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"SHINING WITH SOUND IN THE UNTRANSLATABLE DARK"—REBECCA ELSON'S POETRY OF COSMIC WISDOM

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ABSTRACT. ***"Shining with sound in the untranslatable dark"—Rebecca Elson's Poetry of Cosmic Wisdom.*** Despite having left us only a small body of verse, collected in the posthumously published *A Responsibility to Awe* (2001), Montreal-born astrophysicist and poet Rebecca Elson impresses through a particular sensibility resulting from the unlikely union of positivist certitude and existential angst informed by an acute sense of one's biological finitude. In this paper, intended both as a recuperative effort and an interpretive exercise, we will try to shed light on how poetry, as Elson's case demonstrates, can be a fundamentally ecological effort and a disciplined quest for belonging, reminding us that even the most unremarkable aspects of our everyday existence are irrevocably linked to our profound connections with the universe.

Keywords: *Rebecca Elson, fragmentation, wholeness, unselfing, awe.*

REZUMAT. ***"Strălucind de sunet în întunericul intraductibil"—poezia de înțelepciune cosmică a Rebeccăi Elson*****.** În ciuda faptului că ne-a lăsat un număr restrâns de versuri, adunate în volumul postum *A Responsibility to Awe* (2001), astrofiziciana și poeta Rebecca Elson, născută la Montreal, impresionează printr-o sensibilitate deosebită, rezultată din contopirea neobișnuită a certitudinii pozitiviste și a angoasei existențiale inspirate de un sentiment acut al propriei finitudini biologice. În această lucrare, concepută atât ca efort de recuperare, cât și ca exercițiu de interpretare, vom încerca să punem în lumină modul în care poezia, așa cum demonstrează cazul lui Elson, poate fi un demers esențialmente ecologic și o căutare disciplinată a apartenenței, amintindu-ne că până și cele mai banale aspecte ale existenței noastre cotidiene sunt irevocabil legate de conexiunile noastre profunde cu universul.

Cuvinte cheie: *Rebecca Elson, fragmentare, integralitate, uitare de sine, venerație.*

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1. Introduction: the nomad in search for answers

In section 276 of *The Gay Science,* Friedrich Nietzsche provides one of the most compelling arguments for stoicism as an ultimate expression of intellectual discipline, introducing the notion of *amor fati*, or joyful acceptance of necessity, as a form of spiritual liberation from suffering, the inescapable mark of the human condition:

> I want to learn more and more to see as beautiful what is necessary in things; then I shall be one of those who makes things beautiful. *Amor fati:* let that be my love henceforth! I do not want to wage war against what is ugly. I do not want to accuse; I do not even want to accuse those who accuse. *Looking away* shall be my only negation. And all in all and on the whole: some day I wish to be only a Yes-sayer. (1974, 223)

Formulated at a moment when the Western mind had started to doubt the almighty edifice of rationalist-positivist thought, which had been the letter of the law since the dawn of the Enlightenment, Nietzsche's proposal has remained to this date an enthusiastic assertion of the realist creed: the world is what it is, and one must take on all the load it carries, making the best of it. Challenges are not obstacles, but forces that shape us, while adversities are opportunities for increasing our potential. Saying yes to all facets of life is a radical effort, but, Nietzsche suggests, it is the sign of greatness.

Published more than a century after Nietzsche's seminal work, *A Responsibility to Awe* (2001) is the only book by Montreal-born astronomer and writer Rebecca Elson (1960-1999). Comprising finished poems ("Poems"), a large section of drafts and notes, many of them intended as journal entries ("Extracts from the Notebook"), as well as an autobiographical essay ("From Stones to Stars"), the book is a testimony, albeit in an undeclared form, to a vision akin to the Nietzschean *amor fati*. In one of the unfinished pieces from the notebook section ("Transumanza"), Elson, who had been diagnosed with non-Hodgkin's lymphoma at the age of 29, wonders:

> Is there any language, logic
> Any algebra where death is not
> The tragedy it seems
> A geometry that makes it look
> Alright to die
> Where can it [sic] be proved
> Some theorem

