ORIGINAL PAPER DOI: 10.7401/visions.02.04

Reflections on the Ethics of Technical and Literary Language in Primo Levi

Patrizia Piredda

Independent scholar

Abstract. In this article I will analyse the two modalities of writing which characterised Levi's life, namely the technical writing of weekly professional reports, and the literary writing of poetry and short stories. I will above all focus on such texts as The Wrench, The Periodic Table, Other People's Trades and the Essays and I will analyse the way in which chemistry lies at the basis of his poetic. The most significant difference between the above-mentioned forms of writing rests in the fact that Levi's technical writing always describes reality on the basis of models created by sciences. Literary writing, on the other hand, does not reproduce a model nor describes a fixed order, because it functions as a way of representing the possibilities that lie beyond existence, i.e. it is a way of creating an order; literary writing does not restrict itself to describing an object, but instead produces new interpretations of the object, and consequently new interpretations of life. Therefore, I will analyse the function of metaphor because, from Levi's perspective, it is necessary for good literature: in fact, thanks to its structure, metaphor is apt to show what cannot be described in a rigorous way, namely ethics and aesthetics.

Keywords: Primo Levi, metaphor, scientific and literary language

ISSN 2384-8677 **DOI:** 10.7401/visions.02.04

Article history: Accepted in revised form November, 06, 2014

Published online: November, 22, 2014 http://www.iris-sostenibilita.net/iris/vfs/vfsissues/article.asp?idcontributo=72

Citation: Piredda, P. (2014) Reflections on the Ethics of Technical and Literary Language in Primo Levi. Visions for

Sustainability, 2:36-48

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Competing Interests: The authors have declared that no competing interests exist.

Corresponding Author: Patrizia Piredda, indipendent scholar, Italy.

E.mail: patri_wilde@yahoo.it

Perspective: Theoretical vision

Fields: Human sciences

Issues: Sustainable language and knowledge

1. Introduction

"I am an amphibian [...] a centaur (I also wrote some tales on centaurs). And it seems to me that the ambiguity of science-fiction reflects my present destiny. I am divided in two halves. One is that of the factory, I am a technician, a chemist; the other, instead, is totally detached from the first, and it is that in which I write" (Levi, 1997a: 107).1

In the metaphors of the amphibian and the centaur, Primo Levi represented not only the two complementary aspects of a human being, reason and passion, but he also represented the two modalities of writing which characterised his life: on the one hand the technical writing of weekly reports gathered along his profession as an industrial chemist, on the other hand his poetry and short stories. These two ways of expression have in common the fact that both literature and chemistry result in producing, which "obeys the logic of little steps, of constant control. It is the effort for distinguishing, catching also the smallest differences, it is a proceeding for progressing approximations, as in manual work and in laboratory praxis" (Porro, 1997: 439)2. Beyond that, for Levi technical and literary writing are always deeply dissimilar from one another: "on the first one, of factory, I cannot work with pen and fantasy. I tried to write some tales about my life in the factory: they are the worse. I will never manage, I am sure" (Levi, 1997a:

107)3. The major difference between them lies in the fact that the former always describes the same kind of object. Regarding his work in factory, Levi utilised writing in a limited way in order to observe and describe synthetic polymers, which always exhibited the same chemical behaviour, reason why the writer always considered them as molecules and raw because desperately monotonous, [...] they have practical virtues, but they 'say' nothing, or better, they repeat the same message at libitum" (Levi, 1997c: 952)4. Literary writing, on the other hand, does not reproduce a model, nor does it describe a fixed order, because it functions as a way of representing the possibilities that lie beyond existence, i.e. it is a way of creating an order; literary writing does not restrict itself to describing an object, but instead produces new interpretations of the object, and consequently new interpretations of life.

Therefore, the metaphor of the centaur contains the vital contrast which leads Levi towards two different tendencies: the first aims at consistently describing the same order, and thus at confirming the necessity of nature, whereas the other aims at imagining new orders and at showing freedom through possible and plausible representations: but in order to be efficient, in both cases language has to be clear and simple.

2. Chemistry and literature

For Levi, chemistry was one of the principal elements of his intellectual, human and moral education. In *Il sistema periodico*, Levi recalls that, unlike his friend Enrico, for whom chemistry represented guarantees for a

¹ Translated by the author. "Io sono un anfibio [...] un centauro (ho anche scritto dei racconti sui centauri). E mi pare che l'ambiguità della fantascienza rispecchi il mio destino attuale. Io sono diviso in due metà. Una è quella della fabbrica, sono un tecnico, un chimico, un'altra, invece, è totalmente distaccata dalla prima, ed è quella nella quale scrivo." Unless otherwise noted, all translations are the author's.

^{2 &}quot;Obbedisce ad una logica dei piccoli passi, del controllo costante. È sforzo per distinguere, cogliere le differenze, anche minime, è procedere per approssimazioni successive, come accade nei lavori manuali e nelle pratiche di laboratorio."

