

It's like a Common Graveyard: Photographs of Unknown Men, Women, and Children...Black Faces Beside White

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Motto

Lincoln signed the Emancipation Proclamation on New Year's Day, 1863. De facto, there remain slaves.

Not to cry, not to give them that satisfaction. "Dirty nigger bitches! Dirty!"

Abstract

This text presents an attempt to explain the impact of a literary text in the context of the neurobiological theory of PP. According to this concept, the brain's main function is to survive in an unstable and ambiguous environment. Survival is made possible by the confrontation between top-down predictions (generative model) generated by the brain about the causes of its afferents and prediction error signals triggered by bottom-up postsynaptic signals in cortical hierarchies, which are the result of perception of the external world. Cognition of aesthetic artefacts - especially literary ones, which are the subject of the research in this article - is particularly difficult due to the complexity and polysemous nature of artworks, which exacerbates the increased uncertainty of the viewer interpreting such artefacts. In this article, PP has been used to analyse diagnoses of the causes of social conflict in the United States as depicted in three Joyce Carol Oates novels. The argument presented is intended to lead to the conclusion that PP makes it possible to highlight the connections between the elements of the narrative trajectories in the three novels of the American author. These elements make up sequences, expressing the problem of ideological or intellectual "images" in which the protagonists seek confirmation of their identity. The unveiling of the danger posed by such a course of action is achieved through the use of an experimental narrative form, in which motifs alluding to the images develop and the dangers associated with them combine to form a web of meaning, although their recognition is not as obvious and aggressive as following the events of the plot.

Keywords: Active Inference, Generative Model, Predictive Processing (PP), Precision, Joyce Carol Oates, Novels.

Introduction

The consideration of Oates' novels presented in this article aims to present the possibility of applying the findings of the rapidly developing discipline of neuroscience to highlight two of the most recognisable features of the American author's work. The distinctive aspects of this author's writing are formal innovation and a commitment to social critique, aimed at the marginalisation of vulnerable social groups, women, African-Americans, and the poor, legitimised by American ideology. These aspects of Oates's work can be linked to the tradition of novels aimed at social intervention, often combined with the traditions of the realist novel. At the same time, Oates's works contain numerous themes that deal with the problem of representation, the attribution of stable, immutable meaning to



concepts or social norms, professed values or intellectual aspirations. For the characters, basing their actions and beliefs on them ends in a sense of acute loneliness, sometimes unethical behaviour and guilt. These motifs are evidenced in Oates' novels about the tradition of experimental literature, Franz Kafka, James Joyce, and William Faulkner. By clearly situating the plot of each work in the context of social and historical realities and highlighting the impact that social position has on the identity and choices of the characters, it is possible to identify the texts analysed as realist prose. The numerous aspects concerning the problematisation of the relationship between the subject's self and the language she chooses to define her world, as well as the proliferation of innovative narrative forms stimulated by the exploration of this theme, encourage us to consider Oates's novels as artistic manifestations of a critique of the confinement of individual identity within the framework provided by a top-down system of signs. A student at a prestigious college, dreaming of social advancement, a girl from a family of poor farmers, immigrants on the eve of the American aggression against Korea and during the growing manifestations of African-American resistance against racial segregation, starts an affair with a black man in *I'll Take You There*. This provokes an outcry from the academic community and direct forms of pressure intended to result in the break-up of the relationship. The protagonist's black male lover, a seemingly promising scholar and liberated intellectual in his obsessive adoration of Wittgenstein's first philosophy, seeks escape to his own identity as a black man in a racist country. The girl, on the other hand, is not so much driven by love and desire for a brutal and indifferent man who has abandoned his wife and young child to her, but succumbs to his fascination with his commitment to abstract philosophical concepts. Both try to find the basis of their identity in intellectual development, but these efforts are only a desperate escape from their lack of dignity and inner confusion. Situating the characters in a social context is not a sufficient explanation for the motivation of their actions and feelings, although without knowledge of the characters' backgrounds, it would be impossible to understand their actions. The problematic nature of the novel, related to a different, plausible reading of the text, can be signalled by the motto of the entire work - A picture held us captive. And we could not get outside it, for it lay in our language, and language seemed to repeat it to us inexorably. This well-known quotation from Ludwig Wittgenstein can be taken as a starting point for Oates's implication of the causes of social violence and internal enslavement. 'Image', with a meaning in the novel under discussion that refers to the characters' obsessive search for forms to define who they are and their position in the world, refers not only to the meaning the Austrian philosopher gave to it, but to the intellectually or socially propagated forms a person can use to give meaning to their life.

It seems legitimate to read the formal experiments occurring in Oates's novel as a method of liberation from 'image', questioning it and replacing it with a language in which the question 'who am I?' never gains a final and satisfactory answer. 'Image' can also be linked to desire - the promise of its satisfaction. Shaviro describes the core of an aesthetic experience by drawing the crucial contrast with desire: 'Desire is how the self projects itself into, and remakes, the world; aesthetic feeling is how the world projects itself into, and remakes, the self. While desire is about making the world fit the mind, aesthetic experience is about making the mind fit the world. In such a view, recognitions about the function of aesthetic form as a source of overcoming the power of the "image" over the viewer's mind may involve sufficiently complex and ambiguous shaping of the literary artefact that "making the world fit the mind" is fraught with effort and uncertainty. Learning yields representational



forms at higher levels of processing that allow the system to predict the regularities that govern neural patterns.

Neuroscience problematises the uncertainty faced by biological systems attempting to maintain their integrability in an unstable and changing environment. Researchers solving this field use the concept of a generative model, allowing an agent to represent beliefs about its own uncertainty. This concept is called PP. PP holds that biological agents largely implicitly generate top-down predictions to capture patterns (regularities) in their sensory data and use the resulting mismatches between these predictions and sensory samples to update and adjust the generative modalities that are the source of subsequent predictions. The representation of uncertainty is related to the activity of neuromodulatory systems. Theories aimed at unifying knowledge and removing the barrier between the humanities and experimental sciences have begun to be applied to social science and aesthetic considerations. The tension between receptivity and incomprehensibility-and the emphasis on aesthetic experiences as processes-also makes room for the often-noted contradictory ingredients in full-blown aesthetic experiences: the positive and the negative emotions, the disturbance and the harmony, the order and the change, the inward sense of closure and the outward sense of openness.

In the next novel under discussion, *Because I Am So Bitter Because It Is My Heart*, the realistic aspects of the plot are combined with imagery and narrative techniques informed by 20th-century experimental prose. The novel covers the period of the early 1950s, the end of the novel being the time of the assassination of President Kennedy. The event takes place in a small town, and the characters' views and expressions are indicative of their racist views and their inability to engage in the struggle for social change. The problems associated with the emancipation of the black population in the USA are portrayed against the background of the fascination of the white girl Iris, who comes from an underclass family, with the black boy Jinx. The hidden feelings that the heroine has for the black man are never fulfilled, as the internalised racial prejudices that determine the choices of both of them stand in the way. The inability to overcome racist stereotypes affects each of the characters. In *Because I Am So Bitter Because It Is My Heart*, white and black Americans, although they share a country and often enter into “mixed” relationships, fail to connect across racial and class prejudices. Iris's mother, although she enters into an affair with a black man, is most excited about her lover's desire for her “whiteness”, and after the humiliation her partner suffers at the hands of white police officers, she cannot bear his presence. Iris, although she never stops desiring Jinx, insists on marrying her professor's son, a young intellectual belonging to a privileged social group. In this layer, the novel follows the patterns of realist prose, but in *Because I Am So Bitter Because It Is My Heart* there is also a different way of signalling the motivations and actions of the boogeymen. Images, photographs depicting white and black townspeople, scenes from America's most mythologised moments, compared to a cinema theatre, play an important role in this novel. The metaphor of the “cmenatheatre”, expressing the inability to change and die, the loss of life, is closely linked to the “image” enslaving each of the characters and preventing them from achieving the ability to realise their desires.

Black Girl White Girl depicts the dramatic consequences for the most vulnerable and incapable of critical reflection, the black girl, of superficially understood ideas of equality between white and black Americans. An African-American woman, admitted to a prestigious university, fails to live up to the demands placed on students of a distinguished academic institution. She avoids being expelled from the university by feigning attacks on herself, including dropping off a photograph of Sarah Bartman, a black woman from the 19th century,

a slave, forced to display her sexual organs during public spectacles that attracted crowds of white men in European metropolises. A student of the 1970s, thanks to mystification, she blackmails her surroundings by suggesting that, among the intellectuals of a research university, a black woman is treated no less instrumentally and contemptuously than the Bartman who is exposed for a living. Despite her apparent lack of savvy, the black girl accurately assesses how her professors and colleagues fear similar accusations, keen to preserve their reputation as a liberal, democratic community at all costs. She enforces more and more privileges on her environment, including separate housing, and eventually dies in a fire caused by her carelessness. The fight against racism is, for her milieu, reduced to identifying equality as slogans about equal access to higher education or reducing racial problems to condemning the pacification of African-American protests against racial segregation by white police officers. The two photographs - of Sarah and a black man being battered by white police officers, which the “white girl” roommate of the “black girl”, the narrator of the story unfolding many years after the tragic death, remembers from pictures in her father's study - are images that seem to mark the horizon of the moral sensibility responsible for the formulation and implementation of the idea of academic freedom of professors and their students. The illusions of this, the responsibility for undoing the devastating effects of racial segregation in America, may be manifested in the attribution of intellectual talents and views to the black girl, whose mind and imagination are defined by infantile religiosity, also characterising the father of the “white girl”. The man, happy to have the opportunity to spread anecdotes about the friendship linking his daughter to an “outstandingly gifted” African-American woman, is convinced that the college founded by his ancestors, abolitionists, plays an important role in social reform, founding a new American society based on freedom and justice. He fails to see the inner conflict of his daughter, aware that her black friend, in a desperate attempt to avoid rejection, is lying to everyone in her community. This man, believing that anarchist terrorist attacks on capitalists will change America, is responsible for the destruction of the lives of the trusting, young “students” involved in the attacks, is no less blinded than the lecturers of the “black girl” and it is to him that the blame for the destruction and demoralisation of gullible, young people can be attributed. Defining oneself by political or social ideology as a stable foundation for identity and moral judgements is the subject of criticism in all the novels analysed in this essay.

