

# The Linguistic Shape of Things to Come

Original study

Paolo Bertetti (ORCID: 0000-0001-5510-1405)  
University of Siena (bertetti@unisi.it)

Received: July 2022 Accepted: November 2022

**Abstract:** Published in 1958, *The Languages of Pao* by Jack Vance is one of the earliest linguistic speculations in the science fiction genre. Directly inspired by the Sapir-Whorf hypothesis, it describes a complex, linguistic engineering experiment set up to transform the essentially peaceful nature of the inhabitants of the planet Pao, so that they might stand up to invaders from another planet. It does so through the creation and implementation of three new languages, as opposed to the one they already speak, to create a merchant class, technical class, and warrior class. While Vance's extrapolation is excessively schematic, and certainly leans heavily on a concept of linguistic relativism that now sounds rather dated, other science fiction writers have explored in different ways the idea that language influences thought and perception of the world, beginning with *Babel 17* by Samuel Delany, and Ted Chiang's *Story of Your Life* (on which the film *The Arrival* by Denis Villeneuve is based). But of particular importance here is *Mother Tongue* by Suzette Haden Elgin. Her novel is set in a dystopian, patriarchal future, where a group of linguists creates an artificial language, the Låadan, to better express women's perception of life and as an act of resistance to the dominant male-centred culture, thus anticipating many themes in today's debate on language and gender.

**Keywords:** Science Fiction; Sapir-Whorf hypothesis; Linguistic determinism; Linguistic relativism; Language and thought

## 1. SPECULATIVE SEMIOTICS AND SCIENCE FICTION

In his classical definition of the science fiction genre Darko Suvin states that it is "distinguished by the narrative dominance of a fictional novelty (novum, innovation) validated both by being continuous with a body of already existing cognitions and by being a mental experiment based on cognitive logic" (1978, 45). Seen in this light, the science fiction novel would seem ideally suited to exploring thought experiments that imagine future scenarios, becoming far from just an occasion for pleasant out-of-this-world entertainment and a privileged place for observing contemporary reality, but also a medium for speculating on possible future evolutions of our present, and possible alternatives. In this sense, science fiction is a valuable resource for strategic thinking, bringing it close to the sensitivity that Speculative

Research seeks to cultivate (Wilkie, Savransky, Rosen-garten 2017, 8).

In this paper we aim to show – from a historical rather than a theoretical perspective – that science fiction can be a useful resource for speculative semiotics too, highlighting how it has been able to build whole fictional worlds starting from speculations on specific questions that have animated the semiotic and linguistic debate. In particular, we will focus on the problem of linguistic relativism and on two novels that – in different ways – take their cue from it: *The Languages of Pao* (1958) by Jack Vance and the feminist dystopia *Mother Tongue* by Suzette Haden Elgin (1984).

The title of the paper is directly inspired by *The Shape of Things to Come* (1938), a late utopic work by

H.G. Wells that is a sort of pacifist and optimistic response to Huxley's *Brave New World*. In the form of a future history which ends in 2106, it describes how a technocratic Elite rebuilds the world and reshapes human society through an elaborate social engineering project following a ruinous global war. The two novels we will consider in this paper also focus on projects of social transformation, brought about instead through the use of semiotic and more specifically linguistic tools. In both the social change rests on a deep transformation in the way of thinking engineered by the introduction of new artificial languages. To different degrees, each of these novels assumes that the language used by a people determines, or at least conditions, how they think and act. A people's culture is a product of their language, so by changing their language one can also change their culture. In this sense, as we will see, both novels are excellent examples of fictional speculation centred on the long-debated issue of linguistic relativism.

The first section of the chapter gives a very general historical overview of the relationship between language and thought in philosophy of language and linguistics, with a focus on the so-called Sapir-Whorf hypothesis, which directly inspired the novels by Vance and Elgin. In the second and third section, we will deepen how each author makes use of the Sapir-Whorf hypothesis as a start for their speculations, taking some of its assumptions to extremes. The choice of these two novels is not accidental: not only are they excellent examples of science fiction speculation centred on linguistics, but they are the only ones in which a social engineering project realized through linguistic change is the hegemonic novum (Suvin 1979, 63) that dominates the narrative. They also highlight two different purposes typical of all science fiction narratives. Vance's exploration of linguistic speculation is functional to the creation of intelligent entertainment; in Elgin's case, instead, it aims to highlight how language can be an instrument of power and oppression, but also of liberation, as the author outlines a transformative project that leaves the fictional world to become a proposal for change in our present.

