited by him like a prostitute, forced into kinky sex as she tries to protest US aggression against the Cuban people after her rapprochement, the President no more acknowledged hearing them that he would have acknowledged the noise of antiquated plumbing elsewhere in the suite, a toilet flushing.

Norma's humiliating position vis-à-vis the influential politician, depicted in the rapprochement scene between them, not only emphatically demonstrates Norma's reduction to the role of an erotic toy, a cloaca for the impurities of privileged men, but directly expresses the utter failure of a woman obsessively seeking to regain her dignity and subjectivity through the love of a man. The President (and the heroine's other lovers) ultimately appears as a rape-bearing, humiliating and violence-inflicting figure, a murderer. Norma, however, is not just a mindless, captive victim. The woman is unable to give value to her existence in her private life, but in her art she can convey her emotions uncompromisingly and brutally, making them the material of an artistic, acting performance. Her reactions during the actress's work allow the reader to recognise that the reference in the novel's form and style to the fairy tale is a form of parody, a manipulation aimed at the naivety of the viewer who dreams of treating the American tale as a (Friston et al., 2017) fairy tale with a happy ending. This is indicated by a quote from the novel, taken from the scene during which Norma plays her final role, Roslyn.

The actress, however, interprets her character differently, expressing her rage and hatred for the men responsible for the annihilation of the defenceless. As one can read in an excerpt from the novel: She would scream at the men Liars! Killers! Why don't you kill yourselves! She would scream in the emptiness of the Nevada desert until her throat was raw. (...) I hate you! Why don't you die! She may have been screaming at those men of her life whose faces she retained or she may have been screaming at those men lacking faces, constituting the vast world beyond the perimeters of the crimson velvet backdrop and the blinding-bright photographer's lights. She may have been screaming at H who had eluded her charm.

It should be noted that in this passage there is a reference to one of the first abuses suffered by the novel's protagonist, a pornographic session she decided on while suffering extreme poverty at the beginning of her acting career. In this quotation we can see a manifestation of the organisation of time characteristic of both Oates novels, linking events from the protagonists' distant past to successive episodes of the plot, so that the teleological and chronological time structure of the fairy tale and the political utopia is negated in a peculiar construction of time and space in which it becomes impossible to free oneself from the pain of the past. The presence of this suffering and its ever-recurring actualisation becomes the nucleus of an alternative social narrative, allowing the trauma of the past to be transformed into the seedbed of an experimental form of new literary art. It is noteworthy that the novel's use of the fairy tale template is at odds with the culturally shaped expectations of the audience. The 'mirror of the story' intended to reflect reality is transformed into an impulse prompting the audience to start critically representing their expectations of the narrative structure. The uncertainty of the viewer, who is forced to seek answers about the function of such references and the organisation of time in this way, forces him or her to look for ways to minimise his or her uncertainty. By minimizing uncertainty an organism is self-evidencing: maximizing evidence for its existence (Friston, 2018). Any experience, aesthetic or not, starts with a minimum of proactive engagement, in the form of predictions based on the context established by things previously inferred. Sensory data that matches our predictions recedes to the background, but sensory data that violates our predictions (increasing our uncertainty around their hidden causes) can grab our attention (Sun et al., 2020). They can become the (salient) cues for curiosity. In describing aesthetic experience, Friston and his colleagues do not treat it as an experience separate from other mechanisms of cognition and perception, they unify them under the common umbrella of free energy minimisation theory. At the same time, they emphasise that the tradition of treating aesthetic experience as a continuum of other aesthetic experiences comes from the tradition of pragmatism, especially Dewey.

