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**Article**

## The power of life: Towards an ecopoetics of maize and emancipation in Mexican indigenous poetry

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### Abstract

For thousands of years, Mexican indigenous farmers have been custodians of maize biodiversity, providing food and cultural sustenance, and political and economic independence to communities. Mexican indigenous communities have resisted dispossession by governments and free trade agreements with the excuse of economic modernisation. Particularly, the discovery of genetically modified corn set off a national furore over what indigenous peasants see as an assault by American agribusiness on the crop that is at the core of Mexico's identity. The biopolitical dynamics of agrotech business is sustained on mechanistic biology approaches underpinned by notions of control and commodification of nature, which are antithetical to contemporary organicist, autopoietic directions adopted in biology. Contemporary Mexican indigenous poetry is a fertile ground of cultural and political resistance to these decorporealising logics, supporting the continuation of indigenous worldviews of corn through animistic imagery of maize. In this paper, I propose an enactive, embodied strategy for the reading of Mexican indigenous poetry that potentially elucidates emancipatory possibilities for indigenous poetry. For this purpose, I embrace the methodology of cognitive poetics, which views language as a process of interrelation in which readers engage with the writer's cognitive and sensory information through conceptual blends. The aim is to generate an enactivist poetics whereby readers participate in the writer's co-creation of meaning, transcending Cartesian binary approaches to reading. In this way, the analysis of animism through conceptual blends can be read as Foucauldian "counter-conducts" or creative disruptions, and Enrique Dussel's "ethics of liberation", thus constructing an alternative, life-favouring rationality to the dislocating and commodifying logics of biotech multinationals.

**Keywords:** indigenous, poetry, biopolitics, autopoiesis, maize, emancipation

## 1. Introduction

*De maíz amarillo y de maíz blanco se hizo su carne; de masa de maíz se hicieron los brazos y las piernas del hombre. Únicamente masa de maíz entró en la carne de nuestros padres...*

(Arqueología Mexicana, 2020)

The *Popol Vuh* is a compendium of creation stories that recount Maya's cosmology, that is, the nature, civilisation and life of the K'iche' Maya before the arrival of Christianity. As the quote above indicates, maize was a crucial dietary element of the Mayan people and thus an inextricable constituent of Mayan cosmology until today. As in many creation stories, humans and nature appear as constitutive units of each other, a symbiotic alliance that centres human and non-human life in a mutually dependent horizon of responsibility, respect and care: in the *Popol Vuh*, the flesh and spirit of human beings are made of maize, endowing Mayan ancestors with intimate knowledge about its cultural and organic value which would eventually embrace "250 pueblos de diferente lengua, habitando un territorio de gran diversidad natural y unidos por una forma de vida tejida alrededor del cultivo del maíz" [250 peoples of different languages inhabiting a territory of great biodiversity, linked by a way of life woven around maize cultivation] (Carrillo Trueba, 2009, p. 8).

Thus, indigenous farmers and their ancestors have thousands of years of experience selecting and breeding maize to meet their environment, as expressed in the Manifesto put forward by La Via Campesina, one of the most important international peasant's associations:

... [p]easant systems for rediscovering, re-valuing, conserving and exchanging seeds, together with local adaptation due to the local selection and reproduction in farmers' fields, maintain and increase the genetic biodiversity that underlies our world food systems and gives us the required capacity and flexibility to address diverse environments, a changing climate and hunger in the world. (La Via Campesina, 2011)

Maize is thus crucial for indigenous food sovereignty and food security worldwide, and especially for Mexican indigenous communities. The trouble begins with successive Mexican governments' attempts since the 1960s at aligning the country's agricultural produce to international markets, favouring the interests of multinational corporations and the appropriation by biogenetic multinationals of its most crucial grain, corn, turning its seeds into commodities. This process was fully implemented when the neoliberal economic treaties like the North American Free Trade Agreement (NAFTA) came into effect in 1994. These trade agreements exemplify a dichotomy that lies at the base of Mexican indigenous struggle for food sovereignty: peasant versus entrepreneurial farming. Whereas the former provides the world with at least 70 % of its food (Samberg et al., 2016), and is "also able to successfully adapt itself to a bewildering range of contrasting ecological and

socio-economic conditions” (Van der Ploeg, 2017, p. 4), the latter “is a major threat to peasant farming [...], it is at odds with the new scarcities that society at large is facing (climate, water, employment, food) [...] it is grounded on more or less permanent commodity flows” (ibid., pp. 4, 6).

