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Outbound di Brad R.  
Torgersen: proposta di  
traduzione

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## **Abstract**

El género de ciencia ficción tuvo un gran éxito entre los años treinta y cincuenta de 1900. Desde aquella época, llamada *Golden Age of Science Fiction*, su popularidad, como subgénero literario, está gradualmente disminuyendo, sobre todo por la intervención del cine y de Internet.

En este trabajo se propone la traducción del inglés al italiano del cuento breve *Outbound* del autor Brad R. Torgersen, una obra de ciencia y ficción que en 2010 recibió el premio *Analog magazine 'AnLab' Readers' Choice Award*.

El trabajo se compone de tres partes: en la primera aparece una introducción, en la que se incluyen informaciones sobre el autor y sus otras obras, se presentan las razones de la elección de esta novela y se identifica la tipología textual del prototexto, describiendo los problemas principales de la traducción literaria y las características generales de los textos de ciencia ficción. En esta parte también se analiza el prototexto y sus características, desde el punto de vista estilístico, léxico y morfosintáctico. En la segunda parte se presenta el texto original y la propuesta de traducción. Finalmente, la última parte consta del comentario traductológico, en el que se analizan algunos ejemplos de los problemas de traducción que se han encontrado en el ámbito estilístico, léxico y morfosintáctico, y se comentan las soluciones adoptadas y los casos de variación entre el prototexto y el metatexto. En esta última parte se proponen algunas hipótesis sobre la traducción de los textos de ciencia ficción, en particular sobre el léxico específico de este género literario.

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# 1 Introduction

## 1.1 The Author

In his short biography<sup>1</sup>, Brad R. Torgersen describes himself as a "healthcare computer geek by day, a United States Army Reserve Chief Warrant Officer on the weekend, and a Science Fiction and Fantasy writer by night". He was born in 1974 and currently lives in northern Utah. He was nominated in 2012 for the Campbell Award for Best New Writer in professional Science Fiction and Fantasy and his stories and collaborations appeared on the pages of several popular science-fiction publications, such as *Analog Science Fiction and Fact*, *Orson Scott Card's Intergalactic Medicine Show*, *ESLI*, *Nowa Fantastyka* and other anthologies. His novelette "Outbound" (2010) acquired him the *Analog magazine 'AnLab' Readers' Choice Award* and was featured in the anthology *Into the New Millennium: Trailblazing Tales From Analog Science Fiction and Fact, 2000 – 2010*. The same year, his novelette "Exanatstasis" won the L. Ron Hubbard Writers of the Future Contest. In 2011, his short story "Ray of Light" got him nominated for both the World Science Fiction Society Hugo Award and the Science Fiction & Fantasy Writers of America Nebula Award.

## 1.2 Outbound

"Outbound" was first published in 2010 in the *Analog Science Fiction and Fact Magazine*, and was appreciated both by readers and other authors and professionals such as Dean Wesley Smith and Dr. Jonathan Vos Post.<sup>2</sup>

Other than *Analog*, it was re-published in the Russian magazine *ESLI*, in the anthology *Into the New Millennium: Trailblazing Tales From Analog Science Fiction and Fact, 2000 – 2010*, and it is now available both in Kindle and eBook format respectively in the Amazon and the Barnes and Nobles websites.

The main objective of the translator in choosing this short story was to deal with the challenges posed by literary translation and particularly translation of the literary

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<sup>1</sup> Torgersen, B. T. (2011). *Outbound*. Silent Forge Press.

<sup>2</sup> [www.bradrtorgersen.com](http://www.bradrtorgersen.com)

genre of science fiction. Furthermore, because science fiction is not as popular a genre as others in Italy, I thought it would be interesting to translate a novelette written by one of the newest and promising authors of the genre.

Before proceeding to the analysis of the text, it is important to first identify and examine its text type and genre in order to take into account the different problems of translation they imply.

### 1.3 Expressive texts and literary translation

In translation studies, a significant problem has always been the criteria according to which the quality of a translation can be judged. Many theories have been suggested to answer this question, and most scholars seem to share the importance of the distinction of *functions* or *text types*, which has its basis on Bühler's functional theory of language. Christopher Taylor, in his book *Language to language*<sup>3</sup>, summarizes Bühler's three basic functions of languages as such:

- The informative function, which provides information about the real world;
- The expressive function, which provides an outlet for speakers and writers to express and exploit their creative skills;
- The vocative function, which persuades or influences others.

Amid these three functions, literary texts are generally thought to belong to the expressive function category.

Newmark also refers to Bühler's functional theory, as adapted by Jakobson, to distinguish between text types: *expressive*, *informative*, *vocative*, *aesthetic*, *phatic* and *metalingual*. According to him, "the core of the expressive function is the mind of the speaker, the writer, the originator of the utterance. He uses the utterance to express his feelings irrespective of any response."<sup>4</sup> The aesthetic function can also play an important role in literary translation as a literary text can also make use of sound effects (like onomatopoeias, alliteration, rhyme, intonation) or metaphors.<sup>5</sup>

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<sup>3</sup> Taylor, C. (1998). *Language to language - a practical and theoretical guide for Italian / English translators*. Cambridge: Cambridge University Press., p. 117

<sup>4</sup> Newmark, P. (1988). *A Textbook of Translation*. New York: Prentice Hall., p. 39

<sup>5</sup> Newmark, P. (1988). *A Textbook of Translation*. New York: Prentice Hall., p.42-43

Katherine Reiss distinguishes between *informative, expressive, operative* and *audiomedial* text types and classifies *creative composition* as *expressive* text type.<sup>6</sup>

The distinction between different text types and functions is generally considered crucial as it is strictly related to the translation method and the strategies to be applied when facing a specific kind of text. Therefore, depending on the text's function, the translation will focus on different levels. This theory is of great importance because it elucidates one of the main problem that has always been at the core of translation studies: whether the translation should be literal, free or something in-between.

In *A textbook on translation*<sup>7</sup>, Newmark classifies different translation methods depending on the emphasis put on the source language or the target language:

SL-emphasis:

- Word-for-word translation: interlineal translation, in which the TL appears below the SL. The word order is the same as the source text and the words are translated out of context;
- Literal translation: the SL grammatical structures are translated into the closest TL equivalents, but the words are translated out of context;
- Faithful translation: it attempts to replicate the precise contextual meaning of the source text within the TL grammatical structures, transferring "cultural" words and preserving a sense of grammatical and lexical "abnormality" in the translation;
- Semantic translation: it is similar to faithful translation, but it focuses more on the aesthetic value, giving up meaning where it is necessary as to preserve assonance, word-play and repetition. With respect to faithful translation, semantic translation "is more flexible, admits the creative exception to 100% fidelity and allows for the translator's intuitive empathy with the original."

TL-emphasis:

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<sup>6</sup> Reiss, K. (1977/1989). "*Text-types, Translation Types and Translation Assessment*" in *Readings in Translation Theory* (translated by Chesterman, Andrew). Helsinki: Oy Finn Lectura Ab., p.108-109

<sup>7</sup> Newmark, P. (1988). *A Textbook of Translation*. New York: Prentice Hall., p.45

- Adaptation: it is the freest form of translation, used for plays, comedies and poetry. The characters, the themes and the plots are usually preserved;
- Free translation: it reproduces the content without the form of the original;
- Idiomatic translation: it reproduces the message of the original but prefers idioms and colloquialism even though they are not present in the original;
- Communicative translation: it attempts to reproduce the contextual meaning of the original but in a form that is acceptable and comprehensible to the readers.

In Newmark's opinion, "only semantic and communicative translation fulfill the two main aims of translation, which are first, accuracy, and second, economy."<sup>8</sup> He also argues that semantic translation is to be applied to expressive texts while communicative translation to informative and vocative texts. Therefore, translation of a literary text must first focus on the aesthetics and secondly on the semantic content. According to him,

"Semantic translation is personal and individual, follows the thought processes of the author, tends to over-translate, pursues nuances of meaning, yet aims at concision in order to reproduce pragmatic impact."<sup>9</sup>

This kind of translations is closer to the author rather than the reader, and aims at recreating the style of the author. That is because in literary texts form and content go hand in hand, and how something is said is sometimes more important than what is being said, especially in texts like poems. In this respect, Landers compares translation with the way a freight train works:

"In technical translation the order of the cars is inconsequential if all cargo arrives intact. In literary translation, however, the order of the cars – which is to say the style – can make the difference between a lively, highly readable translation and stilted, rigid, artificial rendering that strips the original of its artistic and aesthetic essence, even its very soul."<sup>10</sup>

In his translation studies, Popovič Anton also argues that form and content cannot be separated, and that style appears as the most important aspect in literary

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<sup>8</sup> Newmark, P. (1988). *A Textbook of Translation*. New York: Prentice Hall, p. 47

<sup>9</sup> Ibidem, p. 48

<sup>10</sup> Landers, C. E. (2001). *Literary Translation: A practical guide*. Clevedon: Multilingual Matters Ltd, p. 7

translation.<sup>11</sup> Consequently, the ideal translation for him must be carried out at the level of the text:

"La traduzione ideale che ha pretese di somiglianza stilistica dev'essere proprio una traduzione a livello di testo. Tale traduzione conserva al meglio le informazioni invarianti e, quando queste cambiano, si ha un cambiamento stilistico tale per cui il metatesto non produca nel contesto stilistico della cultura ricevente un moto di ripulsa."<sup>12</sup>

In this respect, he distinguishes between *prototext* and *metatext*: *prototext* is the original text, while *metatext* is a "model of the prototext"<sup>13</sup>. It is important to mention that even though it is clearly different from an author's creativity, translation is still considered as a creative process. It may even be said that it is even a more difficult process because the author of the prototext has a broader set of choices with respect to the translators, who must base their choices on "choices already made".<sup>14</sup>

In this respect, Niska quotes Wallas' model of four stages regarding the creative process of translation:

- "Preparation: the first stage in the process, where the problem is investigated, i.e. accumulating knowledge about the problem to be solved, from memory and other sources;
- Incubation: a resting phase where the problem is temporarily put aside, if the solution is not found immediately;
- Illumination: a stage where an idea of a solution comes to mind, as a "flash" or "click" as the culmination of a successful train of association;
- Verification: a stage where alternative solutions are tested and their usability is measured. It is at this stage that the creative product is born."<sup>15</sup>

While attempting to recreate the style of the author, the translator must be careful not to fall into the charm of the source language and make the translation too literal.<sup>16</sup>

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<sup>11</sup> Popovič, A. (1975/2006). *La scienza della traduzione. Aspetti metodologici. La comunicazione traduttiva a cura di Osimo Bruno*. Milano: Hoepli, p. 71, 76

<sup>12</sup> Ibidem, p. 68

<sup>13</sup> Ibidem, p. 159

<sup>14</sup> Ibidem, p. 35

<sup>15</sup> Niska, H. (1998). *Explorations in translational creativity: Strategies for interpreting neologisms*. Stockholm: Stockholm University., <http://www.geocities.com/~talk/lic/kreeng2.htm>

<sup>16</sup> Rega, L. (2001). *La traduzione letteraria : aspetti e problemi*. Torino: UTAT libreria, p. 39-41

Another problem the translator has to face when translating literary text is the different cultural contexts in which the source text and the target text exist. They are generally considered autonomous texts from one another, because the translation of a text reflects a difference in both culture and language. Venuti Lawrence talks about loss and gain: when translating there is a loss because the text is de-contextualized from the source culture, and a gain because it is then re-contextualized in the target culture.<sup>17</sup> A good translator should search for similarities between cultures and be aware of the gap between the cultures that are being mediating between.

Other than searching for cultural equivalents, translating literary texts implies finding solutions to the transfer of different varieties, word play, metaphorisation, and all those strategies that authors make use of in their texts.

"When faced with a literary work, translators must know that they bear a heavy responsibility to examine every sentence in terms of its denotative and possibly connotative meanings, and weigh its significance in terms of a whole chapter or a whole book. Many different varieties, styles and even functions of language may interact with one another in the unfolding of a play, novel or short story, and may display evident features of the age in which they were written. Apart from all manner of word play, metaphorisation and use of figures of speech, the source text author may also resort to linguistic idiosyncrasy in the form of symbolism, rhetoric or bizarre description."<sup>18</sup>

What makes translating literary texts one of the greatest challenge in translation is the lack of a general rule (for example, in syntax or morphology) that can be used as a reference for the translator. Unlike technical translation, in which the translator can refer to parallel texts, literary texts have no intertextuality in this sense. The uniqueness of the text's structure is what makes translators unsure about their choices.<sup>19</sup>

Considering all the problems that can arise in a literary translation, we can therefore conclude that in order to deal with this kind of translation the translator must be very careful at all the different levels of the text and have a specific knowledge, especially concerning the source culture. A translator should also be aware that it is

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<sup>17</sup> Venuti, L. (2001). "Tradurre l'umorismo", in *Sulla traduzione letteraria: figure del traduttore, studi sulla traduzione, modi del tradurre*. Ravenna: Longo Angelo, p. 14

<sup>18</sup> Taylor, C. (1998). *Language to language - a practical and theoretical guide for Italian / English translators*. Cambridge: Cambridge University Press., p. 117

<sup>19</sup> Ibidem, p. 118 / Rega, L. (2001). *La traduzione letteraria : aspetti e problemi*. Torino: UTAT libreria.p. 51

generally impossible for all the different levels of the text to be completely transferred to the target language.

"Consider some of the capabilities that the literary translator must command: tone, style, flexibility, inventiveness, knowledge of the SL culture, the ability to glean meaning from ambiguity, an ear for sonority, and humility. Why humility? Because even our best efforts will never succeed in capturing in all its grandeur the richness of the original. If we produce a translation that approximates the TL text or stands as a literary work in its own right, that is the most that can be expected."<sup>20</sup>

Osimo B. also insists on the importance of the translator's competence.

"Per la traduzione letteraria e saggistica esistono vari requisiti, che vanno da un'ampia cultura generale, all'acuta sensibilità linguistica e letteraria, a una formazione critica non indifferente."<sup>21</sup>

Depending on the kind of text, the translator must make a choice between the different options of translation and also settle on which levels are the most important to keep in the target text. For example, in poetic translation content may be sacrificed in order to reproduce the form and the metric of the original. As Landers says, "the literary translator must make a choice, and from a succession of such choices emerges the final product."<sup>22</sup>

Another thing worth of mention is, though literary translation is one of the most demanding kinds of translation, it is usually under-paid. Landers explains that, "Literary translation is underpaid because so many are willing to do it for sheer pleasure."<sup>23</sup> Because of this, there are many more literary translators than those who are willing to pay for it, and literary translation has no place besides the publishing world. Literary translation is therefore mostly done for passion rather than it is for money.<sup>24</sup>

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<sup>20</sup>Landers, C. E. (2001). *Literary Translation: A practical guide*. Clevedon: Multilingual Matters Ltd, p. 9

<sup>21</sup>Osimo, B. (2004). *Manuale del Traduttore: guida pratica con glossario*. Milano: Hoepli, p. 142

<sup>22</sup>Landers, C. E. (2001). *Literary Translation: A practical guide*. Clevedon: Multilingual Matters Ltd, p. 9

<sup>23</sup> Ibidem, p. 8

<sup>24</sup> Ibidem, p. 8

## 1.4 Science fiction

Science fiction is generally defined as a modern genre which explores the impact of science upon society or individuals.<sup>25</sup>

Because this genre has been constantly evolving, there is a big debate regarding when it was actually born: some historians go back to Lucian of Samosata's *A True Story* from the second century AD; others take as a starting point the Renaissance with works like Thomas More's *Utopia* and Francis Godwin's *The Man in the Moon*; others proposed as starting point the Industrial Revolution, with Mary Shelley's *Frankenstein*; others proposed the late nineteenth century or the early twentieth century.<sup>26</sup> The term *science fiction* was in fact coined in the 1920s by Hugo Gernsback. He first called the genre *scientific fiction*, then proposed the contraction *scientifiction*, before settling for *science fiction* in his *Science Wonder Stories* in 1929.<sup>27</sup>

At the beginning of the twentieth century some writers tried to tie science and fiction to promote scientific knowledge, and such a position is what has become known as *hard SF*. However, the main theme of science fiction is applied science or technology, because of the impact that technology has in our everyday life and behavior. It could therefore be assumed that science fiction is about the future, but it is actually about speculation of the future. This is why it is considered a *what if literature*.<sup>28</sup>

It is very hard to define science fiction as a genre. As Mendlesohn in *The Cambridge Companion to Science Fiction* argues, it is less of a genre and more of an ongoing discussion. Critics of the genres have different opinions on the matter, because science fiction is a genre that does not follow the standards and demands of both the literary establishment and the mass market.<sup>29</sup> In *The Reader's Advisory Guide To Genre Fiction*, Saricks highlights science fiction's problem in overlapping with other genres, so much that even experts disagree on its definition.<sup>30</sup>

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<sup>25</sup> <http://www.britannica.com/EBchecked/topic/528857/science-fiction>

<sup>26</sup> Seed, D. (2011). *Science Fiction: A very short introduction*. Oxford: Oxford University Press, p. 3

<sup>27</sup> Luckhurst, R. (2005). *Science Fiction*. Cambridge: Polity Press.