Oates is repeatedly described by others and by herself as a pragmatist (Cologne-Brookes, 2005), one can view her aesthetic project as seeking to abolish the strict separation between art and life. One manifestation of this tendency is her use of a form with an ambiguous status that violates conventional definitions of fiction. The works analysed in this text refer to elements of biographies of real people. Norma Baker's biography was the impetus for the construction of metaphorical and experimental prose, synthesising the historical and aesthetic experience of the 20th century through the story of a poor American woman paying with her life for her attempt to realise the 'American Dream'. *The Gravedigger's Daughter*, dedicated to the writer's grandmother, recycles the story of a Jewish immigrant seeking a chance at life for herself under the fictional identity of an American girl, paying for her salvation by having to hide her future. When she adopts the fictitious name "Hazel Jones", she turns into a shallow, optimistic and straightforward character. A quote from the novel attests to this: the salesclerk Hazel Jones had established for herself a personality distinct as a comic strip character: Olive Oyl, Jiggs-and-Maggie, Dick Tracy, Brenda Starr Girl Reporter. The deepest truth of the American soul is that it is shallow as a comic strip is shallow (Friston, 2018). Hazle Jones, a simple, cheerful American woman replacing the daughter of Jewish immigrant Holocaust survivors, is a figure who allows Americans to avoid confronting their guilt of indifference to the Holocaust. Both Rebecca's employer and her husband question Americans' responsibility for the genocide committed against the Jews. Rebecca does not dare to protest, although in her mind she calls her superior a "bastard" and a "Nazi" (Taylor, 1981). Hazel's general admiration for American men, surrounded by them, allows them to escape from having to confront the crimes committed in the name of history. "Hazel Jones" is reminiscent of the heroine played by Norma Baker in one of her films, deconstructing at the same time the reasons for the fascination of Americans with this "girl with no past", "no name, no memories", who "is an American girl, healthy and

clean as a bandage patch". The form of both stories forces the viewer to actively seek answers not only about the meaning of the individual literary works, but the meaning of art in the face of the cruelty of history and biological determinism, the horror of the female body.

Norma, as a young girl, adores President Roosevelt, Rebecca, now an adult and a victim of marital violence, finds a saviour in a man she meets by chance, enchanted by his elegant appearance and excellent manners, and by his doctorate. Years later, she learns that this man was a serial killer, preying on young working-class women in whom he could inspire confidence with his appearance and behaviour indicative of wealth and education. Norma, dreaming of meeting her father and gaining his recognition, succumbs to a succession of film industry executives, and her downfall begins with a nude photo shoot. During this session, a vulgar photographer makes a brutal comment on Norma's body, linking the film and pornographic industry to the ruthless exploitation of the human body carried out by the Nazis during the Holocaust. This theme connects to the question of US responsibility: "U.S. policy meaning FDR-was to turn away Jewish refugees and send them back to the gas ovens". Otto addresses Norma: "The United States is a booming postwar fascist state (now that the self-declared Fascists are defeated) and the House Un-American Activities Committee is their Gestapo and girls like you are luscious pieces of candy for whomever's got the dough to buy them". One can see in his accusations a foreshadowing of the critical attitude towards US policy at the time, clearly emphasised in other passages of the novel. The initial indifference of Norma's country to the fate of the Jews is also the subject of her obsessive musings during her marriage to a Playwright of Jewish origin. "You know about the Holocaust, and you know about the history of pogroms, and you know about the blood-drenched soil of 'civilized' Christian Europe. You know about Nazi Germany and you even know how indifferent Britain and the U.S. were about saving the Jews". Note the regularity with which the novel returns to the theme of US responsibility for the Jewish genocide.

During an audition in the office of an influential producer, Norma is raped, and in this scene, all the relevant figures for the meaning of the text can be identified. The man exploiting his position at the film studio seems to the protagonist to be her lost father, destined to change her life for the better. Intertextual references to the dystopia of the English writer Wells, functioning here as a foreshadowing of the dramatic end of life on earth, can also be discerned in this passage, and the blazing sun, capable of killing every manifestation of it, is one of the many updates of the trope mentioned earlier, allowing light to be treated as a foreshadowing of human annihilation. In this episode, Norma tries to endure the trauma and pain of the rape by imagining the future that her submissiveness to her attacker was supposed to secure, and her attempts to escape from the horrors of the present to thoughts of the future, which she is supposed to ransom by acquiescing to sexual abuse, are recognised by herself in her inner monologue as a foreshadowing of annihilation and death.