Mexican indigenous land workers have been waging a long war for the preservation of their food sovereignty against biotechnology giants like Monsanto and DuPont: cheap imports or genetically modified seeds of maize threaten the ancestral livelihood of indigenous farmers who rely on stocks of a diversified maize (adapted to every microclimate of the region) and seeds that are passed on from generation to generation. Unfortunately, the consequences for these indigenous farmers too often fall well out of the techno-utopia with which agribusiness sells its apparently miraculous golden grain: exodus from their ancestral land, poverty and marginalisation, and the incalculable loss for humanity of thousands of years old knowledge of biodiversity. Thus, Mexican indigenous farmers refuse to become dependent on patented seeds of biotechnology companies and their pesticides, which, from a biological perspective, perpetuates mechanistic/Cartesian worldviews, disrupting the ongoing, enactive, holistic, reciprocal cycle of life of which Mexican indigenous communities are custodians. In this way, the farmers’ ancestral embodied connection to the land is lost to the regulative abstraction of stock market shares.

Two of the indigenous Mexican poets who have articulated powerful artistic responses against multinationals’ appropriation of seeds are Mikeas Sánchez (from the Zoque people), and Natalia Toledo (Zapotec people) whose imagery of humanised corn precisely invokes embodied, entangled, and autopoietic interactions with nature in its mutually constitutive configuration.

The purpose of this paper is the creation of an emancipatory method of reading animistic imagery of corn in indigenous poetry that challenges the decorporealising mechanistic logics of contemporary biopolitics through an embodied approach to indigenous poetry as an organic, autopoietic, enactive system based on reciprocal structural coupling, of which cognitive metaphor is a crucial element. The concept of enactivism is used by poet and researcher Mari-Lou Rowley, whose papers “Ecopoetics as Enactivist Poetics” and “Poetic Enactivism: Poetry as an Organic Emergent System” open the path to the conception of poetry as a process of co-creation. In other words, Rowley draws from the work of biologists Humberto Maturana and Francisco Varela, who coined the term “enactivism” (Varela et al., 1992, p. 5) to suggest that creative and biological processes are both based in the dynamic interaction between organisms and their environments. Similarly, cognitive and embodiment theories conceive of language, body and environment as interconnected processes (Stockwell, 2002, p. 5). The poetic analysis focuses thus on the readers’ embodied journey through the writer’s cognitive and sensory engagement with humanised maize, which is projected onto the text through conceptual blends. In this sense, conceptual blend is the mental operation where meaning takes place, and where reader and text interact in an autopoietic fashion, that is, enacting each other in a creative

process.

This method of reading escapes the Cartesian feeling/thought dichotomy pervading much of contemporary literary critique (Armstrong, 2000, p. 87), and ties in with Michel Foucault's notion of counter-conduct (Foucault, 2009, p. 201) and Enrique Dussel's notion of material principle of ethics (Dussel, 1998, p. 131). Both theories propose strategic articulations that ceaselessly escape biopolitical totalisation and abstraction and thus might powerfully contribute to the establishment of animistic indigenous poetry in the 21st century as an alternative rationality that fosters emancipation and the continuation of biological and cultural life against the power-ridden, death-laden logics of biotechnology.

For this purpose, the first section focuses on the convoluted history of Mexican maize and on the threat that agribusiness corporations pose on the survival of indigenous local knowledge of maize. In line with indigenous perspectives, new approaches from the field of biology allow us to conceive of organic life as an enactive and regenerative force based on the interaction between organisms and environment. I use Mexican indigenous poetry as an example of an emergent system of interaction between the writers' body and mind, language, and world. The two following sections offer an overview of the methodology used in the analysis of Sánchez's and Toledo's poems. Particularly, I pay attention to how conceptual blending enacts the recorporealising poetics that subverts the disempowering consequences of the abstract rationalism sustaining agribusiness. Finally, I claim it is possible to construct an alternative, life-favouring rationality to the dislocating and commodifying logics of biotech multinationals for the reading and writing of indigenous Mexican poetry.

## 2. Maize, culture and biopolitics

The elusive and compelling concept of biopolitics refers to a political rationality which takes the administration of life and populations as its subject "to ensure, sustain, and multiply life, to put this life in order" (Foucault, 1976, p. 138) through the application of discursive practices. From this perspective, Monsanto's monopolisation of Mexican maize seeds might constitute an attempt at mechanistically reorganising population and natural resources "for the integration of both into economic systems" (Hindmarsh, 2005, p. 4). Likewise, according to Cummings and Ho, attempts at controlling nature through genetic engineering as a mechanistic, commodifying approach "offers a simplistic, reductionist description [of life] which is a travesty of the interdependence and complexity of organic reality" (Ho, 2000).

In "Song of the Cornfield", Mexican-Chilean poet Gabriela Mistral elevates such interconnectedness with the graciousness of humanised corn in showing its capacity to sing, laugh and even hope: "The cornfield sings in the wind / green, green with hope [...] and in the wind she laughs entirely / with her unmeasurable laughter" (My translation, Biblioteca Nacional Digital). In this scenario, the frontline of Mexican indigenous resistance for their food sovereignty lies in resisting the biopolitical control of human (e.g.,

control of the Mexican indigenous populations) and non-human life (control and modification of maize's DNA). Whereas Monsanto and DuPont aim to "foster life" by appropriating and modifying the genetic code of maize for economic ambitions, the Mexican government and global food industries implemented biopolitical strategies to impose a "civilising" process of indigenous communities and low-income populations by which traditional means of nutrition and food habits were meant to be progressively substituted by western consumption patterns (Lutz, 2012, p. 93). In this way, the life of local, indigenous communities is "disallowed", as local knowledge of maize is progressively displaced and with it, an entire epistemological framework of sustainable life and biodiversity, which constitutes what philosopher Boaventura de Sousa Santos calls an "epistemicide", that is, the call for cognitive justice to indigenous peoples across the world whose worldviews have been systematically ignored, marginalised or simply annihilated (de Sousa Santos, 2010, p. 57).