These verses contain the essence of Elson's vision—a vision marked by the existential angst occasioned by the acute sense of her impending death and the fierce determination to find answers even to the most vexing questions. Her destiny, wrote Pierre Barthélémy upon the publication of the first French translation of her book, was of a shooting star or of the supernovae, the giant stars which remain invisible until they explode in a flash, gracing us only with their long-gone light (2021, 22). While her poems do not provide an answer to the question put forth in the above lines (partly due to the premature end of her journey), they reveal, indeed, an energy not unlike that of such celestial bodies, one that amazes and unsettles at the same time. If, as Skelton argues, one of the primary tasks of literature is "to impose a structure on life and death, giving meaning to both", sharing with science the noble goal to help us "interpret our own role as participants in the human condition" (2003, 213), Elson's poems exhibit all the qualities of great literature. Elson's own version of *amor fati* is the "responsibility to awe", as she confesses in the poem that opens the volume, "We, Astronomers".[2] In their search for answers, astronomers are "nomads,/Merchants, circus people", they are "industrious" and "breed enthusiasms". Yet, this is not a mere *pro domo*, for Elson's words provide more than a poetic introduction of the members of her guild—they uncover that which both bonds us as a species and binds us to our destinies: the dogged pursuit of the mysteries of the universe and the intimidating knowledge of the immensity of the task. Like Nietzsche, Elson embraces fate lovingly, but she is not enthusiastic about the inherent duality of our condition. There are moments when "[s]tarlight seems too sharp", so we seek solace in "the small patch where each foot falls". "We Astronomers" is indeed a key-text, as it informs us about the two central forces that govern her outlook: the scientist's unstoppable impulse to enlarge her vision (the inquisitive subject's response to an ever expanding universe), and the complementary drive to remain grounded in something solid (the same subject's search for a familiar communal space). And thus, Elson's astronomers are fated to be nomads because the theories they develop as well as the methods and instruments they use are continuously evolving, since the universe itself is a boundless, endlessly unfolding structure. Their homes are everywhere, yet nowhere, at once.

Building on these preliminary observations, in this paper I propose a discussion of Elson's poetry from the perspective of this double engagement with complementary forces, also having in view the aforementioned equivalent

[2] All quotations from Elson's poems included in this paper are from the e-Book version of *A Responsibility to Awe* (Carcanet Classics, 2018). For this reason, the references do not include page numbers, mentioning instead, in each case, the title of the poem from which the quoted passage has been excerpted.

of the Nietzschean concept of *amor fati*, the "responsibility to awe", the shared ideal of both science and art. Furthermore, along this interpretive and recuperative exercise, we will see how the particular fusion of positivist certainty and poetic sensibility represents for Elson a way to come to terms and cope with her own mortality. Due to the constraints of space specific to such a paper, my approach will be, principally, monographic, aiming at highlighting both the author's general thematic preferences and the common thread that runs through her works. At the same time, I will also try to align Elson's scientifically-informed poetic vision with David Bohm's concept of "undivided wholeness", which I will present in the following section of my paper, as part of the theoretical grounding of my argument. Through this endeavour, I intend to add to the meagre body of criticism available on Elson and suggest a perspective that both complements and diverges from previous scholarship, which has seen her poetry either as a means of popularising scientific concepts through a more accessible transmission medium (Howard, 2002; Bell Burnell, 2006; Crossland, 2017) or as an alternative space in which scientific concepts could be tackled imaginatively and intuitively (Heuschling, 2019).

2. Fragmentation and wholeness—from "two cultures" to "flowing movement"

In her meticulously argued discussion of the relationship between Elson's professional and artistic endeavours, Sophie Heuschling states that for Elson science and poetry were complementary. Through her "astronomical poetry", Elson found a medium to address the limitations of science by means of metaphors, similes and analogies, devices frequently employed in cosmological and astronomical research for developing alternative models to test out various scientific hypotheses (2019, 43-44). While she mentions a number of critics who have looked at Elson's poetry as a complementary activity whereby science could be "communicated" to the general public (44), Heuschling offers a more nuanced interpretation. With Elson, poetry and science are "closely intertwined, in that her poems visualize her astronomical research." (45) Poetry also gave the astronomer "the licence to free speculation" and its specific mechanisms and devices (imagery, metaphor) made it possible for her to think outside the box (47). In addition to the apt analysis of a short but relevant selection of Elson's poems which address such key scientific concepts as the dark matter ("Dark Matter"), Einstein's cosmological constant ("Constellations") or the age of the universe ("Girl with a Balloon"), Heuschling's merit consists in reminding us that Elson's case also brings into question the age-old dialectic between positivist (scientific) and non-positivist (humanistic) disciplines. Given that my

own discussion of Elson's poems will also try to shed light on her "situatedness", in what follows, I will present a number of key-points associated with this dialectic.