Mr Z pushed me toward a white fur rug saying Get down Blondie & only then did it come to me Mr Z is my father he? The secret heartbreak of Gladys Mortensen's life yet the only happiness of her life In bed that night past midnight unable to sleep I would grope for one of Mother's old watersoaked books from years ago the TIME TRAVELER by H. G. Wells & the Time Traveler as he is solely called takes his seat with courage & apprehension on the Time Machine of his invention & presses a lever & plunges into the Future seeing suns & moons spin over-head I'd read it so many times, yet I'd move my finger along the printed lines in dread of what must come & my eyes misting over with tears So I travelled, stopping ever and again, in great strides of a thousand years or more, drawn on by the mystery of the Earth's fate, watching with a strange fascination the sun grow larger and duller in the western sky, and the life of the old Earth ebb away. At last, more than thirty million years hence, the huge red-hot dome of the sun had come to obscure nearly a tenth of the darkling heavens... (Oates, 2001).

Norma, persuaded by her agent that her existential experiences are irrelevant to the art that gives them form, remains sceptical of such an establishment of a relationship-relationship of inferiority-between artistic activity and Your emotions, your anguish over your divorce or Mr Gable's death, whatever- with an airy impatient gesture taking in all of the worlds she'd inhabited in thirty-five years or even envisioned: the very memory of the Holocaust evoked out of much- thumbed secondhand books rescued from a used-book store, vessels of Jewish fortitude and suffering and eloquence even in suffering, the stale-rancid odours of the California madhouses of her mother's captivity, all the memories of her personal life as if they were of no more significance than a screenplay- "you may as well see your trauma as a newsreel because others will."

This is one of the themes of the novel, relating to the question of the relationship between existential experience and art. The reference to Friston's theory (Frascaroli et al., 2023) makes it possible to recognise aesthetic experience as a continuum of existential experiences. This researcher suggests the existence of a link between the reception of art and the autonomy of the subject, achieving its freedom through the recognition of the patterns of the structure of the aesthetic artefact (Van de Cruys et al., 2023). It is possible to see art as capable of positively altering the neurobiological processes of the viewer and increasing their sense of agency (Friston et al., 2012). Oates does not suggest that the transformation of dramatic existence into literary matter invalidates individual suffering or the evils of history. She does, however, demonstrate the value of suffering in the maturation of the individual and the art they create. The relationship between art and life is also significant in the second novel analysed, *The Gravedigger's Daughter*, dedicated to the writer's grandmother Blanche, described as 'the gravedigger's daughter'.

The Gravedigger's Daughter is the story of Rebecca Schwart, the daughter of German Jews fleeing Nazi Germany for America, where their hope of starting a new life proves entirely illusory. Rebecca's father, before Hitler's rise to power, a mathematics teacher and reader of classical philosophers, performs a demeaning role for Rebecca as she witnesses how her family suffers anti-Semitic persecution and must hide their Jewish origins to survive. It is striking that Jacob, losing his mental balance as a result of his dramatic experiences, falling into a persecutory mania expecting an attack by imaginary 'enemies', begins to experience a bizarre fascination with Adolf Hitler's writings and becomes excited by 'this insane conviction! This passion! Juxtaposed with Hitler's tirades, with Hitler's ghastly logic, how ephemeral, how feeble were the great works of philosophers, mere words and nothing more! Mankind's dream of a god was only words! (Van de Cruys et al., 2023).

The rhetoric that seduces the mind of a frustration-filled man bears the hallmarks of other forms of expression, which in Oates' novels are representations of an ideological narrative based on imagined political threat. The humiliations that befall Rebecca and her loved ones are rooted not only in the poverty of the newcomers vegetating in the neglected cemetery but also in their Jewish origins. One of the most painful events Rebecca experiences during her childhood is the dashed hope of the arrival of her cousin from Germany, Freyda. The girl's family, travelling by ship to America was, by President Roosevelt's decision, turned back to Germany. The brutal comments of Rebecca's father, hatefully accusing Americans of anti-Semitism, will resurface in Rebecca's memory throughout her adult life. Her father's aggressive words refer not only to the case of his relatives' tragedy but to the meaninglessness and chaos of history, stripped of any meaning, the 'logic of history' that philosophers have tried to dress it up in. His father's views also refer to a trivial Darwinism; in their light, what unites people is the ruthless struggle for physical survival. The ambivalent bond between the protagonist and her family, especially her father, is the main force driving the novel's achronological composition. "The voice" of the father haunting Rebecca violates the chronology of events depicted in the novel and prompts