Ho and Cumming's claim that organic life is complex and interwoven resonates with contemporary theories of evolutionary biology which, in general terms, propose that organic life emerges as a co-constitutive process between a system and a medium. In other words, according to enactive theories of life, cognition emerges from the interaction between organisms and their environment (Thompson, 2007, p. 37). Particularly, the concept of autopoiesis coined by Maturana and Varela brings to the fore the capacity of life to continually generate and maintain itself, which also underpins the concept of peasant farming, described by Van der Ploeg as a type of farming that "cares for nature and it also cares about the links that relate it to wider society" (2017, p. 5), strengthening thus the autopoietic circularity that sustains life.

The theory of autopoiesis has had an impact beyond the field of biology, extending into sociology, politics, art and creativity. In this respect, it is possible to conceive of poetry as an emergent system if we consider all the actors involved as co-creators, that is, if the power and energy of a poem springs from the interaction between sign, text, and interpretation between reader, poet and environment which thus occurs in organisms as in species. This is beautifully illustrated by Nahuatl poet Juan Hernández Ramírez in his poem "Ear of Corn": "[...] The sun's hair burns / on the corn's body [...] / Yellow, white, black, red / her skin's overtones / The grain of corn" (Zocalo Poets, 2012). In this humanised universe, not only is corn presented as an extension of the human body (i.e. body, skin), but also as a luminous display of corn's biodiverse panoply. Undoubtedly, these celebratory lines exemplify Hernández's cognitive resistance to the cultural and biological erasure imposed in the name of progress and modernity.

Thus, as part of the contribution of indigenous knowledge to an alternative rationality, animism needs to be rethought not as the Cartesian endowment of life into an object, but, as eminent anthropologist Tim Ingold claims, as "the dynamic, transformative potential of the entire field of relations within which beings of all kinds, more or less person-like or thing-like, continually, and reciprocally bring one another into existence" (Ingold, 2011, p. 68). Ingold's claim resonates with the lines of "The Word" by Mè'phàà poet Hubert

Matiúwàa's: "[...] let bone listen to the grey rock, / let us spread the great corn sheaf's breath / and share a path with other flesh that speaks [...]" (Latin American Literature Today, 2017). This poetic fragment shows that, as is customary in indigenous cultures, the distinction between language and the physical world is circular, that is, they are mutually constitutive, forming a continuum of life (i.e., "share a path with other flesh that speaks").

Maturana's notion of life as a co-emergent process of interaction between organisms and environment resonates with Enrique Dussel's first principle of ethics, the material, according to which emancipation is concerned with "the human being reproducing its physical, spiritual, and cultural life in its material content" (Dussel, 1998, p. 131) and similarly echoes Van der Ploeg's claim that "the capacity of farmers to know, deal with, develop and convert living nature into food [...] allows for autonomy and control over production and development" (2017, p. 5). The three potentially emancipatory proposals mentioned above challenge the fundamental tenets of Cartesian dualism on which modernity was founded, opening up avenues of growth and resilience for indigenous culture into the 21st century. In the next section I investigate the translation of these emancipatory processes into the reading of poetry.

### 3. Maize, conceptual blending and enactivism

Mikeas Sánchez is a bilingual poet, Zoque translator, and radio producer. She was born in 1980 in a small village called Tujsübajk (River of Green Water), located in Chapultenango, Chiapas, which she had to abandon as a child due to the eruption of Chichonal in 1981. She has published five books of poems that have been translated into Catalan, Italian, German, Maya, Portuguese and English. In 2004 she was awarded the Pat O'tan Indigenous Poetry Prize, and in 2005 she won the first prize in narrative "Y el Bolom dice" (Enciclopedia de la Literatura en Mexico, 2018). She was born in the heart of the Zoque culture and received her spiritual and cultural nurturing from her mother's narrations.