## 2. THE SO-CALLED SAPIR-WHORF HYPOTHESIS

The idea of an equivalence (or at least a close relationship) between language and thought goes back a long way: it is already present in Aristotle (*Rhetoric*, III), in the tradition of Enlightenment linguistics, from Leibniz to Locke and Vico (Formigari 2001, 121–83), and above all in Wilhelm von Humboldt. In *Über das vergleichende Sprachstudium* Humboldt argues:

Language is the formative organ of thought.  
Intellectual activity, entirely mental, entirely internal,

and to some extent passing without trace, becomes, through sound, externalized in speech and perceptible to the senses. Thought and language are therefore one and inseparable from each other. (Humboldt 1999, 42)

For Humboldt, our knowledge of the world is intrinsically linked to language, which has an evident anthropological relevance (Prato 2019), so much so that he states that "To learn a foreign language should therefore be to acquire a new standpoint in the world-view hitherto possessed" (Humboldt 1999, 47).

The idea of a categorizing function of language is a main point on the structural linguistics of the twentieth century, starting with Ferdinand De Saussure, for which "Prise en elle-même, la pensée est comme une nébuleuse où rien n'est nécessairement délimité. Il n'y a pas d'idées préétablies, et rien n'est distinct avant l'apparition de la langue" (CLG, 224). Following Hjelmslev, language is the way in which we shape our thinking and our perceptions, naming the objects of the world. At the end of his *Essai d'une théorie des Morphemes*, he concludes "La langue est la forme par laquelle nous concevons le monde. Il n'ya pas de théorie de la connaissance, objective et définitive, sans recours aux faits de langue. Il n'ya pas de philosophie sans linguistique" (Hjelmslev 1959[1938], 164).

In the same period, on the other side of the Atlantic other scholars – such as the anthropologist Franz Boas, the linguist and anthropologist Edward Sapir and his pupil Benjamin Lee Whorf – pointed out that language influences our way of thinking, since it leads us to categorize experience in a specific way. In fact, the semantic structures of different languages are not superimposable point by point, and this diversity leads to our adopting different ways of thinking. The so-called "Sapir-Whorf Hypothesis"<sup>1</sup>

starts from the premise that human beings tend to read and interpret the natural world starting from schemes that are contained in their mother tongue. Since these schemes, on the one hand, are different in relation to the diversity of languages, on the other they constitute involuntary and automatic models, speakers of different languages arrive at a different vision of the world (Manetti, Fabris 2006, 84).

Two different interpretations of the hypothesis have been outlined: a "strong" version, the so-called "linguistic determinism" – which neither Sapir nor Whorf have ever advocated and which is now discredited – says that the structure of a language determines the way in which the speaker perceives reality and thinks about facts and the world; the "weak" version of the hypothesis, also known as "linguistic relativism", argues that language does not determine thought, but only affects the perception of

<sup>1</sup> As Duranti (2001) observes, it is improper to use "Sapir-Whorf hypothesis" to refer to linguistic relativity as there are no passages where the two scholars define this hypothesis, and indeed, if we examine more carefully the writings of each of the two, several substantial differences emerge.

## The Linguistic Shape of Things to Come

experience data and the way we think. Starting in the 1960s, with the affirmation of the Chomskian paradigm that focused on the universal properties of grammatical systems, the theory of linguistic relativity became the subject of intense criticism, culminating in the discovery by Brent Berlin and Paul Kay (1969) of linguistic universals in the coding of colors in a vast number of languages.

How did the debate make its way into speculative science fiction? In the mid-1950s, following the publication of Whorf (1956), the Sapir-Whorf hypothesis even enjoyed a period of broad popularity outside the Academy. With a keen sense of timing, a couple of years later Jack Vance published *The Languages of Pao*, directly inspired by linguistic determinism. In the following years, several science fiction novels drew inspiration from linguistic relativism and more generally from the idea of a close relationship between language, thought and perception. Many of these works deal with the theme of communication with alien beings, such as Ian Watson's *The Embedding* (1973) or, more recently, China Mieville's *Embassytown* (2011). Perhaps the most significant work in this regard, however, is *Story of your life* by Ted Chiang (1999) – on which Denis Villeneuve's movie *The Arrival* is based<sup>2</sup> – where Louise Banks, a linguist in charge of making first contact with alien visitors, the Heptapods, develops a new cyclic perception of time by learning their language.

*Babel-17* by Samuel Delany (1966) is heavily influenced by the more deterministic version of the "Sapir-Whorf hypothesis". The novel explores the ability of language to condition individuals against the backdrop of a galactic war between the Earth Alliance and Invaders. In the novel, Babel-17 is a specially constructed language that has the power to change the thought structure of those who use it, transforming them into fifth-column members who serve the Invaders<sup>3</sup>.