<sup>28</sup> Seed, D. (2011). *Science Fiction: A very short introduction*. Oxford: Oxford University Press, p. 1, 2

<sup>29</sup> Mendlesohn, F. (2001). "Introduction: reading science fiction" in *The Cambridge Companion to Science Fiction*. New York: Cambridge University Press, p. 1

<sup>30</sup> Saricks, J. G. (2009). *The Reader's Advisory Guide To Genre Fiction*. Chicago: American Library Association, p. 244

Sci-fi cannot be considered a genre because of the hybrid nature of many science fiction works.<sup>31</sup> It does not have any rough outline of its books like other genres have. When reading mystery stories, we know that there is something to be found out, and we consequently have certain expectations. But science fiction extracts elements from any available genre.<sup>32</sup>

Even though it does not have a recognizable narrative, science fiction centers on what has been termed as the "sense of wonder". The earliest science fiction is based on new inventions or the arrival in a new place and focused on the description of the unfamiliar surroundings. However, almost all stories ended in such a way that the author did not have to go beyond the idea.<sup>33</sup>

As the concept of *wonder* keeps changing over time, science fiction has also been constantly evolving. Science fiction moved to other literary structures, one of which is what Istvan Csicsery-Ronay called "the grotesque" but that Farah defines as "the consequences". In the 1930s the consideration of the consequences of science became one of the main themes of science fiction.<sup>34</sup>

Being speculative, this genre tries to explore philosophical, technical and intellectual questions while posing issues of moral, social and ethical nature. It is often used by writers to express controversial questions. The author may take an idea or precept and explore it in a setting or a time different from our own.<sup>35</sup>

This alienation is the one crucial trait of the genre. The readers find themselves in another, unfamiliar world or time.<sup>36</sup>

The use of language is subtle and that is immediately recognized by newcomers of the genre. Language is not trustworthy, and metaphor may become literal. The mention of body parts can evoke in the reader's mind things like implanted electronics. Through the use of devices such as technological metaphors and invented words, the writer creates dissonance, based on the expectation that the reader will either understand or create meaning where none is provided. This expectation is really important in

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<sup>31</sup> Seed, D. (2011). *Science Fiction: A very short introduction*. Oxford: Oxford University Press, p. 1

<sup>32</sup> Mendlesohn, F. (2001). "Introduction: reading science fiction" in *The Cambridge Companion to Science Fiction*. New York: Cambridge University Press., p. 2-3

<sup>33</sup> *Ibidem*, p. 3

<sup>34</sup> *Ibidem*, p. 4

<sup>35</sup> Saricks, J. G. (2009). *The Reader's Advisory Guide To Genre Fiction*. Chicago: American Library Association, p. 245

<sup>36</sup> *Ibidem*, p. 246

science fiction, as the genre "has come to rely on the evolution of a vocabulary, of a structure and a set of shared ideas which are deeply embedded in the genre's psyche."<sup>37</sup> Because of this, there is no need to mention things like how a space ship works, a simple "faster than light" reference works just as well.

Unlike the reader, the main characters have a knowledge of their own world, and things like body transfer and the boundaries of the mind are never questioned. In this respect, the concept of death assumes different meanings depending on the modes of existence.<sup>38</sup>

The narrative of science fiction takes the reader in directions that are unexpected with respect to the contemporary novel. In many cases, there are no clear answers to what is right and what is wrong, and the ending may fail to solve the issues and questions raised.<sup>39</sup>

Generally, in science fiction the issues, story and frame are emphasized more than the characterizations.<sup>40</sup> The world is often treated as a character: the planet may turn to be alive, or it can become vital for the lives of the characters.<sup>41</sup>

Another thing that differentiates science fiction from other genres is the way sex is used as a way to indicate the differences between the forms of human that have been introduced. The real romance at the heart of science fiction is the romance of the universe. While other genres explore relationships between people, science fiction explores our relationship with the universe. There is a sense of alienation in this, not only in the way romanticism is cold, but also in the way the universe is uncaring – in hard science fiction it is described as a *cold equation*, the rules that govern our life or death, regardless of our feelings.<sup>42</sup>

Alienation is also applied to the characters. From the 1940s until the 1960s there was a recurring theme of the isolated individual as genius, reflecting generations of lonely adolescents.<sup>43</sup>

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<sup>37</sup> Mendlesohn, F. (2001). "Introduction: reading science fiction" in *The Cambridge Companion to Science Fiction*. New York: Cambridge University Press, p. 6

<sup>38</sup> Ibidem, p. 7

<sup>39</sup> Saricks, J. G. (2009). *The Reader's Advisory Guide To Genre Fiction*. Chicago: American Library Association, p. 245

<sup>40</sup> Ibidem, p. 249

<sup>41</sup> Mendlesohn, F. (2001). "Introduction: reading science fiction" in *The Cambridge Companion to Science Fiction*. New York: Cambridge University Press, p. 8

<sup>42</sup> Ibidem, p. 9

<sup>43</sup> Ibidem, p. 10

Science fiction texts are subject to multiple interpretations. Because it is more like a discourse than a genre, and as we have seen it is a polysemic discourse, it can be read as different things depending on who reads it.<sup>44</sup>

Saricks outlines the general characteristics of science fiction as such:

"1. This is speculative fiction, frequently set in the future. it explores moral, social, intellectual, philosophical, and/or ethical questions against a setting outside of everyday reality.

2. Setting is crucial and invokes otherness of time, place, and/or reality. Both the physical setting of the story and the inherent technical and scientific detail create this essential frame.

3. From the jargon of cyberpunk to the lyrical language of some classic tales, Science Fiction offers a range of styles and language crafted to suit the story line and to reinforce the intellectual and speculative nature of the genre.

4. Titles reflect a wide range of tone or mood from dark to comic. Tone is often used to disorient readers and to highlight the issues considered.

5. Authors use characters to underscore issues and atmosphere. Aliens and otherworldly creatures emphasize the otherness of these stories.

6. The focus of the story drives the pacing. if there are more adventure elements and physical action, the pacing is usually faster; if ideas are emphasized more, the book generally unfolds at a more leisurely pace."<sup>45</sup>

Science fiction had its first burst of popularity (*The Golden Age of Science Fiction*) during the so called *magazine era*, when, in 1937, John W. Campbell Jr took over the magazine *Astounding Stories* and renamed it *Astounding Science Fiction*. Starting with his editorship, the fans began to have a bigger role in the shaping the genre along with the writers of short stories that were published in it.<sup>46</sup>

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<sup>44</sup> Ibidem, p. 11

<sup>45</sup> Saricks, J. G. (2009). *The Reader's Advisory Guide To Genre Fiction*. Chicago: American Library Association, p. 245

<sup>46</sup> Attebery, B. (2001). "The Magazine Era: 1926-1960" in *The Cambridge Companion to Science Fiction*. New York: Cambridge University Press.

Magazines eventually gave way to books, and literary science fiction eventually started to decline as the genre ran out of ideas and it was slowly outclassed by other media like television, cinema and computer gaming.<sup>47</sup>

"Until the information explosion began dramatically to impact upon our lives in the 1980s, sf as a genre may have been wrong in many of its advocacies of the future, but it had never been *outmoded*. By around 1990, however, when the Internet began radically to shape our sense of the nature of the real world, sf as a set of arguments and conventions was in some disarray. It had been blindsided by the future."<sup>48</sup>

Because of this, science fiction has been critically changing to catch up to the latest innovations, but most of all to the potential of information and Internet.<sup>49</sup>

## 1.5 Analysis of the Source Text

*Outbound* is a fictional short story, therefore the text has a narrative and expressive function.

The author is an American science fiction writer. The main purpose of the author is to tell a fictional story to its readers. However, as this story belongs to the genre of science fiction, it can be assumed that it is also intended to surprise the readers, to make them wonder, as the genre implies.

In order to establish the recipients of the text, it is important to take into account the magazines and anthologies in which the short story appeared in.

The novelette was first published in *Analog Science Fiction and Fact*, also called *Analog*. This magazine, based in the United States, was born in 1930 and it was originally called *Astounding Stories*. After being renamed *Astounding Science Fiction*, it gradually became one of the most important magazines of science fiction. Under John

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<sup>47</sup> Crute, J. (2001). "Science fiction from 1980 to the present" in *The Cambridge Companion to Science Fiction*. Cambridge: Cambridge University Press, p. 64-66

<sup>48</sup> Ibidem, p. 67

<sup>49</sup> Ibidem, p. 68

W. Campbell's editorship, it made the genre reach what has been referred to as its *Golden Age*. After changing its name, *Analog* has been running up until present time.<sup>50</sup>

*Outbound* was then translated and re-published on *ESLI*<sup>51</sup>. *ESLI* was founded in 1991 and it is probably the oldest Russian science fiction magazine, with a print run of 14,000 a year<sup>52</sup>.

Lastly, the novelette appeared in the *Analog* magazine anthology *Into the New Millennium: Trailblazing Tales From Analog Science Fiction and Fact*. It can therefore be assumed that the recipients of this short story are mostly fans of the genre rather than casual readers. It is likely that they already have a certain knowledge and expectations on the standards and general contents of science fiction.

The text was first published in 2010, and being fairly recent it speculates more on the consequences of technology in the future than on merely scientific innovations and technology. This is evident as the story is set in a apocalyptic future in which Earth burned as a result of a war. As the story is contemporary, published three years before its translation, there are no linguistic problems related to the difference of time between source text and target text.

While the readers are most likely fans and have a certain knowledge, the story can be read by anyone that has at least little acquaintance with science fiction. A few segments can result rather difficult to understand if the reader does not have a general technical knowledge. However, most of the world in which it is set is slowly unfolded and indirectly explained to the reader through the main character, who is familiar with it. The information about what the main character does not know is slowly acquired by him as the story evolves.

The story is set in a speculated future, in which a war starts and the main character finds himself to be the only survivor of the runaway from Earth. This is the triggering event that will result in the main character's search for other humans that have previously left the Earth on a mission to search for fertile grounds for colonization beyond Neptune, the so-called *Outbounders*. Other than this initial setting, many themes

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<sup>50</sup> Attebery, B. (2001). "The Magazine Era: 1926-1960" in *The Cambridge Companion to Science Fiction*. New York: Cambridge University Press, p. 39 / Wolfe, G. K. (2001). *Science Fiction and its editors*. Cambridge: Cambridge University Press, p. 98

<sup>51</sup> <http://bradrtorgersen.wordpress.com>

<sup>52</sup> <http://sffportal.net/2011/08/esli/>

can be found in *Outbound* which are considered typical of the genre: other than the negative consequences of scientific technology in the future, one important theme is that of space travel, as the main character has to travel the cosmos in order to find the Outbounders. In the future pictured by the author, humans had already colonized planets other than Earth. There is also new technology mentioned, like spaceships, successful cloning or the possibility to register human minds in a computer, which is strictly related to the theme of de-corporalization and the boundaries of the human mind and will be significant for the resolution of the plot.

As we have previously seen, science fiction overlaps with other genres. Therefore, it is not surprising that, other than the typical themes of science fiction, this short story explores classic themes of literature as well, such as family, the main character's inner struggles, love and death. The author focuses on the main character's relationship with the people in his life, most of whom he eventually has to part with. First of all, Mirek's relationship with his family (his father, mother and his little sister), especially the one with his little sister that becomes problematic after both their parents die, and the way he deals with their deaths during his childhood; then, after that, he crosses path with the people that will become his second family, Tabitha and Howard. But there is also focus on Mirek's inner struggles, the way he has to bear the burden of being the only young man in the universe, bound to feel lonely his whole life. This is important with regards to his relationship with Tabitha and Howard, as he distances himself from them and relies on alcohol to deal with his problems until he realizes that the Outbounders are not a just a myth and that he has made his family worry. An interesting thing to point out is also the relationship Howard has with his wife and Mirek, as he is a computerized mind and therefore should not be able to feel, but in fact he seems to show his feelings as much as his condition allows him. After Mirek loses his second family, he is left on his own to decide what he has to do to finally reach the Outbounders. When he finally finds them, we have a brief insight on how his life becomes, and the way he finally finds love and gets to have another family with one of the doctors that saved his life. In this sense, it can be said that this is a story "of formation", where we see the character grow into an adult and face several challenges that eventually lead to the final resolution in the end.

The way the author explores these themes shows how science fiction is not only about futuristic speculation but it can also have a more human side, that the reader can relate to.

### 1.5.1 Stylistic analysis

The style of narration chosen by the author is the first person and, for most of the story, the past tense. He tells the story from the point of view of the main character, Mirosław. The happenings are mostly set in Mirosław's past, reconstructed by him in the present starting from the day the Earth burned. There are references to his present in a few sentences, like *I can still remember Papa running into the hotel room on the space station, screaming*, or *we'd all begun to place various – and later, I would think, unrealistic – expectations on the place*, until we reach the last segment of the story, when the verb tense switches to the present. This shows that the narrator is omniscient: as he tells the story from his present point of view, we can assume that he has a full knowledge regarding all the events that happened in his life. It is up to him to choose which events are the most significant, what to conceal and what to say in order to interest the reader (the previously mentioned part about the expectations, which is in the present tense, is probably used to create anticipation).

We experience the story and recreate the unfamiliar futuristic world in which the story is set through the main character's eyes, following him from his childhood until his adulthood. Because of the choice of narrating using the first-person, it can be assumed that the author wanted to put much emphasis on the main character's sensations and feelings, making the reader empathize with him.

The language of the narration is fairly clear, mostly easy to understand, and the structure is fluid. The reader can easily follow what is happening and make up for what is unknown. There are many short sentences and many new paragraphs, sometimes one after the other. This device is supposedly used by the writer to create a sense of suspense in the reader.

The author makes use of some figures of speech, such as analogies: some refer to nature, such as *like sacks of potatoes*, *like a river*, *like a fish in water*, *like rocks across a pond*, *like fleas on the ass of a dog*, others to body parts or conditions related to the body, such as *like a toothache*, *like deep sores newly scabbed over*, *like an itch*, *like*

*a migraine peeled across my consciousness.* Others are more complex and refer to various fields and seem to be meant to give the reader a very specific image, *like a semi that's lost its brakes on a steep hill, like a siren, beckoning a lonely sailor, like a hermit penetrating deep into the wild, like digesting an entire college semester every day of the week.* Most of them are not very sophisticated, and are mostly meant to give the reader a better image of the surroundings, the feelings or the situation. Some analogies in the first part of the story seem to be related to the age of the main character, referring to the perception of a child, such as *like sacks of potatoes* or *like the sped-up films in school that show how mold grows in Petri dishes, like talking to an imaginary friend.* Others, such as *like a shroud, sealing at the edges, like deep sores newly scabbed over,* seem either to be too complex for a child or to refer mostly to the main character's recollection as an adult.

Another figure of speech that recurs in the story is the metaphor. There are many metaphors belonging to various fields. They are mostly used by the author to express the main character's feelings or perception: *I felt only lingering ghosts, I felt a lump in my throat, the world tilted over, the rumbling of a terrible cry, it was a crime that Irenka wasn't here.*

Some refer to religious faith, and highlight Mirek's relationship with God and religion: *I just never found the spark, embrace the fire, open a door into your heart, you are a good soul, my heart was deaf to God.* There are also some metaphoric verbs which refer to the main character's relationship with other characters, like *grow closer, grow distant, get sick of, leave behind, pick up the pieces.* Some metaphors are used to describe and give a better image of Mirek's registration on the computer, like *I was on a one-way trip, the universe vanished into a swirl of sounds and color, I was bathed in an endless sea of shifting and chaotic images, I was on solid mental ground.*

Overall, we can see that the metaphors refer to many different fields. Some are common, like *I felt a lump in my throat, it was a crime, grow closer.* Others seem to be the author's constructions, like *I felt only lingering ghosts, mouths forming twin oh-shapes, the rumbling of a terrible cry.* The use of the metaphors makes the story more interesting by evoking more vivid images in the mind of the reader.

At the beginning of the story, the author chooses to give us an immediate contextualization of what is going on, with the sentence *I was eleven years old when the*

*Earth burned.* He presents us with the destruction of the Earth, picturing the way Mirek experienced it and keeping other information obscure, not revealing anything more than the fact that a war started and that the expectations about Jupiter would prove to be unrealistic. This is probably aimed at catching the reader's interest.

New information and context about the story's world are mostly given directly through Mirek's explanations or assumptions, while others are second hand information given to him by other people through dialogue.

Much focus is given to the description of the surroundings, mostly of the cosmos, and these descriptions are sometimes accompanied by analogies with other things to give the reader a better idea or a strong image. For example, in *The Earth's night side was covered with huge splotches that flowed dull red, like a giant, angry rash.* These descriptions are frequent because they aim at contextualizing the future world the story is set in, by using images that are familiar to the reader.

The tone of the story is mostly dark: in his travel, Mirek has to face the deaths of his loved ones and the burden of humanity's extermination, and until he finally reaches his objective his fate seems to be doomed.

There is a fair amount of dialogues in the story, and they are usually short and mostly used to contextualize what is happening through the questions of the main character or to make the story progress. The sentences in the dialogues are usually short and simple with respect to the narration. The characters that appear in the story are not many, and some appear only for a few segments, like Elaine, while others, like Tabitha and Howard, stay longer in Mirek's life and therefore are given more importance. It is important to note that children and adults speak in different ways. Mirek seems to show his young age in the first part of the story because he asks many questions to the adults (*What's going on?, Why?, What does that mean?*), and he seems to speak in short sentences and in simple English at first, which eventually becomes more complex as he grows. His little sister Irenka does not talk much, but her age is noticeable in what she says. *"I want Mama," – "I want Mirek"*

In this respect, two characters that have very personal manners of speaking are Tabitha and Howard. Tabitha usually makes many references to God, the Bible and faith when she talks, for example: *you can thank the Lord; you've survived the Devil's Day; Adam and Eve saw to that.*

Howard on his part seems to talk in a very colloquial way, frequently using slang, for example: *girl'd be plum crazy not to get with a handsome young guy like you; a man being tall and macho ain't the end-all, be-all; don't fret over it now, especially when we ain't even found these folk yet*. Choosing this manner of speaking, it is shown how the human part of Howard is still somehow alive in him, even though he is a computer.

### 1.5.2 Lexical analysis

The lexicon found in this text is a mix of common words and technical words, mostly of which are related to future technology. Therefore we can find many neologisms or new compounds related to the world of science fiction and technology which can be found in very few parallel texts.

Because this short story is a science fiction one, with typical elements of the genre, the fair amount of technical and scientific terms in the story is what mostly sets a problem for the translator, as they cannot be translated without a good technical knowledge or research. The technical lexicon is challenging as it covers a variety of subjects such as:

- Space exploration technologies;
- Astronomy;
- Computer technology;
- Other technologies (hydroponics, cloning, etc.)

The lexicon that refers to space exploration technologies consists of:

Terms that refer to the means of transport through space, like *common interplanetary liner, observatory, ship, dory*;

- terms related to the interior and the structure of spaceships and other means of transport through space, like *cabin, gee couch, seat, hatch, decompression shield*;
- terms related to the engine, like *thrust, thrusting, burn, anti-matter*;

It is important to note that many of the terms related to spaceships are borrowed from the nautical field, like *liner, dory, hatch, cabin*.