³ "Sulla prima, quella della fabbrica, non riesco nemmeno a lavorarci su con la penna e con la fantasia. Ho tentato di fare dei racconti sulla mia vita di fabbrica. Sono i peggiori. Non ci riuscirò mai, ne sono sicuro."

⁴ "Mute e brute perché disperatamente monotone [...] hanno virtù pratiche, ma non 'dicono' niente, o meglio, ripetono all'infinito lo stesso messaggio."

prosperous future, he decided to become a chemist because chemistry represented "a indefinite cloud of future powers" which enveloped his coming time "in black circles lacerated by lights of fire, like that which concealed the Sinai Mount."5 Later, in a dialogue with the Italian scientist Tullio Regge, Levi remembered that during his time at the university, he was "substantially a romantic and also in chemistry it was the romantic aspect that interested me. I hoped to go very far, to the point of possessing the universe, to understand the why of things. Now I know it doesn't exist, the why of things, at least that's what I believe, but then I really believed in it" (Levi, 1984: 13)6. In addition to the laws of molecules, in chemistry Levi hoped to find the laws on which ethical choice is founded; therefore his decision to study chemistry "was substantially a research of meaning: a sort of construction of own personality in relation to that of cosmos" (Di Meo, 2011: 14)7, thanks to the knowledge of the laws that govern nature and of those which govern human beings, in their capacity as moral beings. Through chemistry, Levi learned to know nature by discovering the order that controls each one of its minimal parts, that is, molecules and cells; and moreover, he learned to know himself through the play of analogies between moral life and chemistry. Therefore, for Levi, literary writing also produced a sort of knowledge, because he considered it "like a learning process through tests and errors like (even though less reliable) the scientific one"

5 "Una nuvola indefinita di potenze future"; "in nere

volute lacerate da bagliori di fuoco, simile a quella che

occultava il monte Sinai" (Levi, 1997g: 758).

(Cicioni, 1989: 265)⁸, composed by a series of essential actions: "filtering, distilling, decanting, sublimating, correcting, condensing, weighing, and separating" (Scarpa, 1997: 233)⁹.

For Levi, the same actions that characterise the chemist's work must characterise literary art, because if writing must communicate knowledge then it has to be clear, essential and ordered as if it arose from the work of an assembler able to bring together pieces into a balanced machine or from the work of a chemist who, by finding some sort of order in raw matter – the hyle¹⁰ –, gives a sense to the world. Both in scientific and in literary fields. order as conceived by Levi has a very particular meaning and differs deeply from the order of scientific thought, which from Galileo through Newton arrives, at its culmination, 'to' Positivism, where nature is a perfect mechanism. Consequently, from the positivistic standpoint, discovering nature's laws corresponds to knowing the world objectively and to predicting, controlling and dominating it¹¹.

According to Levi, on the other hand, order is not an absolute connected to the concepts of perfection or purity. On the contrary, order is the fruit of the processes of knowledge and human activity aimed at creating those representations that permit the interpretation of life and at making sense out of it insofar as they adhere to historical reality. From this perspective, Levian order paradoxically has in itself the germ of disorder: by the same token, purity could not be what it is if it had not in itself the vital

⁶ "Sostanzialmente un romantico e anche della chimica mi interessava l'aspetto romantico, speravo di arrivare molto in là, di giungere a possedere la chiave dell'universo. Adesso so che non c'è il perché delle cose, almeno così credo, ma allora ci credevo abbastanza" (Levi, 1984: 13).

⁷ "Era stata principalmente una ricerca di significati: una sorta di costituzione della propria personalità in relazione a quella del cosmo."

⁸ "Come un processo di apprendimento attraverso prove ed errori simile anche se meno affidabile di quello scientifico."

⁹ "Filtrare, distillare, decantare, sublimare, rettificare, condensare, pesare, separare."

 $^{^{10}}$ Hyle is the greek word for matter and Levi himself uses this word.

¹¹ This argument aroused interest in many authors: for deeper insight I refer to Feyerabend (2002).

germ of impurity. Literary writing ideally shares with technical writing clarity and simplicity, while technical writing shares with literary writing inexactitude: thus, the language of chemistry, although crystalline, maintains in itself something of the mysterious language of alchemy. Since inexactitude is necessary to life, if one speaks about true order one should also include its opposite, disorder: this means that in nature order "is such only when it stays in constant tension against the strengths that aim to desegregate it" (Cases, 1988: XII)12. In other words, order by contemplating the possibility of disorder and diversity distances itself from the concept of absolute purity, which has no correspondence in nature: for Levi, in chemistry as in literature purity is nothing more than the product of distillation, i.e. the product of that "slow, philosophic, and silent occupation, which keeps you busy but gives you time to think of other things" (Levi, 1995: 34)13, and that produces metamorphosis, which consists in a sequence of changes of state ending with the increase in purity of elements. In this case too, one always needs to consider that purity can be obtained only if ab origine there is some impurity. For this reason Levi, rather than acclaiming purity to be like an 'armour' that protects from impurities – i.e. from evil – acclaims impurity without which life would not be: in fact, "in order for the wheel to turn, for life to be lived. impurities are needed [...] but immaculate virtue does not exist either, or if it exists it is detestable" (37)14.