questions about the identity of the protagonist and the very ambiguous sense in which Rebecca's long-standing and ultimately successful struggle to save her life and take her place among the American upper-middle-class gains. The hypocrisy and opportunism of the representatives of this stratum are quite clear to Rebecca, patiently enduring the Holocaust denial of the Jews and the refusal of Americans to take responsibility for passively tolerating Hitler's initial successes and the Nazi genocide. In flattering the good opinion that those around her have of themselves, Rebecca assumes a false identity, claiming to be an optimistic, straightforward, cheerful American woman named Hazel Jones. This does not change the fact that Rebecca is emotionally and intellectually a prisoner of her past, reliving relentlessly the crime of her father and the loss of her mother. Particularly in this aspect, the novel's form is in line with Friston's assumptions about the function of active inference in recognising patterns of aesthetic artefact (Van de Cruys et al., 2023).

It can be seen that *The Gravedigger's Daughter* requires the reader to reconstruct the events that link into a sequence of cause-and-effect relationships that give form to Rebecca's life. It is also the task of the viewer to identify the function and contextualise the 'voices' that Rebecca experiences in her auditory hallucinations and the individual tropes as relevant as the plot, e.g. the lock at Milburn, Rebecca's fantasies of playing with her expected cousin, the Beethoven sonata. Rebecca, like Norma, is a victim of her tragic past and her origins, but like Blonde she refuses to passively accept her fate. She struggles to change her own life, and one of the main factors in her survival is her internal narrative, allowing the woman to retain a partial link with her past. "The voice" of the father in Rebecca's memory, is a source of destruction and pain, and its indestructible power exerts its influence on the daughter for all the years of her life. The protagonist's destructive and disgusting father's voice, his words about people's existence being nothing but a brutal struggle for survival "there is no place for the weak in the animal world".

These are not the only impulses stimulating the protagonist's inner narrative of *The Gravedigger's Daughter*. She is equally strongly influenced by imagined childhood games with her expectant cousin Freyda, through which little Rebecca builds her inner independence and finds the strength to stand up to her brother attempting to sexually abuse her. When, as an adolescent girl, she hides in the locked area of her hometown, she has the illusion of the face of her expected cousin and other relatives. Many years after her mother's death, she thinks she is having a conversation with this woman who was completely dominated and silent when she was alive. As Rebecca listens to her adult son play Beethoven's *Appassionata*, she speaks to her late mother and hears her responses. She asserts that her music-loving mother during her lifetime gave her the strength to develop talent in her son. *The Gravedigger's Daughter* requires - like Blonde - the tracing of very complex temporal relationships, structured by the negation of the separateness of what is past and what lasts. The novel's highly complex meaning requires the viewer to keep small elements of the narrative in mind - usually an italicised 'voice' of another character intruding into Rebecca's thoughts, a reference to an image in the protagonist's memory (the aforementioned lock on the Erie Canal or the title of a Beethoven sonata) and to recognise them as indexes that violate the chronology of the work.

3. Results

Rebecca, like Blonde, is never parted from her past, and the signals of the penetration of the distant past into their adult lives are one way of expressing the fact that the optimistic and progressive official narrative of American social life must be replaced by a narrative of America's shared and shameful past of violence, racism, exclusion and capitalist class divisions (Taylor, 1981). Recognising how possible this change is may become easier by invoking Friston's theory of active inference. This researcher problematises aesthetic experience by

dividing it into three elements (i.e. these cycles of curiosity-epistemic act-aha experiences) (Van de Cruys et al., 2023) and it is possible to represent this schema by referring to the cycle of repetition employed in the poetics of Oates' novel. The clearest manifestation of a procedure intended to stimulate the viewer to minimise uncertainty (Clark, 2015) is the repetition of the same phrases (often italicised) or metaphors, occurring in different parts of the novel. The presence of these elements of textual meaning not only builds a link between the successive stages of Rebecca's life but also makes it possible to signal the influence of the protagonist's traumatic past on her distance from American political mythology, which refers to religious imagery. Friston believes that narratives can represent several events and their interconnectedness, especially their temporal sequence and cause-and-effect structures (Parr, et al., 2023). The main procedure identified in Oates' novels to alter the social narrative is the ironic reference to the teleological and promising story for American women of the second half of the twentieth century, in which father figures, husbands and national leaders are symbols of successful women's lives, defining themselves only about male figures. A parodic and ironic subversion of these figures takes place in the strongly subjective stories that *Blonde* and *The Gravedigger's Daughter* tell about themselves. In their stories, one can perceive a regular updating of themes and figures, contextualised at different points in the narrative trajectories.