The imagery of maize projected in Sánchez's poetry is imbued with the oral dynamics and communal wisdom of Zoque cosmovisions. Her luscious imagery invites readers to establish a fully cognitive and sensory involvement with the writer's embodied experiences. How can the reading of an indigenous poem become a space of emancipatory possibilities? How is it possible to create a form of reading an indigenous poem where the "other" is interpellated and their critical voice can be heard? How can a poem analysis challenge the decorporealising logics of Cartesian dualism? First, the objective of establishing a reading practice of indigenous poetry that generates emancipatory dynamics requires the decolonisation of the very act of reading in the terms suggested by eminent literary critic Isobel Armstrong:

Critique supported by the feeling/thought dichotomy actually rests on an account of the text as *outside*, something external that needs to be grasped — or warded off. Despite the anti-positivist language of so much modern criticism and theory, the

text is seen as other: it is object to a Kantian subject who stands over against the world in a position of power. This is distance reading, not close reading. (Armstrong, 2000, p. 87)

Secondly, Dussel's notion of the analectic as a radical, ethical involvement for and with the oppressed other (Dussel, 1991, pp. 187-188) creates the possibility of a somatic encounter between reader and writer through the writer's embodied cognitive and sensory information revealed in the analysis.

Thirdly, the resources of cognitive poetics/linguistics and neurophenomenology and biopoetics can be useful in the creation of an enactive and recorporealising poetics that subverts the disempowering effects of biopolitical colonialism. Recent advances in cognitive poetics and linguistics focus on the intersubjectivity of the reading experience, and also on the notion of context, which in cognitive poetics refers to the experience of reading literature "as if a threshold is crossed and readers can project their minds into the other world, find their way around there, and fill out the rich detail between the words of the text on the basis of real-life experience and knowledge" (Stockwell, 2002, p. 41). The importance of this assertion lies in the embodied nature of indigenous poetry in question: in addition to a wealth of intertextual dialogues with western and non-western poetic traditions, this poetry is characterised by the creation of powerfully evoking, sensuous environments inherited from their own oral traditions, all of which invite readers to recreate and co-create. Thus, the reading strategy for the animistic imagery of corn projected in the poems requires an attuning of the senses with the text-world created in the poem, a kind of experience like a walk around the text, where readers spend time with the diffuse, emotional atmosphere generated by the landscape (Tsur, 2002, p. 288). Tsur suggests that writers tend to "generate the unique, diffuse character of emotions" by evoking "in the reader's imagination a landscape in which orientation takes place" (2002, p. 285). According to Tsur, this is possible with a delayed categorisation type of reading (*ibid.*, p. 288), one which involves spending time with the diffuse, emotional atmosphere generated by the poem, as opposed to a rapid categorisation reading style that favours "packing" the sensory information into a verbal label.

In this journey through the text, readers find orientation in the text through deictic markers. Cognitive deixis refers thus to the expressions that help readers understand how the poem's rich context can be recreated as they find orientation in the text. Stockwell describes four types of deixis: perceptual, spatial, temporal, and relational. Perceptual deixis involves expressions relating to the participants in the text such as personal pronouns "I/me/you/they/it"; demonstratives "these/those"; and definite articles and definite reference. Temporal deixis involves those expressions referring to time, such as adverbs like "today/yesterday/soon/later" and locatives "in my youth", "after three weeks", etc. Finally, relational deixis refers to the social relationship between authors and readers, for the particular purpose of this thesis. Relational deixis includes naming and address conventions, evaluative word choices and expressions of points of view and focalisations

(Stockwell, 2002, p. 45).

The reading strategy developed in the reader's journey through the textual environments enacted in the animistic imagery of maize, helps them engage with conceptual blends: these are the mental semi-conscious operations that help humans make sense of the world, and they are usually built on locative expressions of place, and expressions of time as deictic markers. In other words, conceptual blends are responsible for language creativity, and they are the space where the reader, the text and the world interact: "Conceptual blending involves a network of mental spaces [...]. The spaces that provide the content grounded in experience are referred to as 'input spaces'. In contrast, the mental space that gives rise to novel or emergent meaning is termed the 'blend'." (Evans, 2015, p. 167). The concept of "blends" originates in the framework of ongoing research in the field of cognitive linguistics. The proponents of Blending Theory expand the conception of conceptual metaphor, which is conceived as a unidirectional mapping between two conceptual structures (source and target), as sustained by proponents of Metaphor Theory. Conversely, the proponents of Blending Theory assume a four-space model which consists of input spaces, a generic space, a blend, and a resulting emergent structure (Fauconnier, 1997, p. 149). The cross-space mapping consists of two (or even more) input spaces which, according to Evans, "provide the content grounded in experience" (2015, p. 167). In this phase of blending, there is a mapping of counterparts between the input spaces. In the generic space, the conceptual structure shared by the two inputs is mapped. In the blend, the input spaces are partially projected, which gives rise to a new, emergent structure. This new emergent structure contains elements of both inputs, but it is neither one nor the other; rather, the new emergent structure "makes new relations available that did not exist in the separate inputs" (Fauconnier, 1997, p. 150).

In this sense, conceptual blending might be seen as a sort of experiential structure that emerges from the coupling of mind, body, and environment, which in turn is enacted by the reader. This blending process occurs as an autopoietic feedback loop in which the perceiver and the perceived world are coupled onto each other like "processes interlaced in the specific form of a network of productions of components which realising the network that produced them constitutes it as a unity", as Maturana and Varela claim (Maturana & Varela, 1980, p. 80). The similarity between the categorisation processes that construe conceptual blending and autopoiesis is supported by recent research in biosemiotic studies, as Kalevi Kull suggests: "The process which organises a set (or system) of recognising structures should be a self-organising, autopoietic process" (Kull, 1998, p. 96).