The novelty of the narrative structures, as evidenced by the composition, stylist and imagery, of the works analysed in this text manifests itself in two seemingly contradictory tendencies, which can be explained through the use of the term “generative model” as defined by Friston: A generative model is just a probabilistic specification of how consequences (outcomes) follow from causes (states). These states are called latent or hidden because they can only be inferred through observations. The generative model generates outcomes in the following way: first, a policy (action or plan) is selected at the highest level using a softmax function of its expected free energies. Expectations about (future) outcomes and their hidden causes are optimised by minimising variational free energy, which renders them the most likely (posterior) expectations about the (future) states of the world, given (past) observations. The variational free energy is an upper bound on (negative) log Bayesian model evidence; also known as surprise, surprisal or self-information. Sequences of hidden states are then generated using the probability transitions specified by the selected policy. In the case of interpreting a literary text, hidden states are the functions of the individual elements of the literary text and their relation to the whole, calling for explanation, and the generative

model is the probability distribution linking the viewer's assumptions that allow him or her to make meaning of the text with the signals coming from the text. The formal complexity of the novels studied makes many policies - many possible interpretations - equally likely.

Method

The detrimental effects of social surveillance, methods of control and the enforcement of collective obedience can be explained by referring to Charles Peirce's neurobiological and anthropological interpretation of semiotics. The typology of signs introduced by this scholar and how signs relate to the external world can be used to interpret the literary text as a stimulus that allows the process of semiosis to begin. This process is supposed to lead to the transformation of conventional symbols, which fund the efficacy of political and institutional surveillance, into indices of critical reflection on the possibility of literature's participation in the construction of a new intersubjectivity, based on different principles. The aforementioned neurobiological implementation of semiosis can be linked to recent findings by scholars elucidating the neural correlates involved in understanding complex, narrative discourse. Doing so will help to argue for the possibility of justifying the significant impact of the reception of a literary text in undermining the impact of social surveillance.

The theoretical framework thus delineated may allow us to combine consideration of the composition, stylistics, rhetorical figures and intellectual references of Joyce Carol Oates' three novels. The theoretical framework thus delineated may allow us to combine consideration of the composition, stylistics, rhetorical figures and intellectual references of Joyce Carol Oates' three novels *Because it is bitter, and because it is my heart, I'll Take You There*, *Black girl / white girl: a novel*, with the problematic of social surveillance as a foundation of racism in American society. Of particular relevance to these considerations will be a consideration of the function of descriptions of elements linking to social surveillance: the photographs in the photographic establishment in *Because it is Bitter, and because it is my heart*, the Slavery-era museum in *Black Girl/white girl: a novel*, or the 'religious' narrative of a community surrounding the 'care' of a raped black girl in *The sacrifice*. *Black girl/white girl: a novel*, *The sacrifice*, with the problematic of social surveillance as a foundation of racism in American society. Of particular relevance to these considerations will be a consideration of the function of descriptions of elements linking to social surveillance: the photographs in the photographic establishment in *Because it is Bitter, and because it is my heart*, the slavery-era museum in *Black Girl/white girl: a novel*, or the 'religious' narrative of a community surrounding the 'care' of a raped black girl in *The sacrifice*. Each of these aspects of the novel can be taken as an index of multiple, equal references, established through abduction - a way of linking literary narrative to social semiosis, questions about the causes of racial prejudice transcending legal and institutional issues and the workings of the sign as the foundation of social bonds. Our reflections tangled together as in the marshy bottom of a pond, or a common grave.

An interpretation of Joyce Carol Oates' three novels *I'll Take You There*, *Because It Is Bitter, and Because It Is My Heart*, *Black Girl / White Girl* in the context of semiotics, allows for the presentation and development of arguments concerning not only the formal innovation of this author's prose but also to indicate the reasons for its impact on the recipient. The concept of Karl Friston, an influential researcher of the brain and mind, referred to in this text, encourages us to perceive semiotics in the light of the latest neurobiological findings. Such a perspective not only motivates understanding of the literary text and its impact on the reader in a way that is deepened thanks to an interdisciplinary approach, but also enables a modest and, for now, speculative outline of an explanation concerning the impact of complex

literary structures on the reader who receives them. The subject matter of each of the novels refers to racial issues, drawing an ambiguous and ironic picture of the relations between the black and white populations of the USA. The world presented in Oates's novels, although consistently demonstrating a concern to credibly present the social and political dimensions of the events that make up the plot, can be treated as referring to a broader range of problems related to the question of the principles of intersubjectivity in the reception of a literary text and as such brings to the fore the themes of meaning and the relationship between the sign and its object.

Of particular importance for the interpretation of the theory of interpretation, which this text very briefly outlines, are the arguments concerning the meta-problem of consciousness.¹ This is a problem arising from the question of how physical events give rise to the diversity of phenomenal experiences.² As one of the researchers working within this theory argues, one of the most remarkable facts about the functioning of minds is that rare and ambiguous stimulations of the sense organs allow the reconstruction of a meaningful world full of objects.³ Some intelligent agents are surprised by the features of their contact with the world - surprised enough to declare the existence of a deep "explanatory gap" between their best idea of how physical things work and the nature and origin of their own experience. This problem concerns the possibility of relating how subjective experience can be "translated" into terms of naturalistic scientific theories. In the context of the reception of art, this is particularly important because it allows the outline of well-motivated scientific theories of consciousness. This will allow us to present a concept of art reception that addresses the complex issues of the relationship between the work of art and the recipient, the validity and intersubjectivity of the reception of an aesthetic artefact, and – most importantly for these considerations – the influence of art on the recipient's self-awareness. The semiotic theory mentioned earlier was formulated by Karl Friston in the context of active inference, and this aspect needs to be explained. Friston and his colleagues claim that the brain is a hierarchical engine of inference. Such a device operating under forms of adaptive pressure can present some of its conclusions as particularly certain. Of course, during the reception of art, these "conclusions" are initially erroneous, contradictory, and related to the erroneous projection of fixed schematic ideas about the "meaning" of literary artefacts onto innovative and intentionally increasing the reader's disorientation of literary structures.⁴ Friston and his colleagues assume that the brain presents some of its conclusions as particularly certain. These intermediate-level states recode sensory stimulation in a way that is not fully

¹ Andy Clark, Karl Friston, and Sam Wilkinson Bayesing Qualia: Consciousness as Inference, not Raw Datum

² Clark, A., Friston, K., & Wilkinson, S. (2019). Bayesing qualia: consciousness as inference, not raw datum. *Journal of Consciousness Studies*, 26(9-10), 19-33.

³ One of the most remarkable facts about the functioning of minds like ours is that, starting from the sparse and ambiguous stimulations hitting our sensory organs, we are able to reconstruct the meaningful world full of objects, people and ordered events that we inhabit. What is even more extraordinary is that in most cases we carry out this constructive activity so quickly and effortlessly that we are not aware of carrying it out, landing almost immediately on the most reasonable solutions for the puzzles posed to our senses.

⁴ Almost always, it seems, we are attributing or withholding this quality (or experiencing this feeling) with varying degrees of intensity. Now, one of the most persistent answers to the persistent question of beauty is that we find beautiful that which presents an ordered arrangement of parts. (...)Ramachandran & Hirstein were already putting forward the hypothesis that (as Armstrong & Detweiler-Bedell] aptly put it) 'the brain rewards progress toward organizing the perceptual field into a meaningful configuration'.



determined by the properties of the external world.⁵ This drives a wedge between the agent and the world. Researchers argue that there is no such thing as raw experience. Instead, our brains construct qualia as hidden variables—inferred causes—in our best generative model of embodied interactions with the world. Qualia are part of a putative set of hidden causes (i.e., experiential hypotheses) that best explain and predict the evolving flux of energy at our sensory surfaces. The starting point of this theory is predictive processing, a theory that explains perception, action, and learning. PP imagines the brain as a biological organ that constantly tries to predict the states of its sensors, using well-understood optimisation methods to continually refine its guesses.⁶ This process installs a probabilistic generative model of the distal causes (sometimes called “hidden causes” or “hidden variables”) that might be causing sensory flow. Many aspects of brain function can be understood in terms of the hierarchy of timescales over which representations of the environment evolve. The lowest level of this hierarchy corresponds to the rapid fluctuations associated with sensory processing, while the highest levels encode slow contextual changes in the environment, with faster representations developing “below.”⁷ The authors cite the example of a system trained on many sentences in a public language that can be led to assume distinct classes of linguistic entities, such as nouns and adjectives, each of which makes certain types of sentence developments more likely than others. Such a system inferred the existence of verbs as a hidden irregularity in the patterns occurring in the sensory stream. The generative models that coexist in the brain evolve in either continuous or discrete time. At the level of sensory receptors, data arrive continuously but can be generated in a sequential, categorical way at a deeper level of hierarchical structure. An important feature of brain organisation is temporal hierarchy; the higher the cortical hierarchy, the time scale represented by each population of neurons generally increases. The regions near the top of these hierarchies are those associated with “delay period” activity or working memory, each defined by the persistence of a representation on a time scale that extends beyond the presentation of the stimulus.

⁵ A generative model is a probabilistic description of how a given type of data might have been generated. It expresses prior beliefs about unobserved hidden states (or latent variables), the probabilistic dependencies between these states, and a likelihood that maps hidden states (i.e., causes) to sensory data (i.e., consequences). Such models can be used to predict new sensory data, and to infer the hidden states that could have caused observed data (Beal, 2003).

⁶ the agent’s generative model cannot simply mimic external dynamics (otherwise the agent would simply follow external dissipative dynamics). Rather, the model must also specify the preferred conditions for the agent’s existence, or the regions of states that the agent has to visit to maintain its existence, or satisfy the criteria for its existence in terms of occupying characteristic states. These preferred states (or observations) can be specified as the priors of the model—which implies that the model implicitly assumes that its preferred (prior) sensations are more likely to occur (i.e., are less surprising) if it satisfies the criteria for existence. This means it has an implicit optimism bias

⁷ Friston and his colleagues propose that slowly changing neural states may encode pathways or trajectories of faster sensory states. They point to evidence that a temporal hierarchy is reflected in the organization of the cerebral cortex. This anatomical hierarchy provides a framework for understanding cortical function: the specific time scale that a cortical area engages can be inferred from its location along the rostral caudal area, which reflects its anatomical distance from the primary sensory areas. This is most evident in the prefrontal cortex, where complex functions can be explained as operations on slowly changing representations of the environment. This framework provides predictions about the relationships between cortical structure and function, and fundamental constraints on these relationships, which can be tested by manipulating the time scales of sensory input. Speech can be decomposed on different time scales (from fast to slow): instantaneous frequency (acoustics), spectral profiles (phonemes), sequences of phonemes, and syntactic structure (pragmatics).