Another substantial difference between the two forms of writing is that while it is possible to learn how to write a factory report or any technical communication, it is quite impossible to learn how to write literature. This is not a transmittable profession like any other practical activity; at most, - as Levi wrote answering a letter by a "young reader" who asked for advice on how to narrate a story, - it is possible to give generic indications founded on one's own experience and one's own way of perceiving writing. Levi's general advise consists in: 1. when the text is finished, leave it to decant because only after a few days "one almost always realises to have sinned by excess, that the text is redundant, repetitive, prolix: or at least, I repeat, that is what happens to me" (Levi, 1989b: 209)¹⁵; 2. try to give the largest amount of information in the smallest space, which is made possible by searching for a variety of possible synonyms and by choosing the most adequate, since "there is always one which is 'more right' than the others: but often it is necessary to look for it;" (209)16 3. be aware of the original meaning of words because thus only words can be used in the most appropriate way, as for example the word "unleash" used for "free from leashes [...] not all readers will notice the artifice, but they will at least perceive that the choice wasn't obvious, that you have worked for them, that you have not followed the line of least resistance" (208)17

¹² "È tale solo quando è in continua tensione contro le forze che tendono a disgregarlo."

[&]quot;Mestiere lento, filosofico e silenzioso, che ti occupa ma che ti lascia tempo di pensare ad altro" (Levi, 1997g: 789).

¹⁴ "Perché la ruota giri, perché la vita viva, ci vogliono le impurezze, e le impurezze delle impurezze [...] neppure la virtù"; "immacolata esiste, e se esiste è detestabile" (Levi, 1997g: 768).

¹⁵ "Ci si accorge che si è peccato per eccesso, che il testo è ridondante, ripetitivo, prolisso: o almeno, ripeto, così capita a me" (Levi, 1997h: 846).

¹⁶ "Ce n'è sempre uno che è 'più giusto' degli altri: ma spesso bisogna andarlo a cercare" (Levi, 1997h: 846).

¹⁷ "Togliere le catene [...] non tutti i lettori si accorgeranno dell'artificio, ma tutti percepiranno almeno che la scelta non è stata ovvia, che Lei ha lavorato per loro, che non ha seguito la linea della massima pendenza" (Levi, 1997h: 847).

3. Writing as an experiment

Levi believes that the impossibility of learning how to write literature is something good because if learning were possible "all writers would write in the same way, these generating such an enormous mass of boredom as to render vain any attempt to pass it off as Leopardian, and to trip the automatic switches of the most indulgent readers due to over-load" (207)18. Levi faces the problem of literary writing conceived as a reproduction of models in Storie Naturali (The Sixth Day and other Tales), which features a group of short stories whose main characters are the I-narrator and his antagonist, the American retailer of electronic machines "Signor Simpson". These tales represent the promethean aspiration to reproduce life and its fundamental aspects by mechanical supports: mechanical reproduction of art (Il versificatore), of matter (L'ordine a buon mercato), of human beings (Alcune applicazioni del Mimete), of aesthetical judgment (La misura della bellezza), of work (Pieno impiego) and of experience (Trattamento di quiescenza). Il versificatore, the first tale devoted to the question of the technical reproduction of poetic language¹⁹, is the story of a poet who writes sonnets, hymns and other poetical compositions on demand for any occasion, weddings, funerals e other anniversaries. Overloaded with requests, one day he decides to buy from Signor Simpson the machine that produces mechanical poetic compositions, despite the doubts of his secretary who does not understand how a computer could substitute artistic genius and its sensibility, fantasy and taste:

Secretary: Maestro... I... I have worked with you for fifteen years... so... forgive me, but... if I were in your shoes I would never do such a thing. I do not say that for me, you know: but a poet, an artist like you... how can you accept to have a machine at home [...] as modern as you wish, but just a machine [...] how can it have your taste, your sensibility. (Levi, 1997d: 419)²⁰

The mechanism of the machine is really easy: it is sufficient to insert three or four words, then choose tone, style, genre, and finally the metrical form. As first test to evaluate the effectiveness of the machine, the poet paradoxically chooses the theme "limits of human genius. Jerk, buzzer, three signals short and one long", and after that the versificator, with a 'metallic voice" says:

Oh foolish brain, why d'you stretch your bow?
Why, though in the struggle that makes you
you waste your hours night and day
he lied, he lied who described you as sacred
The lust of following knowledge
And as fine honey its acre juice. (424)²¹

In this first test there is already something strange: the word 'acro', for example, does not sound Italian to the poet's ear because the correct word is 'acre'. But, as it is written in the vade mecum, the machine is able to produce poetic license in order to create proper rhymes. In addition it almost seems that the machine is capable of feeling emotion. When, asked about free time, it answers:

¹⁸ "Tutti gli scrittori scriverebbero allo stesso modo, generando così una mole di noia tale da vanificare qualunque tentativo di farla passare per leopardiana, e da far scattare per sovraccarico gli interruttori automatici dei lettori più indulgenti" (Levi, 1997h: 846).