As Crawford points out, invoking studies conducted by several scholars (Bell, 1981; Beer, 1996; Albright, 1997), there is incontestable evidence that, since the end of the nineteenth century, literature has become increasingly engaged with science. For instance, it is a well-documented fact that modernist poets were keen on finding ways to incorporate scientific ideas and metaphors in their works, such as relativity, perspectivism, information revolution, quantum physics—as demonstrated by the works of Eliot, Pound or Stevens. However, the corollary aspect, the scientists' interest in poetry, literature or philosophy is more difficult to uncover, despite evidence that a number of important names (for example, Clerk Maxwell, Albert Einstein or Norbert Wiener) were fascinated with the "patternings and imaginative investigations" of poetry (Crawford 2006, 1-3). Yet, despite proof of the "intertwining" of early twentieth century poetry and science, for half a century there has been a debate among journalists, scientists and philosophers regarding "the opposition of the poetic and the scientific" (3)—a statement which would make Elson the odd exception, at the same time casting doubt on the validity of Heuschling's arguments. The most relevant example in this sense is that of C. P. Snow and his famous 1959 Rede lecture *The Two Cultures*, which, according to Crawford, promoted an "eccentric" and "stereotyping" view of the incompatibility of poetry and science that remained influential in many circles for a long time (5). The main points of this lecture are worth summarising here. As Snow claims, by the middle of the 20th century the "intellectual life of the whole western society" (but also its "practical life") had become "split into two polar groups"—the "literary intellectuals" and the "physical scientists" (Snow 1998, 4). Between these groups, there is "a gulf of mutual incomprehension", even "hostility and dislike" and, above all, "lack of understanding" (4). Despite historical evidence that such tensions might in fact prove productive, in Snow's view this was not possible at the time due to the lack of a common language for the members of these "two cultures" (17) and to the fact that "[i]ntellectuals, in particular literary intellectuals, are natural Luddites" (23).

While Snow argued that both parties had to find ways to bridge this gap, he also assigned responsibility for the situation to the British educational system, which had favoured a traditional view on culture that placed greater emphasis on humanistic training, giving it an "unscientific flavour" that could easily turn even "anti-scientific" (11-12). Naturally, Snow's opinions further polarised the world of intellectuals, and many of the debates over the decades that have elapsed since the publication of his work have tried to tip the scales in one or the other direction. Given the limits of this article, in what follows I

will refer to only a few of them, so as to illustrate perspectives that could be associated with either of these "cultures". Thus, in his influential book *Consilience* (1999), Edward Wilson invokes the concept of "Ionian Enchantment", a term coined by historian and physicist Gerald Holton to describe the belief in the unity of all sciences, "a search for objective reality over revelation", whose aim is "to save the spirit not by surrender but by liberation of the human mind" (Wilson 1999, 7). Grounding his own argument in Holton's concept, Wilson states that the "fragmentation of knowledge" which appears to characterise the current state of philosophy is not real, but a product of scholarship. As a response and solution, he proposes the notion of "consilience", which he defines as "a 'jumping together' of knowledge by the linking of facts and fact-based theory across disciplines", with a view to setting up "a common ground of explanation" (8). Consilience, Wilson further explains, should not be understood as another form of hybridisation, but as "fluency across boundaries" (13-14). While this does suggest a conciliatory and productive perspective akin to Snow's own plea, the basis of Wilson's proposal remains reductionist, since consilience implies the belief that all phenomena "are ultimately reducible, however long and tortuous the sequences, to the laws of physics" (291). Thus, with all its merits, consilience can be regarded as another expression of what Mary Midgley, in her book *Science and Poetry*, claims to be the dominant contemporary attitude toward science, which professes the extension of "impersonal, reductive, atomistic methods" of physical science into other fields, such as sociology or psychology, where they often prove inadequate (Midgley 2006, 1-2). Midgley calls this attitude "imperialistic" (1) and "monarchical" (x), largely indebted to the Enlightenment belief in the independence of the human world from the physical one, which also makes the latter subservient to our goals. What we need instead is an approach rooted in the understanding that we are merely a minuscule part, "organically situated within a far greater whole, a biosphere that we can easily damage, but which we could never direct or replace" (xii). A similar opinion is expressed by Wendell Berry, who argues that the "corporate" logic and the "cult of innovation" underpinning contemporary scientific research, especially in the academia, removes the scientist from "the ecological circumstances in which the work will have effect" (Berry 2001, 63-64). In fact, science is fraught with two dangers: on the one hand, sustained questioning or curiosity may sometimes be harmful (as it may involve unethical action) and, on the other, the application of science "is generally crude". In this context, consilience has its own limitations, just as any other perspective, including the religious one. However, unlike religion, science "concedes nothing to mystery", eliminating anything that does not fit its framework or formulas (66).