In this study, we will instead focus on some works that describe created languages (Cheyne 2008), specifically developed to be "mechanisms for social change" (Elgin 1987, 178). Many dystopian novels feature such a correlation, most famously George Orwell's *Nineteen Eighty-Four* which features Newspeak, although many other works likewise depict a manipulation of the masses through language. As Bould notes,

Linguistic social engineering is relatively common in eutopian and dystopian fiction. In Ursula Le Guin's *The Dispossessed* (1974), Pravic, a language constructed by anarchists, discourages possessives; and in Iain M. Banks's *Culture* novels (1987) Marain similarly de-emphasizes ownership, aggression, submission, and gender. In Ayn Rand's *Anthem* (1938) David Karp's *One* (1953) and Robert Silverberg's *A Time of Changes* (1971), the first-person singular is

suppressed, demonstrating a dystopian eradication of the individual. (Bould 2009, 229–30)

However, few works of fiction have pushed extrapolation to such a point where we witness the transformation of entire societies by means of a methodical rehash of the language, as Vance's *The Languages of Pao* and Elgin's *Mother Tongue* do.

### 3. THE MANY LANGUAGES OF PLANET PAO

The first novel discussed here, *The Languages of Pao*, gives an account of a gigantic experiment of linguistic engineering, with the aid of which the peaceful culture of the planet Pao, characterized by a single language and substantial homogeneity, is transformed through the creation of three new languages intended to create classes of technicians, warriors and merchants in order to fend off a possible occupation by invaders from another planet. Vance explains that the original Paonese language "might be said to consist of nouns, suffixed post-positions, and temporal indexes. There were no verbs, no adjectives; no formal word comparison such as good, better, best", so "language sentence did not so much describe an act as it presented a picture of a situation". The typical Paonese citizen "was one of a uniform mass, a crowd of men distinguished only by the color, cut and weave of their clothes—highly significant symbols on Pao" (Vance 2004[1958], 3).

Vance's linguistic speculation is based on a highly deterministic version of the Hypothesis. In this regard there is an enlightening dialogue in the novel that takes place between Finisterle, a teacher from the College of Comparative Cultures on the planet Breakness, and a pupil:

"Each language is a special tool, with a particular capability. It is more than a means of communication, it is a system of thought. [...] Think of a language as the contour of a watershed, stopping flow in certain directions, channeling it into others. Language controls the mechanism of your mind. When people speak different languages, their minds work differently and they act differently. For instance: you know of the planet Vale?"

"Yes. The world where all the people are insane."

"Better to say, their actions give the impression of insanity. Actually they are complete anarchists. Now if we examine the speech of Vale we find, if not a reason for the behavior, at least a parallelism. Language on Vale is personal improvisation, with the fewest possible conventions. Each individual selects

2 However, it should be noted that the Sapir-Whorf hypothesis is explicitly mentioned only in *Arrival*, while Chiang's short novel presents a more complex linguistic and philosophical speculation. For a comparison between the literary text and the film see Noletto, Lopes 2020.

3 On linguistic relativity in Delany's *Babel-17* see Fitzpatrick 2020.

## Bertetti

a speech, as you or I might choose the color of our garments.” (Vance 2004[1958], 63)

Obviously, the question that arises is: “does the language provoke or merely reflect the eccentricity? Which came first: the language or the conduct?” (Vance 2004[1958], 63–64). However, this is only an academic question. Finisterle himself gives a clear answer later in the novel, illustrating the principles of “dynamic linguistics”:

“Language determines the pattern of thought, the sequence in which various types of reactions follow acts. No language is neutral. All languages contribute impulse to the mass mind, some more vigorously than others. I repeat, we know of no ‘neutral’ language—and there is no ‘best’ or ‘optimum’ language, although Language A may be more suitable for Context X than Language B. In an even wider frame of reference, we note that every language imposes a certain world-view upon the mass mind. What is the ‘true’ world-picture? Is there a language to express this ‘true’ world-picture? First, there is no reason to believe that a ‘true’ world-picture, if it existed, would be a valuable or advantageous tool. Second, there is no standard to define the ‘true’ world-picture. ‘Truth’ is contained in the preconceptions of him who seeks to define it. Any organization of ideas whatever presupposes a judgment on the world.” (Vance 2004[1958], 112)

The relativity of conceptual systems and their dependence on language refers to some passages by Whorf:

When Semitic, Chinese, Tibetan, or African languages are contrasted with our own, the divergence in analysis of the world becomes more apparent; and, when we bring in the native languages of the Americas, where speech communities for many millenniums have gone their ways independently of each other and of the Old World, the fact that languages dissect nature in many different ways becomes patent. The relativity of all conceptual systems, ours included, and their dependence upon language stand revealed. (Whorf 1956, 214–5)

The principles of Dynamic Linguistics have a practical application in the gigantic social engineering project conceived by the head of the College of Comparative Cultures, Palafox. The premises of the project, destined to revolutionize Pao, are simple: to save the planet from invasion it is necessary to persuade the peaceable Paonese to become fighters, and this is possible using a linguistic tool: “We must alter the mental framework of the Paonese people—a certain proportion of them, at least—which is most easily achieved by altering the language” (Vance 2004[1958], 76). Palafox explains:

“Paonese is a passive, dispassionate language. It presents the world in two dimensions, without

tension or contrast. A people speaking Paonese, theoretically, ought to be docile, passive, without strong personality development — in fact, exactly as the Paonese people are. The new language will be based on the contrast and comparison of strength, with a grammar simple and direct. To illustrate, consider the sentence, ‘The farmer chops down a tree’. (Literally rendered from the Paonese in which the two men spoke, the sentence was: “Farmer in state of exertion; axe agency; tree in state of subjection to attack.”) “In the new language the sentence becomes: ‘The farmer overcomes the inertia of the axe; the axe breaks asunder the resistance of tree.’ Or perhaps: ‘The farmer vanquishes the tree, using the weapon-instrument of the axe’ [...] “The syllabary will be rich in effort-producing gutturals and hard vowels. A number of key ideas will be synonymous; such as pleasure and overcoming a resistance — relaxation and shame — out-worlder and rival. Even the clans of Batmarsh will seem mild compared to the future Paonese military.” (Vance 2004[1958], 77)

As we can see, the construction of the new language, “Valiant”, affects all the different grammatical components: semantic, syntactic, phonological. Here, too, Whorf’s writings immediately spring to mind.

The Palafox project is, however, more complex: in fact, to introduce the necessary skills and the ways of thinking that Pao lacks requires the creation of *three* different languages and their gradual introduction into three isolated communities over a period of twenty years. As well as “Valiant”, conceived to produce warriors, it also includes “Technicant” to produce technicians, and “Mercantil”, to create a class of scientists. Palafox explains how:

In [Technicant], the grammar will be extravagantly complicated but altogether consistent and logical. The vocables would be discrete but joined and fitted by elaborate rules of accordance. What is the result? When a group of people, impregnated with these stimuli, are presented with supplies and facilities, industrial development is inevitable. And should you plan to seek ex-planetary markets, a corps of salesmen and traders might be advisable. Theirs would be a symmetrical language with emphatic number-parsing, elaborate honorifics to teach hypocrisy, a vocabulary rich in homophones to facilitate ambiguity, a syntax of reflection, reinforcement and alternation to emphasize the analogous interchange of human affairs. All these languages will make use of semantic assistance. To the military segment, a ‘successful man’ will be synonymous with ‘winner of a fierce contest’. To the industrialists, it will mean ‘efficient fabricator’. To the traders, it equates with ‘a person irresistibly persuasive’. Such influences will pervade each of the languages. Naturally, they will not act with equal force

## The Linguistic Shape of Things to Come

upon each individual, but the mass action must be decisive. (Vance 2004[1958], 78)

As we can see, the mechanism is very schematic, even naive, and extremely deterministic. However, Vance's novel itself warns us that the relationship between language and social transformation can be surprisingly complex. Actually, linguistic changes in the novel turn out to be scarcely controllable and lead to unexpected effects: "With the changed languages, – as Mohr notes – the formerly peaceful monarchy turns into a segregated capitalist society where everyone is a prisoner of his or her one-dimensional reality-cum-language" (Mohr 2009, 233).

The fragmentation of world views leads to incomprehension and incommunicability, and finally to civil war: the aggressive language of the soldiers induces them to revolt against their more peaceful compatriots. But one obstacle stands in the way of their ambitions to dominate the other components of the Paonese society: their inability to govern, even this a consequence of their language.