4. Discussion

Computational theories of curiosity (Schwartenbeck, 2019) offer convincing justification for the claim., that the uncertainty, disorder or disorientation experienced in contact with an aesthetic artefact alone is not enough to arouse the viewer's curiosity; it must be intensified by an implicit expectation that there are chances of minimising uncertainty if it is preceded by a restructuring of the artist's mind. In each of the novels examined in this text, stylistic and compositional mechanisms can be identified that intensify two distinct tendencies-uncertainty about the function of certain elements of meaning and the suggestion that this uncertainty can be replaced by a plausible conviction about the role that particular elements play in the meaning of the novel. Friston's description of the aesthetic experience (Van de Cruys et al., 2023) treats it as one manifestation of the agent's ability to minimise surprise and to create a good model to justify the stimuli provided by the aesthetic artefact. According to the concept of predictive processing (PP), agents largely implicitly generate top-down predictions to capture patterns (regularities) in their sensory inputs (Friston, 2013). Agents exploit mismatches between these predictions and the sensory samples to update and adjust generative models, the source of subsequent predictions. By minimising these prediction errors, the agent can infer hidden causes that may have generated proximal sensations (Allen, et al., 2016). In the comparative analysis of the two novels presented in this text, selected aspects of the poetics of the texts are shown to stimulate the adjustment of the viewer's generative models to the influx of sensory stimuli, providing ambiguous, often contradictory signals regarding the attitudes of the main characters and the relationship between - the language of political propaganda and the language of art.

Each of the novels analysed invokes numerous genres and stylistic forms. Researchers have highlighted the influence of the Gothic literary tradition and fairy tales (Warner, 2006) on Oates' aesthetics, and this tendency prompts questions about the balance between the ahistorical and the strictly political in the writer's work. It should be emphasised that Oates herself creates a coherent picture of the mechanisms of propaganda and related violence in such a way that she reveals the common aspects of these phenomena, whether they concern the language of Nazism, the US anti-communist campaign, religion, sexism or manipulation to lead to social acceptance of US military aggression in other countries. In the case of the novel *Blonde*, the common basis of these phenomena is signalled by a network of synecdoches,

uniting in the protagonist's imagination images of physical annihilation (the Los Angeles fire), fire and the burning of bodies in the concentration camps or the atomic explosion in Hiroshima and Nagasaki. The motifs of fire and light, and the burning of the body accumulate condensing the novel's meanings in Norma Baker's poem *The Burning Princess* (Oates, 2001). It's hard to talk about a work of literature in that way. There's a danger of becoming reductionist. A work of literature is its language, mood, and atmosphere. It's not just about an issue. Oates is the consummate process writer, following James in 'assessing the journey, the flow,' to be all-important, even if concentration on the flow means that some of the results are less impressive-less stimulating than others.