Since the main character travels through space, planets, celestial bodies and other terms related to space are mentioned, like *Earth*, *Earth's night side*, *satellites*, *Jupiter*, *inner system*, *Kuiper belt*.

Different technology than that of spaceships is also mentioned: some of it is familiar to the world of the reader, like *PDA*, *screen*, *computer*, *key card*. There is a brief mention of cloning technology, with words such as *tissue*, *clone brain*, *cerebral matrix*.

Some technology mentioned may be less known, like *hydroponics*, a method of growing plants using mineral nutrient solutions that is used to keep the air clean, in this case on spaceships. Other technology is completely futuristic, like *grip shoes*, *gee couch*, *automated defense satellite*, *warbots*. Some seem to be invented by the author, like *cycler machinery*, *master program*, while others, like *spaceship* or *grip shoes* are recurring in the genre of science fiction.

Computer technology is especially important as it is related to the possibility for people to be registered in a computer and become a computerized mind. There is therefore mention of many terms from the computer field that refer to how this works, especially towards the end of the story, when the character experiences such recording first-hand: terms such as *array*, *databank*, *fail-safe*, *backup*, *workstation*, *server*.

It is important to note that the title of the short story, *outbound*, is both the name of a mission in the outer space and an adjective that means "outward bound", "going out", which is strictly related to the objective of the mission to find planets to colonize.

There is only one use of onomatopoeias: *rip-rip* to denote the sounds grip shoes make when adhering to the ground and *thump* to denote the sound of hitting something.

In the dialogues, there are many elements typical of the spoken language, for example expletives like *Jesus almighty*, *mercy*.

Other challenging lexical elements are the few neologisms and construction that could be found in very few parallel texts: *TransCom*, that supposedly denotes a universal language that is in use in the story's world; *gas ice*, that was understood as a neologism because the two words put together like that could not be found in parallel texts; *gee couch*, that refers to a seat with a buckle that people use in a spaceship in order to keep safe during space travel, and could be found in very few parallel texts with

no fixed equivalent in the target text; *decompression shield*, that supposedly refers to a sort of clothing that protects from decompression, and that was found in a few corpora with no equivalent in Italian; *grip shoes*, shoes that are used to grip to the floor when there is no gravity, and could be found in a few parallel text with only one result of a potential Italian equivalent; *spin room*, a room that is used to exercise in zero gee, in parallel texts this word is used to refer to the room where reporters and debate participants speak after a debate, but nothing was found in relation to space fiction; *cycler machinery*, which was understood as machinery that cyclically does something related to *air* and *waste* (*waste cycler* and *air cycler* were also used in the text), but was not found in any parallel texts.

### 1.5.3 Morphosyntactic analysis

Because this is a literary text, there is a variety of morphosyntactic structures used in it. As previously seen, unlike with technical texts, there are no fixed structures nor parallel texts to refer to when translating.

As the story is told from the main character's point of view, many sentences have the first-person pronoun as theme.

The narrator tells the events mostly using the *past simple* to refer to the past and the *pluperfect* to refer to the events that happened before the ones that are being told. However, it is clear from the start that he is talking from a present point of view, when he says, *I can still remember Papa running into the hotel room on the space station, screaming* or *I remember the curved corridor being filled with adults*. These uses aim at contextualizing the story and to set the events of the story as the main character's past, making it more believable for the reader. The narrator also uses the present to create anticipation in the reader, like in *we'd all begun to place various – and later, I would think, unrealistic – expectations on the place*. Only in the last segment of the story does the narrator return to the present, using the *present* and *present perfect*: *she brings my wife Col and I a great deal of joy, I've gradually accepted the fact that impossibilities are routine in my new, expanded reality, we've reached Jupiter*.

The use of the *past simple* and *pluperfect* to tell the past events or in the dialogues creates a problem for the translator when choosing between *imperfetto*,

*passato remoto*, *passato prossimo* and *trapassato prossimo*. Some of these cases will be analyzed in the translation comment.

There is a difference of structure between dialogues and narrative description: while in the narrative there is use of both simple, short, complex and long sentences, with use of parataxis and hypotaxis, dialogues mostly consist of simple, short sentences with use of parataxis. There is also a distinction when it comes to the way children and adults talk, with adults using more complex structures with respect to children. Some examples:

- Narrative:
- *I kept thinking about my chair.*
- *I remember Papa slowly putting Irenka and me down on the deck and hugging us both very closely, his big hands stroking the backs of our heads while he spoke.*
- *He apologized and kissed us both.*
- *Papa yelled at us so loudly it made us silent, because we'd never heard Papa say such words to us before, nor in such a loud voice.*
- Dialogues:
- *"Mirek, you're the oldest. You have to take care of Irenka. And Irenka, I want you to be good for your brother and do what he says. Because you both have to leave this place and I can't come with you."* (adult)
- *"Miroslaw Jaworski. This is my sister, Irenka. I'm eleven, she's four."* (child)

Furthermore, in dialogues we can find the use of the pronoun *you*, which can be translated as *tu*, *voi* or *lei* in Italian, depending on the context.

We can find the use of the modals *could*, *would*, *might* and *should* with relation to the past.

- *I could* still feel Papa's hand on my head;
- Being unbuckled in zero gee *would* be dangerous;
- My sister's eyes were puffy and wide and she now looked at everything as if it *might* bite her;
- Days I spent wandering alone through the halls of the observatory, wondering just what in the universe I was even doing here, and why I *should* keep trying to extend a life that seemed to have amounted to futility.

The translator must pay attention to the equivalent forms these modals result in the target text in order to adapt to the different specific grammar rules and uses of the target language.

*Would* is also used a few times in a more narrative way to refer to usual happenings, like in the following sentences:

- *At which point she'd take off for the little indoor playground the crew had built in the lower cargo hold, and I wouldn't see her for an hour. Until she'd come sulking back to our couch, apologize for being mean to me, and we'd end it with a great big hug.*
- *One moment, I'd be wondering how to fix a certain problem. The next, the knowledge would be there, as if it had always been there.*

There are also a few cases where new information (rheme) is placed at the beginning of a sentence as a theme in order to put emphasis on it in marked sentences such as:

- *What he said, exactly, I can't recall.*
- *flashes could be seen through the massive, rolling clouds;*
- *Orbital stuff's been hit.*
- *Days I spent wandering alone through the halls of the observatory [...].*

(riguardo la modulazione, espansione o riduzione ho pensato che fosse più appropriato parlarne nel dettaglio nel commento alla traduzione, dal momento che gli esempi concreti di cambiamento li faccio là)

## 2 Outbound (English version)

I was eleven years old when the Earth burned.

I can still remember Papa running into the hotel room on the space station, screaming. What he said, exactly, I can't recall. But there was fear in his eyes when he picked me up and threw me over his shoulder. He did the same with my little sister, Irenka, and then he was back out the door—both of us bouncing across his deltoids like sacks of potatoes.

Papa didn't stop for luggage, nor any of our toys.

Not even my special chair.

I remember the curved corridor being filled with adults: screaming, fighting, and yelling.

One of them got in Papa's path, and Papa literally kicked the man out of the way.

Papa had never hurt another human being in his whole life.

Irenka, who was just four, kept calling for Mama. But Mama had been at a conference on the other side of the station, and we didn't see her anywhere.

I kept thinking about my chair. If whatever was happening was bad enough for Papa to forget my expensive new chair, then it was really, *really* bad.

When we got to the hatch for the ship, there were big people with guns and they wouldn't let Papa onboard.

Papa yelled at them. They yelled back.

I remember Papa slowly putting Irenka and me down on the deck and hugging us both very closely, his big hands stroking the backs of our heads while he spoke.

"Mirek, you're the oldest. You have to take care of Irenka. And Irenka, I want you to be good for your brother and do what he says. Because you both have to leave this place and I can't come with you."

The big people with guns moved aside and other people, wearing crew jumpers, came through the hatch and tried to take Irenka and I away from Papa.

Panic gripped me.

I wouldn't release him.

Irenka kicked. I shrieked, because I couldn't kick.

We hung onto Papa's shirt for dear life.

Ultimately, Papa yelled at us so loudly it made us silent, because we'd never heard Papa say such words to us before, nor in such a loud voice.

He apologized and kissed us both. We let go of his collar.

"Remember me," Papa said when the crewpeople took us away. "Remember your Papa and Mama. We will always love you!"

The ship was crammed with people. Other children, mostly.

When the heavy banging noises came through the cabin, some of the kids screamed. I knew better, though. We'd undocked from the station because I felt all the gravity go away.

This was a good thing. No gravity meant I didn't need my chair.

The crewpeople who'd taken us away from Papa didn't even speak to us. They hurriedly found a two-person gee couch, strapped us into it, and moved on.

Irenka was sniffing and sobbing while I held her hand and looked out the window, perhaps too dazed to really feel what had just happened to our family.

The big rings of the station rotated beautifully while our ship thrust away from it. The gee from thrusting tugged at my stomach, then shifted ninety degrees. I was being pushed sideways, the view in the window spinning just as the station began to disintegrate. I couldn't tell what happened, other than that there was a sparkling cloud that seemed to envelope the station for an instant, and then a white flash so brilliant I had to cover my eyes.

When I could see again, the station was gone, and the gee pressing me into my seat was so strong I had a hard time breathing.

Irenka's sobbing had quieted to a whimper and she gripped my hand so hard I thought her little tendons would snap.

Our ship was moving. Fast.

The Earth's night side was covered with huge splotches that glowed dull red, like a giant, angry rash.

Occasionally, flashes could be seen through the massive, roiling clouds.

An adult, clad in a spacesuit and with a helmet under his arm, shuffled past our couch. I tapped him on the arm and pointed out the window.

"What's going on?"

The man paused just long enough to lean over us and look outside.

"Orbital stuff's been hit," he said in American English. "Now they're using antimatter warheads in-atmosphere. Jesus almighty..."

The man bolted aft while I kept looking out.

Somewhere down there, I knew my cousins and grandparents were in trouble. The smoky clouds were too thick for me to see the continents clearly, but I looked for Europe anyway. Poland was by the sea, and I thought that, maybe being near the sea, it wouldn't be so bad.

Until I saw the day-side limb come up, and wherever the glowing splotches touched the ocean, the water exploded into hurricanes of white vapor.

The angry splotches also expanded visibly, like the sped-up films in school that show how mold grows in Petri dishes.

Then, the ship rolled over and I could see nothing more, the additional gee shoving me back into my seat.

I looked away from the window to see Irenka slumped against me, exhausted and eyes closing.

Her little breaths became regular and gentle, and before long I also felt my eyes close, and then there were only memories of Mama and Papa, gone forever.

Irenka woke up crying, and the adults in crewpeople jumpers had to come and get her and take her to the bathroom. When they brought her back she was in night pants and nothing else. They said she'd had an accident, and her clothes wouldn't be clean for an hour. My sister's eyes were puffy and wide and she now looked at everything as if it might bite her.

I asked if it was okay if she sat in my lap, and after some conversation, they told me yes, as long as we both stayed buckled in together. Being unbuckled in zero gee would be dangerous. But I already knew that.

Irenka snuggled into my lap, the night pants making a gentle crackling sound. I had us both buckled up and I wrapped my arms around her.

I put my head back and closed my eyes, hoping for additional rest. I felt more tired than I'd ever felt in my life.

"I want Mama," Irenka said in a low voice.

I opened my eyes and looked down into her small face.

"I want Mama too," I said. "But I think Mama and Papa aren't alive anymore."

My sister stiffened and began to whimper again, burying her face in my chest.

I hugged her tightly, feeling the lump move into my throat. I wasn't sure who I felt sorrier for: my little sister, myself, or my parents.

I fought back the swell of grief and tried to stay calm. I could still feel Papa's hand on my head when he looked me in the eye and told me to take care of Irenka—because he'd known Mama and he wouldn't be around to do it anymore. Papa had looked resigned when he'd said those words to me. Resigned, and yet full of dignity. While the other adults on the station had panicked, he'd made sure Irenka and I were safe.

Now, my sister needed me to be the strong one. And I needed me to be strong for us both.

I swallowed thickly and let my tears be silent tears while I gently stroked Irenka's golden hair.

An hour later, an adult appeared near our seat. She was older than many of the other adults we'd seen onboard, with short hair that was going gray. She seemed motherly and smiled at my sister and I, patting our shoulders.

"Do you speak TransCom?"

"Yes," I said.

"Good. Can you please tell me your names and ages?"

"Miroslaw Jaworski. This is my sister, Irenka. I'm eleven, she's four."

The kindly crewperson noted our names on her PDA.

"Do you know where your parents are?"

"Yes. You wouldn't let Papa come onboard. He's dead now."

The woman's mouth sank to a frown.

"I am sorry, honey. The Captain wouldn't let us bring any more adults than we already had. The ship was full."

Her words were small comfort. But I worked to remain strong. Something told me that my childhood had suffered an abrupt ending, and the sooner I acted like a man, the better.

"What happened?" I asked.

"Ummm... did you watch the news these past few months?"

"No."

"There was... they... no, maybe it's better if I don't explain it. Honey, someone started a war. A very terrible war."

"Why?"

The woman paused, her eyes un-focusing and her frowned lips beginning to tremble.

"I have damn no idea," she whispered.

Then the woman seemed to remember who she was speaking to, apologized for cursing, and went back to recording information. She took down where we'd lived, the names of extended family, what we liked to eat, if we had any favorite videos we liked to watch, and if we had anything special the adults on the ship would need to know.

"I don't have my chair," I said.

"Pardon me?"

"On the ground, I can't move without my chair."

I pantomimed using the little joystick that commanded my electric chair, without which I couldn't move except to drag myself across the floor with my arms.

"You're a paraplegic?"

"Yes."

The woman's lips quivered again, and she reflexively reached out and stroked a lock of hair off my forehead.

"I'm OK," I said. "When there is no gee, I don't need legs. It's one of the reasons Mama was at the conference. She thought she'd get a job with one of the settlements in the asteroids, where I'd probably never have to worry about a chair again."

"Of course. I'll pass it on to the Captain. Can you handle your sister, or should I see if one of us can take her?"

"I want Mirek," Irenka said, not looking at the woman and reflexively wrapping her arms so tightly across mine, I think there was nothing more that needed to be said.

The woman stood up, her special shoes gripping the floor, and affectionately stroked my hair one more time.

"If you need any help, press the blue button on the seat in front of you. My name is Elaine, and I am one of the crew. Otherwise, the screen below the button is a computer you can use to look at shows or play games."

"Thank you," I said. "But what I really want to know is, where are we going?"

"We're not sure. The Captain has to decide. The war didn't happen only at Earth."

Our ship was a common interplanetary liner. The kind that are so common, they don't have names, just numbers. The captain did his best to inform us of what was going on, but I don't think he was used to talking to kids, so I had to keep asking Elaine to explain it to me. She said that the captain had decided to take us to Jupiter, where we might find other refugees at the Jovian space settlements.

There was near-constant thrust because we had to go as fast as we could to get away from the war satellites that were still hunting between Earth and the moon.

This meant I had to spend the first half of the trip on the couch to which Irenka and me were assigned, which would have been fine except that I needed Elaine's help whenever I had to go to the lavatory. Some of the younger teenagers laughed and called me a baby when Elaine carried me up and down the aisle. I could handle that. You don't live life as a child cripple and not get used to the fact that a lot of other kids are always mean.

But when they started picking on Irenka, I knew I had to do something.

I waited until we were at mid-point, when we got a few hours of freefall before deceleration. It was the one time during the trip when the other kids were awkward, and I felt comfortable. I'd spent the previous months onboard our station using the zero gee exercise rooms in the station's hub, in preparation for Mama's hoped-for assignment to the asteroids. Now I used these skills to maximum advantage.

A few black eyes and fat lips later—both theirs and mine—and the troublemakers and I reached an understanding.

When Elaine found out, she scolded me hotly of course. Adults always have to do that, so that it seems to everyone like they're not taking sides. But when we were thrusting again and I was back to needing Elaine's help to use the lavatory, she quietly told me she was glad I'd stuck up for my sister, and that some of the rowdier kids had stopped being so rowdy.

There was no more teasing, and the people who had been bothering Irenka didn't say another word.

Which was good enough for me.

Jupiter was gorgeous outside our liner's cabin windows. The huge planet had hung there for a week now, growing steadily larger while we adjusted and burned in order to drop into a rendezvous orbit with one of the Jovian stations the captain had spoken of shortly before we fled the inner system.

I'm not sure what all of us were thinking. The Jovian settlements had grown into a sort of mythic destination in our minds, and we'd all begun to place various—and later, I would think, unrealistic—expectations on the place. Irenka especially seemed fascinated with Jupiter.

I felt bad, having to keep reminding her that Mama and Papa wouldn't be there at the door to greet us when we got off the ship. Every time I did it, Irenka got mad at me and told me she hated me because I was happy that Mama and Papa were dead, so that I could take Papa's place and boss her around. At which point she'd take off for the little indoor playground the crew had built in the lower cargo hold, and I wouldn't see her for an hour. Until she'd come sulking back to our couch, apologize for being mean to me, and we'd end it with a great big hug.

Irenka was up front using the lavatory when the lights in the cabin went red and the klaxon sounded over the speakers.

The captain's voice roared, temporarily drowning the screams of the other kids.

"WE ARE UNDER ATTACK BY AN AUTOMATED DEFENSE SATELLITE! BUCKLE IN AND PREPARE FOR SEVERE GEE!"

My immediate thought was of Irenka, stuck in the bathroom. I used my arms to propel myself out of my seat, but was promptly shoved back down from behind by Elaine's hands on my biceps.

"Do as you're told!" Elaine yelled at me.

"But my sister!"

Elaine looked to where I stared wide at the lavatory, then nodded once and said, "You stay here, I'll go get Irenka!"

The older woman almost ran down the aisle, her grip shoes making *rip-rip* sounds as she went. I managed to get my harness buckled around me when the gee kicked hard. We all slammed from side to side, up and down, screams and shouts and crying filling the cabin. Elaine stayed upright through all of it, and I saw her reach the lavatory door and use the special key card on her lanyard to open it. She vanished inside for a moment, then emerged with Irenka, whose eyes were searching frantically while her legs kicked in the air. Elaine was yelling, "Calm down! Calm down, honey!"