To summarise this section and before proceeding to the analysis of the Zoque and Zapotec poems, the method of reading proposed here attempts to create an enactive, autopoietic approach to Mexican indigenous poetry, that is a space where reader and text interact with the cognitive and sensory information emanating from the text. Conceptual blends are the mental spaces where meaning takes place and where the creative process of humanised maize takes place, allowing readers to engage with that process. This is



important because this method of reading focuses on the interaction between body, mind, and world, which challenges the abstract, commodifying logics of biotech agribusiness. Similarly, this embodied connection between readers and the indigenous poets opens the possibility for an ethical and potentially emancipatory engagement with the oppressed.

Sánchez's poetry brings to life the beauty of Zoque communal wisdom with a political vindication of the survival of Zoque worldviews, especially the millenary cultivation of maize. Similarly, her poetry, whilst being cosmopolitan and multifaceted, is also strongly rooted in the Zoque cosmovision and "shaped by the oral indigenous traditions of the Zoque people" (Perez Aguilera, 2016, p. 207), and Sánchez herself admits being brought up among stories of mystical beings and haunted hills. Crucial for the understanding of Zoque cosmology is the concept of Kojama or soul of the Zoque people, which is formed by "plants, minerals, natural phenomena, or other objects of different kinds" (Sulvarán López et al., 2014, p. 33). Thus, in Zoque cosmology, a person might have more than five Kojamas, which, like many indigenous cosmologies across the world, establishes a continuum of life between the human and non-human life world. This is very clear in her poem "Maize Man" (Circe, 2015) where the poetic persona presented as the seed holder is conceptualised as "protector of the land" and as "flower of maize", that is, as male and female at the same time, as corn is a monoecious plant, challenging mind/body dichotomies prevalent in western thought. Thus, indigenous cosmologies find their way in the text, inviting readers to navigate this transcultural space of indigenous knowledge, which presents these views as forms of interdependence between humans and maize: "Mikeas Sánchez's work illustrates that ancestral and traditional knowledge, or IKS, including agroecological knowledge, has ecocultural relevance in the present. Informed by the monoecious characteristics of corn, Sánchez deconstructs the divisions of human/animal/inhuman and gendered, heteronormative understandings of female/male" (Perez Aguilera, 2016, p. 211). The fragment that I analyse reads as follows:

## VI

I am the seed holder  
Protector of this land  
The flower of maize  
With my ancient eyes I observe  
With my heart I choose every seed  
My knowledge of the world is not in vain  
I talk to the owner of the mountain  
I argue with malevolent plants  
I am the agitator of invisible beings  
My voice is heard even in the boundaries of mountains  
Because nobody will deny my journey through the universe

(Poem cited in Perez Aguilera, 2016, p. 211)

As readers enter the space of the poem, they encounter the pronouns “I” and “this” which situate the readers in the relational space of the poem. These pronouns establish the interdependent relation between humans and maize: the “I” is both the caretaker of the land (male) and also the flower of maize (female). In indigenous culture this entity is called “Mokaya”, which is the title of the poem that includes the fragment above. The pronoun “I” is pervasive in the fragment whilst showcasing the role of Mokaya as caretaker of the land: “I argue”, “I choose”, “I am the agitator”, “I observe” and “I choose every seed”.

The demonstrative pronoun “this” brings the land closer to the reader, not only creating a poetic effect of closeness and helping readers recreate in their minds, images of mountains and rivers, but also asserting indigenous sovereignty over the land. This effect is reinforced by the repetition of the possessive pronoun “my” in “my ancient eyes”, “my heart”, “my knowledge” and “my voice”: the land belongs to Mokaya — which in Zoque language means “corn people” and is the name of the pre-Olmec cultures that inhabited “the Soconusco region in Mexico and parts of the Pacific coast of Guatemala” (Wikipedia, 2015).

As is typical in much indigenous writing, this poetry is plagued with physical locations, evoking sensory information that invites the reader to recreate the imagery with detail. In this case, spatial deixis presents the reader with locative expressions that situate the reader in the particular environment of Zoque natural world: “this land”, “the flower of maize”, “the malevolent plants”, “the world”, and even “the universe”. All these linguistic elements marking spatial deixis present Mokaya as a supernatural being that inhabits both the physical world and beyond, creating a beautiful picture of Zoque cosmology. In this sense, the contrast between the evoked natural imagery and the absence of verbs of motion (“I observe”, “I choose”, “I talk”) reinforces the effect of contemplation of creation, as if the whole of creation is present in front of the reader rather than moving from one place to another. Paradoxically, the only movement appears in the last verse, “my journey through the universe”, which creates an almost magical effect of transportation.