Blonde is a text that uses a series of synecdoches to introduce the motif of threat and annihilation not only of the title character but of the entire social community that is the backdrop of the events depicted in the piece. The complexity of this voluminous and multithreaded piece can be reduced to a few tropes, and the links that connect them allow sensory signals to be ordered from the highest to the lowest level of the generative model (Friston, 2009). The model or system must have an internal dynamics that has a mnemonic aspect; namely, the capacity to infer the past and future (i.e., to postdict and predict). Such generative models, necessary for planning (Friston, 2013), immediately confer an ability to not only represent the future but to represent the past. This follows because the current time must be located within the temporal span of the generative model, endowing the model with both a predictive (anticipatory) and postdictive capacity. This has close relationships with the notion of mental time travel (Suddendorf, et al., 2009; Buckner et al, 2007); Schacter et al., 2007) and a form of autoeic memory for recently experienced events (Tulving, 2002) that are contextualised by subsequent evidence accumulation (Tulving, 1985). The artistic value of the American writer's work is determined by the fact that the ambivalent meanings - death and rescue, annihilation and persistence - can be seen in the light of these aforementioned synecdoches and lead to a competition in the contradictory, ambiguous treatment of the various elements of the text's poetics. Signs of a regular return of the two main tropes can be discerned in the subsequent parts of the work, and their presence helps to give structure to the novel. The organisation of meaning in *The Gravedigger's Daughter* can be seen similarly, although the most significant tropes are the other figures and absurdity of history and the dehumanisation of man in the horrors of 20th-century history. Both protagonists attempt to give meaning to their personal experiences so that it can be evidence of overcoming hatred, contempt and death passed in the name of ideology. You are you because you revisit (the neighbourhood of) these attractive states time after time. Your life traces out a path on this delicately structured attracting set or manifold, where your highly convoluted orbits-or strange loops-keep bringing you back to where you once came from Hofstadter (Hofstadter, 2007).

5. Conclusion

Aspects of the analysis of these texts that are particularly relevant to the research presented here are the methods of undermining the impact of the master narrative (Bouizegarene et al., 2024) employed in each of the works. The master narrative being critiqued in these works is the ideas values and perceptions at the root of US military aggression, racism and classism of that state in the first half of the twentieth century. Recognising the artistic methods employed in both novels to compromise and challenge the social narrative that determines America's patriarchal and religion-based social order requires the viewer to follow a generative model with great temporal depth, to take into account signals in the text that indicate the combination in a single description or metaphor of previously signalled content introduced in much earlier parts of the work. Temporality is of particular importance for both *The Gravedigger's Daughter* and *Blonde*, and the organisation of space-time in the novel is subordinated to the internal

experiences of the protagonists of both texts. Each of these arbitrarily delineated layers of the novel, isolated for the sake of clarity of analysis, can be identified with levels of the generative model, from the most abstract - and the artistic techniques employed to undermine the influence of political propaganda to the fictional and descriptive elements of the American author's prose can be considered as such.

References

- Allen, M., Friston, KJ. (2016). From cognitivism to autopoiesis: towards a computational framework for the embodied mind. *Synthese*, 1–24. [doi:10.1007/s11229-016-1288-5](https://doi.org/10.1007/s11229-016-1288-5), [Web of Science](#), [Google Scholar](#)
- Bernheimer, K. (Eds.). (1996). *Mirror, Mirror on the Wall: Women Writers Explore Their Favorite Fairy Tales*, Knopf Doubleday Publishing Group.
- Bouzigarene, N., Ramstead, MJD., Constant, A., Friston, KJ., & Kirmayer, L.J. (2024). Narrative as active inference: an integrative account of cognitive and social functions in adaptation. *Front Psychol.* 2024 Jun 6;15:1345480. doi: 10.3389/fpsyg.2024.1345480. PMID: 38903472; PMCID: PMC11188712.
- Buckner, R.L., & Carroll, D.C. (2007). Self-projection and the brain. *Trends Cogn. Sci.* 11,49. [doi:10.1016/j.tics.2006.11.004](https://doi.org/10.1016/j.tics.2006.11.004), [Crossref](#), [PubMed](#), [Web of Science](#)
- Clark, A. (2017). How to knit your own Markov blanket: resisting the second law with metamorphic minds. In *Philosophy and predictive processing: 3* (eds Metzinger T, Wiese W). Frankfurt am Main, Germany: MIND Group. [Google Scholar](#)
- Clark, A. (2023). *The experience machine: how our minds predict and shape reality* (First edition). Pantheon Books.
- Clark, A. (2015). *Surfing uncertainty: prediction, action, and the embodied mind*. Oxford, UK: Oxford University Press. [Google Scholar](#)
- Cologne-Brookes, G (2005). *Dark eyes on America: the novels of Joyce Carol Oates*. Louisiana State University Press. ISBN 0-8071-2985-2.
- Constant A., Ramstead M. J. D., Veissière S. P. L., Campbell J. O. and Friston K. J. (2018). A Variational approach to niche construction *J. R. Soc. Interface.*1520170685. <http://doi.org/10.1098/rsif.2017.0685>
- Frascaroli, J., Leder, H., Brattico, E., and Van de Cruys, S. (2023). Aesthetics and predictive processing: grounds and prospects of a fruitful encounter, *Philosophical Transactions of the Royal Society B: Biological Sciences*, 379:1895, Online publication date: 29-Jan-2024.
- Friston, K. (2018). Am I self-conscious (or does self-organisation entail self consciousness?). *Front. Psychol.* 9. doi: 10.3389/fpsyg.2018.00579.
- Friston, K., Breakspear, M., & Deco, G. (2012). Perception and self-organized instability. *Front. Comput. Neurosci.* 6, 23035. [doi:10.3389/fncom.2012.00044](https://doi.org/10.3389/fncom.2012.00044), [Crossref](#), [Web of Science](#), [Google Scholar](#)
- Friston, K.J., Lin M., Pezzulo, G., Hobson, J. A., & Ondobaka, S. (2017). Active Inference, Curiosity and Insight, *Neural Computation* 29(10):1-51 DOI:[10.1162/neco_a_00999](https://doi.org/10.1162/neco_a_00999)
- Friston, KJ. (2011). Embodied inference: or 'I think therefore I am, if I am what I think'. In *The implications of embodiment (cognition and communication)* (eds Tschacher W, Bergomi C), pp. 89–125. Exeter, UK: Imprint Academic. [Google Scholar](#)