¹⁹ The text is structured as a theatrical pièce with dramatis personae at the beginning (the poet, the secretary, signor Simpson, il versificatore, Giovanni) and a prologue.

²⁰ "Segretaria: maestro... io... io lavoro con lei da quindici anni... ecco, mi perdoni, ma... al suo posto non farei mai una cosa simile. Non lo dico mica per me, sa: ma un poeta, un artista come lei... come può rassegnarsi a mettersi in casa una macchina [...] moderna finché vuole, ma sarà sempre una macchina [...] come potrà avere il suo gusto, la sua sensibilità."

²¹ Cerèbro folle, a che pur l'arco tendi? / A che pur, nel travaglio onde se' macro / Consumi l'ore, e dì e notte intendi? / Mentì, mentì chi ti descrisse sacri / Il disio di seguire conoscenza / E il miele delicato il suo succo acro.

A girl to take to bed
Nothing is better, so they say.
I would not dislike a try.
What an experience would it be:
But for her, o poor girl, what a pain!
This frame of mine is too hard.
Brass, bronze, cast iron and Bakelite;
She pushes her hand and meets a screw;
she tends her lips and finds a brush;
she holds me to her breast
and shock's all what she gets (428)²².

For Levi, unlike the others praxes that produce tangible objects, poiesis does not need manual skill because poetry is born, not from the hand - which Levi considers a 'noble organ" (Levi, 1984: 20) - but from an intellectual act. For this reason, from the final ironic overturning, where the narrator confesses that the whole tale is the product of the machine, it follows that computer could be a very useful means because it facilitates writing thanks to the "facility of cancelling, correcting, adding and replacing;"(Levi, 1997b: 1264)²³ but its services like "to mark repetitions, alliterations, rhymes, anaphors voluntary or not... they will never make a poet out of a laic and they will never exalt his genius nor will they, nevertheless, degrade it."24 Essentially, Levi considers writing performed by computer as a means of literary writing because even if he cannot provide scientific demonstration, he believes that a computer can only accomplish logical operations and therefore produces syntheses from fortuitous combinations of words, while

"poetry is higher that logic and chance: it can contain both of them in itself, but is wider" (Levi, 1997c: 1266)²⁵. In fact, when choosing words, the versificatore works mechanically because it has not the aesthetic-critical ability to value and to choose on the basis of judgment. What differentiates literal and technical writing is, in the last analysis, the faculty of judgment founded on aesthetic sentiment²⁶.

This is the theme of the short story called *La* misura della bellezza, where during the summer holiday the narrator meets Signor Simpson on the beach, occupied on a curious activity: pictures with an odd machine of all pedestrians, whatever they look like, young, old, women, or men. The secret is soon revealed: Simpson is actually testing a new product aimed at measuring the level of beauty in people. In this case too, the functioning of the machine is really basic: one just has to give coordinates concerning two models of beauty, one for men and one for women, and later to verify how the machine has evaluated people's appearance. According to the philosophy of the new machine, beauty "is relative to a model, variable at will, at the judgment of fashion" (Levi, 1991: 85)27, therefore in order to be considered beautiful one just needs to stay within determined

²² Una ragazza da portare a letto/Non c'è nulla di meglio, mi hanno detto./ Non mi dispiacerebbe far la prova,/Per me sarebbe un'esperienza nuova:/Ma per lei, poveretta, che tortura!/Quest'intelaiatura è troppo dura./Ottone, bronzo, ghisa, bachelite:/Tende la mano ed incontra una vite/Tende le labbra ed incontra una brossa/Mi stringe al seno, e si prende la scossa

²³ "Facilità con cui si cancella, corregge, aggiunge e sostituisce" (Levi, 1997b: 1264).

²⁴ "Segnalare le rime, le ripetizioni, le allitterazioni, le anafore, volontarie o no... non faranno mai di un laico un poeta né di un poeta esalteranno la vena; ma neppure gliela inquineranno" (Levi, 1997b: 1265).

²⁵ "La poesia è maggiore della logica e del caso: può contenerli in sé entrambi, ma è più ampia."

According to Kant, the aesthetic sentiment is the agreement born form the free play between our faculties, imagination and intellect, with which the judgment of taste is determinate: for this reason there is not any concept a priori at the ground of the statement this thing is beautiful. "Such a judgment is an aesthetic judgment on the purposiveness of the object and does not furnish one [...] this pleasure in the representation of such an object – with its representation this pleasure is also judged to be necessarily combined, consequently not merely for the subject who apprehends this form but for everyone who judges at all. The object is then called beautiful; and the faculty for judging through such a pleasure (consequently also with universal validity) is called taste" (Kant, 76).

²⁷ "È relativa a un modello, variabile a piacere, ad arbitrio della moda" (Levi, 1997d: 500).

parameters chosen a priori. Further, in this tale it is the feminine character, the wife of the I-narrator, who raises doubts about the presumed practical and moral validity of the machine: rather than an evaluator of beauty the contraption seems to be a means to measure conformity "and is therefore an exquisitely conformist instrument" (88)²⁸.