In perception, we become very certain that our phenomenal experiences “reflect” states of the external world, but phenomenal states are not conditioned solely by states of the external world. This is the familiar “qualia” problem, for it has long been known that perception does not consist of raw data from which we make inferences about the world. Clark and Friston believe that there is no such thing as raw data; instead, brains construct qualia as “hidden variables,” inferred causes in our best generative model of embodied interactions with the world. Qualia are part of a set of hidden causes (i.e., experimental hypotheses) that best explain and predict the evolving energy flux across our sensory surfaces⁸ in the analysis of a literary text—a “system,” that is, the recipient is “trained” on literary forms,⁹ genres, stylistic, and compositional patterns that have existed in the history of literature.¹⁰ There is also the issue of context, which, according to Hasson, has a strong influence on the understanding of individual words and sentences. The research presented in this article is based on the analysis of images, phrases and metaphors repeated in many fragments of the novel to highlight the connection between the representations at the “lower textual level” developing diachronically in continuous time and the higher layers of the generative model that lasts in discrete time.¹¹

In the aforementioned Oates novels, these forms are combined on the one hand with the tradition of the developmental and initiatory novel, references to the ancient tradition of Bacchanalia, the aesthetic myth condensed in modernist aesthetic reinterpretations of the duel between Apollo and Marsyas, the Gothic novel, the realistic novel of the “mirror with which the narrator walks along the highway”, Kafka’s prose, Eliot’s poetry, to name the most obvious and most strongly related to what will be referred to in this text as “formal illusionism”, an illusory and mocking guarantee of access to the experimental literary form, which Oates’s works are, using a form of aesthetic perception organization fixed in the canon of culture. *I’ll Take You* includes a motto from Wittgenstein, referring to *A Picture That Held Us Captive*. *And we could not get outside it, for it lay in our language, and language seemed to repeat it to us inexorably*. In the further parts of the novel, there are other, numerous other references to the late Wittgenstein, which will be analysed in more detail later. In this text, they will function as an impulse to ask about the value of the literary tradition mediating contact with a new and groundbreaking work.

The thesis of this article is that the function of the literary forms evoked in the seminal work can be seen as a vehicle for what Clark and Friston call brain learning in a multilevel architecture, in which lower levels discover patterns on shorter scales of space and time,

⁸ Dennett (2015)), has argued that qualia involve some kind of illusion. In ‘Quining Qualia’ the response to that illusion was to follow Quine in eliminating such misleading posits from (at least) the scientific image. But in what follows we aim not to Quine (explain away) qualia but to ‘Bayes’ them –to reveal them as products of a broadly speaking rational process of inference, of the kind imagined by the Reverend Bayes in his (1763) treatise on how to form and update beliefs on the basis of new evidence. Our story thus aims to occupy the somewhat elusive ‘revisionary’ space, in between full strength ‘illusionism’ (see below) and out-and-out realism.

⁹ Under this view, human neural dynamics can only be understood by considering the broader context of our evolution, enculturation, development, embodiment, and behavior

¹⁰ What for the cognitive scientist are predictions or hypotheses that the agent makes about the structure of its world, for the art historian are conventions or expectations that inform our artistic and interpretive practices.⁵ Such expectations are likely to range from evolutionarily acquired expectations about the shape of our environment to culturally acquired expectations shared among the members of a community

¹¹ Deep Learning and Period Classification



while higher levels use these patterns to learn about still other patterns spanning larger scales of space and time. Equipped with a good predictive model, these systems provide not only learning but also online perception by minimising “prediction error.” In perception, we seem to become very certain about what the external world (in this case, a literary text) looks like. We can be very certain that our phenomenal experience is made true by features of the distal world—it becomes the “truth” of what the text is like (including the author’s intentions). The operation of literary structure and its false leads, which we gradually learn, makes us aware that phenomenal facts are different from what is external and gives us an incentive for new, important forms of counterfactual reasoning and building hypotheses.

The method used in this text - interpretation of the same phrases, sentences or images repeated in new contexts of the discussed novels will serve as a starting point for perceiving multiple contextualizations as a source of counterfactual reasoning of the recipient of the literary text. This repeated contextualization of the same elements of the poetics of the text, discussed in connection with intertextual references occurring in each of the cited novels, aims to reveal how the text generates a critical attitude both to the phenomenal content of one's own experience and to the historical-literary tools of categorization of the reception of works of art. Precision, identified with the psychological construction of attention, is part of the architecture of predictive processing. Focusing on something increases the precision, certainty or trust of those interested in that thing, usually at the expense of other evidence. An important aspect of these hierarchical models is the scope they provide for factoring the space of models or hypotheses to enable useful conjunctive constraints on lower-level inferences. If we believe in a deep or hierarchical form of belief updating in our brains, this gives us the capacity to consider alternative (counterfactual) models or hypotheses. This involves conscious control over the precision attributed to different high- and low-level beliefs. Phenomenal experiences no longer need to be treated as “mirrors” of the external world, but as states of sensory stimulation that could be the same despite being stimulated by different states of the external world. Different states of the sensory world could give rise to the same sets of sensory stimulations.¹² Translated into the interpretation of familiar forms from literary history, this assumption can be combined with the recognition and recontextualization of intertextual references in experimental novels. Thematic, structural and thematic convergences that connect the new form with the range of genres known in the tradition of the letter are often deceptively similar to their originals, but - using the jargon of Friston and Clark - it is sensory stimulation that can be mistakenly recognized as related to the highest level of the generative model and considered decisive for the meaning of the text. In each of the novels discussed, there are references to the initiation novel, but it is impossible to recognise any of them as promising such a close connection between the individual and the world around them as classical novels promised. Numerous threads of criticism of institutions constitutive of social life - family, law, academic education or religion - suggest that the sphere of intersubjectivity should be combined in Oates's novels with other planes of generating and understanding signs. It is an aesthetically mediated construction of relations between people using such aesthetic categories as grotesque, liminality and parody. The

¹² The ensuing information gain penalizes observations for which there is a many-to-one mapping from observations to states—in the sense that one can obtain the same observations in different states—as this precludes precise belief updating.



thesis of this article is that each of the aesthetic categories mentioned allows us to question the status of symbols that legitimise the social order in the process of changing the status of symbolic signs to iconic and then indexical. This process develops in each of the novels in the narrative activity of each of the protagonists. It is not the case that most of the protagonists' narrative identity lies in remembering and recounting the past; the narrative function shifts to treating the stories as if they were evidence of building the future, not basing narrative identity on the past.¹³ In the sphere of themes related to reception, successive updates of the same text fragments allow the reader to make increasingly precise predictions about the possibility of integrating divergent sensory data provided by diverse text elements into a stable representation at the highest level of a hierarchical model, with increasingly better-explained transitions between individual aspects of literary structure. Friston and Clark define hierarchical inference as the Bayesian updating of beliefs within a hierarchical generative model in which probabilistic beliefs at one level depend on beliefs at another level. An important aspect of these hierarchical models is the scope they provide for factorising the model or hypothesis space to enable useful constraints on lower-level conjunctive inference.

Results

You know there's no Heaven, no place for all those dead to end up

In the context of the formal analysis of Oates's three novels about the phenomenon that has been defined as "formal illusionism", the placement at the highest level of the generative model regulating the interpretation of each of the mentioned novels is the placement of probiotic beliefs referring to selected figures appearing in the structure of the novel. *Because I Am So Bitter Because It Is My Heart* tells the story of the social advancement of a white girl, Iris, who comes from an impoverished family of prominent local people. Due to her difficult financial situation, Iris is forced to live in a cheap rental housing district, where African Americans also rent apartments. The protagonist, despite constant contact with blacks, does not stop perceiving them in terms of racial stereotypes characteristic of the place and time at the beginning of the novel, the sixties of the twentieth century. The abandonment of the family by her father and the progressive degeneration of her mother, forced to work for money, and gradually destroying herself with alcoholism, causes the heroine to begin to understand that she will have to fight for survival alone. As a teenager, she is persecuted by a mentally ill, poor white man who tries to rape her. A black boy, Jinx Fairchild, comes to the girl's defence, killing the attacker. The attack on Iris is preceded by insults from the disabled man and vulgar, racist comments about the sexual nature of the bond between Iris and Jinx. The necessity of hiding from the police and the entire environment, the accidental murder committed by a black man, taking the life of a white man, unites Iris and Jinx forever, although their feelings will never be physically fulfilled. According to a commentator on the novel (Oates), she separates her two central characters from the rest of society and links them immutably to each other by making them co-conspirators in the accidental death of a classmate, the circumstances of which they never

¹³ One contribution of the active inference perspective is to shift the emphasis to consider the functions of narratives, even when they are about the past, as related to anticipating the adaptive challenges of the immediate or longer-term future. Perhaps the most relevant questions about identity then are not "Who am I?" or "Who was I?" but "Who am I becoming?" or "Who will I be?" To examine the relative weight of past and future narratives on identity processes, future research could compare the degree to which they predict aspects of identity processes over time.



reveal publicly.¹⁴ This plot thread can be seen as having a more general meaning, referring to the difficulties in understanding and creating bonds experienced by white and black Americans. Love,¹⁵ whether sexual or not, can never be realised between people of different races. Through the formal devices used in the novels described here, Oates attempts to engage the reader in a search for the answer to the question of why this is so. The motif of photographs and other visual representations in *Because I Am So Bitter Because It Is My Heart* creates a web of meanings that intertwines the plot motifs. In PP, action, perception, attention, and learning are cast as inference processes over prior beliefs, or as corollaries of such influences; these beliefs are the relation between unknown (unobservable or latent) variables such as states of the world across time and the (observable) outcomes they are thought to cause. Action selection is presented as an inference process over sequences of latent variables, and that leads to actions that harvest the sensory data that is least surprising and implicitly makes the beliefs come true.¹⁶

Language may thus enable us to comprehend equivalence classes that would otherwise lie forever outside our intellectual horizons. His considerations do not directly refer to artistic language, but one can perceive the series of repetitions used in Oates's novels as operating with such a series of equivalence classes, aimed at illustrating the problems in building the foundations of intersubjectivity in communication between the inhabitants of America. The cited texts use numerous artefacts related to the most famous events in American history - the Civil War and the fight for equal rights in the times of Reverend King to provide the recipient with an impulse to inscribe this content into a new structure. Its aim is not only to expose the weaknesses of social or religious narratives defining the ethical framework of contact between people, but also to propose a new way of perceiving the relationship between people. In the discussed novel, the position of the white girl and the black boy does not differ significantly, and their freedom is limited by the same factors - not only socially established racial prejudices but also internal enslavement that causes neither Iris nor Jinx to fulfil their lives. Each of them is bound not only by racial stereotypes but also by their fear of rejecting them. Both experience flashes of consciousness that allow them to recognise how overwhelmed and stifled they feel by the social and moral norms that make skin colour the primary determinant of a person's identity and choices. The representations that Oates uses in her narrative are a way of "marking where you are,"¹⁶ a point of departure that allows the literary narrative to absorb mythologised images of American history, which

¹⁴ ELLEN G. FRIEDMAN., "FEMINISM, MASCULINITY, AND NATION IN JOYCE CAROL OATES'S FICTION." *Studies in the Novel* Vol. 38, No. 4, JOYCE CAROL OATES (Winter 2006), Pp. 478-493 (16 Pages), 2006, <https://doi.org/https://www.jstor.org/stable/29533787>.