Another series of violent maneuvers battered the occupants of the cabin. I saw one girl come loose from her partially-buckled harness and crash into the ceiling. She floated limply for a moment before being catapulted over my head and out of sight, followed by a sickening *thump*.

Elaine held Irenka tight, however, and began making her way back to my couch when there was a horrific concussion that made my teeth rattle, following by groans and shrieking from beneath the floor.

My ears suddenly felt like they might pop, and for an instant I realized that the ship had been hit. Elaine and Irenka simply looked at me, their mouths forming twin oh-shapes while their hair ruffled in the rush of escaping atmosphere.

Then the orange decompression shield slipped out of its compartment on the headrest of my couch and dropped down over me like a shroud, sealing at the edges.

I screamed Irenka's name and fought to undo the chest buckle on my harness, watching through the shield's small window while the cabin became a nightmare of flashing red lights and debris exploding from the floor. My little sister and I were able to exchange one final look, her little mouth shrieking, *Mirek!* Then the world tilted over and I was crushed into my couch, the decompression shield flapping and billowing.

When I came to, I was numb to the core. My ears hurt a lot and my nose had bled all over the front of my shirt. I didn't care. For the longest time I just sat and kept my eyes closed tight, re-watching the image of my little sister noiselessly screaming my name.

Eventually I felt the rumbling of a terrible cry struggle up in my chest. Once it broke the surface, I howled for many minutes, snot and tears and blood caking my face and hands. By the time I went silent I was so spent physically and emotionally, I could only muster a few last sniffles, and then I was back to simply feeling nothing much at all.

Hours passed. I didn't move until my bowels complained, and I used the small LCD in the armrest of the couch to read the emergency instructions. The decompression shield had snapped taut as a balloon, affording me some elbow room. So I unlatched myself from the harness and, per direction, pulled the seat cushion up to reveal the orifice for an emergency zero-g toilet, which I used. Then I simply sat and stared out the shield's window, watching the blackness of space and the stars beyond roll slowly past.

I figured I'd been blown free of the wreck during the decompression, or the couch was designed to eject in an emergency. It didn't matter, really. Irenka had died five meters from me, and all I'd been able to do was watch.

I'd failed Irenka. And I'd failed Papa, who'd told me to take care of her.

I wished very much that I could cease to exist.

Another cry rumbled, but I didn't have anything left for it.

I fell back asleep.

I came awake with a start.

The decompression shield was slowly deflating around me.

I hurried punched at the LCD on the armrest, wondering why the system hadn't sounded an emergency alarm, only to find the decompression shield lifting back up into the headrest on its motors.

I flinched for an instant, expecting the vacuum of space, but instead found the illuminated, metal-ribbed interior of... another ship?

There were no people present in the high-ceilinged, rectangular space. It dwarfed the passenger cabin of the ship *Irenka* and I had originally escaped on.

*Irenka*. A wave of sudden depression washed over me and I brought my useless knees to my chest, burying my face. The repeating images of her frantic death began to replay across my mind, and I slowly beat my forehead on my kneecaps, unable to make the horror stop. Would it be like this forever? Always seeing *Irenka*, dying a million deaths, with me unable to help her?

There was a clanking sound from across the large compartment, and I snapped my head up. I saw a circular hatch swing open.

My heart began to beat rapidly in my chest. I stayed put on the couch, watching a small figure in white, flowing, pajama-like clothes float through and attach to the deck with grip shoes.

To my surprise, it was an old woman.

Her skin was wrinkled and coal-black, and her eyes were wide with dark irises.

She looked at me, unblinking. Then she quickly walked *rip-rip-rip* across the deck.

"Boy's a mess, Howard," the old woman said, but not to me. Her speech was American English, but heavily accented in a way I'd never heard except on television. When she drew near I noticed the tiny device in her ear—a headset. I just looked at her while she knelt down slowly near the coach and examined my face, the dried blood on my shirt, and the way my balled fists gently trembled while I hugged them over my knees.

"You got a name, son?"

"Miroslaw," I said, the dried mucus and blood in my nostrils making it sound as if I had a bad cold.

"That's... Russian?"

"Polish"

"Well you can thank the Lord that your little lifeboat here crossed our path, Miroslaw from Poland. The killsats didn't leave much left when they hit Jupiter.

Howard and I kept the observatory dark until the killsats moved on. Then we did a slingshot burn, and now we're away."

"What does that mean?"

"Everything has gone on automatic. The military doesn't exist anymore, but their machines do. To the killsats, *everyone* has become a target. So Howard and I decided it would be best to cut loose and go."

"Where?"

"The Kuiper Belt, boy. Only place left. We're going to find the Outbound."

*Outbound*. There had been stories about them in school: privately-funded deep space missions that had been sent to determine if the space beyond Neptune provided fertile ground for colonization. None of them had ever sent back any data, once they passed the orbit of Pluto. Common sense said the Outbound had perished.

But had they really?

As long as Irenka's death was foremost in my mind, the Outbound didn't matter to me. I kept hugging my knees, and stared past the old woman, looking at nothing.

"I'm Tabitha," the old woman said, sticking out her hand.

"Thank you for finding me," I said, weakly shaking it.

"You don't seem too happy about it, Miroslaw."

"Mirek. My sister called me Mirek. She's... she's..."

I couldn't say it, but it didn't seem like I needed to. Tabitha just put a gnarled old finger to my lips.

"Hush child. You've survived the Devil's Day. Come on, let's get you cleaned up."

I let her grab my arm and pull me up off the couch. Using the grip shoes, she towed me back to the hatch she'd used to enter the large bay.

She noticed that my legs trailed behind me, and I used only my arms to maneuver through the hatch on its hand rails.

"Can't walk?" Tabitha asked.

I nodded. She immediately flipped me over to check for injury, but I pushed her hands away. "Not hurt. Paralyzed. Since I was born."

"Mercy," Tabitha breathed. "Well Mirek, we'll just have to do the best we can, you and I."

"What about Howard?" I said.

"He's my husband. You'll meet him soon enough."

Howard and Tabitha Marshall were originally from Virginia. Assigned to one of Jupiter's six original Humason-series mobile space telescope platforms, they'd served as technicians when they were young, and moved up to take over their observatory when older.

We talked while Tabitha helped pull my shirt off and began washing my face.

"NASA told us the telescope was too old, and ought to be decommissioned, but Howard and I liked it out here so much, where we could be close to God's quiet grandeur. When the astronomers and other staff packed up and left, we stayed. In protest, at first. But eventually NASA gave up and let us keep working. We sent data back right up until the war."

Howard, I'd learned, had actually died a few years earlier, but they'd recorded him into the computer, and now he ran the observatory as its brain. I'd heard of that being done for some of the very long deep space missions, using volunteer pilots who'd grown too old or sick to fly. It was an experimental thing, and lots of people back on Earth still hadn't been too sure about. Talking to Howard was a little like talking to an imaginary friend, since he seemed to exist everywhere and nowhere at the same time.

The observatory itself was a sprawling complex built into the side of a tiny piece of ore-rich rock that had been blasted off one of Jupiter's trailing Trojan asteroids. When the hunter-killer satellites from the inner system had reached and attacked the Jovian settlements, Howard had turned off every piece of active equipment he could, going "dark" in the hope that he and Tabitha wouldn't be detected.

Pure chance had sent my couch spinning across their path, and when Howard's passive sensors picked up my vital signs, Tabitha demanded that I be brought aboard, in spite of the risk.

I didn't know what to say, so I mostly kept quiet and let Tabitha—Tab, she insisted—do most of the talking.

She literally flowed with stories and spunk and an irrepressible good cheer, such that I almost forgot the depression that had sunk its teeth into my heart since Irenka had

died. But the dual loss of my sister and my parents remained like a toothache—always there, and always painful.

We got me bathed, and dressed in an oversized smock similar to the one Tab wore, and then she took me on a tour of the facility. Most of the compartments were sealed and cold, since the observatory's automation did most of the upkeep and Tab herself only needed a few rooms in which to work and live. She moved like a fish in water when she maneuvered in zero gee, and she showed me the spin room where she spent at least a couple of hours every day, doing exercise and letting her body experience centripetal gravity so that her muscles and bones didn't wither away.

"I know you can't use your legs, Mirek," Tab said, "but we'll find out a routine for you. Meanwhile, we can open one of the other compartments and get you a room set up. You're going to be our guest for awhile, I think."

I stopped.

"What if I don't want to?" I said.

Tab looked at me with a raised eyebrow, her steel-gray, close-cropped hair poking out in a mass of springy ringlets.

"Boy, you think you got any choice at this point?"

"Papa used to tell me there are always choices."

Tab opened her mouth to argue, then stopped and looked at me carefully.

"Fair enough, child. The Lord gave free will, and it's not mine to take away. We could put you into one of the observatory's dories. You could take your chances on your own."

I stared at my host. Staying here wouldn't make the pain to go away, that was for sure. But then, I wasn't certain anything would.

Hot tears began to well up in my eyes again, and I ferociously jabbed at them with the billowy sleeve of my smock.

I cursed in Polish.

Tab sighed, and lowered her floating self down until she was looking at me eye to eye. When she spoke, her Southern Black accent was especially thick.

"It's a damn shame any of this had to happen, Miroslaw. Your family. My family. All our people, gone. The Armageddon came, and it went, and we're still here. Which tells me the Lord still has work for us. It 'aint an accident your couch came floatin' by

Howard and me. That much I'm certain of. I don't know what else your Papa ever told you, but let me tell you something my Papa told me when I was your age. He told me that there was never any way of gettin' out of pain in this life. Adam and Eve saw to that. Because the Lord needs us to know pain. That's part of the test. So while I can't make your pain go away, I can tell you that we're all gonna be judged by how we bear that pain, and use it, and do the Lord's will because of it. Do you understand?"

I didn't. Mama and Papa had been physicists. Our family never went to church. Tab's talk sounded like something out of a history book about the days when people thought religion was more important than science. It was foreign in my ears and made me uncomfortable, but I couldn't deny the earnestness with which Tab had spoken. Nor could I deny the heart-felt kindness in her expression.

My tears flowed like a river, and I stopped trying to wipe them away.

Irenka would have liked Tab. It was a crime that Irenka wasn't here.

I blubbered something to that effect, and then I felt myself whisked up into Tab's arms, almost crushed by the woman's surprisingly strong embrace.

It was the first time anyone had held me—really held me—since Papa.

I bawled into Tab's shoulder, and she just kept holding me, singing a soft song under her breath that I would later learn was a hymn.

I chose to stay, of course.

And Tab and I talked about the Outbound.

"So where do we start?" I asked Tab. "We can't just search blindly."

"The largest group of Outbounders was said to have followed in the wake of Pioneer 10. Can we do the same, Howard?"

"Let me see if I have the file on that," Howard's voice spoke from the speakers in the ceiling. "Oh, here it is. Yes, I think we can do that. It's lucky for us we came out of the slingshot when we did, or we'd be going in the totally opposite direction. We'll have to wait awhile longer before I can risk a second burn. We're not far enough away for Jupiter yet."

"No problem," Tab said. "I think time is the one item we're not going to run out of."

She wasn't kidding. Even with constant thrust, it took two months to cross the orbit of Pluto, and another eight to get as far as the inner limit of the Kuiper Belt. The observatory was well suited to long voyages. A plentiful fuel reserve, in the form of antimatter, provided power while a large hydroponics facility kept the air clean. Tab trained me to service the various automated and manual life systems of the observatory, and we inventoried and re-inventoried all the consumables and spare parts. With Howard's help we drew up graphs and charts to see just how far we could stretch our resources.

Barring damage to the observatory, and with regular burns for course correction, Tab and Howard estimated we could go twenty years before running out of anything important. Even if the main reactor failed, a backup radioactive decay generator could provide full internal power for another ten.

Shutting down everything but the bare minimums increased these time frames by a factor of three. Which meant all we had to do was keep the hydroponics farm healthy, and Tab and I would have enough food to eat and air to breath for decades.

*Decades.* My soul chilled at the thought of such a long, lonely voyage.

Howard stopped monitoring the inner solar system at sixteen months. There were no more human cries for help. All that remained were the automated signals of the few surviving death machines, each acting out its programmed orders regardless of the fact that the men and women who had given those orders were gone.

No other automated ship-to-ship communications were intercepted either, though if anyone else had survived and fled, they had likely done so in the same manner as we: deliberately silent.

Several times, Tab and I debated turning back.

But as the kilometers between Earth and the observatory grew, the very thought of going home became abstract. We were now well beyond the confines of the planetary system proper—the sun having become just another pinpoint in the star-filled sky. What chance did we have, in going back? How would we look for anyone while avoiding the robot killers?

Better to forge on.

For my thirteenth birthday, Tab told me she would teach me to be an astronomer.

It was easy, since everything I needed to know was in Howard's databanks. And it helped pass the time, keeping my mind off things I still didn't want to think about. Mama and Papa and Irenka were still there, like deep sores newly scabbed over. But somehow, day by day, Tab and I grew closer. And the hurt got a little bit less, and a little bit easier to carry.

She and I manipulated the observatory's sensors and equipment, cataloguing various large and small objects in their path.

Tab told me that, contrary to popular conception of centuries past, deep space was not a total void. The Kuiper and Oort regions were actually a combined debris field that bled inexorably into the sparser debris that populated the interstellar medium—where the planemos ruled.

Planemos. Planets without stars. Worlds unto themselves.

Perhaps the Outbound had ultimately reached and settled on one of them? After a voyage spanning centuries?

Howard diverted our course on several occasions in order to investigate anomalies that showed up on the observatory's impressive sensor array.

In each case, we found nothing; even if the comets and icy worldlets themselves were interesting.

Mostly, they were rocky bodies which had accrued a shell of water and gas ice. Perfectly routine, once you got out beyond Pluto.

On only one of these did we find something which indicated humanity.

It was a smallish snowball of a world, irregularly shaped, yet giving off radioactive emissions from one of its many craters.

Closer inspection with the telescopes revealed signs of mining, long since abandoned.

It was enough to make Tab whoop and spin, shaking her hips side to side while she floated through the observatory's control center while Howard jabbered with as much excitement as his computer-cooled mentality could muster.

We matched with the ice body and Tab and I went outside in one of the observatory's two dories. Landing, we then took suits—one of which I'd helped Tab

extensively modify to fit me—and we were disappointed to find only ice-crusts and garbage and a small pile of spent fissile material.

No messages. No clue to how long the Outbound had stayed, nor where they had gone.

Though there was no sign of Pioneer 10 either.

We returned to the search.

Twice more in two years, we found similar pit-stops on similar worlds. The Outbound had needed hydrogen isotopes and reaction mass for their fusion drives. It must have taken them many decades to travel as far as we had gone in just a few years on antimatter drive.

Tab risked active communications, tight-beamed to the fore.

For weeks we waited for a reply, and nothing came.

The longing to see other living humans became like an itch to me. Beyond missing my family, I also missed the wide open plazas and parks of home, where I'd been able to race my electric chair between the fountains and startle the pigeons and laugh like a boy ought to laugh.

At ship's night, I began dreaming of home, and... other things. It was embarrassing to talk about with Tab. I had an easier time talking about it with Howard, who had been a man once, and before that, a teenaged boy.

Howard said he was surprised that I was getting the kind of physical response I was getting, even though I had never felt anything below my hip bones my entire life. When our conversations turned specifically to women and women's bodies, Howard hesitantly uncorked a database of pictures he'd been keeping—pictures that my mother would have been scandalized by, had she caught me looking at them on my laptop back at home.

"Don't tell Tab," Howard had warned in a fraternal fashion. "She'll be liable to erase me if she finds out I've shown you this."

I promised Howard I would not tell, and was actually grateful to have something I could share with another male, even if he was just a computer recording. We talked more and more, Howard and I, while Tab and I remained close, if gradually more separate. One evening when Tab thought I was asleep, I slipped out of bed and moved silently through the air to the doorway to her room, where I heard she and Howard

talking. Pillow talk, my mother would have called it, made strange by the fact that Howard was not actually in the bed with his wife.

"He's going to be a man soon," Tab said sadly.

"He became a man when his Daddy died," Howard replied.

"Probably true. But you don't know how happy I've been, finally having a young one around to look after. We tried so hard, all those years, you and I. And nothing. Then, like Sarah, God sends me this boy in my old age. Only, I never got to have him as a baby. He was mostly grown up when he came, and now..."

I felt a lump form in my throat while Tab quietly wept.

"He's a good boy, Tabitha. We can both see that. And I think he loves you. He won't say it when I talk with him, but I can feel it."

Tab barked out a mocking laugh. "Hah! A computerized man who can feel!"

"You know what I mean, woman. Now hush up. My sensors tell me the boy is lurking at your door. He's probably heard everything we've been saying."

"Sorry," I said, letting myself in, sheepishly smiling.

Tab was there, wiping tears from her eyes. "Don't be, Mirek. I'm just a sad old lady who never had a chance to have any children of her own. Don't mind it if I've become too attached to you."

In fact, I didn't mind it. I didn't mind it at all.

Using my arms, I launched from the hatch and grabbed Tab in a bear hug, squeezing her as tightly as I remembered her having squeezed me that first day I decided to stay with my new family, and seek the Outbound.

She wept anew, for joy this time, and I told Tabitha and Howard Marshall how much I did love them, and how thankful I was that they'd found me and given me a home when the world had taken all such things from me.

By the time I was sixteen, I suspected that the full burden of humanity's self-annihilation had yet to settle on my shoulders. Some crucial part of me remained numb to the idea that everyone had ceased to exist, and that all the artifacts of humanity on virtually every world had been antimattered to dust. How ironic that perhaps the only surviving tokens of human intelligence, were the final remaining warbots which

continued to prowl the solar system, seeking targets and enemies which did not exist. Such thoughts were depressing, and depression again became a common companion.

I'd have liked very much to have another young woman around to talk to, to touch, and to hold in my arms at night. But the way things stood, I might not ever see another woman again, besides Tabitha, and this grew to be an irritant like no other.

With Howard's surreptitious help, I began to distill spirits from the grains grown in the farm domes.

Shortly after, Howard began to worry that he had an alcoholic on his hands.

But how else was I supposed to bear it? I had a dead past, and an unknown future. The only living young man left in the universe!

Homesickness and abstract horniness accentuated my depression, giving it a melancholy flavor.