The solution to the problem is always in (and through) the language itself and in its irreducibility into any desired condition. As Paolo Fabbri recalls, language is elastic: "this elasticity of language always makes it possible for a fixed term to be redefined differently. So, anyone who tries to block a language with a 'plastic' definition to a fixed meaning is constantly facing a highly variable medium" (Fabbri 2014). In other words, the key to language (and its changes) is inevitably in the hands (or on the tongues) of the speaking mass (Saussure) and its linguistic work. Hence the appearance of a "Pidgin" language provides a solution for Pao's future: the so-called 'Pastiche' – an amalgam of the different Paonese idioms, that develops with the unofficial contribution of the linguists themselves as a means of exchange between the different communities – becomes the tool, through its creolization, to achieve much greater flexibility of thinking and to create a common more complex vision of reality. As Dunja Mohr notes, "Foreign or multiple language acquisition, Vance seems to suggest, allows the incorporation of different worldviews and therefore a more multidimensional outlook on reality" (Mohr 2009, 234).

### 4. MOTHER TONGUE

Almost thirty years after Vance's novel was published, the Sapir-Whorf hypothesis and the creation of a new language designed to instigate cultural and social change are once again at the centre of a dystopian novel, *Mother Tongue* by Suzette Haden Elgin. In the intervening years, many things changed, in both science fiction and linguistics. So, while for many *The Languages of Pao* is little more than an intelligent escapist novel set on another planet, the work by Suzette Haden Elgin, who is not only a science fiction writer but also a professor of Linguistics at San Diego State University, is certainly much more ambitious.

At the end of the 1960s and throughout the 1970s, the advent of a generation of new female science fiction

authors led not only to a subversion of the structures and themes of a hitherto typically male genre, but also to the use of science fiction itself within the feminist debate. Its ability to build "other" worlds, makes science fiction a privileged space in which female identity can be rethought, acting as a "bridge between feminist theory and practice" (Federici 2015, 10).

In linguistics, after a period of criticism several scholars – we only recall the research of John Lucy (1992) – were reconsidering the ideas of Whorf (Duranti 2001), especially the "weak" form of linguistic relativism. Here we can speak of "Neowhorfianism", where language does not actually determine thought, but can facilitate or inhibit it; the grammatical gender, the lexicon, and other linguistic elements have the ability to condition ways of thinking (Evola 2012). Elgin herself explicitly subscribes to this weak form. As she wrote, *Mother Tongue* is based on two hypotheses: "The first hypothesis is that language is our best and most powerful resource for bringing about social change; the second is that science fiction is our best and most powerful resource for trying out social changes before we make them, to find out what their consequences might be" (Elgin 2000c).

The novel, set on Earth in the late 22nd and early 23rd centuries, is the first in a trilogy that also includes *The Judas Rose* (1987) and *Earthsong: Native Language III* (1994). It describes a misogynist dystopia in which women are legally equated with minors: they do not enjoy an autonomous position in society, are deprived of all civil rights and are subject to the protection of a male guardian. In the novel, the theme of communication with aliens also reappears; in fact, the Linguists corporation has a powerful position in this future society, as its members are the only humans able to communicate with the alien races that humanity has come into contact with. The central theme, however, is the construction of Láadan, a secret artificial language conceived and built by a group of female linguists to enable womankind to escape social and political segregation, offer a better means for expressing women's perceptions, and re-shape the overtly male-oriented culture. Láadan "allows women to express their subjectivity and constitutes an act of rebellion against the totalitarian system which does not recognize them as individuals" (Federici 2015, 104). As stated in *Native Tongue*:

These women, and the women of linguistics for generations back, had taken on the task of constructing a language that would be just for women. A language to say the things that women wanted to say, and about which men always said "Why would anybody want to talk about that?" (Elgin 2000a[1984])

As Federici notes: "The language of women becomes a way to put together the community of women and to obtain mutual support and, at the same time, it represents a tool to gain confidence in oneself and one's potential" (Federici 2015, 105). The secret language of women is

a theme that recurs in various feminist dystopias, see for example Suzy Mckee Charnas' tetralogy *The Holdfast Chronicles* (1974–1999). What is particularly interesting in Elgin's case is that she is not only a science fiction writer but also a linguist who does not confine Láadan's existence to the novel, but concretely develops an entire artificial language, complete with a grammar book and a dictionary: in 1985 she published the *First Dictionary and Grammar of Láadan*, and since then the language has been greatly enriched thanks to the contribution of several volunteers who continue to develop Láadan even after the death, in 2015, of its creator. Curiously, as Mohr points out (2009), the three novels give only very few examples of Láadan (morphemes, Encodings, translations of passages from the King James Bible). Dictionaries, introductory and in-depth lessons, and other material on the Láadan language can be found news can be found on the *Láadan Language* website.