As regards temporal deixis, all the verbal tenses (except the last one, “nobody will deny”) are in present, which contributes to create an effect of immediacy and assertiveness over the land. The imagery is presented in the “now”, readers are reassured that the Mokaya is not merely a past mythical figure but a force that extends its power into the future.

The different aspects of deixis or “space builders” (Stockwell, 2002, p. 97) analysed above are crucial in the construction of time, space and domain spaces that configure the fragment. In this case, the fragment consists of time spaces, indicated by the present and future tenses, which create, as mentioned above, an effect of assertiveness and affirmation for the land. Space spaces are formed by the locative expressions related to the physical features of the land, namely the mountains, the flower of maize, the land, the world, and the universe. And the domain space is marked by the word “seed” and the various roles professed by the caretaker of the land, that is, observing, choosing the seeds, talking to the owner, or arguing with malevolent plants. Therefore, the domain space asserts the role of the Mokaya as an active agent in charge of mediating between the human and non-human

world. By means of the deixis and mental spaces analysed above, the writer deconstructs the traditional distinctions between human/nature/animal, or male/female.

As readers cross the mental spaces of the poem, they may wish to stop and focus on the representation of the indigenous land worker as a flower of maize. As a conceptual blending, the process involves an initial stage of input spaces formed with the content grounded in experience. In this case, the space spaces formed by the natural elements, and the domain space formed by the references to the caretaker of the land, form the input spaces. We all carry in our mind images of landscapes filled with mountains and plants, their smell, the hard, cold texture of rocks, and the softness of grass. Our experience of mountains and plants evokes amazement at their beauty, peacefulness, a sense of belonging and connection, yet respect and caution for their dangers. Our experience of the flower of maize might evoke notions of resilience, perseverance, and renewal. Likewise, our experience of land workers might involve the idea of physical effort, care, and nourishment. Thus, the two input spaces might be processed as follows:

**Input space 1:**

- Indigenous peasants have a physical, organic body.
- Indigenous peasants use the effort of their bodies to ensure the nourishment of the land.
- Indigenous peasants treat the land carefully and respectfully.
- Indigenous peasants are generous in their effort to cultivate the land.

**Input space 2:**

- Flowers of maize are physical, organic entities.
- Ensures the germination of maize.
- Both male and female.
- Delicate, soft, gentle, yet strong and resilient.

But to know how to integrate these elements in a blend, a generic space is needed. In these space maps, the generic properties in both input spaces are connected. In other words, this is the space where elements across the input are matched. In this case, the image suggests that both land workers and maize ensure the continuation of life as shown below:

**Generic space:**

- Organicity
- Earth dependence
- Reproduction
- Shape

**Blend:**

Once counterparts have been matched, they are projected into the blend through the

process of “compression” (Evans, 2015, p. 168), through which a new entity is born from the fusion of two or more elements in the counterparts. The relevant information we extract from the flower of maize is the hairy floret; the relevant information extracted from the seed holder is the hands. In so doing, a new entity is created that has human and maize attributes: this new entity is neither male nor female as we learn from Sánchez in another beautiful poem titled “One”, is resilient, nourishing, delicate and respectful of nature cycles. Thus, the image highlights the interdependence between humans and nature, where both appear as extensions of each other. At this point, readers might use their imagination to enact this imagery in as many ways as they possibly can. Readers might recreate in their minds a caretaker entity with arms and stamens and pistils, or they might evoke an image where the maize plant resembles a human body. Readers might as well evoke the sensuous qualities of this new entity: this half human, half maize entity might smell nutty and musty, and might have the rough texture of the land worker’s skin and the firmness of the cob. What we see in this four-stage conceptual blending process is the dance of autopoiesis in the reading of poetry, one in which readers continuously recreate the other’s emotions and feelings through the creative process of conceptual blending. Thus, the poem emerges as a tandem between the poet, the reader, the environment, the body and the mind, and in every enactive process, in every new generation of meaning, the marginalised “other” (in this case Mexican indigenous land workers) appears a fully embodied human being and the possibility of a greater understanding of the indigenous world arises as a space where oppression can be radically questioned and even negated.

Additionally, the previous analysis casts new light on Ingold’s notion of animism as the transformative potential of all beings to reciprocally bring one another into existence. The analysis of the blend not only shows the interrelated process of mutual creation between the maize and the indigenous mind, but also adds the reader in the equation: the reader also brings forth their own elaboration of the humanised flower of maize projected in the blend. In this way, it is possible to reconceive animism as an ampler transformational force in cognitive poetics by making the reader a co-creator of meaning in animistic imagery.