I began to drink daily. Alone. In the private module I'd built out on the face of the observatory's foundation, where Tab couldn't touch nor talk to me. I neglected my daily exercise in the spin room. Why bother? What future awaited me now? I'd been young when I left Earth, and young I would remain for many years. But what was youth without joy? Without a girlfriend? I found myself daydreaming endlessly about all the older girls I had ever been attracted to: their faces, their expressions, the way they laughed or got angry, how their bodies had moved under their clothes. It got so that I thought I would be ecstatic to see even a single, other breathing female, regardless of her state. Just someone I could hug, and who could hug me back, and who wasn't old enough to be my grandma.

I grew distant from Howard and Tabitha both.

I got sick of them, and I think they began to grow sick of me.

We began to go days or even weeks not speaking to each other, and eventually I retreated to the privacy module almost entirely, forcing Howard to monitor and tend to the observatory all by himself, with Tabitha's declining help.

Which was fine, at first, because Howard had always done most everything anyway.

Then, one day, there came a beacon.

It was faint. No more than a weak radio signal, sending binary.

Howard couldn't make sense of the message, which seemed truly random—ones and zeroes in an endless stream, without pattern.

That was okay. It was a sign that we were still on the right path. It was also enough to shock me into a forced detox.

By the time we reached the comet from which the transponder was sending, I was sober enough to take out a dory; and human enough to actually be pleasant to Tab for the first time in too long.

On the surface of the comet, I found a tunnel.

At the bottom of the tunnel, I found a grave: sixty-eight bodies, all perfectly frozen, and arranged with dignity.

I spent days examining the site. I reverently combed the dead for anything that might indicate where the other survivors had gone. They were of mixed racial heritage and gender, and if I'd had to guess, I'd have said they were Americans. And whether or not they came from the group of Outbounders that we'd been specifically pursuing, was uncertain. But their presence was the first absolute proof that humanity had survived to that point, so far from its now-dead home.

And that was enough. I reverently went among the dead, recording their names from the steel tags attached to their bodies and taking digital pictures.

When I ultimately got back to the observatory, I was calm.

Almost too calm for Tab's taste.

But the dead of the Outbound had helped me cross a threshold I hadn't known needed crossing, and at once filled me with renewed resolve.

Quickly, I flushed out the privacy module and dumped every last drop of grain alcohol.

Next, I began an exhaustive catch-up on all my neglected duties, interspersed with profound and heartfelt apologies to Tab and Howard alike. I couldn't tell whether or not the man inside the computer could feel pain, but I knew my behavior over the last few months had scared and hurt Tab. Certainly I'd treated them both badly enough. I hoped that I could make it up to them, given time. And they certainly seemed grateful and relieved to see my renewed sense of purpose.

"Forgive?" I finally said one day, when the observatory was back in order and Tab and I were sharing a meal for the first time in ages.

A very long silence.

"Forgiven," Tab said, slightly smiling so that the corners of her eyes wrinkled warmly. She reached out a shaking, gnarled hand, and I took it gratefully, squeezing.

During the tenth year of our flight, we found the first ship. It was abandoned. Ransacked. Every last usable part, taken. A skeleton of a vessel, accompanied by another mass grave.

At year fourteen, we found three more ships, also stripped, and also serving as a memorial to more people who had apparently lost—or given—their lives for the cause.

This time, I also found children; each far too young to have been born on Earth. The sight of those little ones brought up disturbing memories. They reminded me far too much of Irenka.

For Tab, who had become so old that she never left the observatory anymore, the children were actually a sign of providence.

"The day God takes away our ability to make babies, that's the day when we know we're truly cut off from His grace."

I pondered Tab's words and watched her gently maneuver through the kitchen, wrapped tightly against a chill in the air that did not exist. She'd tried over the years to bring me to Christ. Oh yes, she'd tried. Especially when I came off my bender with the grain alcohol. But somehow, I just never found the spark. I heard the words and I grudgingly listened when she read scripture, but while I respected and even admired the old woman's faith, I could not feel it likewise.

Where Tab felt certainty in God's purpose, I felt... nothing. In my teens I'd often questioned myself on this, suspecting some kind of internal moral failure. But now I just resigned myself to the fact that I was too much like my parents—unable to set aside the rational long enough embrace the fire and, "get religion."

As so often happened when Tab and I failed to see eye to eye, I discussed it with Howard, who had always seemed to support his wife's belief without necessarily going great-guns himself.

"Tab's Pops was a pastor," Howard said one night when he and I were having a quiet conversation in the observatory's control center. "God was mighty in her family,

from the father down to the youngest child. It was kind of scary, when we first got together. She'd drag me off to meeting and bible study and I went along with it because my Moms had read me bible too, and it didn't bother me any. And Tabby, well... She was just so damned attractive, I think I'd have walked into a pool of piranha if it meant I got to sit next to her and hold her hand.

"She was furious with me when she found out about you learning to distill. Almost as furious as when she found out about the pictures from the men's e-zines."

"Tab found out about that?" I said, laughing. "I swear, I didn't tell!"

"I know, son. It was me. I never could keep a secret from that woman, not in my entire life."

We shared laughter, one old man and one young man.

I sighed, and was silent for a long time.

"Howard, do you think I'll ever get to have a wife?"

The speakers were quiet. Pondering.

"If we can ever find these Outbounders we're on the trail of, I'd say, yes. Absolutely. Girl'd be plum crazy not to get with a handsome young guy like you."

"But I'm still a paraplegic."

"True. But let me tell you something, for women, a man being tall and macho 'aint the end-all, be-all. Especially the older a woman gets, and the longer she goes learning how hard it is to find a decent man, she appreciates the good ones when they come along. Don't worry about it, son. Your woman is out there."

"But what if I can't make her—"

"Let that part of it take care of itself, son. Don't fret over it now, especially when we 'aint even found these folk yet. You hear me?"

"Yessir," I said, clamping up on the subject, even if it remained heavily on my mind.

Another lengthy silence.

"Howard," I said.

"Yeah, boy?"

"Does it hurt?"

"Beg pardon?"

"When they recorded you. And moved you into the computer. Does it hurt?"

"Not really."

"What does it feel like?"

"Impossible to describe."

"You can't even try?"

"If I did, it would probably just confuse you. But for the sake of argument, imagine going to sleep one night, and when you wake up, your body is huge, has a hundred new arms, a hundred new eyes, a hundred new mouths... It really takes some getting used to. But no, it doesn't hurt."

"We'll have to record Tab soon, won't we?"

"No. Tabby made me swear to never do that. She's afraid it will interrupt her soul going to Jesus."

"But *you* were recorded."

"That was different. And believe me, Tab's only reason for allowing it was because she feared being alone more than she feared my soul getting lost in space between this world and the next. I think in the long run she's stopped worrying about me. Though she still insists that when it's her time, nothing stop her."

"Does she really believe she'll go to Jesus?"

"You know she does, Mirek."

"How about you? Do you really believe it?"

Pause.

"I *want* to believe, Mirek. Whether or not that counts... I dunno."

Disaster came suddenly, almost 15 years after leaving Jupiter.

A micrometeoroid storm, composed of dark carbons so black and so thinly diffused we never saw them on the telescope, nor the radar. One moment I was helping Tab get dressed and get her room cleaned up, the next the observatory was trembling and a sound like hard rain echoed through the corridor outside.

"Howard, what's happening?" Tab shouted.

When no reply came, Tab and I both looked at one another in alarm and rushed to the door to look out. Sparks lit from the ceiling and tiny rays lanced down and into the floor. The cosmic dust—moving at several tens of thousands of kilometers a minute,

relative to us—was penetrating through many centimeters of steel and polycarbonate plate. Tab gripped me as we stood in the doorway, not daring to move, while the eerie light show continued for several minutes, until finally it ended, and I was able to rush out to the nearest computer access panel and bring up a status report on the station.

It was grim. Half the observatory was either off-line or red-lined. Worse yet, the workstation was operating on local software only—cut off from Howard's direct control. We were also gradually losing air pressure, though the level had not yet dropped enough to be dangerous.

Tab and I floated frantically down several hundred meters of corridor until we reached the access hatch for the main computers buried down in the basement. I noted that the hatch had numerous almost-too-tiny-to-see holes in it, then dropped legs-first into the bowels of the main computer core, where Howard's mind—and perhaps his spirit—had dwelled for over two decades.

The databanks were a mess. Whole arrays were dead. The computer center had been hardened against cosmic radiation and solar flares, but never something like this. I worked frantically to trace the logic paths of the fail-safes while Tab gripped a handrail and sobbed uncontrollably, saying, "Howard... oh, Howard..."

It was no good. Too many arrays were damaged or down. Even if I could load backups, the constant synergy between the databanks that was necessary for Howard Marshall to exist, as a person, had been disrupted. If we got something back, it probably wouldn't be Howard.

Tab needed no one to tell her the reality of what had happened.

She simply stared at the arrays, many of them blinking red warning lights, and kept repeating her husband's name.

She took to her bed later that day, not seeming to care about the thousands of microscopic punctures that were leaking our air away into space. Nor did she care about the other damaged equipment—repairs to which were now going to be near-impossible without Howard's help. I had not realized how totally dependent Tab and I were on the man, until he was gone.

In a frenzy, I booted up as many of the dummy programs as I could, running them on local workstations or servers so that life support and other vitals didn't close

down. Then I spent the next three days securing the hydroponics farms and the cyclor machinery and the other life necessities, without which death was certain.

Not that it mattered much for Tab.

Every time I checked on her, she'd gotten worse.

The final time I looked in on her, she was curled—floating—near her bed. An old framed photo of she and Howard from when they were young was pressed tightly to her chest. The same hymn she'd once sung to me, when I was breaking down, drifted from her lips.

I almost had to shout at her to get her to pay attention to me.

"It doesn't matter anymore, Mirek. The Lord has taken Howard, and it's time for me to go now too."

"You can't just quit!" I screamed. "You told me once that God would judge us by how we bore our pain and burdens, right?"

These words seemed to bring her back to herself for a moment, such that she replaced the photo in its holder and pushed off to drift down to me.

The slap that came was unexpected, and the first and last time she ever laid a hand on me in anger.

I was too shocked to be angry.

"Don't quote God at me, boy!" Tab said sourly. "I've spent my last years trying too hard to open a door into your heart, through which Christ might step through. But you've rejected Him, and a part of me too. Now go away and leave me be. I'm too old to help anyway."

There was nothing to say, so I left, and got a few hours of harried sleep before returning to Tab's room.

Her body was suspended in the zero gee bed. She was dressed in her white smock, and her eyes were closed, though her mouth hung slackly open while her chest drew no breath. A little roll of paper was held in one cool hand.

I shakily reached for it, and when it unrolled, it said, in Tab's handwriting, "You are a good soul Mirek. Thank you for letting me have you as my boy."

I couldn't think for the rest of the day. Only the seriousness of my predicament kept me moving. But my mind and heart were as empty and cold as the space through which the observatory now lamely traveled.

I eventually put Tabitha's body next to her husband's, in the tomb they had made for themselves on the far side of the observatory. There was no ceremony, no words of eulogy. There had been none for Papa, nor Mama, nor Irenka after them. There seemed none appropriate now, and I felt anything I said that even remotely touched on the spiritual, would be almost profane. Tab had been right. My heart was deaf to God. If God even existed. I stared at the closed doors to the final resting place of my second set of parents, and doubted very much that Jesus, nor any other saving deity, existed. There was only the harshness of life, followed by the silence of death. Which came suddenly and without warning, and always took those who least deserved it.

That month, my work on the observatory was purely mechanical. And ultimately futile. Too much had been ruined in the micrometeoroid storm. Without the expanded capacities of Howard—his ability to be everywhere and see and feel and "think" the observatory all at once—there was no way for a single person to manage.

The local software kept things going, for a time, but when three months had passed, it became clear that the hydroponics were failing, along with the waste cyclers. Even with the stores that had been kept safe down in the many cellars we'd dug into the rock, within a couple of years, I was going to be out of both air and food.

I went back to the main computer core and considered my options. There were enough good arrays to try and re-assemble a new master program, using the original factory defaults which were kept on disc, but since everything I knew about computers I'd learned piecemeal from helping Howard and Tab, I didn't have the expertise to make more than a half-assed attempt.

I tried anyway, and created a computerized retard whom I promptly erased.

I didn't even think of messing with what was left of Howard. Those arrays I kept isolated, in case there was still some chance of sieving data from them which might prove useful.

Days I spent wandering alone through the halls of the observatory, wondering just what in the universe I was even doing here, and why I should keep trying to extend a life that seemed to have amounted to futility.

Whether by luck, or design, that was when the next beacon revealed itself.

Like the other, it was very faint, but it called softly from directly ahead, in the belly of the Kuiper Belt, like a siren beckoning a lonely sailor.

I went to it. Dumping more antimatter than I should have into the reaction, I thrusted viciously, pushing the observatory up the relative velocity scale, not caring if I was risking more micrometeoroid storms. If there was going to be any point to this entire journey, any way at all of giving the deaths of Howard and Tabitha meaning, then I had to reach that beacon, which lay an indeterminate way off, but appeared to be growing just a little be stronger, day by day.

Weeks later, I found the buoy.

It appeared to be the first piece of whole-cloth Outbounder technology I'd yet discovered. Incredibly small, and apparently operating on a store of antimatter—which the original Outbounders had never had—the device pinged happily at the observatory while I used the remaining, functional thrusters of the station to pull alongside and match course and speed. My radio query sparked a message laser that shot towards the observatory. I had to fiddle for a few minutes to bring the correct receptor dish into place—something Howard could have done reflexively, with a mere thought—and then the main audio-video channel was alive with a recorded message.

It was a head shot of a young woman against a bluescreen. She was of Asian descent, and spoke TransCom with an accent I suspected to be Chinese.

"If you are seeing and hearing this message," she said, "then you are halfway to us. We know about the war, and we know that you would not have come this far unless you sought refuge. Be aware the Quorum has decided to grant asylum to all refugees from the governments of Earth, the independent satellite localities, and all colonies of the asteroids and the Jovian planets. Provided that you can reach us. We regret that we can offer no further assistance at this time. We also regret that we cannot offer you precise coordinates to follow, but if you have come this far, you already know the rest of the way. Good luck."

The message repeated, and I was both elated and crushed.

So far. I'd come so far. Tab and Howard had sacrificed so much. And this was only *halfway*?

I went back to my calculations, regarding stores and the upkeep of the hydroponics. There was no way I'd squeeze out fifteen more years, even if I thought I

could last that long alone without going insane as a result. And even if I dumped the entire antimatter reserve into one, long, drawn-out burn. Which would be stupid, because then I'd have nothing left to slow myself down with when I neared the endpoint.

I stayed near the buoy, and debated at length.

The girl in the message had obviously intended for refugees to keep following the last known trajectory of Pioneer 10. Following that jellybean trail was a snap. How I could do it and still be alive upon arrival, was another matter entirely.

It took me three days of thinking and tinkering to come up with a plan.

It terrified me, because it seemed so much like suicide.

The room with the recording equipment hadn't been touched in a long, long time. Tab had sealed it in a low-density, pure nitrogen environment after she'd helped put Howard into the computer, so that all the machinery and the consoles remained pristine and in good working order. It was also one of the few rooms the micrometeoroid disaster had not touched, and this gave me a hint of comfort while I set about preparing to download myself into the observatory's database arrays.

I'd spent a few weeks carefully creating a new, hardened shelter for those arrays, then painstakingly moved each one of them from the old core, down to the new location, finally powering them up and synchronizing them, with triple-redundant electricity I'd snaked down from the antimatter reactors.

If the observatory got hit again, I didn't want to suffer the same lobotomized fate of my old friend.

The instructions for recording were fairly simple. The device itself was like a compact PET scanner that lowered over the skull like a hair dryer.

The catch was that the process could not be aborted nor re-tried. The recording process took days, and was so electromagnetically intensive it destroyed neural pathways as quickly as it stored them in the databanks. Once the recorder lowered itself over my skull and began scanning, I was on a one-way trip. And since I didn't have any help, and had never done anything like it before, there was a very good chance I'd wind

up nothing more than a mindless piece of meat, my entire life hopelessly scrambled inside the computer.

I prepared carefully. In the event that I did not survive, I programmed an automatic course into the guidance system. Having come this far, it seemed worth it to make sure my remains had at least a chance of arriving at my destination. I also networked the life support servers and crossed them with the recording monitor, so that if the recording process completed and I did not awake and assume full control over the observatory, the contents of the observatory would be gradually deep-frozen.

My brain would be empty at that point anyway, and I didn't like the idea of leaving my body to slowly rot on the recording couch.

Once I was satisfied that I'd tended to the necessary details, I sat down and considered my final words. In my entire life, through everything I'd experienced, I'd never really thought about what I'd want to leave behind for the future. It had always been someone else leaving something behind for me. I had always been the one to have to pick up the pieces and carry on. It frustrated me to sit there in front of the computer, finger poised over the button that would begin audio-video storage, and not have a damned thing to say.

After ten minutes I finally tapped the button and spoke—in TransCom, so that the people who might recover the recording would understand.

"My name is Miroslaw Jaworski. I might be the only survivor to have escaped the destruction of planet Earth. If you are viewing this message, it means that I am dead. If it's not too much trouble, I'd like somebody to put up a placard somewhere; for myself and my family."

I slowly repeated the full names of my sister, mother, and father, as well as my grandparents, and several extended family who had been alive when the antimatter bombs wiped out the Earth. It seemed like a good idea to include them, since we were all victims and I wanted our lives to be remembered somewhere, by somebody.

"I don't really care what happens after that. Tabitha and Howard Marshall are entombed on the other side of this facility, and I think they should stay there. My body, and the entire contents of this observatory, are yours to do with as you see fit.

"Out."

I punched the stop key, made sure the file replicated through my crude daisychain of stand-alone workstations, then stood up and walked to the recording room, where I slowly shut the door, set up the IV system—I'd need fluid put into me during the process, or I'd dehydrate to death before recording was complete—then sat in the recorder's attached chair.

The recorder "crown"—which is how I'd come to think of it—was poised just centimeters above my skull. I'd detached the activator toggle from the control station and put it on a cable that allowed me to hold the toggle in my hand.