¹⁵ Clark, Andy. "Magic Words: How Language Augments Human Computation" in P. Carruthers and J. Boucher (Eds) LANGUAGE AND THOUGHT: INTERDISCIPLINARY THEMES (Cambridge University Press: Cambridge, 1998) P.162- 183 Andy Clark It can be shown, for example, that the provision of linguistic labels for classes of perceptually presented objects can speed category learning in artificial neural networks. This is because the presentation of the same label accompanying a series of slightly different perceptual inputs (e.g., different views of dogs) gives the network a heavy hint. It flags the presence of some further underlying structure and thus invites the network to seek the perceptual commonality (for a detailed discussion see Schyns (1991), Clark (1993) Ch. 5). It also seems likely (though no formal demonstration exists) that for certain very abstract concepts, the only route to successful learning may go via the provision of linguistic glosses. Concept such as charity, extortion and black hole seem pitched too far from perceptual facts to be learnable without exposure to linguistically formulated theories. Language may thus enable us to comprehend equivalence classes that would otherwise lie forever outside our intellectual horizons.

¹⁶Constant, Axel . "Cultivating Creativity: Predictive Brains and the Enlightened Room Problem." :*Royal Society*, 2023, <https://doi.org/10.1098/rstb.2022.0415>.

become “an index of an index.” A photograph can be treated as an iconic sign,¹⁷ representing people and content based on similarity. The works that are the subject of this analysis introduce ekphrases as indexes of indexes—an evolving narrative structure in which the subject of parody is the tendency to treat representation as a direct reflection of its object. In this sense, the aforementioned notion of “formal illusionism” can be seen as arising from the perception of the bond between a sign and its referent in terms of Peirce’s abduction. Friston and other authors of the cited text begin their considerations with explanations of the relationship between their views and the concepts of the famous philosopher. These researchers write that simpler types of signification are embedded within more complex types – that is, there is a nested structure of signs at play in the constitution of more complex semiotic relations. To recognise a sign as the index of some signified, the creature needs to recognise (iconically) the two elements composing the indexical relation (e.g., symptom and disease) and relate them using a superordinate sign.¹⁸

This is particularly so for generative models based upon discrete state spaces, where the only thing that distinguishes one state from another is its index, and the only operational meaning of these indices is the transition (or likelihood) mappings to the indices of other states (or sensory outcomes). It should be emphasised that in literary narratives, photographs and other forms of representation are pointers to what distinguishes one state from another – the connections between a literary form consisting of discrete states, the most probable transitions of which the recipient tries to determine. As Clark notes, Human learning allows hostages to at least some degree of path dependency. Certain ideas can be understood only once others are in place. References to iconic signs, allowing for the connection of Oates’s novel with a specific historical and social context, are indexes of indexes – processes developing in different plot variants, in many novels, transitions in discrete spaces of states encompassing numerous textual realisations of Oates’s aesthetic project. This project aims to train the reader to distance themselves from what Clark calls quality,¹⁹ but in this text, these states should be considered as attempts to perceive literary texts as relating to the external world only through plot and the delineation of realistic aspects of the world presented, rather than through the complex structure of the aesthetic artefact. Clark writes: What we think of as perceptual experience, this suggests, is nothing other than a set of abstract re-descriptions of the sensory evidence that are consistent with multiple interpretations of the kind that emerge as higher levels settle into a best-fit picture of how the distal world most probably is. Our ideas about perceptual experience thus reflect the fact that specific patterns of high mid-level certainty can be consistent with many 15 distal causes. The idea that perception and cognition

¹⁷ Deacon, Terrence W. *The Symbolic Species*. W.W. Norton & Co, 1997: persons can leverage the palpable similarity between the photograph and their friend and recognize the image as being a photograph of this friend. Iconic signs underlie the most elementary forms of perception, since members of a given perceptual category bear iconic resemblance to each other, for the interpreter. Perceptual categorization is thus dependent on iconicity – in the general sense of shared quality or similarity – because a category is simply a set of members sharing certain features, which means that they signify each other iconically (for the interpreter who uses the category). proposal here is similar to Deacon’s description (...) the most basic sense of iconicity is that of “non-distinction” – that is, that the same interpret-ative processes are in play for two things, making them “iconic” of each other (Deacon, 1997: 76–77). The neuroanatomical correlates of this matrix A function will be explored in the next section, linking icons (A matrices) and indices (B matrices).

¹⁸ Friston, Karl. "Sentience and the Origins of Consciousness: From Cartesian Duality to Markovian Monism." 2020, <https://doi.org/10.3390/e22050516>.

¹⁹ Clark A. Whatever next? Predictive brains, situated agents, and the future of cognitive science. *Behavioral and Brain Sciences*. 2013; 36(3):181-204. doi:10.1017/S0140525X12000477



are distinct processes may have its roots (and limited grains of truth) exactly here. High mid-level sensory certainty constrains how we take the world to be. But advanced perceivers can deliberately explore other ways the world might be, consistent with holding fixed those mid-level encodings.²⁰ He also notes that the role of public language and text in human cognition is not limited to the preservation and communication of ideas. Instead, these external resources make available concepts, strategies and learning trajectories which are simply not available to individual, un-augmented brains. Much of the true power of language lies in its underappreciated capacity to reshape the computational spaces which confront intelligent agents.²¹

It was mentioned above that two oppositions are visible in the work of the American writer. The first is the figure of photography and the network of meanings associated with it, which can be traced to a single trope in which death and alienation are combined with the issue of representation and its reference. The second trope can be mentioned, introducing the motifs of dispersion and negation of the boundaries of the identity of individual people, inextricably connected with others. The first evidence supporting such an assumption is a scene that takes place shortly after the murder committed by Jinx. Talking to his mother, who suspects that her son may have participated in this crime, Jinx experiences the feeling that his eyes reflect the face of the man he killed:

Jinx stares and blinks. He knows his eyes are bloodshot and there's the reflection of a dead man's face in them. Blurred as it sinks into the water. How long he's been there, leaning precariously out, his fingers slipping on the rusted railing and his eyes dilated as if the pupils have begun to bleed into the trainees, Jinx Fairchild doesn't know. He has very nearly lost his balance. He has forgotten where he is and why. The river is no longer the Cassadaga River but a churning, rushing, living thing, a region of spirits; me, me, me in Jinx Fairchild's brain has been drowned out by their deafening murmur.

It is noteworthy that Jinx experiences what happens to other heroines mentioned in this text of novel - the disintegration of her subjectivity and questioning its boundaries. This is one of many examples of violating the boundary between "self" and "other", subject and world. Jinx tries to redefine her identity, tormented by remorse after the murder she committed. She also tries to find a place for herself in America in the sixties. The scene showing Jinx staring at a photo of soldiers from the American Civil War is one of many ways of unmasking the false promise of equality and freedom that America gave its citizens:

It's a sepia-tinted photograph, very old, measuring about six inches by eight, on stiff cardboard backing. A photograph of the Civil War. Stiffly posed across a rural bridge, reflections sharp in the water and sky, in the background massed with jungle-like foliage, are a band of Union soldiers, some on horseback, most on foot, and among the foot soldiers are several black men, uniformed like the rest. The caption, in faded ink, reads Military bridge across the Chickahominy, 1864. Jinx Fairchild whistles faintly. Is this the real thing? I mean, so old?

Jinx's later fate, his dashed hopes of making a career (Jinx is a talented basketball player) and probable death in Vietnam are one of many signals in the novel that testify to the

²⁰ Clark, A., Friston, K. & Wilkinson, S. (2019). Bayesing Qualia: Consciousness as Inference, Not Raw Datum. *Journal of Consciousness Studies* 26 (9-10):19-33.

²¹ Clark A. Magic words: how language augments human computation. In: Carruthers P, Boucher J, eds. *Language and Thought: Interdisciplinary Themes*. Cambridge University Press; 1998:162-183.

young man's inability to transcend the boundaries of his self and establish a true bond with other people. The young man does not find a form that allows him to give shape to his thoughts about death; he is unable to make it part of his interpretation of the world - unlike the protagonist of *I'll Take You There*, who expresses her experience of her dying father through the metaphor of a broken mirror. This metaphor connects with other indexes of indexes appearing in the novel, referring to the problem of the relationship between a sign and its object. The protagonist can perceive representation as a construct of her mind, and "the breaking of the mirror can be treated as a break with the tradition of the novel as a mirror. The existential experiences that led her to question representation as an icon are the death of her parents and the intense experience of closeness with other women, lonely and suffering like her. Jinx is helpless in the face of death, just as he is in the face of guilt for the death of the man he killed. The young man's decision to fight in the Vietnam War can be seen as an escape from the necessity of constantly reinterpreting his perception and co-creating the existence and passing of other subjects through this. His feelings when he looks at the photograph of the dead soldiers do not become part of an actively constructed process of interpretation. When a young man looks at a photograph of black soldiers from the time of the Union-Confederacy conflict, he thinks"

It always scares Jinx and stirs him to an emotion he can't name when he sees the images of people long since dead and considers their strange composure in the face of destiny and dissolution. Contemplating the past, you know there's no Heaven, no place for all those dead to end up. Also, these are Union soldiers, freed slaves among them, in the Man's uniform: just as husky, just as manly, just as composed, though their uniforms are all as shabby as the whites. A photograph is a puzzle, Jinx Fairchild thinks, but what's it a puzzle of? And what's the solution? He's just staring and staring, like a small child.