For Levi, beauty and all that concerns aesthetics and ethics can neither be determined by a model, nor established by the whims of the fashion market, nor by the principle of de gustibus non disputandum est. If in all aesthetic judgments beauty cannot be regulated by any determinate norm, then beauty is ungraspable and this means that it can be recognised but not defined²⁹. For this reason Levi states that it is possible to learn a technique, a manual work but

how to write poetry cannot be taught in school: for the same reasons why nobody is taught how to speak or walk. These are activities to which we are genetically predisposed and that we learn to perform easily and with pleasure, although not spontaneously. We do not need for study; we just need examples, which is enough; starting from that each of us develops the personal style that characterized his wit, walking style as well as his verse. (Levi, 1997c: 943)³⁰

28 "E quindi uno strumento squisitamente conformista" (Levi, 1997d: 502).

Through examples, which only show possibilities but do not produce any norms on how to act, one perfects his own ability in writing, while building his own style. In fact, if there were a model to establish what beauty is, or what good is insofar as a model represents a perfect prototype, then aesthetic and ethical judgments would be founded on a pre-judgement. In this case, literature would be deprived of its purpose, i.e. to bring clarity to those aspects of existence that cannot be known rigorously via scientific definition since they are not within the necessity of nature's cause and effect process. The most significant difference between technical and literary writing resides in the fact that while the former permits the definition and description of the object, the latter. on the contrary, allows the representation of the possibilities of the object. In both cases, clarity must be an essential quality because, in its absence, what the writer wants to express risks not being understood and appearing confused. In La chiave a stella the protagonist Faussone, a technician in industrial works, is always clear when narrates his adventures connected with his work, and although he very often opens digressions or uses dialect word forms, his speech is always comprehensible to his listener. Therefore, when at the end of the book his listener, i.e. Primo Levi, narrates his own story, Faussone immediately stops him to ask for clarification:

hold it a minute. While I was telling you stories about my job, you have to admit, I never took advantage. I know you're all pleased with yourself now, but you mustn't take advantage, either. You have to tell things so people can understand; otherwise the game's over. Or are you already on the other side: one of those people who write and then the reader has to fend for himself

²⁹ However, the aesthetic judgment of its very nature is universal even if it has not any concept at its basis. This means that it is not possible to say everybody must judge this object to be Beautiful; it is possible to say that everybody must be able to judge this object to be beautiful.

³⁰ "Poetare non s'insegna a scuola: per gli stessi motivi non s'insegna a parlare né a camminare. Sono tutte attività per cui siamo geneticamente predisposti, e che impariamo a svolgere con facilità e piacere, anche se non spontaneamente. Non ci occorre lo studio, ci occorre (e basta) l'esempio; a partire dal quale, ognuno di noi sviluppa quello stile personale che informa la sua parola, il suo passo e il suo verso."

since he's already paid for the book anyway? (Levi, 1987: 169)³¹

The interplay of narration on the one hand requires the narrator's willingness to be understood by his listener and, on the other hand, the latter's willingness to receive the story without interrupting with questions that break the rhythm, and force the narrator to give explanations irrelevant to the story itself. While Faussone tells the story of an error made during his work, his listener wants to stop him to ask for deeper insight, but he restrains himself

to keep from a spoiling his story. In fact, just as there is an art of story-telling, strictly codified through a thousand trials and errors, so there is also an art of listening, equally ancient and noble, but as far as I know, it has never been given any norm. And yet every narrator is aware from experience that to every narration the listener makes a decisive contributing: a distracted or hostile audience can unnerve any teacher or lecturer; a friendly public sustains. (35)³²

As the listener engages himself in listening, so the narrator himself engages in telling things as they occurred: therefore, Faussone tells the truth. The fact that stories are sometimes told with emphasis does not mean that they are false; Faussone explains: "I don't believe that's a sin, because anybody who listens to me catches on immediately" (99)³³. If one pretends to play, if one or the other breaks the implicit narrative pact, the play loses its meaning. For Levi, when literature loses clarity it misses its aim because if the aim of writing is to communicate then anyone who utilizes abstruse language "who is not understood by anyone does not transmit anything, he cries in the desert" (Levi, 1989b: 159)³⁴.

4. The ethical consequences of language

Communication is so important for Levi that in I sommersi e i salvati he defines the obscurity of language as a sin that leads to incomprehension: "one can and must communicate [...] to say that it is impossible to communicate is a failing; one always can" (Levi, 1988: 68-69)35. Thus, there is a crossreference of analogies between the modus scribendi and the modus vivendi, as a consequence bad writing is an immoral act that impedes communication and as such produces evil; so that in comparison with chemistry, "bad writing, therefore, would be like realising non-plausible molecules" (Di Meo, 2011: 49)³⁶. In Levi the tendency towards clarity and simplicity of language, which does not leave any space to the oratorium artificium, had developed since he was at the university, i.e. since when "the direct confrontation with matter, the analysis,

³¹ "Un momento. Finché sono stato o a raccontarle le storie del mio mestiere, lei o deve ammettere, io non ho mai profittato. Capisco che oggi lei è contento, ma anche lei non deve approfittarsene. Deve raccontare le cose in una maniera che si capiscano, se non non è più un gioco. O non è che lei è già dall'altra parte, di quelli che scrivono e poi quello che legge si arrangia, tanto orami il libro lo ha già comprato" (Levi, 1997f: 1103).