I thought about how Howard had once had to do this, with only Tab to monitor his progress.

Swallowing hard, I flipped the toggle with my thumb.

And the universe vanished into a swirl of sounds and color.

Nothing could have prepared me for what happened next. One moment I was bathed in an endless sea of shifting and chaotic images—sounds echoing across the cosmos from one side of my mind to the other—and the next moment I seemed to snap back to a state of utterly cold and solid reality.

Only, I was seeing the observatory through at least fifty different eyes, and hearing with fifty different ears, and I couldn't blink nor turn off the input, so that I was trying to scream, but that just made things worse because my scream bellowed from fifty different speakers, which overloaded fifty different microphones, and within my head a feedback squeal like a migraine peeled across my consciousness.

It was Howard who saved me. Or, rather, his memories.

On the chance that I'd be able to access what was left of Howard's intellect, I'd networked his old arrays in a cluster adjacent to the main set of blanks I'd set up for myself. In desperate panic, I mentally reached for Howard, and felt a quick jolt of information flow across the link. Suddenly I was on solid mental ground again, my field of vision rapidly narrowed to one camera view, and my ability to hear narrowed down to a single, neutered computer voice that simply said, "Command access granted, Mirek. Awaiting further instructions."

The system knew my name.

I'd made it.

Only, I couldn't *feel* excited about that. Intellectually, I think I was relieved. But the glandular *feeling* of satisfaction, of triumph, that should have been mine, was absent. All that remained was the coolness of pure, rapid thought. Thought so fast, I felt staggered by the implications. And capability. No mathematical calculation ever need be beyond my grasp again. The moment I could conceive of a problem, the answer was in my mind at the same instant. Memory recall proved similarly instant, and I took a few moments to ponder this reality, which brought on a further jolt of data from Howard's banks, which were actively integrating with my own, now that they had a reliable cerebral matrix to map to.

It took me only a few minutes to master the network, and another few to access and test all the remaining, functional systems in the observatory.

At once, it became obvious how sloppy and haphazard I'd been. Total facility efficiency was down to forty-two percent, with a list of yellow, orange, and red-lined items stretching into the hundreds. While I scanned and prioritized, I received continual jolts of data from Howard's arrays. One moment, I'd be wondering how to fix a certain problem. The next, the knowledge would be there, as if it had always been there. As if I'd done it a hundred times before.

Though his personality was barely perceptible in the data, like a tiny aftertaste on the tongue, Howard was still, for all intents and purposes, gone. I sent numerous mental *thank-yous* to the man's memory, then made ready to depart the buoy, and begin the down-hill leg of my journey towards the Outbound.

One thing about being a computerized mind. I could make time go as fast or as slow as I wanted to. Weeks and months evaporated in a blink while I made necessary fixes to reactors and set up a schedule to ration the fuel supply, all the while thrusting gently up the relative velocity curve, being careful to have more than enough fuel left over at the end-point for slowing down. I had no idea what might be waiting for me there, but I knew it'd probably be bad manners to go speeding past the Outbounders like a semi that's lost its brakes on a steep hill.

I turned my radios forward and began gently peppering my flight path with greetings for whomever it was that would meet me.

I suppose there was always a chance that nobody would meet me, and that the buoy, for all its promise, could have been a deception, or even a relic from an effort that had since failed. But my computer-dictated intellect didn't have the capacity for real fear. Such strong emotion, I found, was purely a residual memory—like a stimulus response, now delayed. I knew I should be afraid, but this was largely a past-tense knowledge, and did not affect my overall progress, nor my determination to reach my goal.

What happened when I got there... well, I purposely tried not to wonder about that. What use would the Outbound have for a computer mind like me? It wasn't like I could just put myself back into my own head again. Nor, I began to think, would I want to. The expanded capacity of the neural arrays was almost intoxicating, and after a couple of years had passed I suspected that if ever I had to be restricted again to one set of eyes, one set of ears, one set of senses, I might feel so claustrophobic about the whole affair, I'd go mad.

With the main telescope mostly wrecked, I deployed the backup and used my idle cycles to scan and chart the narrow sliver of the Kuiper Belt through which I passed.

It really was amazing, to see so much debris in an area of space that most humans had thought of as empty, even up to and through the twenty-second century. Only the Outbound had had the forethought to see this region for what it truly was: a refuge from the catastrophes that were sure to strike the planets of the solar system—be they comet or asteroids, intense solar flares, or as had actually happened, the competitive stupidity of humanity itself.

Out in the Kuiper Belt, there was room enough to get lost. Like a hermit penetrating deep into the wild, seeking resources enough to survive and distance enough to avoid the madness of humanity.

I found two more buoys, each with a similar message to the first.

My antimatter fuel passed the point of no return, making it totally impossible to go back to the Jovian region of space. But I paid little attention. I was Outbound now, and there would never be any going back.

Another decade's worth of time elapsed in surreal ease, and at the end of that, another micrometeoroid shower hit. But I'd secured the vital systems before putting

myself into the computer, and the effort paid off. Nothing critical was damaged, though the hydroponics and other life support systems would never operate again—too many micro-holes.

I wondered why my messages, which I had been casting ahead of me like rocks across a pond, garnered no response.

Maybe that was just the nature of being Outbound—never reveal yourself until the time it's absolutely necessary.

At the twenty-ninth year since leaving Jupiter, I should have felt excited and nervous with anticipation.

I felt only lingering ghosts.

I never saw the other ship.

One moment, I was alone in space. The next moment, a fifty-meter-wide wedge was matching course and speed—which was no small feat.

I politely lobbed radio hellos at the wedge, anticipating a reply. But all the wedge did was spit out a dozen, tinier wedges, each of which fell on the observatory like fleas on the ass of a dog, and suddenly I was struck by the notion that I'd been baited into a colossal mouse trap.

Each of the small wedges touched down and disgorged a series of spider-like drones that began scrambling into the observatory's interior, cutting through metal and rock as easily as a knife through butter.

My hello calls became pressed, and then frantic. The spiders blindly ignored my efforts and sped towards the hole where I'd stashed the memory arrays. My cameras and others senses followed them, and I'd have screamed if I'd still felt the kind of visceral panic necessary.

I remember one last camera view, overlooking the arrays. I watched a spider climb on top of my databanks, hungrily rubbing together its claw-tipped forelegs, then I sensed my mind fissioning into separate parts—which seemed like the worst kind of insanity imaginable—then merciful blackness.

Reactivation was bothersome, because they wouldn't let me see, hear, nor sense anything. Not at first. All I got was the impression that someone needed me to be patient, so I waited, tasting the quality of my thoughts and finding them... Truncated. Limited. The absolute speed and precision of the observatory's databanks was missing. It felt like... It *felt* like?

When I finally opened my eyes—?!—I was greeted by several different faces, all of which appeared concerned. I sat up—?!—and looked at the Outbounders, each of whom was dressed in what I took for medical gowns, though the room in which they'd placed me was remarkably warm, and free from anything even approaching a scalpel or other menacingly surgical object.

"I'm Doctor Hastel. How do you feel?"

That was one of the women, who looked about forty.

"I'm not sure yet," I said. "How did you... put me back?"

"It's a long explanation," said one of the men, a Chinese-ish fellow in his thirties who identified himself as Surgeon Chow. "Here, I'll make it simple for you."

He never moved, but there was a sudden mind jolt, like the ones I'd gotten from Howard's memory array. In the space of a single second, I suddenly understood everything about the Outbounder procedure. They'd cloned me, using tissue from the frozen corpse they'd found in the observatory's recording room. Inside my clone brain they'd installed a new organ: a direct-connect interface. They'd used it to slowly trickle my cerebral matrix into the clone brain while the clone body grew.

Now that I was awake, the direct-connect would allow me to access their public network—once they deemed it safe for me to do so. I still had a lot to learn before I could get out of the hospital.

All of this knowledge arrived in my consciousness with a cool surety, as if I'd always known such things. But I felt a tight thrill run down my spine while I looked down at my legs.

"Fully functional?" I asked.

"Yes," Hastel said, with a small smile. "Were they not before?"

"No," I said. "Paraplegic."

"We've gotten a few of those," she said. "Easily fixed."

I dared to try to move my legs, which had been useless my entire life, and discovered I didn't really know how. Though if I concentrated, I could feel the sensation of the air cycler's gentle current across my thighs, such that it created tiny goose bumps.

I felt delirious with sudden joy, tears leaking from the corners of my eyes while I smiled broadly.

My mind began to burst with questions.

"All in good time, Mister Jaworski," said Chow. "We're sorry we had to keep you off-line for so long. Even with advanced gen, it takes years to grow a clone body to the decanting stage. You were put into the queue as soon as possible."

One of the other women, a younger and freckly red-head, asked the next question.

"I'm Surgeon's Assistant Keilor. What would you like to know first?"

"Can I..." I stopped to really think about it. Then I said, "Can I get something to eat, please?"

The entire group smiled widely.

I looked around. "Is that the right question?"

"You bet," Keilor said, taking my hand.

Another mind jolt, directly from her.

I slid off the table, and discovered I knew how to walk.

The Outbound were far more numerous and sophisticated than I'd expected them to be. While the solar system had gone about its myopic, self-centered business, the Outbound had secured great whacks of the Kuiper Belt, both for mining and colonization. Eventually they'd erected a monitoring network that had, at first, been designed to keep an eye on the rest of humanity that lived, "down in the hole," as I'd learned they called everyone who lived inside the orbit of Neptune.

It was this grid which had first detected the Others, who had apparently erected a monitoring network of their own, dating back to the twentieth century.

Things sort of snowballed from there.

Exchanging information and technology with the other sentient species of nearby star systems, the Outbound rapidly outpaced those of us "down in the hole," so that the Outbound were able to easily mask their gradual takeover of the Kuiper.

None of the Outbound had been surprised by the outbreak of war. They'd seen it coming for many years. The wedge-shaped ship that had intercepted the observatory had been one of numerous, automated picket craft designed to intercept anything sent from the solar system, and determine if it was friendly or hostile. Had I been one of the killsats, or any other hostile entity, I'd have been destroyed. But once they found my memory arrays and determined that I was benign, they pulled the arrays, sampled tissue for cloning, returned both the arrays and the sample to a safe harbor, and the rest was history.

The observatory, along with the bodies of Howard and Tabitha, was allowed to continue on its eternal journey towards the vastness of the far-away Oort.

I bided my time as just another adolescent Outbounder: lounging around in the public spaces, getting used to my new body and its revelatory mobility, and playing on the direct-connect system. Hundreds of thousands of minds, most human, a few alien, all feeding into and interconnected by a vast, peer-based sharing system that was serverless and extended as far as communications equipment could make it go. Not quite a pooled mind, since everyone kept up their privacy barriers, but enough crossover so that we each could learn and access enough information that it was like digesting an entire college semester every day of the week.

I also managed to stay in touch with the freckly red-head from the clone center. Physically, Colleen Keilor was a good bit older than I was, but age didn't seem to matter much to Outbounders.

Col and I got along quite well.

A couple of years after I awoke among the Outbound, their Quorum announced its intention to begin reclamation of the solar system. The Quorum asked for volunteers to spearhead the effort, which would involve not only cleaning out all the killsats that still prowled between the planets, but a partial terraforming of the wasted Earth.

It would be a protracted effort—the greatest challenge of the Outbound Age.

Col and I signed up immediately.

Irenka Elaine Jaworski-Keilor was born in the midst of the Inbound flight of the First Reclamation Flotilla. Bright-eyed, and with a face and smile that seems eerily familiar, she brings my wife Col and I a great deal of joy. Once, Irenka would have seemed an impossibility. But through the years of changing diapers and teaching her to read and write and do math and use direct-connect, I've gradually accepted the fact that impossibilities are routine in my new, expanded reality.

We've reached Jupiter, and found the scorched remains of the old settlements. The killsats were waiting too, but we made short work of them, radioing our progress back to the Second and Third Flotillas which were launched in our wake.

There's work aplenty for the new inhabitants of the solar system.

I hope that some day I can take Irenka down to Earth and show her a world I once called home, and which, hopefully, with a lot of fixing, might be called home again.

— The End —

### 3 Outbound (Italian translation)

Avevo undici anni quando la Terra bruciò.

Ricordo ancora papà che si precipitava nella stanza d'albergo della stazione spaziale, gridando. Quel che disse, esattamente, non riesco a ricordarlo. Ma vidi la paura nei suoi occhi quando mi sollevò e mi gettò sulla sua spalla. Fece lo stesso con la mia sorellina, Irenka, per poi tornare fuori dalla porta – entrambi sobbalzavamo sui suoi deltoidi come sacchi di patate.

Papà non si fermò a raccogliere i bagagli, e nemmeno uno dei nostri giocattoli.

Neanche la mia sedia speciale.

Ricordo il corridoio curvo colmo di adulti: gridavano, litigavano e urlavano.

Uno di loro si mise in mezzo al cammino di papà, e papà lo cacciò via letteralmente a calci.

Papà non aveva mai fatto del male a un altro essere umano in tutta la sua vita.

Irenka, che aveva solo quattro anni, continuava a chiamare la mamma. Ma la mamma era andata a una conferenza dall'altra parte della stazione, e non la vedevamo da nessuna parte.

Continuavo a pensare alla mia sedia. Se ciò che stava accadendo era così grave da far dimenticare a mio papà la mia nuova e costosa sedia, allora doveva essere qualcosa di davvero, *davvero* grave.

Quando arrivammo al portello della nave, c'erano persone enormi con delle pistole e non permettevano a papà di salire a bordo.

Papà gli gridò contro. Loro gridarono a loro volta.

Ricordo che papà posò me e Irenka con lentezza sul ponte e ci abbracciò stretti, le sue grandi mani ci accarezzavano la nuca mentre parlava.

"Mirek, sei il più grande. Devi prenderti cura di Irenka. E Irenka, voglio che ti comporti bene con tuo fratello e che faccia ciò che ti dice. Perché dovete entrambi andarvene di qui e io non posso venire con voi."

Le persone enormi con le pistole si spostarono, e altre persone, che indossavano le uniformi dell'equipaggio, attraversarono il portello e cercarono di portare via me e Irenka da papà.

Il panico mi assalì.

Non volevo separarmi da lui.

Irenka scalcio. Io strillai, perché non potevo calciare.

Ci aggrappammo alla camicia di papà disperatamente.

Alla fine, papà ci gridò contro così forte che ammutolimmo, perché non avevamo mai sentito papà dirci parole del genere prima, né a voce così alta.

Ci chiese scusa e ci baciò entrambi. Lasciammo la presa sul suo colletto.

"Ricordatevi di me," disse papà quando i membri dell'equipaggio ci portarono via.

"Ricordatevi di mamma e papà. Vi ameremo per sempre!"

La nave era gremita di gente. Soprattutto di altri bambini.

Quando dalla cabina si sentirono dei boati, alcuni dei ragazzi gridarono. Io non mi spaventai, però. Sapevo che ci eravamo sganciati dalla stazione, in quanto sentii la gravità sparire di colpo.

Era una cosa positiva. Senza gravità non avrei avuto bisogno della mia sedia.

I membri dell'equipaggio che ci avevano portati via da papà non ci considerarono nemmeno. Trovarono di fretta un sedile gravitazionale per due, ci allacciarono le cinture, e passarono oltre.

Irenka tirava su con il naso e singhiozzava mentre le stringevo la mano e guardavo fuori dalla finestra, forse troppo perplesso per rendermi conto sul serio di ciò che era appena successo alla nostra famiglia.

I grandi anelli della stazione ruotavano meravigliosi mentre la nostra nave si allontanava. La gravità dovuta alla spinta mi fece sentire uno strappo allo stomaco, per poi spostarsi di novanta gradi. Venivo spinto di lato, la visuale della finestra ruotò proprio nel momento in cui la stazione iniziò a disintegrarsi. Non riuscii a capire cosa successe, vidi solo una nuvola luminosa che sembrò avvolgere la stazione per un istante, e infine un lampo di luce bianca talmente forte che dovetti coprirmi gli occhi.

Quando riuscii a vedere di nuovo, la stazione non c'era più, e la gravità che mi spingeva contro il sedile era così forte che faticavo a respirare.

I singhiozzi di Irenka si erano ridotti a un piagnucolio e mi afferrò la mano così forte che pensai che i suoi piccoli tendini si sarebbero spezzati.

La nostra nave si muoveva, velocemente.

Il lato notturno della Terra era coperto di enormi chiazze che brillavano di una lieve luce rossa, come un gigantesco, furioso sfogo.

Di tanto in tanto, si scorgevano dei lampi attraverso le nuvole massicce e ondeggianti.

Un adulto, coperto da una tuta spaziale, che teneva un casco sotto il braccio, si trascinò oltre il nostro sedile. Gli diedi un colpetto sulla spalla e indicai fuori dalla finestra.

"Cosa sta succedendo?"

L'uomo si fermò quanto basta per piegarsi verso di noi e guardare fuori.

"Hanno colpito della roba in orbita," disse in inglese americano. "Ora stanno usando testate antimateria nell'atmosfera. Cristo santo..."

L'uomo si precipitò verso poppa mentre io continuavo a guardare fuori.

Laggiù, da qualche parte, sapevo che i miei cugini e i miei nonni erano in difficoltà. Le nuvole di fumo erano troppo dense perché potessi vedere chiaramente i continenti, ma cercai comunque l'Europa con lo sguardo. La Polonia si trovava lungo il mare, e pensavo che forse, trovandosi vicino all'acqua, la situazione non sarebbe stata così critica.

Finché vidi spuntare il lato diurno, e nei punti in cui le macchie luminose toccavano l'oceano, l'acqua esplodeva in uragani di vapore bianco.

Le macchie rabbiose si stavano inoltre espandendo visibilmente, come in quei filmati accelerati che fanno vedere a scuola e che mostrano come la muffa cresce nelle piastre di Petri.

Infine, la nave si girò di lato e non riuscii più a vedere niente, e la gravità ulteriore mi spinse nuovamente sul sedile.

Distolsi lo sguardo dalla finestra e vidi Irenka accasciata su di me, era esausta e le si chiudevano gli occhi.

I suoi piccoli respiri si fecero regolari e pacati, e in poco tempo sentii i miei occhi chiudersi, e da quel momento in poi nella mia mente ci furono solo ricordi di mamma e papà, scomparsi per sempre.