In *Because I Am So Bitter Because It Is My Heart* there are two opposing figures related to the tension between two literary constructions of intersubjectivity. One of them is the meanings generated by the descriptions and metaphors of the mirror reflection and the photographs exhibited in a small photography studio. The first signal indicating the role of the figure of photography and its reference is the impressions of the photographs that the protagonist of the novel, who is a little girl at the beginning of the book, has:

When Iris thinks of her uncle's photography studio, she thinks of the doomed lobsters, black, spidery, giant-clawed, groping about in the bubbly water tank in the neighbouring front window. Staring in the window of Leslie's shop, mother and daughter are silenced for a moment, seeing their likenesses on display... amid many other portraits. The glass is flyspecked, and many of the older photographs are discoloured. What a jumble! It's like a common graveyard: photographs of unknown men, women, and children...black faces beside white... landscapes of the city of Hammond.²²

It seems justified to treat the figure of the photograph as the killing of living people in an external representation as a prelude to the theme of relations between white and black citizens of America, developed throughout the novel. Little Iris's associations lead her thoughts to treat the exhibition of images of people as dying, doomed animals, unaware and unable to influence their fate. The disgust and fascination that the girl feels when staring at the creatures vegetating in containers, writhing in the agony of artificially sustained life that will soon be taken away from them, are also connected with the perception of photographs of

²² Oates, Joyce . *Because It Is Bitter, and Because It Is My Heart*. Penguin Publishing Group, 1990.



human faces, but while observing them, sadness and pain prevail over disgust. The chasm separating the photograph from the living person, the stained glass between Iris's vision and the overexposed photographs, becomes even deeper when she begins to express the distance separating white and black residents of a provincial American town in the sixties. Death also connects with another trope found in this description—the cemetery, the burial place of both white and black people. The punctuation used in this fragment allows us to treat the elements of the description as apparently indirect speech, reflecting not only little Iris's thoughts but their tone, rhythm, and tempo, the vividness and strength of her feelings, emphasized by the exclamation mark that ends the sentence about the “mess” at the exhibition of not-so-good photographs that can be viewed through a dirty window. The hesitation and uncertainty aroused by Iris's intuition about how the representation might connect with its referent are expressed by the ellipsis placed at the end of the sentence in which the thought about the connection between representation and death is expressed. This description can be treated as the first symptoms of sensory stimulation that enable the factorisation of the model space or hypotheses, enabling useful constraints on lower-level conjunctive reasoning. The description of the photograph and its development in the further parts of the plot suggest that the numerous and accentuated formal references to the realistic novel with the intention of social criticism, which can be indicated in Oates's work, are insufficient to recognise the ambiguity of *Because I Am So Bitter Because It Is My Heart*. Categorising this work as foregrounding themes concerning racial conflicts between black and white US citizens in the times of Martin Luther King does not exhaust the possibilities in which one can perceive the influence of aesthetics on social emancipation. The description of the photograph will be one of the reference points to indicate how the structure of the novel allows the recipient to create a generative model, enabling hierarchical inference in a situation where the higher level includes the space of models or hypotheses that establish probable contexts of inference at a lower level. This allows for considering hypotheses that infer sensory evidence in a certain context. The generative model is not an objective map of the world; it is created as a function of the needs and concerns of creation.²³

The photography studio itself is small and perpetually cluttered with equipment. Leslie is always buying new cameras, new camera attachments, or props for his portraits... and not throwing anything out. It's a room lit with a single muted light, except when a blaze of lights is turned on. Thus, to Iris, who has seen it since a time when, in the most literal terms, she was incapable of comprehending, let alone remembering, incapable even of comprehending herself as a being of consciousness and identity, the studio has an air familiar as a dream she has visited numberless times yet, awake, has not the power to recall. Oates undermines a satisfying sense of closure in the achievement of these ordinary destinies by infusing the text with irresolution and frustrated yearning. Iris, although she has fought to enter this narrative, finds that she cannot believe in it, so she walks perfunctorily through its chapters. The master narrative fails Jinx and Iris because it is defunct, even irrelevant, in the world of the author and the world of the narrative. The young black man in the photograph, formally, even a bit stiffly posed, in his dress uniform, hands clasped against his knees, hat smartly set on his head, was certainly Jinx Fairchild: the shock of seeing him after so long, of seeming empowered to look, in an instant, into his eyes, ran through Graice and left her

²³Friston Karl 2013. Life as we know it. *J. R. Soc. Interface*. 102013047 <http://doi.org/10.1098/rsif.2013.0475>

weak.²⁴ The works analysed in this text introduce a nuanced and visionary image of a social community that fails to build the principles of communication that guarantee not only social justice but also a bond between the individual and other people. In *I'll Take You There*, the protagonist and narrator try to reconstruct her first attempts at building a social identity and the influence of language on her efforts. The narrator uses several tropes - the image of the church, the memory of the father observed from hiding, and the mirror - to show the productivity of literary critical contestation of the relationship of meaning based on an unchanging and socially sanctioned bond between the sign and its object. The title of the book, directly related to the narrator's initiatory journey to her dying father, can be seen as a discreet invitation to participate in an aesthetic pact in which the sign as a "mirror" of the external world is transformed into a figure of a constant effort, shared by members of the communication community, to make the bond between the sign and its referent an effort of multiple, ambiguous interpretation in numerous and complex contexts. This thread is closely related to the issue taken up by Friston via Peirce, referred to as abduction, and will set the horizon defining the scope of the recipient's action in building connections between types of signs appearing in a literary text and participating in the process of determining what type of relationship connects them with the referent. The meaning of the novel becomes clearer when presented in the context of scenes related to two motifs - cigarette smoke and a mirror. The first of these interpretive tropes is connected with the lack of identification and rejection that the protagonist experienced in childhood. The girl, raised in a family of poor farmers and immigrants from Germany, orphaned at an early age by her mother, had no clues from her environment about who she was or who she could become. The father blames the daughter for the death of her mother; he does not take care of the girl. The images through which the protagonist's relationship with her father is expressed are very vivid and described in detail, presented by the narrator as irreversibly recorded in her memory, rich in details. The durability of these memories, having the clarity and meticulousness of sensory perception, allows us to recognise the ongoing influence of the past on the emotions of the girl, who at the beginning of the novel is already beginning an independent life. Her emotions related to furtively staring at her father intensified the impressions showing the father's behaviour as a "ceremony", saturated with meaning unknown to the child. In these sentences, one can point out quotes suggesting that the father could have searched with his eyes for his lost wife as if his daughter were an insufficient substitute, unable to replace the lost partner. This is evidenced by the quote:

If my father discovered himself alone in my presence, his startled eyes would shift a few inches above my head as if seeking out—who? (Our vanished Ida?). My father smoked Camels, lighting them with kitchen matches scraped noisily against the iron stove; I can see still, always in my mind's eye, I will see the sudden leaping bluish flame that turned at once transparent orange, the mysterious and indefinable colour of fire. At such a time, my father was obliged to squint against the smoke he exhaled; it was a curious ceremony, hurtful, yet profound, the way my father squinted, coughed, sometimes coughed at some length, as a result of this smoke²⁵. **Sometimes I caught him staring at me by lamplight, drinking a pungent, colourless liquid from a glass, and smoking one of his Camels. The veil of smoke shielded his gaze. That's her, is it? The one to blame.**

²⁴ Oates, Joyce . *Because It Is Bitter, and Because It Is My Heart*. Penguin Publishing Group, 1990.

²⁵ Oates, Joyce . *I'll Take You There*. Ecco Press, 2002.

The child, whose gaze followed the man's eyes, saw his "frightened eyes" as if being alone with his daughter aroused fear in the father. The lack of connection with her father and the feeling that her life cannot compensate for the death of her mother - in the broader sense of the never-soothing pain of loss and absence of a woman she never had the chance to know - are combined in the child's imagination with the pungent smoke that blurs the image of her father. The girl perceives her father's burning as a "ceremony", a word that brings connotations of religion and gives the scene an additional dimension, justifying the narrator's passivity towards the "sisters" from the sorority who persuade her to undergo strange ceremonies. Behaviours that are not connected to any personal experience and a sense of giving meaning to time, stopping it and giving it a symbolic character - trigger a compulsive need for participation in the protagonist. This is indicated by the quote:

In several downstairs rooms there were imposing marble fireplaces like altars (rarely used, as it turned out, since they smoked badly); everywhere were filigree-framed mirrors with singed-looking glass that enhanced the plainest face if you tiptoed to stare into them, like Alice approaching the Looking-Glass World; these mirrors seemed to double, even treble, the proportions of the sombre rooms as in a dream of fanatic clarity that leaves the dreamer exhausted and strangely demoralized, as if emptied of personality. Confused by these mirrors on my first visits to the house (during second-semester sorority rush week), I staggered away from the Kappas with a misleading sense of the house's grandeur, as if I'd been in a cathedral.²⁶

The "passage" that enables the union of the past and the present in the ritual is not available to the girl robbed of her bond with others, devastated by rejection, desperately wanting to experience participation in an event transcendental to time. Both the image of the father and the "ceremony" are treated by the narrator as an iconic sign at this stage of the development of the novel – the quote is at the beginning of the first part. The most basic meaning of an icon is indistinguishability – that is, the same interpretive processes are applied to two things, making them "icons" for each other. The narrator perceives the image of her father as an icon; he is a faithful reflection of the man who was partly responsible for the sadness and loneliness she experienced in the first years of her life.²⁷ As the plot progresses, this multiply contextualised image changes its status. It becomes a sign, referred to by Friston as the index of the index. The condition for recognising the sign as an index of some signified is that the being must recognise the two elements that make up the symptom and the disease, and connect them using a superior sign. Indexes can be formalised by active inference, through the correspondence between the processes of indexical inference and beliefs about Friston uses the term indexical indices to describe beliefs about state transitions at the superordinate level of the generative model. The development of the ability to use signs, which is the most important theme of²⁸ *I'll Take You There*, should be seen as the ability to combine icons into

²⁶ Oates, Joyce . *I'll Take You There: A Novel*. Ecco Press, 1990.