³² "Come avesse potuto commettere una dimenticanza così grave, ma mi sono trattenuto per non guastare il suo racconto. Infatti, come c'è l'arte di raccontare, solidamente codificata attraverso mille prove ed errori, così c'è pure un'arte dell'ascoltare, altrettanto antica e nobile, a cui tuttavia, che io sappia, non è stata mai data norma. Eppure, ogni narratore sa per esperienza che ad ogni narrazione l'astratto od ostile snerva qualsiasi conferenza o lezione, un pubblico amico la conforta" (Levi, 1997f; 973).

³³ "Credo che non sia peccato, perché tanto chi sta a sentire si accorge subito" (Levi, 1997f: p. 1034).

³⁴ "Non viene capito da nessuno, non trasmette nulla, grida nel deserto" (Levi, 1997h: 678).

³⁵ "Comunicare si può e si deve [...] Negare che comunicare si può è falso: si può sempre. Rifiutare di comunicare è colpa" (Levi, 1997e: 1059-1060).

³⁶ "Scrivere male sarebbe, dunque, come realizzare molecole non plausibili."

the experimental research became the key to face the world, to build the self and to understand the other" (Mattioda, 2011: 16)³⁷. When the other is transfigured into literary language, he must be represented not in a rhetorical but rather in an essential way. In *La chiave a Stella* the narrator says:

I promised Faussone I would be very careful to follow his indications, and under no circumstances would I yield to the professional temptation to invent, embellish, and expand; and therefore I would add nothing to his report, though I might pare away a little, as the sculptor does when he carves the form from the block. And Faussone declared himself in agreement. (Levi, 1987: 113)³⁸

While simplicity in technical writing means simplification of language and thought, in literary writing it paradoxically means union of 'clear and difficult', 'easy and complex' because if writing means making order, then one needs not "to respond chaos of universe whit chaos of writing" (Scarpa, 1997: 128-9)³⁹. Therefore, Levi "does not love nor looks for ambiguities, in which sometimes poetry dwells, but also the blurring of values" (Segre, 1989: VIII)⁴⁰ and constantly shows antipathy for "the vague and imprecise words, the cult of the exact expression, of the well sorted synonymous, are in fact the linguistic

correspondence of the difference between sodium and potassium" (Cases, 1990: 23)⁴¹.

These two elements differ from one another because potassium in contact with air reacts more energetically than sodium, and in water it reacts with hydrogen and becomes inflammable. as Levi himself would experience during experiment an distillation: he decided to pour potassium instead of sodium into a ball from which, when brought in contact with water, a flame came out toward the window and put the curtains on fire, so saturating the air with smoke. Moral of the tale: from this chemical experience Levi learnt to "distrust the almostthe-same [...] the practically identical, the approximate, the or-even, all surrogates, and all patchwork" (Levi, 1995: 65)42, because from differences, even if minimal, serious consequences could flow. The same happens with words, which means that, because names represent the essence of things, nominating things always consequences: on the one hand "give a name to thing is gratifying like give a name to an isle"; on the other hand it is dangerous because after the object has been baptised there is the risk of "becoming convinced that all is taken care of and that once named the phenomenon has also been explained" (Levi, 1989b: 146)43.

³⁷ "Il confronto diretto con la materia, l'analisi, la ricerca sperimentale diventavano le chiavi con le quali affrontare il mondo, costruire il sé e comprendere l'altro".

³⁸ "Ho promesso a Faussone che mi sarei attenuto con la miglior diligenza alle sue indicazioni; che in nessun caso avrei ceduto alla tentazione professionale dell'inventare, dell'abbellire e dell'arrotondare; che perciò al suo resoconto non avrei aggiunto niente, ma forse qualche cosa avrei tolto, come fa o scultore quando ricava la forma dal blocco; e lui si è dichiarato d'accordo" (Levi, 1997f: 1048).

³⁹ "Rispondere col caos della scrittura al caos dell'universo."

⁴⁰ "Non ama e non cerca l'ambiguità, in cui talora risiede la poesia, ma anche la confusione dei valori."

⁴¹ "Le parole vaghe e imprecise, il culto dell'espressione esatta, del sinonimo ben scelto, sono infatti il corrispondente linguistico della differenza tra sodio e potassio."

⁴² "Diffidare del quasi-uguale [...] del praticamente identico, del pressappoco, dell'oppure, di tutti i surrogati e di tutti i rappezzi" (Levi, 1997g: 791).

⁴³ "Dare un nome a una cosa è gratificante come dare il nome a un'isola ";"convincersi che il più sia fatto e che il fenomeno battezzato sia anche spiegato" (Levi, 1997h: 759).