Láadan is a response to the idea that existing natural languages encode masculinist perceptions and values, and are inadequate to express Woman's perceptions, which was a major concern of the 1970s and 1980s feminism (Squire, Vedder 2000). According to Elgin, English and its close linguistic relatives "lacked vocabulary for many things that are extremely important to women, making it cumbersome and inconvenient to talk about them" (Elgin 1999). In particular, "they lacked ways to express emotional information conveniently, so that – especially in English – much of that information had to be carried by body language and was almost entirely missing from written language" (Elgin 1999).

One of the purposes of Láadan, whose name means "language of perceptual knowledge", is to give adequate form to the expression of the female emotional sphere; to do this, it attempts to lexicalize what is usually conveyed by non-verbal language or vocal intonation in English. For example, the sentence "Bíid shóod le wa" means "I-say-to-you-in-anger, I'm busy!" (Elgin 2003). As Grigoletto summarizes, the main characteristic of Láadan is

its essential tonal character, a single (high) tone that a defined grammatical structure articulates in four distinct tones, and which manifests the idea of an intimate link between feminine, musicality and the emotional sphere. This is also attested by the presence of numerous affixes designed to indicate any emotional specificity of the utterance. (Grigoletto 2017, 288)

However, it is not just a matter of conceptualizing the female emotional sphere, but of giving shape to a different mode of perception. In *Native Tongue*, the "Encodings Project" is of fundamental importance. It involves the semantic conceptualization of a specific female perception: "A word for a perception that had never had a word of its own before" (Elgin 2000a[1984]), as a motto reported in the novel says. Although the expression seems to suggest that perception is pre-existing and independent from

language, in the following lines the explanation leaves no doubt. There are two different types of Encodings:

Major Encodings, the most precious because they were truly newborn to the universe of discourse. Minor Encodings, which always came in the wake of a Major one, because it would bring to mind related concepts that could be lexicalized on the same pattern, still valuable. (Elgin 2000a[1984])

Elgin herself recognizes that at the origin of *Native Tongue* there was a reflection on the weak version of linguistic relativism:

Native Tongue is a book which assumes that the Sapir-Whorf hypothesis (also known as the linguistic relativity hypothesis) is true – it assumes that human (and nonhuman) language does have power to structure human perceptions in significant ways and can be used deliberately to bring about social change. (As opposed to the idea that the social change must come first and will then be reflected in changes in the language.) (Elgin 2002)

In a 1999 commentary on her linguistic creation, she claims to have written the novel as a thought experiment with a time limit of ten years. Her specific goal was to test four interrelated hypotheses:

(1) that the weak form of the linguistic relativity hypothesis is true [that is, that human languages structure human perceptions in significant ways; (2) that Goedel's Theorem applies to language, so that there are changes you could not introduce into a language without destroying it and languages you could not introduce into a culture without destroying it; (3) that change in language brings about social change, rather than the contrary; and (4) that if women were offered a women's language one of two things would happen – they would welcome and nurture it, or it would at minimum motivate them to replace it with a better women's language of their own construction. (Elgin 1999)

As Elgin herself admits, the results of the experiment were not successful: for the first three hypotheses she ended up with nothing more than anecdotal information, and the fourth hypothesis proved false. In a 2007 interview, she admitted that Láadan attracted very little attention: "the conclusion I draw from that is that in fact women (by which I mean women who are literate in English, French, German, and Spanish, the languages in which *Native Tongue* appeared) do not find human languages inadequate for communication." (Glatzer 2007).

## 5. CONCLUSIONS

As Carl Malmgren points out, "in a relatively few science fictions, an invented language becomes the

## The Linguistic Shape of Things to Come

narrative dominant, informing the plot, the themes, and the discourse of the fiction" (1993, 6). This is the case of the two novels that have been the subject of our analysis, Vance's *The Languages of Pao* and Elgin's *Native Tongue*, perhaps the only examples of science fiction novels centered on social engineering projects based on constructed languages. Both are more or less explicitly speculations based directly on the Sapir-Whorf hypothesis. However, there are profound differences between the two novels.