In truth, the concern for the limited abilities and applicability of science is not a novel thing. Many of the great scientific minds of the previous century were aware of the need to reconcile the positivistic and the humanistic perspectives wherever required and possible. Thus, in a conversation with Werner Heisenberg, during the fifth Solvay Conference on Physics (24-29 October 1927), Niels Bohr argued that the difference between science and religion is only apparent. Religion is closer to poetry in its use of language (being reliant on images, parables and paradoxes), because it deals with a reality that cannot be grasped otherwise, but the reality it addresses is as genuine a reality as that which represents the central interest of science. Thus, Bohr suggests, the division of reality into "objective" and "subjective" is "much too arbitrary", hence, counterproductive (Heisenberg 1972, 87-88). More recently, another major name in the world of physics, David Bohm, expressed similar ideas. In *On Creativity*, he argues that artists and scientists "feel the need to create something new that is whole and total, harmonious and beautiful" (Bohm 2004, 3). Bohm believes in the deeply "aesthetic" quality of modern scientific thought. In fact, he further argues, the problem with post-Copernican science is that it has generally regarded the universe as a lifeless mechanism. However, science does not necessarily imply such a mechanistic understanding of the world. For example, many of the most "creative" scientists have considered that the laws of the universe have a distinct kind of beauty, which is a perspective that brings science close to the arts, since the latter is primarily concerned with beauty (38-39). It is therefore possible to engage all fields of culture in a dialogue, which should not represent an "exchange" (as in a game of ping pong), but a "flowing through". Ultimately, through dialogue, if something new is discovered, every party wins, concludes Bohm (144). Elsewhere, in *Wholeness and the Implicate Order*, Bohm formulates a coherent theory whose implications reach beyond the sphere of physics. He starts by acknowledging that "fragmentation" is widespread in the current world, affecting both society and the individual, which leads to "a general confusion of the mind" and muddles perception (Bohm 2002, 1). Akin to Bohr's view on the merely apparent separation of "objective" and "subjective" realities, he states that the notion of these fragments having an independent existence is purely illusory, creating "endless conflict and confusion" (2). What is more, such a fragmentary worldview determines humans to develop intellectual frameworks that are themselves based on fragmentation, thereby increasing the existing fragmentation (i. e. creating a self-perpetuating system), since "every form of theoretical insight introduces its own essential differences and distinctions" (8). To counter this, Bohm argues that "wholeness" is not some abstract ideal toward which one should tend, but what *is* actually real, while fragmentation is merely a response to "man's action, guided by illusory

perception, which is shaped by fragmentary thought" (9). Therefore, in order to eliminate fragmentation, we should also embrace a different understanding of thought, as a "form of insight, a way of looking, rather than as a 'true copy of reality as it is'" (9). Bohm calls this new form of insight "Undivided Wholeness in Flowing Movement", based on the notion that everything is in a state of continuous flux, impossible to conceptualise directly but nonetheless knowable "implicitly", through the stable and unstable "explicitly definable forms and shapes" which can be "abstracted from the universal flux". In line with this view, there is no distinction between mind and matter, both being merely "different aspects of one whole and unbroken movement" (14).