Irenka si svegliò piangendo, e gli adulti che indossavano le uniformi dell'equipaggio dovevano venire a prenderla per portarla in bagno. Quando la riportarono indietro, indossava soltanto la mutandina assorbente. Dissero che c'era stato un imprevisto, e che i suoi vestiti sarebbero tornati puliti tra un'ora. Gli occhi di mia sorella erano gonfi e sbarrati, e ora guardava qualunque cosa come se potesse farle del male.

Chiesi se fosse possibile farla sedere sul mio grembo, e dopo aver conversato un po', mi dissero di sì, a patto che restassimo con le cinture allacciate su entrambi. Tenere le cinture slacciate a gravità zero sarebbe stato pericoloso. Ma questo lo sapevo già.

Irenka si accoccolò sul mio grembo, la mutandina assorbente fruscìo leggermente. Allacciai le cinture attorno ad entrambi e la avolsi tra le mie braccia.

Piegai la testa all'indietro e chiusi gli occhi, sperando di potermi riposare ancora un po'. Mi sentivo più stanco di quanto lo fossi mai stato in vita mia.

"Voglio la mamma," disse Irenka a bassa voce.

"Voglio la mamma anch'io," dissi. "Ma penso che mamma e papà non sono più vivi."

Mia sorella si irrigidì e iniziò di nuovo a piagnucolare, affondando il viso sul mio petto.

L'abbracciai forte, sentendo il nodo alla gola muoversi. Non ero sicuro per chi mi dispiacesse di più: se per la mia sorellina, per me stesso, o per i miei genitori.

Lottai contro il dolore che cresceva e cercai di restare calmo. Riuscivo ancora a sentire la mano di papà sulla nuca quando mi aveva guardato negli occhi e mi aveva detto di prendermi cura di Irenka, perché sapeva che lui e la mamma non avrebbero più potuto farlo. Quando mi aveva detto quelle parole, papà aveva un aspetto rassegnato. Rassegnato, ma pieno di dignità. Mentre gli altri adulti che si trovavano nella stazione si erano fatti prendere dal panico, lui si era assicurato che io e Irenka venissimo portati in salvo.

Ora, mia sorella aveva bisogno che io fossi forte. E io avevo bisogno di essere forte per entrambi.

Deglutii con difficoltà e lasciai che le lacrime scendessero in silenzio, mentre accarezzavo con delicatezza i capelli d'oro di Irenka.

Un'ora più tardi, un'adulta comparve vicino al nostro sedile. Era più grande di molti degli altri adulti che avevamo visto a bordo, e aveva i capelli corti brizzolati. Aveva un aspetto materno e sorrise a me e mia sorella, dandoci una pacca sulle spalle.

"Parlate TransCom?"

"Sì," dissi.

"Bene. Potete dirmi, per favore, nome e età?"

"Miroslaw Jaworski. Questa è mia sorella, Irenka. Ho undici anni, lei ne ha quattro."

Quel disponibile membro del personale annotò i nostri nomi sul suo palmare.

"Sapete dove sono i vostri genitori?"

"Sì. Non avete lasciato che papà salisse a bordo. Ora è morto."

Gli angoli della bocca della donna sprofondarono in un'espressione corruciata.

"Mi dispiace, tesoro. Il Capitano non ci ha permesso di portare a bordo più adulti di quelli che c'erano già. La nave era piena."

Le sue parole non erano di molto conforto, ma mi sforzai di rimanere forte. Qualcosa mi diceva che la mia infanzia era stata troncata bruscamente, e sarebbe stato meglio che iniziassi a comportarmi da uomo il prima possibile.

"Cos'è successo?" chiesi.

"Uhm... hai guardato il telegiornale in questi ultimi mesi?"

"No."

"C'è stato... loro... no, forse è meglio che non te lo spieghi. Tesoro, qualcuno ha dato inizio a una guerra. Una guerra davvero terribile."

"Perché?"

La donna si fermò, i suoi occhi persero la concentrazione e le sue labbra corruciate iniziarono a tremare.

"Non ne ho la più fottuta idea," sussurrò.

Poi la donna sembrò ricordarsi con chi stava parlando, si scusò per avere imprecato, e tornò ad archiviare le informazioni. Annotò dove avevamo vissuto, i nomi di tutta la famiglia, i nostri piatti preferiti, se c'era qualche video che ci piaceva guardare, e se c'era qualcosa di particolare che gli adulti avrebbero avuto bisogno di sapere su di noi.

"Non ho la mia sedia," dissi.

"Scusa?"

"Sulla terra, non posso muovermi senza la mia sedia."

Mimai l'uso del piccolo joystick che comandava la mia sedia a rotelle elettrica, senza la quale non potevo muovermi se non trascinandomi sul pavimento con le braccia.

"Sei paraplegico?"

"Sì."

Le labbra della donna vacillarono di nuovo, e di riflesso stese il braccio e mi scostò un ciuffo di capelli dalla fronte.

"Sto bene," dissi. "Se non c'è gravità, non ho bisogno delle gambe. È uno dei motivi per cui la mamma era alla conferenza. Pensava che avrebbe ottenuto un lavoro in uno degli insediamenti negli asteroidi, così probabilmente non avrei più dovuto preoccuparmi di avere una sedia a rotelle."

"Naturalmente. Lo farò sapere al Capitano. Puoi occuparti di tua sorella, o devo controllare se uno di noi può farlo?"

"Voglio Mirek," disse Irenka, senza guardare la donna e stringendo le braccia attorno alle mie con una tale forza che penso non ci fosse più niente da dire.

La donna si alzò, le sue scarpe speciali che aderivano al pavimento, e mi accarezzò i capelli con affetto ancora una volta.

"Se avete bisogno di qualunque cosa, premete il bottone blu sul sedile di fronte a voi. Il mio nome è Elaine, e faccio parte dell'equipaggio. Un'ultima cosa, lo schermo sotto al bottone è un computer, e potete usarlo per guardare qualche programma o per giocare."

"Grazie," dissi. "Ma quello che vorrei sapere è, dove stiamo andando?"

"Non lo sappiamo con certezza. È il Capitano che deve decidere. La guerra non è scoppiata solo sulla Terra."

La nostra nave era una comune nave interplanetaria, di quelle talmente comuni che non hanno un nome, ma solo un numero. Il capitano fece del suo meglio per informarci di ciò che stava succedendo, ma non penso che fosse abituato a parlare con i bambini, per cui continuavo a chiedere a Elaine che mi spiegasse meglio. Disse che il

capitano aveva deciso di portarci su Giove, dove avremmo potuto trovare altri rifugiati negli insediamenti spaziali gioviani.

La spinta era quasi costante, dovevamo andare il più veloce possibile per sfuggire dai satelliti di guerra che sorvegliavano la zona tra la Terra e la luna.

Ciò significava che avrei dovuto passare la prima metà del viaggio sul sedile al quale io e Irenka eravamo stati assegnati, il che mi sarebbe andato bene, se non avessi avuto bisogno dell'aiuto di Elaine ogni volta che dovevo andare in bagno. Alcuni degli adolescenti più giovani ridevano di me e mi chiamavano "neonato" quando Elaine mi trasportava avanti e indietro per il corridoio. Riuscivo a sopportarlo. Vivere da storpio fin da bambino significa abituarsi al fatto che molti bambini ti trattano male.

Ma quando iniziarono a prendere in giro Irenka, sapevo di dover fare qualcosa.

Aspettai che ci trovassimo a metà strada, che comportò alcune ore di caduta libera prima della decelerazione. Era l'unico momento del viaggio in cui gli altri bambini si sentivano a disagio mentre io mi sentivo a mio agio. I mesi precedenti sulla stazione li avevo passati utilizzando le stanze di allenamento a gravità zero che si trovavano nel centro della stazione, per prepararmi alla prospettiva del lavoro sugli asteroidi che mia madre sperava di ottenere. Ora usavo questa abilità per ottenerne il massimo vantaggio.

Dopo alcuni occhi neri e labbra gonfie – sia miei che loro – io e gli attaccabrighe raggiungemmo un accordo.

Quando Elaine ne venne a conoscenza, naturalmente mi sgridò senza tregua. Gli adulti lo facevano sempre, per dare l'impressione che non prendessero le parti di nessuno. Ma quando la nave tornò ad avanzare ed ebbi ancora bisogno dell'aiuto di Elaine per usare il bagno, lei mi disse dolcemente che era felice che avessi difeso mia sorella, e che alcuni dei bambini più indisciplinati si fossero calmati un po'.

Non venni più preso in giro, e le persone che avevano infastidito Irenka non dissero altro.

Per me era sufficiente.

Giove era meraviglioso, visto dalle finestre della cabina della nostra nave. L'enorme pianeta era rimasto sospeso là per una settimana, crescendo di grandezza

costantemente mentre ci adattavamo e aumentavamo di potenza per raggiungere un'orbita di rendezvous con una delle stazioni di Giove di cui il capitano aveva parlato poco prima che fuggissimo dal sistema solare interno.

Non sono sicuro di quali fossero i nostri pensieri. Gli insediamenti gioviani nelle nostre menti erano diventati una sorta di destinazione chimerica, e avevamo iniziato ad crearci varie – e irreali, avrei pensato in seguito – aspettative sul posto. Irenka, in particolare, sembrava affascinata da Giove.

Mi faceva star male doverle ricordare continuamente che mamma e papà non sarebbero stati alla porta per accoglierci quando saremmo scesi dalla nave. Ogni volta che lo facevo, Irenka si arrabbiava con me e mi diceva che mi odiava perché ero felice della morte di mamma e papà, visto che così potevo prendere il posto di papà e comandarla a bacchetta.

A quel punto se ne andava, diretta alla piccola area giochi che l'equipaggio aveva costruito nella stiva più in basso, e spariva dalla mia vista per un'ora. Finché, tenendo il broncio, non tornava al nostro sedile, si scusava per essere stata cattiva con me, e la cosa finiva con un lungo abbraccio.

Irenka era più avanti e stava usando il bagno, quando le luci nella cabina divennero rosse e si sentì il suono del clacson attraverso le casse.

La voce del capitano rombò, per un momento coprendo le grida degli altri bambini.

"SIAMO SOTTO ATTACCO DI UN SATELLITE DI DIFESA AUTOMATICA! ALLACCIARSI LE CINTURE E PREPARARSI PER UN'INTENSA FORZA DI GRAVITÀ."

Il mio primo pensiero andò a Irenka, bloccata nel bagno. Usai le braccia per spingermi via dal sedile, ma venni riportato al mio posto dalle mani di Elaine che mi afferrarono per i bicipiti da dietro.

"Fai quel che ti dicono!" mi gridò contro Elaine.

"Ma mia sorella!"

Elaine guardò il bagno, che fissavo con gli occhi sbarrati, poi annuì e disse, "Resta qui, vado a prendere Irenka!"

L'anziana donna quasi corse lungo il corridoio, le sue scarpe gravitazionali che facevano *strap strap* ad ogni passo. Riuscii ad allacciare l'imbracatura nel momento in

cui la gravità ci urtò con forza. Sbattemmo tutti da una parte all'altra, su e giù, grida e urla e pianti che colmavano la cabina. Elaine rimase in piedi durante tutto questo, e la vidi raggiungere la porta del bagno e utilizzare la chiave a scheda magnetica sul suo laccetto da collo per aprirla. Vi scomparve dentro per un momento, prima di riapparire con Irenka, che si guardava intorno freneticamente mentre le gambe scalciavano in aria. Elaine gridava, "Calmati! Calmati, tesoro!"

Un'altra serie di manovre violente colpì gli occupanti della cabina. Vidi una ragazza la cui cintura, non allacciata bene, si allentò e la fece schiantare contro il soffitto. Fluttuò fiaccamente per un momento prima di venire scagliata oltre la mia testa e scomparire alla vista, seguita da un raccapricciante tonfo.

Elaine, tuttavia, strinse forte Irenka, e iniziò a dirigersi verso il mio sedile quando si sentì un'orribile scossa che mi fece battere i denti, e che venne seguita da cigolii e stridii provenienti da sotto il pavimento.

Improvvisamente mi sentii come se le orecchie stessero per esplodermi, e per un istante mi resi conto che la nave era stata colpita. Elaine e Irenka si limitarono a guardarmi, entrambe con la bocca in un'esclamazione di sorpresa mentre i loro capelli venivano scompigliati dal flusso dell'espulsione dell'atmosfera dalla nave.

La tuta anti-decompressione arancione scivolò via dal suo compartimento verso il poggiatesta del mio sedile e cadde su di me come un sudario, sigillandosi ai bordi.

Gridai il nome di Irenka e cercai di slacciare la fibbia pettorale della mia imbracatura, osservando attraverso la piccola fessura del casco mentre la cabina diventava un incubo di luci rosse intermittenti e di detriti che esplodevano dal pavimento. La mia sorellina ed io riuscimmo a scambiarci un ultimo sguardo, la sua piccola bocca che gridava, *Mirek!* Poi il mondo si capovolse e venni schiacciato contro il sedile, con la tuta anti-decompressione che sbatteva e si gonfiava.

Quando ripresi i sensi, non sentivo assolutamente niente. Le orecchie mi facevano malissimo e il sangue che avevo perso dal naso aveva macchiato tutta la camicia sul davanti. Per un tempo interminabile rimasi seduto e mantenni gli occhi serrati, rivedendo nella mia testa l'immagine della mia sorellina che gridava silenziosamente il mio nome.

Infine sentii il rombo di un terribile grido salirmi su per il petto. Una volta che raggiunse la superficie, gemetti per parecchi minuti, mentre muco, lacrime e sangue mi s'incrostavano sulla faccia e sulle mani. Quando mi calmai, ero così esausto fisicamente ed emotivamente che riuscii solo a tirare su col naso poche ultime volte, poi ripresi a non sentire solamente quasi nulla.

Le ore passarono. Non mi mossi finché il mio intestino non protestò, e usai il piccolo schermo LCD sul bracciolo del sedile per leggere le istruzioni di emergenza. La tuta anti-decompressione si era tesa come un palloncino, dandomi un po' di spazio per muovere i gomiti. Perciò mi slacciai l'imbracatura e, come indicato, tirai il cuscino del sedile verso l'alto per scoprire un'apertura che poteva servire da bagno a gravità zero in caso di emergenza, e la utilizzai. Dopodiché, restai semplicemente seduto e guardai oltre la fessura della tuta anti-decompressione, osservando l'oscurità dello spazio e le stelle più in là che scorrevano lentamente fino a scomparire.

Immaginai che durante la decompressione ero stato scagliato via dal relitto, o che il sedile era stato progettato per venire espulso in caso di emergenza. Non aveva molta importanza. Irenka era morta a cinque metri di distanza da me, e non avevo potuto fare altro che guardare.

Avevo deluso Irenka. E avevo deluso papà, che mi aveva chiesto di prendermi cura di lei.

Desiderai con forza di poter smettere di esistere.

Un altro grido rombò, ma non avevo più alcuna forza per emetterlo.

Mi riaddormentai.

Mi svegliai di soprassalto.

La tuta anti-decompressione si stava lentamente sgonfiando attorno a me.

Di fretta, colpii con un pugno l'LCD sul bracciolo, domandandomi perché il sistema non avesse fatto suonare un allarme di emergenza, e vidi la tuta anti-decompressione rialzarsi e tornare nel poggiatesta sugli ingranaggi.

Sobbalzai per un istante, aspettandomi di ritrovarmi nel vuoto dello spazio, e invece mi ritrovai in un luogo illuminato, di metallo ondulato, all'interno di... un'altra nave?

Non c'erano persone presenti in quel posto rettangolare e dal soffitto alto, che faceva impallidire la cabina passeggeri della nave con la quale io e Irenka eravamo inizialmente scappati.

*Irenka.* Un'ondata di depressione improvvisa mi travolse e mi portai le ginocchia inutilizzabili al petto, nascondendoci il viso. Le immagini della sua morte disperata iniziarono a ripetersi senza tregua nella mia mente, e con lentezza picchiai la testa sulle rotule, incapace di fermare l'orrore. Sarebbe stato così per sempre? Avrei continuato a vedere Irenka morire un milione di volte, senza poterla aiutare?

Sentii un rumore metallico dall'altra parte dell'ampio compartimento, e la mia testa scattò verso l'alto. Vidi un portello circolare spalancarsi.

Il cuore iniziò a battermi veloce nel petto. Rimasi immobile sul sedile, osservando una piccola figura dai vestiti bianchi dalle linee fluide, simili a quelle di un pigiama, che fluttuava e si attaccò al ponte con le scarpe gravitazionali.

Con mia sorpresa, vidi che era una donna anziana.

Aveva la pelle raggrinzita e nera come il carbone, e i suoi occhi erano larghi e dalle iridi oscure.

Mi guardò, senza battere ciglio. Poi si incamminò rapidamente per il ponte, facendo *strap strap*.

"Il ragazzo è messo male, Howard," disse la donna anziana, non rivolta a me. Parlava in inglese americano, ma aveva un accento pesante che non avevo mai sentito se non in televisione. Quando si avvicinò a me, notai che aveva un piccolo dispositivo nell'orecchio – una cuffia. La guardai senza fare altro, mentre si inginocchiò con lentezza vicino al sedile e mi esaminò il viso, il sangue incrostato sulla camicia, e i pugni chiusi che tremavano leggermente mentre li stringevo sulle ginocchia.

"Hai un nome, figliolo?"

"Miroslaw," dissi, il muco incrostato e il sangue nelle narici che mi facevano sembrare gravemente raffreddato.

"È... russo?"

"Polacco."

"Beh, puoi ringraziare il Signore che la tua piccola scialuppa ci abbia incrociato, Miroslaw dalla Polonia. I satelliti assassini non hanno lasciato molto dietro di sé quando hanno colpito Giove. Io e Howard abbiamo mantenuto nascosto l'osservatorio finché i

satelliti assassini non si sono spostati. Dopodiché abbiamo effettuato una manovra di fionda gravitazionale, e ora siamo lontani."

"Cosa vuol dire?"

"Tutto è diventato automatico. L'esercito non esiste più, esistono solo le loro macchine. Per i satelliti assassini, sono *tutti* diventati dei bersagli. Per questo io e Howard abbiamo pensato che fosse meglio andarcene."