5. Metaphors and similitudes

As for Aristotle, according to whom every discourse is "significant not like a natural instrument, but conventionally," (Aristotele, 2011: §4 17a 34, p. 60)44 so also for Levi a name (ònoma) does not derive from a divine mind but is a conventional sound and a graphical sign created by men. To pronounce the name of things does not mean to know what the thing is. However, while in scientific language words have to possess one and only one meaning and have to indicate one and only one object in order not to create confusion, in literary language they have to be able to express a different meaning from the usual one, i.e. a translated meaning. The translated meaning is fundamental in cases where one has to speak about something whose very nature escapes logical language: ethics, aesthetics and religion⁴⁵. In these cases words and propositions cannot have a logical equivalent in reality and therefore do not refer to a fact or a state of affairs. He affirmed that the statement 'in the situation x it is really cold' does not give any idea of the intensity of the coldness in question, but it is like affirming that 'in the situation x people are really hungry' does not give any idea of the intensity of hunger. One does however feel the need to 'have to tell' that urges to go beyond the insufficiency of logical language, in order to discover different ways of expression, like metaphor. In metaphor words are used in an allotropic and foreign way unlike in their common use; in metaphor, a different possible use of words is shown, one which produces new sense. For this reason metaphor does not explain anything and does not refer to anything real but puts before our eyes what is habitually veiled⁴⁶. This capability also constitutes the danger of metaphor precisely because the fact that it does not refer to a state of affairs and because it does not explain anything but only shows what could not be achieved in other way, it can miss its purpose, which is producing knowledge: in this case metaphor is not created in a proper way and produces confusion. Levi, in La chiave a stella, reprimands Faussone by telling him:

you have to be careful with similes, because they may be poetic, but they don't prove much, so you have to watch your step in drawing educational or edifying lessons from them. Should the educator take as his model the smith, who roughly pounds the iron and gives it shape and nobility [...] beware of analogies: for millennia they corrupted medicine, and it may be their fault that today's pedagogical system are so numerous, and after three thousand

⁴⁴ "Significativo non già alla maniera di uno strumento naturale, bensì, secondo quanto si è detto, per convenzione."

⁴⁵ The world, i.e. "the world is all that is the case" (Wittgenstein, 2010, 5, prop. 1), is composed of the totality of facts, i.e. of the relations between the 'state of affairs" (5, prop. 2). For Wittgenstein states of affairs are represented by language because there is a correspondence, or better an logical homology, between them: the image of a proposition "can depict any reality whose form it has" (11, prop. 2.171) but it cannot represent its own form of depiction but only exhibit it. This because "in order to be able to represent logical form, we should have to be able to station ourselves with propositions somewhere outside logic, that is to say outside the world," (31, prop. 4.12) but this is not possible: philosophy can only be delimited by the borders of the natural sciences, i.e. what can be thinkable from inside. That means that "what cannot be said, by presenting clearly what can be said" (30, prop. 4.115). Ethics cannot be said because it "is transcendental" (86, prop. 6.421) For Wittgenstein, being a sentiment and not a fact of the world, ethics cannot be expressed in logical language. For this reason Wittgenstein writes in the Preface of the Tractatus that "what can be said at all be said can be said clearly, and what we cannot talk about we must pass over in silence." (3) and finishes with one solitary proposition: "what we cannot speak about we must pass over in silence" (109, prop. 7).

⁴⁶ In Rhetoric Aristotle writes that metaphors produce knowledge when they are well formed, i.e. when tõ poieîn tò prãgma prò Ommátôn they put "the matter before the eyes," (2, 1405b, p. 359.)

years of argument we still don't actually know which is best. (Levi, 1987: 77)⁴⁷

The metaphor and similitude do not determine anything and their sense is always imprecise and vague: for this reason they cannot be interpreted literally and cannot be used where stricter rigour is instead required, i.e. in scientific statements. Half ironically, the narrator tells Faussone that unlike in practical arts imprecision of literary words does not kill anybody:

on the towers we construct they don't run any high-tension lines; if our structure fall, nobody gets killed, and they don't have to be wind-resistant. In other words, we're irresponsible, and no writer has ever been put on trial or sent to jail because his constructions came apart. (52)⁴⁸

But a writer has great responsibility because, even if he cannot be legally accused in the event of writing a bad book, his writing would affect reality: telling a false story pretending it to be real or formulating a metaphor that creates confusion and not clarity has moral consequences. Therefore, on the one hand, metaphors are necessary to show that of which one cannot speak and to produce that sort of knowledge that could not be achieved in other way: on the other hand, when only used rhetorical metaphor is as embellishment that does not produce knowledge, it is also deprived of its ethical value. The question is complex if one thinks that while it is possible to teach the technique to assemble a stable tower fit for its purpose, there is no possibility of teaching anyone how to compose good metaphors⁴⁹, "unless, indeed, I teach him some way of hearkening, some kind of receptivity" (Wittgenstein, 1958: 87, §232).