²⁷ Iconic signs underlie the most elementary forms of perception, since members of a given perceptual category bear iconic resemblance to each other, for the interpreter. Perceptual categorization is thus dependent on iconicity – in the general sense of shared quality or similarity – because a category is simply a set of members sharing certain features

²⁸ The (...) aspect of symbols is more akin to the linguistic notion – that is, signs that can indicate other signs or, in the hierarchical model of Deacon, indices of indices (Deacon, 1997). Based on generative models with deep temporal structure (e.g. Friston et al., 2020), we suggest that the best way to implement syntactic constraints in

increasingly elaborate and ambiguous structures of meaning, the reference of which is not an individual story of maturation, but the fluidity and dynamics of signs. Although these signs are closely related in the plot of the novel to historical and social problems - democratization and egalitarianism in access to education, available to poorer and deprived of intellectual traditions young people and racial problems - at the higher level of the generative model - both the narrator's and the reader's - they change. The main axis of the development of the plot of the novel after the protagonist's forced departure from the elite student society is her relationship with a much older, black researcher of the philosophy of early Wittgenstein. Vernor Matheius is a man possessed by an intellectual obsession with "logical atomism"²⁹, aware of the weakness of the narrator of the novel, who uncritically adores him and is fascinated by his "genius." He knows that the girl is very poor; before they began their acquaintance, he saw her digging for food in the trash, because the high costs of belonging to the association were eating up her modest earnings. The heroine dreams of uniting with her lover, because it seems to her that she will escape from emotions that are difficult to name and not easily expressed into a safe and stable sphere of meaning, the ability to distinguish between sense and nonsense. This is indicated by the quote:

In the gloomily romantic coffeehouse, Vernor Matheius spoke almost exclusively of philosophy. It was his true passion. It might have been his only passion. Such a ferocity of commitment and concentration excited me, for I felt the same way, or nearly; I'd grown to distrust all that was mere emotion, fleeting and ephemeral; the world of sliding, collapsing surfaces; the world of my father's drifting cigarette smoke, vanishing into the ceiling of my grandparents' old farmhouse; the world of clock time. And there was the thrill of a common language. A common religion. Almost, I could think, as if we were a couple. Lovers.³⁰

In this description, the juxtaposition of "the world of ephemeral emotions with 'father's cigarette smoke'" and "clock time, or the irreversible loss associated with death and transience, but the elusiveness of what we perceive, is striking. The protagonist of the novel hopes to "mature" under the influence of her lover, and her infantile delight in "a common religion founded on the philosophical language that unites the two is expressed with considerable irony. The girl hopes that by distancing herself from what philosophy calls qualia, she will recognise herself as belonging to the objective "truth" decreed in the philosophical treatise. Wittgenstein's intention: "The book will ... draw a limit to thinking, or rather—not to thinking, but to the expression of thoughts The limit can ... only be drawn in language and what lies on the other side of the limit will be simply nonsense" (*TLP* Preface). Names must have a *reference* /meaning, but they can only do so in the context of a proposition, which is held together by logical form. It should be noted that the entire formation of the protagonist (never named) proceeds from fascination with academic

a generative model is to use a hierarchical model that has a superordinate B matrix 1995; Roy, 2005; Teh et al., 2006), sometimes with an explicit nod to semiotics.

²⁹ Wittgenstein's in his *Tractatus Logico-Philosophicus* of 1921 (Wittgenstein 1981). The core tenets of Wittgenstein's logical atomism may be stated as follows: (i) Every proposition has a unique final analysis which reveals it to be a truth-function of elementary propositions (*Tractatus* 3.25, 4.221, 4.51, 5); (ii) These elementary propositions assert the existence of atomic states of affairs (3.25, 4.21); (iii) Elementary propositions are mutually independent — each one can be true or false independently of the truth or falsity of the others (4.211, 5.134); (iv) Elementary propositions are immediate combinations of semantically simple symbols or "names" (4.221); (v) Names refer to items wholly devoid of complexity, so-called "objects" (2.02 & 3.22); (vi) Atomic states of affairs are combinations of these objects (2.01).

³⁰ Oates, Joyce. *I'll Take You There*. Ecco Press, 2002.



philosophy to recognition of her artistic talent and resignation from philosophy understood as a critical consideration of its language, and showing in her art the consequences of being imprisoned in our image of the world. This thread refers to the metaphor of language in which we are imprisoned, but safe, gaining, thanks to the limitation of the linguistic image of the world, the possibility of orientation in reality and the basis for defining our identity. The subsequent defeats of the narrator of the novel, losing the possibility of identifying with her student fraternity, with finding support in the intellectual project, which is associated with the early stage of Wittgenstein's activity, are transformed into recognition of her attitude as an artist. This is evidenced by the quote:

To show the fly the way out of the bottle was the life's hope of Ludwig Wittgenstein but the truth is that human beings don't want a way out of the bottle; we are captivated, enthralled by the interior of the bottle; its glassy sides caress and console us; its glassy sides are the perimeters of our experience and our aspiration; the bottle is our skin, our soul; we're accustomed to the visual distortions of the glass; we would not wish to see clearly, without the barrier of the glass; we could not breathe a fresher air; we could not survive outside the bottle.³¹

The language seen as a “safety bottle” is replaced by two other images. There are also clear associations with religious ideas, similar to the earlier descriptions of the “temple” with which the heroine associates the building of the student association. The protagonist's maturation is aimed at being able to perceive her own experiences as models or hypotheses³² and does not refer directly to the outside world; they can be treated as a hypothesis regarding what is “real”. It seems that her development as an artist is achieved by breaking the bond between symbols provided by the social world and the trauma of her lack of belonging. At the level of the plot and the world presented, this process of the narrator's development can be treated as distancing herself from the social and religious clichés that set the framework for the functioning of American society in the 1950s. At the level of reception and interpretation of the novel – the meta-problem of art reception – the difficulties in defining the relationship of language to the outside world, which the nameless student has – can be seen as one of the manifestations of critical reflection on treating the aesthetic artefact as an “icon” of the outside world. The most basic sense of iconicity is that of “non-distinction” – that is, that the same interpretative processes are in play for two things, making

³¹ Oates, Joyce . *I'll Take You There*. Ecco Press, 2002.

³² Hierarchical inference is Bayesian belief updating under a hierarchical generative model in which probabilistic beliefs at one level depend upon beliefs at a higher level. All intermediate levels in hierarchical inference now play the role of empirical priors; namely, prior beliefs that depend upon the bedrock sensory evidence. For example, I could entertain two hypotheses that constrain my inference about sensory evidence in some context: “I could be sitting in my front parlor” or “I could be sitting on a film set”. If I see white flakes floating down outside my window, my perceptual inference will be profoundly different under the two models (i.e., it is snowing – or someone is using a synthetic snow machine). Crucially, the empirical priors afforded by the second level of my generative model not only constrain my perceptual synthesis but are also informed by higher and lower level beliefs. For example, if I know it is summer (i.e., higher empirical priors) I will assign greater credence to the ‘film set’ hypothesis over a ‘winter snowscape’. Furthermore, if I see that the snowflakes do not melt when settling on warm surfaces (i.e., lower empirical priors), this will reaffirm the ‘film set’ hypothesis. As noted above, if we subscribe to a deep or hierarchical form of belief updating in our brains, then this lends us a remarkable capacity: namely, I can entertain alternative (counterfactual) models or hypotheses and effectively ask “what would this look like if I was in this situation”. In the lucid dream setting, we might reflect that the sensorium would appear just like this.

them “iconic” of each other.³³ Instead, the symbol comes to signify by convention.³⁴ The conventional aspect of symbols can be understood as an effect of collective patterns of inference based on the same, shared generative model; and (2) the syntactical aspect of symbols (symbol-to-symbol transitions, as are commonplace in language) can be recast as superordinate beliefs about (semiotic) state transitions. Oates marks the social context of her novel, and the form of her novel grows out of the aesthetic experience of both experimental and realist novels. Ironic references to the possibility of petrifying the process of interpreting the world into a fixed and unchanging image fixed in language are the starting point not only for a critique of ideology and religion but also an impulse for building a new aesthetic project. Like much of the literature of modernity, this narrative centres on unrecoupable loss, which Paul Bowles offers as the defining condition of modern life.³⁵ In this sense, her novels can be seen as a utopian idea of creating a community of art recipients ready to treat “formal illusionism” as an impulse towards ethics based on the aesthetically presented abolition of the boundary between subjects. The heroine’s dreams of rooting in language dissipate but are replaced by experiences related to the abolition of individual identity in favour of identification with other people. This is indicated by the quote:

Deep in the interior of the subterranean mirror with its discoloured surface splotched from the sink, its lead backing corroding the glass like leprosy: how many generations, how many decades of girls since the building had been constructed a hundred years before, had gazed into such depths as I did, stark yearning eyes, female eyes, our reflections tangled together as in the marshy bottom of a pond, or a common grave.³⁶

The girl looking in the mirror does not see her reflection; she has the impression that other women are looking at her from the mirror, just as lost and helpless as she is. Their images in the mirror suggest, similarly to the photographs described in *Because It Is Bitter, and Because It Is My Heart*, associations with the cemetery, with death.

I saw near a trash can a tall column of shining light beckoning to me as if with an outstretched hand, and when I drew closer, it turned into a four-inch shard of broken mirror. I moved the mirror stealthily to the left and saw a sight that I couldn't at first interpret, my vision was blurred and blotched as if I were staring through water. A skeletal figure propped against a filthy pillow. A bald head that looked enlarged or in some way misshapen, and a ravaged face crosshatched with deep lines and veins; the skin was both ashen and reddened as if it had been boiled; the gaping mouth disappeared into the upper jaw and the lower jaw was hardly more than a flap of lacerated toothless gum; there were welts or burns on the right side of the face and throat, and the throat looked as if

³³ An active inference approach to semiotics A variational theory of signs Antoine Milette-Gagnon, Samuel P. L. Veissière, Karl J. Friston, Maxwell J. D. Ramstead, García, Adolfo M., and Agustín Ibáñez. “The Routledge Handbook of Semiosis and the Brain.” *Routledge eBooks*, 2022, <https://doi.org/10.4324/9781003051817>.

³⁴ An active inference approach to semiotics A variational theory of signs Antoine Milette-Gagnon, Samuel P. L. Veissière, Karl J. Friston, Maxwell J. D. Ramstead, García, Adolfo M., and Agustín Ibáñez. “The Routledge Handbook of Semiosis and the Brain.” *Routledge eBooks*, 2022, <https://doi.org/10.4324/9781003051817>.

³⁵ An active inference approach to semiotics A variational theory of signs Antoine Milette-Gagnon, Samuel P. L. Veissière, Karl J. Friston, Maxwell J. D. Ramstead, García, Adolfo M., and Agustín Ibáñez. “The Routledge Handbook of Semiosis and the Brain.” *Routledge eBooks*, 2022, <https://doi.org/10.4324/9781003051817>.

³⁶ Oates, Joyce . *I’Ll Take You There*.



it were melting into the shoulder. The eyes! I would not have recognised my father's face except for the eyes.³⁷

A terrible faintness rose in me. My eyes rolled in my head, and the sliver of mirror fell from my fingers to the porch floor and shattered into pieces. Defining the symbol, Friston and his colleagues write that people sharing the same culture will share the same (or similar enough) generative models, which means they share the same expectations about how the world is and how agents can act within it.³⁸ As already mentioned, a generative model is a set of beliefs about what the most probable transitions between states of the external world are. In the case of the reception of a literary text, these "hidden states" are the subject of the recipient's hypotheses about the relationship connecting individual elements of the text into a complex structure. As the researchers note, "Symbols can be recast as state transitions, beliefs about state transitions, beliefs."³⁹ In the discussed novel, the most generating hypotheses about state transitions can be put forward by analysing the transitions between the image of the bottle tongue and the mirror.