In my opinion, Bohm's concept of "undivided wholeness" is particularly useful for approaching Elson's poetry. As I will try to illustrate in the following section, rather than seeing poetry as complementary to astronomy, with Elson, science and art are occasioned by the same inquisitive impulse—merely different idioms for the same unbroken movement of the whole. Indeed, whether Elson was an "astrophysicist who rhymed" or a "poetess who counted stars" (Barthélémy 2021, 22)[3], in the final analysis, does not matter.

3. Of stars and stones and the antidotes

Although the poems in *A Responsibility to Awe* cannot be subsumed to a single common theme, we can notice certain similarities between them based on the topics they address, which makes it possible to group them along broad lines. Thus, for the purpose of this discussion, I shall distinguish between three main groups. The first of them includes poems in which Elson explores various scientific concepts and ideas, such as cosmology, astronomical phenomena or the laws of physics. The second comprises poems which tackle the more prosaic complementary space of ordinary things, people and relationships. The third category consists of pieces in which emotion is at its most intense, as they deal with Elson's illness, her deteriorating physical condition, the awareness of death, as well as her fears and hopes regarding the future. In what follows, I will provide an overview of the characteristics of each group, illustrating them through relevant passages from a selection of poems that I consider representative for each case. I will also complement my observations with further theoretical references wherever necessary.

Generally, through their choice of title, the poems in the first group signal their thematic focus quite clearly: "The Expanding Universe", "Explaining Relativity", "Dark Matter", "Theories of Everything", "Constellations", "Some

[3] In the French original: "On ne saurait trop dire si Rebecca Elson était une astrophysicienne qui rimait ou une poétesse qui comptait les étoiles, et peu importe dans le fond" (my translation).

Thoughts about the Ocean and the Universe", etc. The editors of the volume decided to give these pieces prominence by placing them at the beginning of the book, in homage to Elson's professional efforts. Yet, contrary to what one might expect in such a case, these are not mere translations of scientific concepts by means of poetic language and devices. As Fritz notes, there is "no altruistic, popularising intent" in these pieces so as to make science more accessible to the general audiences (2002, 71). Furthermore, as already demonstrated by the volume's opening poem ("We Astronomers"), even in her approach to astronomical concepts, Elson exhibits a curiosity for what lies beyond the immediate subject. Fiske argues in this sense that Elson is not interested in stars in an abstract, detached way. Instead, with her, "[m]eticulous attention is transformed into wonder" (2001, 846). Elson creates here what we may call a "poetry of contact"—a goal already announced in the same poem's reference to the face that bends to the ground, toward "the small patch where each foot falls". We become aware of the need to establish or reveal connections which transcend the physical realm, as in "The Expanding Universe", in which a seven-year-old's curiosity, channelled not on the incomprehensible scientific explanation of the concept announced in the title but on the empirical evidence that could support it, becomes an occasion for making analogies:

> How do they know, he is asking,
> He is seven, maybe,
> I am telling him how light
> Comes to us like water,
> Long red waves across the universe,
> Everything, all of us,
> Flying out from our origins.

However, as indicated by the last stanza of this poem, Elson's real interest is in fact in the living element that is integral to the observed phenomena. Here, the lasting impression is that of the distracted child's ingenuous concern for the "pink blossoms" he is collecting "[i]n his father's empty shoe." Elsewhere, as in the imagistic poems "Dark Matter"[4] and "Notte di San Giovanni", biological structures (a spider, respectively, mosquitoes, surprised in their natural environment) translate the abstract scientific concept into a visible form, reminding us also that beneath all matter there is vital energy.

[4] For a detailed discussion of this poem, see Heuschling. The author focuses on Elson's analogy between dark matter and the spider's web, convincingly arguing that the poem is "an exercise in defamiliarization by turning the popular anthropic principle on its head": dark matter is seen here as a trap, rather than a force that ensures the growth of galaxies and galaxy clusters, as it is commonly presented to the general public (2019, 51-52).

This interdependence of all things visible and invisible is a notion that sends us back to Bohm's distinction between the "implicate" (deep) and "explicate" (surface) orders that constitute the foundation of reality. The implicate order is a holographic structure in which everything contains everything else, being, at the same time, contained by and related to everything else. Moreover, "[t]he implicate order implies the participation of everything with everything", as nothing is complete in itself, being realized fully "only in that participation" (2004, 129-130). Elson propounds the same idea in "The Last of the Animists", a poem in which "the chill of reason" and the "perfect teeth" of mathematics seem to be incapable of leaving an impression upon the "bones of matter" and the "flesh of space." However, as with Bohm, behind this "unknowing" and "insensitive" reality, there lies an invisible realm in which each thing implies and is implied by others:

> We say the dreams of night
> Are within us
> As blood within flesh
> As spirit within substance
> As the oneness of things
> As from a dust of pigeons
> The white light of wings.