While Jack Vance extrapolates from Sapir-Whorf hypothesis, in its strong and deterministic formulation, in order to construct an intelligent adventure novel, albeit, with some non-trivial considerations on the anthropological mechanisms of power, Elgin's enterprise immediately reveals itself to be decidedly more complex. It amounts to a genuine experiment in speculative linguistics, if not in speculative semiotics, explicitly inspired by the weak form of linguistic relativism. Elgin's linguistic position – the idea that the language we use to describe and operate in the world affects the way we understand the world, our place in it, and our interactions with one another, and that changing our language changes our world – has powerful feminist implications (Squire, Vedder 2000). Although the results fell short of her expectations, Elgin's thought experiment is nevertheless still of interest. It reveals, if anything, how a certain vision of the relations between the sexes typical of the feminist theories of the period and which saw a strong separation between the genders "opposed to one another in thought, action, and desire" (Squire, Vedder 2000), needed to be re-discussed. While *Native Tongue* is in some ways linked to this theoretical vision of the relationship between genders, typical of the period, Elgin's idea that changing language can lead to a change in ways of thinking and stimulate social change is still very relevant, being a central theme in today's debate on language and gender and in the emphasis on non-sexist and inclusive language.

However, there is another significant difference between the two novels. In *The Languages of Pao*, as in other classic dystopias, language is seen as a means of social control: the new Paonian languages are top-down creations, no less than Orwell's Newspeak. They are an imposition from above, in contrast to which the pidgin language called Pastiche represents a space of unpredictability, but not of opposition in itself. Conversely, in *Mother Tongue*, as well as in other contemporary feminist dystopias, language is "an instrument of both (men's) domination and (women's) liberation", as Ildney Cavalcanti (2000, 152) claims. Láadan is a bottom-up project, a place of resistance and a militant utopic effort to change society, the fictional one of 22nd Century, sure, but also our contemporary chauvinistic one.

Vance's novel is a story of a distant and undefined future, set on another planet, involving invented languages. Elgin's is instead set on our planet, in a relatively near future period of time. The patriarchal language being denounced is not a fictional language, it is English, a future version that is actually identical to today's. Like any good

science fiction novel, *Mother Tongue* is a metaphor for our present, and a very transparent one: even if women nowadays are not totally deprived of rights, the patriarchal structures that govern our society – and above all the form of language – are similar, and in order to achieve real liberation, it is necessary to change them, here and now. And so, the Láadan steps out from the framework of narrative fiction and becomes a project of change in the real world.

If the future is built on the present, and speculative fiction is the mirror of our time, speculative thinking – and Speculative Semiotics – can be a powerful means of promoting social change.

### WORKS CITED

- Berlin, B., Kay, P., 1969. *Basic Color Terms: Their Universality and Evolution*. Stanford: Center for the Study of Language and Information.
- Bould, M., 2009. Language and Linguistics. In Bould, M. et al. (Eds.), *The Routledge Companion to Science Fiction*. London: Routledge, pp. 225–235.
- Cavalcanti, I., 2000. Utopias of/f Language in Contemporary Feminist Literary Dystopias. *Utopian Studies*, 11(2), 152–80.
- Cheyne, R., 2008. Created Languages in Science Fiction. *Science Fiction Studies*, 35(3), 386–403.
- Duranti, A., 2001. Relativity. In Duranti, A. (Ed.), *Key terms in language and culture*. Oxford: Blackwell.
- Elgin, S. H., 1985. *First Dictionary and Grammar of Láadan*. Madison, Wisconsin: Society for the Furtherance and Study of Fantasy and Science Fiction.
- Elgin, S. H., 1987. Women's Language and Near Future Science Fiction: A Reply. *Women's Studies*, 14, 175–81.
- Elgin, S. H., 1999. Láadan, the Constructed Language in *Native Tongue*. *Suzette Haden Elgin's Website*, available at: < [www.sfw.org/members/elgin/Laadan.html](http://www.sfw.org/members/elgin/Laadan.html) >.
- Elgin, S. H., 2000a. *Native Tongue*. New York: The Feminist Press [e-book]. Originally published: New York: DAW, 1984.
- Elgin, S. H., 2000b. *The Language Imperative*. Cambridge: Perseus Books.
- Elgin, S. H., 2000c. Linguistics and Science Fiction. *Suzette Haden Elgin's Website*. Cited in Squire, Vedder 2000.
- Elgin, S.H., 2002. *Native Tongue: Questions & Topics for Discussion*. *Suzette Haden Elgin's Website*, available at: < <https://laadanlanguage.com/articles/native-tongue-trilogy/native-questions/> >.
- Elgin, S.H., 2003. Láadan Made Easier – Lesson Two. *Laadan Language Website*, available at: < <https://laadanlanguage.com/articles/articles-by-suzette/laadan-made-easier-two/> >.
- Evola, V., 2012. Aveva ragione Whorf? La lingua embodied/embedded. *Reti, saperi, linguaggi*, 4(2), 38–43.