A cracked window. A broken window. Glass breaking

Black Girl / White Girl, this novel takes up the thread of the American legacy of the ideology of the struggle for equal rights for African Americans can be an impulse for reflections on the uncertain and unreliable attempt to build and confirm one's own identity through narrative, founding political or religious identification. In this work, the events create a terrifying image of opportunism and thoughtlessness of the faculty of a prestigious women's college. The work can also be seen as a reckoning with the attempts by anarchists to weaken the social system of capitalist America based on exploitation and discrimination. The novel is written in the form of a first-person narrative and can be seen as a "confession" of the protagonist, a mature university lecturer. The account refers to the time of the woman's university education, trying to write the "truth" about the death of her black roommate, Minette, who died in a fire. The narrator also intends to reckon with her participation in the conviction of her father, a lawyer and anarchist activist. The man ended up in prison because of Genna's incriminating testimony. Oates notes: Genna is that rare individual, a "good" person; she has internalised a genuine moral code, and is appalled by her father's seemingly involvement in the death of an innocent man. Yet it is only under emotional duress that she exposes him⁴⁰. It should be noted that one of the main threads of Genna's story, giving coherence to her narrative, is the ethical motivation that prompts the girl to write down her memories. Genna not only wants to settle accounts with her passivity and consent to the lies that cost her roommate her life. The heroine wants to settle accounts with the adult witnesses

³⁷ What are missing and unrepresentable, and what this literature expresses nostalgia for, according to Lyotard, are the master narratives that sustained Western civilization in the past and that have now been delegitimated. By calling into question the Western paternal narratives of philosophy, religion, and history, as well as the great quest and goal narratives, modernity has provoked a "crisis in narrative" resulting in a literature that can present the sense of loss but not what is lost (78-81). Fredric Jameson, in his introduction to the English translation of Lyotard's book, observes that these master narratives have not disappeared.

Rather, they have gone underground, protected in the culture's unconscious, a site from which they still wield power Where Are the Missing Contents? (Post)Modernism

³⁸ Friston, K., Moran, R. J., Nagai, Y., Taniguchi, T., Gomi, H., & Tenenbaum, J. (2021). World model learning and inference. *Neural Networks*, 144, 573–590. <https://doi.org/10.1016/j.neunet.2021.09.011>

³⁹ An active inference approach to semiotics A variational theory of signs Antoine Milette-Gagnon, Samuel P. L. Veissière, Karl J. Friston, Maxwell J. D. Ramstead, García, Adolfo M., and Agustín Ibáñez. "The Routledge Handbook of Semiosis and the Brain." *Routledge eBooks*, 2022, <https://doi.org/10.4324/9781003051817>

⁴⁰ <https://celestialtimepiece.com/2016/03/25/black-girl-white-girl/>

of the Minette disaster, but her goal is also to present a broader problem - the responsibility of adults, able to gain influence over young people, for the actions and decisions of inexperienced people who trusted their authorities. Genna's father persuaded his "disciples," who succumbed to his strong personality, to plant a bomb that maimed the black security guard. One of the young men, Ansel Trimmer, could not bear the burden of responsibility and attempted to commit harakiri, which the narrator witnessed as a little girl. The awareness that her father contributed to the evil. The theme of the story written by Genna is the defeat of the intellectually unformed and emotionally immature who became tools of the followers of the ideology. The stratification of Genna's story into "the proper text" (concerning her roommate) and "the shadow text" (concerning Ansel Trimmer) is one of many methods of branching the narrative and expanding its meaning. Genna notes:

...tended to compose an inquiry into Minette Swift's life/death exclusively, but like an eclipse of the sun, the shadow-text began to intrude. I could not seem to prevent it! The shadow-text is an inquiry into Max Meade and a portrait of the daughter who betrayed him. I'd in-263 intended to compose an inquiry into Minette Swift's life/death exclusively, but like an eclipse of the sun, the shadow-text began to intrude. I could not seem to prevent it! The shadow text is an inquiry into Max Meade and a portrait of the daughter who betrayed him (26).

It seems that Genna, in writing her story, is not only driven by a desire to do justice to her deceased colleague but also constructs a story in which social bonds founded on any ideology or kinship are no guarantee of an individual's ethical conduct. The difficulty of remaining faithful to a single theme and literary form, which ranges from bildungsroman to crime or gothic horror, results from the fact that the events, characters and plots in the novel are so closely linked, constituting contexts for each other, extending the meaning of the entire text, that each of them can be an index of another structure, another story. "Competing hypotheses"⁴¹ about the meaning of the story include not only formal issues concerning the genre or style of the story but also its ethical purpose. Genna refers to religious ideas in her text:

So fiercely Minette believed that Jesus Christ was her saviour, yet her saviour was meant to be merely her roommate, an eighteen-year-old white girl not strong enough for the task.⁴²

She exposes the naivety of her friend's faith, but the irony aimed at the tragic consequences of the naivety of the "black girl" has, like other allusions to the Bible (including the betrayal of the teacher), a deeper meaning. Genna seeks justification for writing itself, for capturing life in structures mediated by language, and would like to define their ethical function. The novel *Black Girl/White Girl* uses formal illusionism by introducing ambiguous signals regarding the thematic and stylistic classification of the text. This illusionism arises from an attempt to

⁴¹ The idea is that organisms entertain and evaluate competing models or hypotheses (Umwelten) and select the one for which there is the most evidence (i.e., the hypothesis that renders the sensations the most likely or least surprising). Crucially, this evidence is the complement of the free energy above. In other words, minimizing free energy minimizes the discrepancy between sensory states and those expected under a generative model. This is mathematically the same as maximizing the evidence for the generative model. Heuristically, variational free energy therefore provides a measure of the evidence for a creature's generative model. To select the model that minimizes the discrepancy between what is predicted and what is sensed (i.e., variational free energy) is the same as selecting the model that is supported by the most evidence (Friston, 2020) – that is, a form of self-evidencing (Hohwy, 2016).

⁴² Oates, Joyce . *Black Girl White Girl*. Harpercollins Publishers, 2007.



weaken the influence of a coherent, top-down vision of the world on the reader's imagination, questioned regardless of whether its source is religion or a liberal or anarchist narrative. In each of the novels discussed, Oates uses this technique, but offers the reader a new form of identification - an aesthetic vision of subjectivity, the boundaries of which are constantly unstable and changeable, violated by the processes of other people's consciousness. Driven by fear of being accused of racist prejudice, the teachers ignore the signs that the persecution that their black student is allegedly falling victim to is a hoax planned by her. By simulating racial attacks on herself, the "black girl" tries to cover up the fact that her abilities are not sufficient to earn a degree from a distinguished research university. Aware of the cowardice of her superiors, who do not dare to expel a black student from the university, she simulates attacks on herself. In one of them, she allows her colleagues to find photos of Sara Bartman on the door to her room, with the caption "Go back home, you black bitch". Bartman, functioning as a figure of the crime of colonialism, was a black resident of Africa, brought to Europe as a source of income for her owners. By staging shows with the participation of a black woman forced to show her genitals to the residents of European metropolises, they achieve huge profits. A "Black American" in a liberal college, offended by being compared to a helpless victim of the owners, as a wronged victim of persecution, gains unlimited power over her environment, forcing the lecturers to make further concessions, allowing her to avoid the consequences of the lack of necessary intellectual qualifications required of a student of a higher education institution. The complete lack of resistance from the people gathered around the girl is the result of the obsessive fear of intellectuals who pride themselves on their liberal views and panic at the thought of being accused of tolerating racist persecution. Her roommate, Genna, marked by a complex about her origins from a family of wealthy, influential whites involved in the activities of the Underground Railroad, a legendary organisation supporting black plantation refugees in the American South, shows particular condescension towards her colleague's actions. Genna is not only aware of the privileges she enjoys as a relative of wealthy, influential activists whose dedication to the abolition of slavery is a pretext for perpetuating the narrative of the struggle for collective democracy, but she also notices her colleague's intellectual inferiority, which is inferior to other talented colleagues - both black and white. She tries to protect the black girl, although she sees her intentions and realises that the "racist persecution" that supposedly befalls the inept liberal arts student is a lie.

I could not recall the Dow Chemical bombing, I had been too young to care or to know or to make connections yet there came to me a memory blurred as damp newsprint the photograph of the black man killed in the blast, legs blown off and he'd crawled out of the burning rubble dragging himself as he bled to death, I was a ghost observing, I was a ghost blown about by the air-vent winds of the Valley Forge Mall hearing again Veronica's furious rush of words. Seeing again the raptor's face. You could argue, anyone on the payroll.⁴³

In the scene that explains Genna's motivation for deciding to reveal the guilt of her father, the co-organiser of the terrorist attack on the factory of a wealthy capitalist, the heroine of the novel identifies with two black victims, the doorman and Minette. Yet Oates finds human parallels, no matter how far apart her people might be on the social or the colour scale.⁴⁴ The

⁴³ Oates, Joyce. *Black Girl White Girl*. Harper Collins Publishers, 2007.