That awe is the central feeling in Elson's poetic space is demonstrated by the fact that even the imperfect can be fascinating for her, as it, too, has the potential to reveal a mystery. This is the case of "Aberration", a poem inspired by the malfunctioning of the Hubble Space Telescope, with which Elson worked in the early 1990s. The distortion caused by the improperly ground-down mirror of the telescope initiates a series of connections which take us first to the common analogy used to explain the physical phenomenon responsible for the distortion of the image in the optical instrument, only to send us, almost instantaneously, to the frenzied migration of birds:

> The sky so full of wings
> There is no sky
> And just for a moment
> You forget
> The error and the crimped
> Paths of light
> And you see it
> The immense migration
> And you hear the rush
> The beating

"Aberration" illustrates the double function of awe—to transform and to connect. As Keltner explains, the feeling of awe we experience in front of something that inspires and astounds leads, on the one hand, to the "quieting" of the self, enabling us to "collaborate, to open our minds to wonders, and to see deep patterns of life" (2023, xx). On the other hand, awe also deepens our relations with "the wonders of life", making us "marvel at the vast mysteries that are part of our fleeting time here" (xxvi).

This overarching concern for connections is also reflected by the other two groups of poems. The poems dedicated to ordinary things, people or relationships can be considered complementary to the ones discussed so far, being motivated by what Elson perceives as "the unreasonable neutrality of the sky" ("February, Rue Labat"). The recurring motifs in these pieces are mostly associated with motion (or the lack of it), both in the concrete and abstract sense—rushing, growth, change, floating, swelling, rising, falling, weight, weightlessness, stillness. We also note the stronger presence of the organic, primarily the human, element. Sometimes, it becomes so pervasive that it suffuses the whole fabric of the universe. Thus, in "Constellations", Elson proposes an alternative interpretation in which lambada dancers become substitutes for the "minor gods" and the animals that are associated with these celestial objects. In other words, a mundane image takes the place of myth, in a gesture that both questions and validates the role of (human) agency in the cosmic scheme, while also highlighting the idea of perspectivism and the tenuous nature of scientific constructs:

> Imagine they were lambada dancers
> Practising their slow seductions
> On the manifolds of space.
>
> Then in the name of science
> We might ride their studded thighs
> To the edge of our hypotheses,
> Discover there the real constants
> Of the universe:
>
> The quick pulse,
> The long look,
> The one natural law.

However, Elson never slips into metaphysical solipsism, reminding us repeatedly of our biological and cosmic allegiances. As she declares in "Evolution", we are made of the same substance and energy as all the things that predate us. Hence,

we are creatures of hazard and circumstance, "small, wet miracles without instructions, // Only the imperative of change." Even the poems which address highly subjective or personal themes like love, desire or sex capture energies in flux, bespeaking a sense of proximity of bodies in a process of metamorphosis overseen by natural or planetary forces, as in "Like Eels to the Sargasso Sea":

> We are not what we were
> When we began
> In river mud.
>
> It seems all voyage now
> Between the poles
> Of love
> And breeding
>
> And something
> We may never know:
> Beneath us
> Continents are slipping.

Thus, we may argue that the poems in this group, by insisting on the symbiotic relation between the human and the natural as well as the biological and the material, illustrate what Annie Murphy Paul described as "thinking with our surroundings"—a form of "situated cognition" that implies the power of place to influence our thinking by means of "environmental cues that convey a sense of belonging, or a sense of personal control", facilitating our "performance" in that place (2021, x). This form of cognition may arise after the fact, since the impact of such environmental cues is not always immediately apparent. Illustrative of this is the poem "Devonian Days", in which the original erotic energy between two lovers is transformed by force of memory into an allegorical interpretation of geological evolution. Re-actualising the intimate moment from the past reveals, once again, our common biological inheritance that dates back to prehistoric times:

> […] we just stayed there
> By the window, watching,
> So aloof from our amphibious desires
> That we didn't recognise
> The heaviness we took to be
> Dissatisfaction with the weather
> To be, in fact, the memory
> After buoyancy, of weight,

Of belly scraping over beach.
We didn't notice, in our restlessness,
The webbed toes twitching in our socks,
The itch of evolution,
Or its possibilities.