From an emancipatory perspective, this analysis of the conceptual blending is where Dussel’s theory of the analectic can be informed by a more detailed analysis of the interaction between readers and the marginalised, the excluded “other”. Instead of appearing as merely “other” described and analysed from a position of power, the indigenous text engages readers in a process of co-creation. Similarly, the resources of cognitive poetics allow us to adopt a delayed categorisation type of reading (Tsur, 2002, p. 288) whereby this journey through the indigenous conceptual blend is made possible. Likewise, the analysis of the conceptual blending opens an avenue for the exploration of Dussel’s concept of material principle of ethics mentioned in this paper: this process of engagement between the reader and the indigenous mind allowed by the analysis of the conceptual blending creates a space where indigenous cosmologies might be better understood and, therefore, reproduced spiritually and culturally. If, according to Dussel, the material principle of ethics involves the reproduction of human’s “physical, spiritual,

and cultural life” (Dussel, 1998, p. 131), then the co-creation process in the blend might be seen as a potential contributor to that purpose.

#### 4. Natalia Toledo: humans as maize

Natalia Toledo (Juchitán de Zaragoza, Oaxaca; 1968) is a Mexican poet who writes in Zapotec language. She has published four volumes of poetry in bilingual form (Isthmus Zapotec and Spanish) which have been translated into various languages (Words without Borders, 2018). Toledo’s work is deeply entrenched in Zapotec indigenous culture, and the imagery of her poetry leans heavily on Zapotec’s cosmology, which is stunningly rich and diverse. Equally important is the biocultural role of maize in Zapotec culture, which is a basic ingredient in their diet and their cultural worldviews, because as Zapotec writer Javier Castellanos claims, “our history is that of corn” (Castellanos, 1988, p. 238) and, more importantly, corn is an ingredient that, in Zapotec cosmology, created the human race, “its flesh, blood and sustenance” (Florescano, 2000, p. 16). Zapotec culture is inherently animistic as humans are perceived as descendants of animals from the local fauna, from the earth, the caves, and even from trees.

In her poem “Unkerneled Flower”, Toledo’s beautifully sensual lines deconstruct the artificial division between humans and nature:

##### **Unkerneled Flower**

Throw the purple grains of corn  
 On your bed mat  
 So that you get to know the cob that you are made of,  
 Dekernel your body  
 In the fire of the hotplate  
 On the soil of the world, grain of corn we are

(My translation, Oaxaca Maíz, 2018)

The cognitive mapping continues with perceptual deixis, through which readers are presented with the poetic participants. First, the definite article in “**the** purple grain of corn” introduces one of the perceptual elements, the grain of corn, as well as “**the** cob that you are made of”, which will play a crucial role in the blending as it presents human and maize as sharing properties. This is followed by the personal pronoun “you”, which introduces the poetic persona to which the fragment is aimed at. By means of spatial deixis, readers elucidate the deictic centre in place, which in this case might be a home: “**on** your bed mat” and “**in** the fire of the hotplate” present the space of a home, a kitchen perhaps as deictic centres. Likewise, “on the soil of the world” takes readers out of the homely context into a universal dimension in which the locative “soil” acts as a link between bodies of corn, springing out if it and the world in which corn grows. In terms of temporal deixis, the imperative tense and the present tense locate the fragment in the “now”: the dialogue

between the poet and the participant “you” is sustained by a command, as in “**throw** the purple grain of corn” or “**dekernel** your body”. Both verbs help generate sexual tension, as deictic elements such as “bed”, “fire” or “body” might be interpreted as sexual elements. Finally, the present tense in “grain of corn **we are**” adds an element of timelessness that perfectly combines with the universal dimension of “on the soil of the world”: time and space are dominated by the essentiality of human’s rootedness in maize, which is crucial in the Zapotec cosmovision. So far, this deictic referentiality helps reader engage with the multi-dimensional space of the poem: the domestic imagery serves as a spatial frame where sexuality and reproduction bring forth and perpetuate life. Thus, deictic referentiality produces the building blocks on which the mental spaces of the poem are sustained.

Again, readers might wish to focus their attention on the image of the body represented as maize (“the cob that you are made of”; “grain of corn we are”). Human bodies might be generally experienced as warm, cold, thirst, hunger, fatigue or pleasure. Similarly, our experience of corn might involve its sweet and crunchy taste, its firm yet soft and creamy texture, or the immense fields of maize plants which form a fundamental part of nutrition for humans. Also, the poem features the domain space of houses, which are generally experienced as having walls that protect us from the outside world, offering security, control, belonging, privacy, as well as a sense of identity and memory. This network of mental spaces might be developed as follows in the process of conceptual blending:

**Input space 1:**

- Humans have a physical, organic body.
- The human body is made of various parts.
- Humans reproduce.

**Input space 2:**

- Corn has a physical, organic constitution.
- It is made of grains.
- It is a produce of the earth.

Again, the generic space will match counterparts between the input spaces:

**Generic space:**

- Organic, biological entities
- Reproduction
- Earth dependence
- Shape

**Blend:**

Again, once the counterparts have been identified, some of them will be projected in the “compression” phase of the blend, where features for the two entities are integrated

into one. The relevant information extracted from the human body has to do with its shape as it is formed of various parts. For the cob we extract its earth dependence as well as its reproduction. Therefore, a new, emergent entity arises sharing elements of the two, but without resembling completely any of them. Thus, readers can recreate the image in their minds as an entity that has the shape of a human, grains of corn springing from the earth whilst the grains are thrown in a bed mat and then burn in the hotplate. This stage of interaction between the reader and the text can be described as an autopoietic process since meaning is generated in a feedback loop in a process of structural coupling between the reader and the text. As readers elaborate the emergent entity of the humanised corn, new meaning is generated that in turn feeds on the reader because readers might wish to engage with the sensory information emanating from the image, or with the cognitive possibilities of humanised corn.