- Friston, KJ. (2012). A free energy principle for biological systems. *Entropy* 14, 2100–2121. [doi:10.3390/e14112100](https://doi.org/10.3390/e14112100), [Crossref](#), [PubMed](#), [Web of Science](#), [Google Scholar](#)
- Friston, KJ. (2013). Life as we know it. *J. R. Soc. Interface* 10, 20130475. [doi:10.1098/rsif.2013.0475](https://doi.org/10.1098/rsif.2013.0475), [Link](#), [Web of Science](#), [Google Scholar](#)
- Friston, KJ. (2009). The free-energy principle: a rough guide to the brain? *Trends Cogn. Sci.* 13, 293–301. [doi:10.1016/j.tics.2009.04.005](https://doi.org/10.1016/j.tics.2009.04.005), [Crossref](#), [PubMed](#), [Web of Science](#), [Google Scholar](#)
- Friston, KJ., Adams, RA., Perrinet, L., Breakspear, M. (2012). Perceptions as hypotheses: saccades as experiments. *Front. Psychol.* 3, 151. [doi:10.3389/fpsyg.2012.00151](https://doi.org/10.3389/fpsyg.2012.00151), [Crossref](#), [PubMed](#), [Web of Science](#), [Google Scholar](#)
- Friston, KJ., Rigoli, F., Ognibene, D., Mathys, C., Fitzgerald, T., & Pezzulo, G. (2015). Active inference and epistemic value. *Cogn. Neurosci.* 6, 187–214. [doi:10.1080/17588928.2015.1020053](https://doi.org/10.1080/17588928.2015.1020053), [Crossref](#), [PubMed](#), [Web of Science](#), [Google Scholar](#)
- Hofstadter, D. R. (2007). *I am a strange loop*. New York, NY: Basic Books. [Google Scholar](#)
- Limanowski, J., and Friston, K. (2018). 'Seeing the Dark': Grounding Phenomenal Transparency and Opacity in Precision Estimation for Active Inference. *Front. Psychol.* 9:643. doi: 10.3389/fpsyg.2018.00643.
- Metzinger, T. (2003). Phenomenal transparency and cognitive self-reference. *Phenomenology and the Cognitive Sciences* 2, 353–393 (2003). <https://doi.org/10.1023/B:PHEN.0000007366.42918.eb>
- Metzinger, T., Wiese, W. (eds). (2017). *Philosophy and predictive processing*. Frankfurt am Main, Germany: MIND Group. [Google Scholar](#)
- Oates, J. C. (2001). *Blonde*. Fourth Estate.
- Oates, J. C. (2007). *The Gravedigger's Daughter: a novel*. New York, Ecco.
- Pagnoni, G. (2023). An exciting path ahead: Comment on "Path integrals, particular kinds, and strange things" by Friston K., Da Costa L., Sakthivadivel D.A.R., Heins C., Pavliotis G.A., Ramstead M., and Parr T. *Physics of life reviews*, 47, 139–141. Advance online publication. <https://doi.org/10.1016/j.plrev.2023.10.030>
- Parr, T., Holmes, E., Friston, KJ., & Pezzulo, G. (2023). Cognitive effort and active inference. *Neuropsychologia* 184, 108562. [doi:10.1016/j.neuropsychologia.2023.108562](https://doi.org/10.1016/j.neuropsychologia.2023.108562), [Crossref](#), [PubMed](#), [Web of Science](#), [Google Scholar](#)
- Parr, T., Pezzulo, G., Friston, K. (2022). *Active inference: the free energy principle in mind, brain, and behavior*. London, UK: MIT Press. [Crossref](#), [Google Scholar](#)
- Ramstead, M.J., Sakthivadivel, D.A., & Friston, K.J. (2022). On the Map-Territory Fallacy Fallacy. DOI:[10.48550/arXiv.2208.06924](https://doi.org/10.48550/arXiv.2208.06924)
- Ramstead, MJ., Kirchhoff, MD., Friston, KJ. (2020). A tale of two densities: active inference is enactive inference. *Adapt. Behav.* 28, 225–239. [doi:10.1177/1059712319862774](https://doi.org/10.1177/1059712319862774), [Crossref](#), [PubMed](#), [Web of Science](#), [Google Scholar](#)
- Schwartenbeck, P., Passecker, J., Hauser, T.U., FitzGerald, T.H., Kronbichler, M., & Friston, K.J. (2019). Computational mechanisms of curiosity and goal-directed exploration. *Elife* 8, e41703. [doi:10.7554/eLife.41703](https://doi.org/10.7554/eLife.41703), [Crossref](#), [PubMed](#), [Web of Science](#), [Google Scholar](#)
- Suddendorf, T., Addis, D. R., Corballis, M. C. (2009). Mental time travel and the shaping of the human mind *Phil. Trans. R. Soc. B* 364:1317–1324. <http://doi.org/10.1098/rstb.2008.0301>