- Fabbri, P., 2014. La forza "politica" del linguaggio: creare e trasformare testi e contesti. *Scrittinediti*, Mar. 2014, available at: < <https://scrittinediti.wordpress.com/2014/03/29/la-forza-politica-del-linguaggio-creare-e-trasformare-testi-e-contesti/> >.
- Federici, E., 2015. *Quando la fantascienza è donna. Dalle utopie femminili del secolo XIX all'età contemporanea*. Roma: Carocci.
- Fitzpatrick, J., 2020. Linguistic Relativity and Cryptographic Translation in Samuel Delany's *Babel-17*. In Ahuja, N. et al. (Eds.), *The Palgrave Handbook of Twentieth and Twenty-First Century Literature and Science*. Cham: Palgrave Macmillan, pp. 263–281.
- Formigari, L., 2001. *Il linguaggio. Storia delle teorie*. Roma-Bari: Laterza.
- Glatzer, J., 2007. Interview With Suzette Haden Elgin. *Absolute Write*, available at: < [https://web.archive.org/web/20070612005757/http://www.absolutewrite.com/novels/suzette\\_haden\\_elgin.htm](https://web.archive.org/web/20070612005757/http://www.absolutewrite.com/novels/suzette_haden_elgin.htm) >.
- Grigoletto, L., 2017. *Gepatra lingvo* (Lingua madre): il problema di una glossopoiesi al femminile in Italia. In Ricci, D. et al. (Eds.), *Repensar o feminino em contexto lusófono e italiano / Ripensare il femminile in ambito lusofono e italiano*. Lisboa: CLEPUL, pp. 283–292.
- Hjelmslev, L., 1959. Essai d'une théorie des Morphemes. In *Essais linguistiques*. Copenhagen: Nordisk Sprog- og Kulturforlag, pp. 152–164. Originally published in *Actes du IVe Congrès international des linguistes 1936*, Copenhagen, 1938.
- Humboldt, W., 1999. *On Language, On the Diversity of Human Language Construction and its Influence on the Mental Development of the Human Species*. Losonsky, M. (Ed.). Cambridge: Cambridge UP.
- Laadan Language Website*, available at < <https://laadanlanguage.com> >.
- Lucy, J., 1992. *Language Diversity and Thought*. Cambridge: Cambridge UP.
- Malmgren, C., 1993. The Languages of Science Fiction: Samuel Delany's *Babel-17*. *Extrapolation*, 34(1), 5–17.
- Manetti, G., Fabris, P., 2006. *Comunicazione*. Brescia: La Scuola.
- Marrone, C., 1995. *Le lingue utopiche*. Roma: Melusina.
- Mohr, D.M., 2009. "The Tower of Babble"? The Role and Function of Fictive Languages in Utopian and Dystopian Fiction. In Pordzik, R. (Ed.), *Futurescapes. Space in Utopian and Science Fiction Discourses*. Amsterdam-New York: Rodopi, pp. 225–248.
- Noletto, I.A.C., Lopes, S.A.T., 2020. Heptapod B and whorfianism. Language extrapolation in science fiction. *Acta Scientiarum. Language and Culture*, 42(e51769), 1–9, available at: < Doi: 10.4025/actascilangcult.v42i1.51769 >.
- Prato, A., 2019. Sul relativismo linguistico e le sue implicazioni antropologiche. *Dialoghi mediterranei*, 36, 296–301, available at: < <http://www.istitutoeuroarabo.it/DM/sul-relativismo-linguistico-e-le-sue-implicazioni-antropologiche/> >.
- Saussure, F. De, 1967. *Cours de linguistique Générale*. Paris: Payot. Originally published Paris: Payot, 2016.
- Suvin, D., 1978. On What Is and Is Not an SF Narration; With a List of 101 Victorian Books That Should Be Excluded from SF Bibliographies. *Science Fiction Studies*, 5(1), 45–57.
- Suvin, D., 1979. *Metamorphosis of Science Fiction. On the Poetics and History of a Literary Genre*. New Haven and London: Yale University Press.
- Squire, S., Vedder J., 2000. Afterword. Encoding a Woman's language. In Elgin 2000a [e-book].
- Vance, J., 2004. *The Languages of Pao*. New York: ibooks [e-book].
- Whorf, B., 1956. *Language, thought, and reality: Selected writings of Benjamin Lee Whorf*. Cambridge: The MIT Press.
- Wilkie, A., Savransky, M., Rosengarten, M., 2017. The Lure of Possible Futures. On Speculative Research. In Wilkie, A., Savransky, M., Rosengarten, M. (Eds.), *Speculative Research: The Lure of Possible Futures*. London and New York: Routledge, pp. 2–17.