The sexual connotations and eroticism of the image are obvious as throwing the grains of corn in the bed mat and the “dekernelling” of the body clearly suggest the initiation of the sexual ritual. But sexuality is the thread conducting the story that the blend exemplifies splendidly: what is at stake in this blend is the reproduction cycles of human and non-human life (a crucial element in Amerindian worldviews). Indigenous land workers are one with corn because their survival depends on this food staple, and the survival of corn depends on the careful hands of the land worker. Indeed, their interaction depends on an intimate, affectionate relation of respect and love for the land. Hence, humans and non-humans share a relationship of interdependence in which western Cartesian boundaries are blurred. This blend might constitute an excellent illustration of Foucault’s concept of “counter-conduct”, which is the notion that life cannot be completely dominated or integrated into mechanisms of power. In this way, the analysis of conceptual blending clearly creates a space where readers not only are aware of the importance of the process of creation of the corn imagery, but also of the philosophical and environmental underpinnings of animism. The more readers achieve a better understanding of indigenous cosmologies, the more difficult it will be for hegemonic discourses to undermine those worldviews. This is more crucial in the context of the fight of indigenous farmers against agribusiness corporations whose conception of life is at odds with indigenous notions of renewal and continuation of life. Likewise, the analysis of the conceptual blend also contributes to expand and further elaborate Dussel’s notion of the “analectic”, as mentioned before in the paper. In this poem, the cognitive poetic analysis exposes the reading process as a space where readers obtain a more profound understanding of indigenous notions of life whilst navigating through the poem and engaging with it. The indigenous other is not presented as a passive entity waiting to be analysed and dissected by an external entity, and information is not “packed” into a verbal label. Rather, a delayed categorisation type of reading allows spending time with the diffuse sensuous information generated by the imagery of humanised corn.

## 5. Conclusion: from resilience to emancipation through enactive poetics

In light of Vyvyan Evans's notion of cooperative intelligence (Evans, 2015, p. 265), the origin of language lies primarily in our capacity to work for the common good, to share responsibilities and to acknowledge the existence of the other. From this perspective, the enactive cooperation between the reader, the text, the writer and the world that emerges in the humanised imagery of maize offers an alternative, life fostering indigenous rationality to the abstract, decorporealising logics of biotech biopolitics. I wholeheartedly agree with Mari-Lou Rowley when she claims that “[d]estructive cycles can be broken through awareness, reflection, and interaction in language” and that “[c]hanging emotions by changing language can alter the attitudes of individuals, the behaviour of systems, and the environment in which we coexist” (Rowley, forthcoming). Indeed, the analysis in this paper shows that the language of indigenous poetry can and must contribute to both adaptation and political change to confront the political and environmental challenges awaiting in the 21st century. This is the reason why the analysis of conceptual blending is so relevant: by allowing readers to engage with the indigenous blends, they become more aware of the rationale behind their cosmologies, and in this way the reading of indigenous poetry can play a more active role in the creation of a more sustainable and equitable world. In this paper, the analysis of humanised maize as conceptual blends contributes to reinvigorate their ancestral indigenous knowledge by exposing their internal creative process, not as an object to be mastered from a distance, but as a cognitive and sensuous interaction process where reader and text co-create each other.

Likewise, the poem analysis suggests that Dussel's notion of the material principle of ethics might further expand the idea of persistence and adaptability to the enactive co-creation and continuation of biological and cultural life. But more importantly, a more environmentally oriented interpretation of Dussel's theory of liberation might shift the centre of the debate from the Eurocentric rationality (Ungar, 2008, p. 219) of certain uses of the term resilience to the inclusion of indigenous marginalised voices, as his concept of “analectic” implies. Thus, not only the ability to adapt or resist but to contest, to “counter-conduct” is also relevant here. In this sense, the indigenous perspectives projected in the poem reveal the reluctance of Mexican indigenous communities to be “conducted” by the economic interests of biotech multinationals and free trade agreements, as well as their will to support their own “conduction” of maize cultivation as they have been doing for the last 10,000 years.

Finally, the paper shows it is possible for the analysis of a poem to participate in a process of cognitive mapping from which an empowering discourse emerges in relation to the biocultural resilience of indigenous communities. In this sense, the analysis of conceptual blending might be seen as a “tightly woven fabric of events of freedom” (Hardt & Negri, 2013, p. 239) as the cognitive mapping sheds light on potential common ground between the reader and the indigenous poet, who uses his/her art as a beautiful and life-affirming denunciation against cultural oppression.



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