The poem's scenario echoes the Biblical story of the Fall, occasioned here not by disobedience, but by environmental factors. However, the initial melancholy pining for the paradisiacal condition of buoyancy is replaced in the closing lines by the urgency and inevitability of evolution. The environmental cues (the rain, the window) initiate the learning process that ends in a revelation about the potential of the biological legacy.

The poems in the third group are centred upon the problematic of Elson's own degrading condition, the imminence of death and the subject's search for coping mechanisms. These are expressed, as before, through a number of common motifs, most frequently, symbiosis, fusion, light and darkness. The emphasis is on fragile organicity, but the poems do not turn elegiac in tone. In fact, the prospect of death provides Elson with another opportunity to reveal the unbroken unity of everything. Thus, in "OncoMouse, Kitchen Mouse", death anxiety is counterbalanced by the communion of supplicant bodies, testifying to the redeeming power of sacrifice: the tiny kitchen mouse is seen not as vermin, but as the representative of the species that have given their lives, "[u]nder the needle and the knife, / The awful antiseptic smells" to provide a cure for deadly diseases. As a token of gratitude, Elson makes an offering to these fellow sufferers, sharing with them her home and victuals: "Here is my kitchen. / Make it yours. / Eat all my crumbs." This act of hospitality comes with a warning, however. We are reminded that there is no logical reason for why bad things (here, cancer) happen, and the search for it can only lead to more suffering:

Cozy up behind my fridge
But watch out for the trap,
The why-me box.

Once you've started in
It snaps you shut.

Like Nietzsche, Elson chooses to embrace and love fate. Even this terrible condition can be turned into something positive, as many of the poems in this group suggest. For instance, in "Radiology South" the harrowing sense of ending is counterbalanced by an intense meaning-making activity through which the

fragmentary images of a damaged body are made to recohere in a whole that can survive the plain brutality of individual existence. As with a modernist painting, the human condition may not be fathomable rationally or scientifically, but it is possible to find transcendental beauty even in decay and death:

> In the dim room
> He adjusts the beam,
> Projecting squares of light,
> Like window panes,
> A bit Magritte:
>
> Blue and white flower field
> Of the hospital robe,
> And all my living bones.

Recurrent in these poems are the various symbols of creative power. In nature, as in art, the fragments become material for new things while dying is perceived not as an end but as the beginning of a new cycle. An example of this is provided by the aptly-titled "Futura Vecchia, New Year's Eve", where death is portrayed as a cauldron in which a primeval soup is being prepared:

> A shiver of sparks sweeps round
> The dark shoulder of the Earth,
> Frisson of recognition,
> Preparation for another voyage,
>
> And our own gentle bubbles
> Float curious and mute
> Towards the black lake
> Boiling with light,
> Towards the sharp night
> Whistling with sound.

As elsewhere, the allusion to natural evolution is a reassurance of our belonging to the cosmic family. We are not flotsam aimlessly drifting in the sea, but tiny containers of light, suspended between an old future ("Futura Vecchia") and a not yet gone past ("New Year's Eve").

Elson's "antidotes to fear of death", as shown in the eponymous poem that closes the cycle, is to absorb as much of the universe as possible in the limited course of our existence ("eat the stars") and lose oneself in the universal ("lie down here on earth / Beside our long ancestral bones"). This graceful but difficult act is what Iris Murdoch has called "unselfing". Much of our dissatisfaction

with life, Murdoch explains, comes from the mind, whose incessant activity creates a "self-preoccupied, often falsifying veil which partially conceals the world." In order to increase the "quality of consciousness", we should try to rid ourselves of this subjective veil (1985, 84). This is a humbling effort, involving the "disciplined overcoming of the self" and "selfless respect for reality". In the end though, by removing the filter of the subjective ego, we are able to see things as they are. Indeed, liberated from ourselves, we *are* the undivided whole, as Elson herself admits in the same "Antidotes to Fear of Death":

> No outer space, just space,
> The light of all the not yet stars
> Drifting like a bright mist,
>
> And all of us, and everything
> Already there
> But unconstrained by form.