⁴⁴ Stanley Crouch. *The Lies that Blind: A Review of Black Girl / White Girl*

psychosomatic hallucination of the "white girl" is the result of knowledge of the mutilation of the doorman, injured by the bomb blast, planted by Genna's father and other perpetrators of the explosion. The protagonist relives in her nightmare the moment when the doorman lost his legs after the detonation of the bomb, feeling as if she were a victim of the catastrophe herself. In her delirium, one can also indicate a reference to the late Minette, who died in the fire, although the name of her former roommate is not mentioned in this description:

I was dragging myself along the floor. It had come over me suddenly. My legs are so we, and in that instant, the panicked realisation, My legs are gone. In the terrible blast, my legs became shreds of bone, gristle, and tissue, but I did not know of it because the explosion had obliterated all knowledge. And it is not as difficult as you might think, dragging yourself along a hardwood floor, not carpeted. And in dream logic, I knew this. (...) In the middle of the night able to make my way on foot to the bathroom, but returning, I was light-headed, so weak, there was no Max Meade to observe me in pity, distress, or distaste. I knew this, and then I realised as I was pulling myself. She didn't lose her legs, she did not die in the explosion but in a fire and for a moment I was confused as in a fever dream, though thinking: possibly she'd dragged herself, too. Amid the flame, she'd dragged herself. Dying, she'd dragged herself.⁴⁵

Recognising the connection between the doorman's accident and Minette's horrific death requires contextualising the pronoun "she" referring to Genna's roommate. Putting these elements of the novel together requires contextual analysis. Recent neurobiological research no longer connects the process of understanding in context with a dedicated linguistic network. As Hasson and his colleagues write: certain brain networks appear to have the capacity to generate predictions in an abstract, domain-general manner and may subserve prediction in both linguistic and non-linguistic domains.⁴⁶ (...) Lateral temporal regions implicated in low-level auditory speech processing (left planum temporale and medial transverse temporal gyrus) can engage in low-level predictions and their evaluation. Tremblay, Baroni, and Hasson (2013) found that these regions were sensitive to the predictability of auditory input streams, regardless of whether these consisted of speech or non-speech tokens, and importantly, no temporal regions showed sensitivity to predictability in speech series alone, thus suggesting that there is no unique status for predictability in speech stimuli. These findings can provide new research impulses for analyses of the impact of the linguistic text and its referents. It should be noted that this fragment requires the reader not only to consider numerous previous suggestions about Genna's ambivalent bond with her family and the sense of insecurity she experienced as a child but also the themes of the novel relating to the role of Genna's relatives in the struggle for African-American liberation. Her father, declaring contempt for capitalist and racial privilege, decided on an act of violence that was not only cruel but surprisingly senseless, surprising in a man of his intelligence.

In Genna's inner experiences, a maimed man and a young woman who lost her life in an accident died because of the cruelty and thoughtlessness of whites. The revelation of her father's guilt and her own "confession" regarding the morally ambiguous role that the academic community, including Genna herself, played in Minette's death. Genna did not reveal the fact that her colleague faked racist attacks so that the position of the victim would

⁴⁵ Oates, Joyce. *Black Girl White Girl*. Harper Collins Publishers, 2007.

⁴⁶ For instance, activity in the anterior part of the right temporal cortex differentiates between predictable and unpredictable sequences for both auditory and visual inputs (Nastase, Iacovella, & Hasson, 2014).

allow her to avoid consequences for the lack of progress in her studies and disqualifying low academic results. The passive and blackmailed group of professors not only violates the university regulations by allowing a student who is unable to pass exams to remain a member of the academic community. The lecturers fear losing the reputation of the college as an institution based on liberal principles, promoting equality for people regardless of their race or origin. It should be emphasised that in Genna's experiences, both Minette and the unnamed doorman are victims of white people, blinded by their ideas about what role they should play in striving for full emancipation. It is the lecturers and the conservative Genna who are responsible for Minette's death, and the "vision" revealing her identification with her deceased colleague confirms this assumption. The researcher's claim seems dubious, concluding that: "the use of the grotesque reinforces stereotypical images of black women as bound to the body, rather than the mind, and the Gothic plot explains racist and misogynous hate crimes as a form of guilt-inducing manipulation. In such ways, readers are invited to partake of a sense of white fragility, particularly about the modern university, which Jeffrey J. Williams observes, is no longer an elite experience but a part of mass culture."⁴⁷

Genna, although she has difficulty understanding her roommate's behaviour and feelings, does not lose her ability to judge her behaviour or that of her professors. She understands that cowardly avoiding responsibility for the young girl and giving in to her subsequent demands contributed to her death. Their behaviour was the result of a conformist fear of being accused of racial discrimination against the student. Attempts to "sacrifice" freedom, which whites undertake to make African Americans equal, turn out to be only narcissistic and superficial rhetoric and destructive actions, making the lives of blacks even more unbearable. In Genna's imagination, the traumatic experiences of the wounded man and the dying colleague become her own. This is one of the most expressive manifestations of constructing a literary representation of intersubjectivity, which can be indicated in the three Oates novels analysed in this text. The author of the article quoted above claims that horror and the grotesque can be a means of escaping Oates's narrative from dealing with manifestations of white supremacy. However, the above description seems to contradict this. The book contains numerous examples related to racial conflicts, and Genna sees the guilt of white people who deprive African Americans of freedom. The protagonist repeatedly refers to artefacts documenting racial conflicts in her narrative, and the association that comes to her mind in the dormitory she shares with Minette introduces connotations of racial persecution:

Several feet beyond the window was an old oak tree with thick, gnarled limbs. One of these had split in the storm and hung down broken, its pale raw wood like bone piercing flesh. I was reminded uneasily of one of my father's photographs, on a wall of his study in our home in Chadds Ford: a framed glossy photo of a young black man who'd been beaten by heavily armed Los Angeles riot police in April 1968 following the assassination of the Reverend Martin Luther King, Jr. The young black man lay on filthy pavement, streaming blood from head wounds, writhing in agony, the stark white bone of his right arm grotesquely piercing his flesh at the elbow.⁴⁸

Genna's memory refers to another important thread in the novel, the political involvement of her father, Max, as well as the past of the girl's ancestors, abolitionists and founders of a

⁴⁷Liz Kella, White Fragility and the Grotesque in Joyce Carol Oates's *Black Girl/White Girl*

⁴⁸Oates, Joyce. *Black Girl White Girl*. Harper Collins Publishers, 2007.

higher education institution. In her youth, Genna believed that her mission was to continue the family's mission, paving the way for African Americans to freedom, but her father's crime verified her conviction that she came from those who were just. The protagonists, like the heroines of previously analysed novels, must create new foundations for their identity and their efforts to define who she is proceed in a similar way to Iris's or the anonymous student's. Their adolescence is connected with the ability to use the transformation of illusions about the possibility of a permanent and reliable connection between language and the world to the use of language as a means of questioning the stable bond between conventional social symbols and one's own identity. At the level of the meta-problem, the artistic form of Oates' novel - formal illusionism - draws its means of expression from the negation of the possibility of finding an image of oneself on a predetermined, stable narrative, especially political or religious. Self-definition must occur through the process of interpretation undertaken by the individual. This interpretation in each of Oates' novels is born out of the conflict between individual conscience and the socially guaranteed criteria for separating good from evil.

Discussion

Friston and his colleagues write: as emphasised by many philosophical traditions (notably, stoicism), humans do not interact with the world in an unmediated way (as a naïve realist or phenomenological account might hold), but rather apprehend it via the meaning that they assign to their experience.⁴⁹ Peirce's construct of semiotic interpretant – the interpreter's understanding of the relation between a signifier and what it signifies. Friston, referring to the concept Umwelt⁵⁰: the subjective world of organisms is not composed of a series of objects with "objective" properties, but rather is better understood as a set of objects that are made meaningful in the organism's perceptual field by its action capacities.

Genna, looking at the broken window, sees it as a metaphor revealing the "cracks" in the perception of the world. This is indicated by the quote - As if the world, so seemingly clear and guileless in its appearances, yet held secret crevices, cracks, unimaginable interiors, opaque to our knowledge. I thought A cracked window. A broken window. Glass breaking.⁵¹ This description can be combined with metaphors referring to references, which were analysed in the previous parts of this text. This quote can be seen not only as a rejection of the illusion that any ideology and the support of the actions of institutions based on its values guarantee the ethical actions of individuals and the community. The broken window also seems to be a metaphor for the structure of the literary text, drawing its strength from questioning the iconicity of representation in art. It can also be treated as a reference to the rejection of the perception of mental processes as transparent in the sense given to this concept by Metzinger and Friston:

Transparency is a concept with some tradition that can metaphorically be understood as looking through a window onto the world, instead of looking at the

⁴⁹ Friston and his colleagues on philosophical traditions

⁵⁰ The Umwelt can be understood as the embodied perspective (i.e., the viewpoint) that biological beings take on their world, and this perspective is the union of the effector world and the perceptor world (von Uexküll, 1982). This means the subjective world of organisms is not composed of a series of objects with "objective" properties, but rather is better understood as a set of objects that are made meaningful in the organism's perceptual field by its action capacities: for foxes, given their specific set of hunting capacities, a field of grass is a support for walking towards their prey; but for worm-eating birds, given their action capacities, the field grass is the "pantry" itself, so to speak.

⁵¹ Limanowski, J., & Friston, K. (2018). 'Seeing the dark': Grounding phenomenal transparency and opacity in precision estimation for active inference. *Frontiers in Psychology*, 9, Article 643.
<https://doi.org/10.3389/fpsyg.2018.00643>

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 (cf. e.g., Moore, 1903; Harman, 1990; Tye, 1999; Lycan, 2015). Metzinger (2008) extends the traditional transparency notion by the claim that not only the carrier, but the 'construction process' of a phenomenally transparent mental representation is inaccessible to *introspective attention* – an inward-directed, sub-symbolic resource allocation within representational space. (Metzinger, 2003)⁵²

Literary narrative seems to be particularly effective in overcoming this attitude, and the concept of formal illusionism introduced in this text aims to expose it through the interpretation of the literary text. Conversely, if its construction process *is* accessible, this particular mental representation will be phenomenally *opaque*. Thus, whereas the content of a transparent representation is experienced as something mind-independent in the world, phenomenal opacity is the converse experience of some mental content *as being constructed* by one's mind. The story of two female students at a prestigious college may become a starting point for questions about the function of literary form, capable of revealing “cracks” in language that is supposed to refer to the world in an accurate, clear way. One of the many figures expressing the problem of the relationship between art and representation as a “window” onto the outside world may be the description referring to the well-known aesthetic myth of Apollo and Marsyas contained in *Because It Is Bitter and Because It Is My Heart*. Objects, and we among them, objects in others' eyes, losing their shapes, definitions, names: the boundaries separating them gone, their very skins were torn off or peeled deliberately away as in that deathly painting at which Graice Courtney stared for a very long time one day in doctor Savage's library at his home, turning the pages of an enormous Italian produced book of Titian plates late oil of Titian's titled Marsyas Flayed by Apollo. The skinning alive of a satyr who's a human being. Not evil, but madness.

Conclusion

The analyses presented in this text do not aspire to be an exhaustive summary of such a complex and dynamically developing field as neuroaesthetics, which aims to conceptualise the relationship of literary artefacts to everyday language and to propose testable hypotheses about the neural implementation of the reception process of a literary text. The argument documented in this article is intended to show only a preliminary proposal for the possibility of studying literary texts within PP. The task ahead is to develop a concept which, founded on neurobiologically plausible models, will be flexible enough and adapted to the requirements of literary studies, i.e. to identify the unique characteristics of each literary text and explain the course of its reception within the more general framework of neuroscience.

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