- Sun, Z., Firestone, C. (2020). The Dark Room Problem. *Trends Cogn. Sci.* 24, 346-348. [doi:10.1016/j.tics.2020.02.006](https://doi.org/10.1016/j.tics.2020.02.006), [Crossref](#), [PubMed](#), [Web of Science](#), [Google Scholar](#)
- Taylor, G. O. (1981). Ellen G. Friedman, Joyce Carol Oates (New York: Ungar, 1980, \$13.50). Pp. x, 238. - Kathryn Grant R.S.M., *The Tragic Vision of Joyce Carol Oates* (Durham, North Carolina: Duke University Press, 1978, \$9.75). Pp. xiv, 167. *Journal of American Studies*, 15(3), 442–444. doi:10.1017/S0021875800009166.
- Tulving, E. (1985). How many memory systems are there? *Am. Psychol.* 40, 385–398. [doi:10.1037//0003-066X.40.4.385](https://doi.org/10.1037//0003-066X.40.4.385), [Crossref](#), [Web of Science](#), [Google Scholar](#)
- Van de Cruys, S., Frascaroli, J., & Friston, K. (2023). Order and change in art: towards an active inference account of aesthetic experience. *Phil. Trans. R. Soc. B* 379, 20220411. [doi:10.1098/rstb.2022.0411](https://doi.org/10.1098/rstb.2022.0411), [Link](#), [Google Scholar](#)
- Veissière, SPL., Constant, A., Ramstead, MJD., Friston, KJ., Kirmayer, LJ. (2020). Thinking through other minds: A variational approach to cognition and culture. *Behavioral and Brain Sciences* 43, e90: 1–75. doi:10.1017/ S0140.
- Warner, S. O. (2006). The fairest in the land: "Blonde" and "Black Water", the nonfiction novels of Joyce Carole Oates. *Studies in the Novel*, 38(4), 513–524. <http://www.jstor.org/stable/29533789>
- Wu, G. (2016). A Study on Oates's Gothic Short Stories from the Perspective of Psychological Realism-Haunted: Tales of the Grotesque as an Example, DOI 10.2991/ichess-16.2016.19.