4. Conclusions—beyond *amor fati*

At the end of this brief interpretive exercise, we can formulate a number of conclusions. Thus, if the essence of the scientific method is to "measure" the world, the function of art is to make us "resonate" with it (Armitage 2006, 117). Yet, we should not see this as the failure of the one and, implicitly, the need for the other, since "measuring" and "resonating" are neither mutually exclusive nor complementary. Rather, they represent two concurrent and contiguous facets of the same human experience, or two manifest forms of "insight", as Bohm would put it. In other words, Elson's case reminds us that "[b]oth imagination and a competent sense of reality are necessary to our life" because they inevitably "discipline" each other (Berry 2001, 85)—that is to say, they lend meaning to our lives.

We can call this a poetry of spontaneous totalising experience, conducive to "unselfing" and reintegration in the cosmic order. There is no conflict between inner and outer realms, as they are not acknowledged to be separate in the first place. When Elson is looking for an anchor in the earthly, the quotidian, the transitory bit, it is not because of a dissatisfaction with the instruments and methods of her profession in face of the impenetrable, awe-inspiring vastness of the cosmos, but because she recognizes the ephemerality of her existence, which makes her crave not so much a theory of everything as the chance to be exposed to every small and big thing at once. Thus, while poetry may indeed represent an environment in which the mind can transcend the limits imposed

by scientific thought and practice (Heuschling 58), as I have tried to suggest in this paper, with Elson it acquires several other valences. For one thing, it provides a mythical perspective on the universe, a revelatory experience which fuses past and present, life and death, organic and inorganic in a spectacular, unbroken whole. In other words, poetry is the answer to the wish expressed in the aptly titled "Myth":

> What I want is a mythology so huge
> That settling on its grassy bank
> (Which may at first seem ordinary)
> You catch the sight of the frog, the stone,
> The dead minnow jewelled with flies,
> And remember all at once
> The things you had forgotten to imagine.

In addition, as illustrated by many of the titles mentioned this paper, poetry also enriches our understanding of "awe" and clarifies our "responsibility" to it. Awe begins where awe ends, since the mystery of the universe can never be contained or fully comprehended. Burnside has eloquently explained this, drawing our attention to another essential "duty":

> [...] while science at its best seeks to reduce our ignorance, it cannot—and should not seek to—eliminate mystery. The more we know, the more the mystery deepens. If poetry has a role in relation to science, it is to remind science of that universal truth. In this, it is also an *essentially ecological discipline*. It teaches us part of the *duty of dwelling*, it teaches us a *necessary awe*. This awe is central, is vitally necessary, to any description of the world. A description that lacks this awe is, in truth, a lie.
>
> (2006, 95, my emphasis)

Rather than being simply a joyous acceptance of our fate (thus, another instance of *amor fati*), it is also a *fearsome* responsibility, as it forces us to accept the delicate position of dwelling in the immense whole.

Since dwelling implies active engagement with our habitat, it leads to changing it and being changed by it in our turn. In this sense, Fiske notes (in reference to the earlier-mentioned "Notte Di San Giovanni"), that Elson's poems attempt to "penetrate 'the untranslatable dark'" by relying on imagery and rhythm (2001, 845). Put differently, poetry, with its specific aesthetic and formal devices, is an answer—sometimes even an "antidote"—to the inescapable cosmic rhythms that confine and liberate us. This is an almost Promethean effort, carrying with itself the prospect of a tragic but ennobling destiny and, equally

important, the hope of renewal and resurrection. As Elson puts it in "Let There Always Be Light (Searching for Dark Matter)", one of her most sincere odes to our duty and vulnerability, we search for the "dimmest stars" and "signs of unseen things" in order to stop the universe from exhausting its own fire through incessant expansion:

> Let there be swarms of them,
> Enough for immortality,
> Always a star where we can warm ourselves.
>
> Let there even be enough to bring it back
> From its own edges,
> To bring us all so close that we ignite
> The bright spark of resurrection.

Eventually, this is Elson's way to prove herself as a "Yes-sayer"—the testimony of hope in face of adversity, the acceptance of our fragile but meaningful destiny.

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