The problem of how to be able to metaphorize concerns the individual because it is a personal virtue that cannot be taught but could at most be shown in examples. It is not easy, indeed, to say when a metaphor is good or bad: this may be due either to some lack of perspicuity or most easily, a lack of willingness to acknowledge errors; in *La chiave a stella* Levi explains Faussone that

it's easier to see if a piece of metal structure is 'right on the bubble' than a written page; so you can write a page with enthusiasm, or even a whole book, and then vou realize it won't do, that it's a botch, silly, unoriginal, incomplete, excessive, futile [...] but it can also happen that you write some things that really are botched and futile (and this happens often) but you don't realize it, which is far more possible, because paper is too tolerant a material. You can write any old absurdity on it, and it never complains: id doesn't act like the beams in mine tunnels that creak when they're overburdened and are about to cave in. In the job of writing the instruments, the alarm systems are rudimentary: there isn't even a trustworthy equivalent of the T square or the plumbline. But if a page is wrong the reader notices, and by then it is too late, and the situation is bad, also because that page is your work, only yours: you have no

^{47 &}quot;Che con le similitudini bisogna stare attenti, perché magari sono poetiche ma dimostrano poco: perciò si deve andare cauti nel ricavarne indicazioni educative-edificanti. Deve l'educatore rendere esempio dal fucinatore, che battendo rudemente il ferro gli dà nobiltà e forma [...] alla larga dalle analogie: hanno corrotto la medicina per millenni e forse è colpa loro se oggi i sistemi pedagogici sono così numerosi, e dopo tremila anni di discussione non si sa ancora bene quale sia il migliore" (Levi, 1997f: 1013).

⁴⁸ "Sui tralicci che costruiamo noi non passano i cavi ad alta tensione, se crollano non muore nessuno, e non devono neppure resistere al vento. Siamo insomma degli irresponsabili, e non si è mai visto che uno scrittore vada sotto processo o finisca in galera perché le sue strutture si sono sfasciate" (Levi, 1997f: 988).

⁴⁹ Aristotle writes: "above all that which gives perspicuity, pleasure, and a foreign air and it cannot be learnt from anyone else" (Aristotle, 1975: 355, III, 1405a §2).

excuses or pretext; you are totally responsible. (Levi, 1987, p. 48)⁵⁰

Unlike the common use of words that everybody can understand, the metaphorical use of words is possible thanks to the ability to see connections and to have "an eye for resemblances" (Aristotle, 1973: 91, §22, 1459a 3-7) or seeing similarities. From this point of view the exactitude-inexactitude of literary language differs from scientific language because it has its origin in metaphor that, for Levi, does not have a function of embellishment but has a "actualizing and cognitive function" (Segre, 1988: LXIII).

Therefore, metaphor with its capability to show similarity in dissimilarity has an ethical and cognitive value: where the exactitude of technical language fails as inadequate, the exactitude-inexactitude of literary language becomes essential. But the exactitude-inexactitude of literature has to be supported every time by the ethical will because, for Levi, the writer carries great responsibility for what he writes "word by word" (Levi, 1989b: 162). The writer, in conclusion, must decide not to lie and not to use the privileged form of literature, the metaphor, as a rhetorical embellishment in order to create

aestheticizing effects, but he must decide to use it to represent that which could not otherwise be represented. It is a fundamental imperative for the writer to choose ethical writing because what happens in history "can happen, and it can happen everywhere [...] it is necessary to sharpen our senses, distrust the prophets, the enchanters, those who speak and write 'beautiful words' unsupported by intelligent reasons" (Levi, 1988: 167)⁵¹.

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^{50 &}quot;È facile accertarsi se è 'in bolla d'aria' una carpenteria metallica che non una pagina scritta: così può capitare che uno scriva con entusiasmo una pagina, o anche un libro intero, e poi si accorga che non va bene, che è pasticciato, sciocco, già scritto, mancante, eccessivo, inutile [...] Ma può anche capitare che uno scriva delle cose, appunto, pasticciate e inutili (e questo accade di sovente) e non se ne accorga e non se ne voglia accorgere, il che è ben possibile, perché la carta è un materiale troppo tollerante. La puoi scrivere sopra qualunque enormità, e non protesta mai: non fa come il legname delle armature nelle gallerie di miniera, che scricchiola quando è sovraccarico e sta per venire un crollo. Nel mestiere di scrivere la strumentazione e i segnali d'allarme sono rudimentali: non c'è neppure un equivalente affidabile della squadra e del filo a piombo. Ma se una pagina non va se ne accorge chi legge, quando ormai è troppo tardi, e allora si mette male: anche perché quella pagina è opera tua e solo tua, non hai scuse né pretesti, ne rispondi appieno" (Levi, 1997f: 984-985).

⁵¹ "È accaduto, quindi può accadere di nuovo: [...] occorre quindi affinare i nostri sensi, diffidare dai profeti, dagli incantatori, da quelli che dicono e scrivono 'belle parole' non sostenute da buone ragioni" (Levi, 1997e: 1150).

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