"Dove?"

"Nella Fascia di Kuiper, ragazzo. È l'unico posto rimasto. Troveremo gli Outbound."

*Outbound*. Giravano delle voci su di loro a scuola: missioni nello spazio profondo finanziate da privati che erano state lanciate per determinare se nello spazio oltre Nettuno si trovasse terreno fertile per le colonizzazioni. Nessuna di loro aveva inviato alcun rapporto, una volta superata l'orbita di Plutone. Era logico pensare che gli Outbound fossero morti.

Ma era davvero così?

Finché la morte di Irenka fosse rimasto il mio primo pensiero, non m'importava degli Outbound. Continuavo a stringermi le ginocchia, e tenni lo sguardo fisso oltre la donna anziana, senza guardare niente.

"Sono Tabitha," disse la donna anziana, porgendomi la mano.

"Grazie per avermi trovato," dissi, stringendola con debolezza.

"Non sembra che la cosa ti renda troppo felice, Miroslaw."

"Mirek. Mia sorella mi chiamava Mirek. Lei è... è..."

Non riuscivo a dirlo, ma non sembrava che ne avessi bisogno. Tabitha posò un dito ruvido sulle mie labbra.

"Shh, figliolo. Sei sopravvissuto al giorno del Diavolo. Forza, hai bisogno di una pulita."

Lasciai che mi prendesse per il braccio e mi tirasse via dal sedile. Utilizzando le scarpe gravitazionali, mi trascinò fino al portello che aveva usato per accedere alla grande stiva.

Notò che le mie gambe rimanevano indietro, e che usavo solo le braccia per spostarmi attraverso il portello sul corrimano.

"Non riesci a camminare?" chiese Tabitha.

Annuì. Lei mi rovesciò immediatamente per controllare se fossi ferito, ma le spinsi via le mani. "Non sono ferito. Sono paralizzato. Da quando sono nato."

"Oh cielo," sussurrò Tabitha. "Beh, Mirek, dovremo fare del nostro meglio, io e te."

"E Howard?" dissi.

"È mio marito. Lo incontrerai presto."

Howard e Tabitha Marshall venivano dalla Virginia. Assegnati a una delle sei piattaforme di Giove fornite di telescopi spaziali mobili originali di serie Humason, avevano lavorato come tecnici da giovani, per poi fare carriera e prendere il controllo dell'osservatorio con il passare del tempo.

Parlavamo mentre Tabitha mi aiutava a togliermi la camicia e iniziò a lavarmi la faccia.

"La NASA ci ha detto che il telescopio era troppo vecchio, e doveva essere messo fuori uso, ma a me e Howard piaceva così tanto stare qua fuori, vicini alla silenziosa grandezza di Dio. Quando gli astronomi e altri membri del personale hanno fatto i bagagli e se ne sono andati, noi siamo rimasti qui. All'inizio per protesta. Ma alla fine la NASA si è arresa e ci ha permesso di continuare a lavorare. Le abbiamo inviato rapporti fino allo scoppio della guerra."

Howard, avevo saputo, in realtà era morto pochi anni prima, ma l'avevano registrato nel computer, e ora gestiva l'osservatorio come se fosse il suo cervello. Avevo sentito che era stato fatto in alcune delle missioni più lunghe nello spazio profondo, utilizzando piloti volontari che erano troppo vecchi per poter volare. Era una cosa sperimentale, e molte delle persone sulla Terra non ne erano ancora molto sicure. Parlare con Howard era un po' come parlare con un amico immaginario, dal momento che sembrava esistere ovunque e da nessuna parte contemporaneamente.

L'osservatorio stesso era un complesso tentacolare costruito sul lato di un piccolo pezzo di roccia ricca di minerali grezzi e che era stato lanciato da uno degli asteroidi troiani di Giove esterni. Quando i satelliti assassini che venivano dal sistema solare interno avevano raggiunto e attaccato gli insediamenti gioviani, Howard aveva

spento qualunque componente dell'equipaggiamento attivo possibile, nascondendosi nella speranza che lui e Tabitha non venissero rilevati.

Per puro caso il mio sedile si era ritrovato a roteare sul loro cammino, e quando i sensori passivi di Howard avevano percepito i miei segni vitali, Tabitha aveva preteso che venissi portato a bordo, nonostante il rischio.

Non sapevo cosa dire, perciò rimasi per lo più in silenzio e lasciai che fosse Tabitha – Tab, come insisteva che la chiamassi – principalmente a parlare.

Traboccava letteralmente di racconti e fegato e di un irrefrenabile buon umore, tanto che mi dimenticai quasi della depressione che aveva affondato i denti nel mio cuore da quando Irenka era morta. Ma la duplice perdita di mia sorella e dei miei genitori persisteva come un mal di denti – sempre là, sempre dolorosa.

Mi aiutò a farmi il bagno, e mi fece indossare un camice di qualche misura più grande simile a quello che indossava Tab, e successivamente mi fece fare un giro della struttura. La maggior parte dei compartimenti erano sigillati e freddi, dal momento che era l'automazione dell'osservatorio ad occuparsi della manutenzione e la stessa Tab aveva bisogno di poche stanze in cui lavorare e vivere. Si muoveva come un pesce nell'acqua quando si muoveva a gravità zero, e mi mostrò la "spin room", nella quale passava almeno un paio di ore ogni giorno, facendo esercizio e sottoponendo il corpo alla gravità centripeta in modo che i muscoli e le ossa non si indebolissero.

"So che non puoi usare le gambe, Mirek," disse Tab, "Ma troveremo degli esercizi quotidiani per te. Nel frattempo, possiamo aprire un altro dei compartimenti e farti preparare una stanza. Sarai nostro ospite per un po', credo."

Mi fermai.

"E se non volessi?"

Tab mi guardò con un sopracciglio alzato, i suoi capelli corti color grigio acciaio che spuntavano fuori in una massa di riccioli elastici.

"Ragazzo, pensi di poter scegliere a questo punto?"

"Papà mi diceva che si può sempre scegliere."

Tab aprì la bocca per ribattere, ma si fermò e mi guardò con attenzione.

"Mi sembra giusto, piccolo. Il Signore ci ha dato il libero arbitrio, e non sarò io a portartelo via. Potremmo metterti in una delle navi dell'osservatorio. Così da potertela giocare da solo."

Fissai la mia ospite. Restare qui non avrebbe fatto andar via il dolore, quello era sicuro. Ma effettivamente, non ero sicuro che ci fosse qualcosa che potesse farlo.

Lacrime calde iniziarono a sgorgare dai miei occhi di nuovo, e con ferocia le asciugai usando la manica larga del mio camice.

Bestemmiai in polacco.

Tab sospirò, e chinò la sua figura fluttuante finché si trovò a fissarmi negli occhi. Quando parlò, il suo accento africano meridionale era particolarmente fitto.

"È un vero peccato che tutto ciò sia successo, Miroslaw. La tua famiglia. La mia famiglia. Tutte le persone che conoscevamo, non ci sono più. L'Armageddon è arrivato e se n'è andato, e noi siamo ancora qui. Ciò mi dice che il Signore ha ancora del lavoro per noi. Non è un caso che il tuo sedile sia arrivato in volo da me e Howard. Di questo sono sicura. Non so cos'altro ti abbia detto tuo papà, ma lascia che ti dica una cosa che il mio papà mi ha detto quando avevo la tua età. Mi ha detto che non è mai esistito un modo di liberarsi del dolore in questa vita. Adamo ed Eva ne hanno avuto la prova. Perché il Signore ha bisogno che conosciamo il dolore. È parte della prova. Perciò, anche se non posso farti smettere di soffrire, posso dirti che verremo tutti giudicati a seconda del modo in cui sopportiamo quel dolore, dell'uso che ne faremo, e di come realizzeremo la volontà del Signore a causa di ciò. Capisci?"

Non capivo. Mamma e papà erano fisici. La nostra famiglia non andava mai in chiesa. Il discorso di Tab sembrava qualcosa di tratto un libro di storia sul periodo in cui le persone pensavano che la religione fosse più importante della scienza. Alle mie orecchie suonava estraneo e mi faceva sentire a disagio, ma non potevo negare l'entusiasmo nelle parole di Tab. Né potevo negare la profonda gentilezza dell'espressione del suo viso.

Le lacrime scorrevano come un fiume, e smisi di cercare di asciugarle.

A Irenka Tab sarebbe piaciuta. Era una disgrazia che non fosse qui.

Dissi qualcosa piagnucolando a riguardo, per poi ritrovarmi di colpo tra le braccia di Tab, sentendomi quasi schiacciare dall'abbraccio incredibilmente forte della donna.

Era la prima volta che qualcuno mi stringeva – stringeva sul serio – dalla scomparsa di papà.

Piansi disperatamente sulla spalla di Tab, e lei continuò a stringermi, cantando sottovoce una dolce canzone che in seguito avrei scoperto trattarsi di un inno.

Scelsi di restare, naturalmente.

E io e Tab parlammo degli Outbound.

"Allora, da dove iniziamo?" chiesi a Tab. "Non possiamo cercare alla cieca."

"Si diceva che il gruppo più grande di Outbounder abbia seguito la scia di Pioneer 10. Possiamo fare lo stesso, Howard?"

"Fammi controllare se ho il file a riguardo," disse la voce di Howard dalle casse sul soffitto. "Oh, eccolo. Sì, penso che sia possibile farlo. Abbiamo avuto fortuna a uscire dalla fionda in quel momento, o staremmo andando nella direzione totalmente opposta. Dovremo aspettare un po' di più prima che possa rischiare un secondo aumento di potenza. Non siamo ancora abbastanza lontani da Giove."

"Nessun problema," disse Tab. "Credo che il tempo sia l'unica cosa che non ci manca."

Non stava scherzando. Nonostante la propulsione costante, impiegammo due mesi per attraversare l'orbita di Plutone, e altri otto per arrivare fino ai confini interni della Fascia di Kuiper. L'osservatorio era adatto a lunghi viaggi. Un'abbondante riserva di carburante, sotto forma di antimateria, forniva energia mentre una grande complesso idroponico manteneva l'aria pulita. Tab mi insegnò a effettuare la manutenzione sui vari sistemi di sopravvivenza automatici e manuali, e facemmo l'inventario più volte di tutte le risorse non rinnovabili e le parti di ricambio. Con l'aiuto di Howard redigemmo grafici e prospetti al fine di calcolare per quanto tempo potessimo far bastare le nostre risorse.

Riparando i danni all'osservatorio, e utilizzando fiammate regolari per correggere la rotta, Tab e Howard calcolarono che avremmo potuto andare avanti per vent'anni prima di finire a corto di componenti importanti. Anche se il reattore principale si fosse guastato, un generatore di decadimento radioattivo di riserva avrebbe fornito un'alimentazione interna completa per altri dieci anni.

Tenere acceso il minimo indispensabile allungava questi periodi di tempo di tre volte. Il che significava che tutto ciò che dovevamo fare era mantenere il campo di

coltivazione idroponica in buone condizioni, e io e Tab avremmo avuto cibo da mangiare e aria da respirare a sufficienza per decenni.

*Decenni.* La mia anima raggelava al pensiero di un viaggio così lungo e solitario.

Howard smise di monitorare il sistema solare interno dopo sedici mesi. Non c'erano più grida umane di aiuto. Tutto ciò che restava erano i segnali automatici delle poche macchine di morte rimaste, ognuna delle quali eseguiva gli ordini programmati indipendentemente dal fatto che gli uomini e le donne che avevano dato tali ordini fossero morte.

Non intercettammo nemmeno altre comunicazioni da nave a nave automatiche, anche se, se ci fosse stato qualcuno a sopravvivere e fuggire l'aveva fatto probabilmente al nostro stesso modo: deliberatamente in silenzio.

Diverse volte, io e Tab ci chiedevamo se fosse il caso di tornare indietro.

Tuttavia man mano che i chilometri tra la Terra e l'osservatorio aumentavano, il solo pensiero di tornare a casa diventava irrealistico. Ora ci trovavamo ben oltre i confini del sistema planetario vero e proprio – il sole era diventato uno dei tanti piccoli punti nel cielo stellato. Che possibilità avremmo avuto, se fossimo tornati indietro? Come avremmo potuto cercare qualcuno mentre evitavamo i robot assassini?

Meglio andare avanti.

Per il mio tredicesimo compleanno, Tab mi disse che mi avrebbe insegnato il mestiere dell'astronomo.

Era semplice, dal momento che tutto ciò che dovevo sapere si trovava nelle banche dati di Howard. E mi aiutava a passare il tempo, mantenendo la mente libera da quelle cose a cui ancora non volevo pensare. Mamma, papà e Irenka erano ancora là, come delle profonde piaghe che si stavano appena cicatrizzando. Ma in qualche modo, giorno per giorno, io e Tab ci avvicinammo. E la sofferenza si ridusse un po', e divenne un po' più semplice da sopportare.

Io e lei manovravamo i sensori e i dispositivi dell'osservatorio, catalogando vari oggetti, grandi e piccoli, sulla loro strada.

Tab mi disse che, contrariamente alla concezione popolare dei secoli passati, lo spazio profondo non era completamente vuoto. Le regioni di Kuiper e Oort erano in

realtà un campo congiunto di detriti che confluiva inesorabilmente con i rottami più radi che popolavano il mezzo interstellare – dove regnavano i planemo.

Planemo. Pianeti senza stelle. Mondi a sé stanti.

Forse le Outbound infine ne avevano raggiunto uno e vi si erano stabiliti? Dopo un viaggio durato secoli?

Howard modificò la nostra rotta in diverse occasioni per indagare sulle anomalie rilevate dall'impressionante matrice di sensori dell'osservatorio.

Non trovammo mai niente; anche se le comete e i planetoidi ghiacciati erano interessanti.

Erano per lo più corpi rocciosi che avevano maturato uno scudo d'acqua e gas ghiaccio. Perfettamente normali, una volta superato Plutone.

Solo in uno di questi trovammo qualcosa che denotava presenza umana.

Era un mondo dalle dimensioni di una palla di neve piuttosto piccola, di forma irregolare, che però emetteva fughe radioattive da uno dei suoi tanti crateri.

Un'ispezione più attenta con i telescopi rivelò segni di attività mineraria, da tempo abbandonati.

Fu sufficiente per far strepitare e volteggiare Tab, facendole oscillare i fianchi da un lato all'altro mentre fluttuava per il centro di controllo dell'osservatorio, mentre Howard balbettava con eccitazione per quanto la sua mente fredda da computer potesse permettergli.

Avvicinammo il corpo ghiacciato e io e Tab uscimmo a bordo di una delle due navi dell'osservatorio. All'atterraggio, prendemmo due tute – una delle due modificata minuziosamente da Tab col mio aiuto in modo che fosse della mia misura – e rimanemmo delusi nel trovare solo spazzatura incrostata di ghiaccio e un piccolo cumulo di materiale fissile consumato.

Nessun messaggio. Nessun indizio su quanto tempo gli Outbound fossero rimasti, né di dove fossero andati.

E non c'era neppure alcun segno di Pioneer 10.

Ritornammo alla ricerca.

Altre due volte in due anni facemmo fermate simili in mondi simili. Gli Outbound avevano avuto bisogno di isotopi dell'idrogeno e massa di reazione per il

motore a fusione. Probabilmente avevano impiegato molti decenni per viaggiare quanto avevamo viaggiato noi in pochi anni con un motore ad antimateria.

Tab si arrischiò a tentare comunicazioni attive inviandole verso prua tramite raggio trasmittente.

Per settimane aspettammo una risposta, ma non arrivò niente.

Il desiderio di vedere altri esseri umani divenne come una smania per me. Oltre a sentire la mancanza della mia famiglia, sentivo anche la mancanza delle piazze aperte e dei parchi di casa, dove potevo correre sulla mia sedia a rotelle elettrica tra le fontane e spaventare i piccioni e ridere come un ragazzo avrebbe dovuto ridere.

Durante le notti sulla nave, iniziai a fare sogni sulla mia casa, e... altre cose. Era imbarazzante parlarne con Tab. Fu più semplice parlarne con Howard, che era stato un uomo una volta, e ancora prima un adolescente.

Howard disse di essere sorpreso delle mie reazioni fisiche, nonostante non avessi mai sentito niente al di sotto delle ossa dei fianchi in tutta la mia vita. Quando la nostra conversazione si rivolse in modo specifico alle donne e all'anatomia femminile, Howard rivelò con esitazione un database di immagini che teneva – immagini che avrebbero scandalizzato mia madre, se mi avesse sorpreso a casa a guardarle sul mio portatile.

"Non dirlo a Tab," mi aveva avvertito Howard con fare fraterno. "Sarebbe propensa a cancellarmi se scoprisse che ti ho mostrato queste cose."

Promisi a Howard che non le avrei detto niente, ed ero stranamente grato di poter condividere qualcosa con un altro maschio, anche se era solo una registrazione sul computer. Parlammo sempre più spesso, Howard ed io, mentre Tab ed io restammo vicini, anche se gradualmente più indipendenti l'uno dall'altra. Una sera in cui Tab pensava che stessi dormendo, scivolai fuori dal letto e mi mossi silenziosamente per aria raggiungendo la porta d'ingresso della sua stanza, dove sentivo lei e Howard parlare. Chiacchiere fra le lenzuola, le avrebbe chiamate mia madre, rese strane dal fatto che Howard non era davvero a letto con sua moglie.

"Diventerà presto un uomo," disse Tab con tristezza.

"È diventato un uomo quando suo papà è morto," rispose Howard.

"Probabilmente hai ragione. Ma non sai quanto sono stata felice di avere un giovane di cui occuparmi. Ci abbiamo provato così tanto, tutti quegli anni, io e te. E niente. Poi, com'è successo a Sara, Dio ci ha mandato un ragazzo alla mia veneranda età.

Solo che non ho mai potuto averlo fin da piccolo. Era già grande quando è arrivato, e ora..."

Sentii un groppo formarsi in gola mentre Tab pianse in silenzio.

"È un bravo ragazzo, Tabitha. È chiaro a tutti e due. E credo che lui ti voglia bene. Non lo dirà quando parlo con lui, ma riesco a sentirlo."

Tab esplose in una risata canzonatoria. "Hah! Un uomo computerizzato che riesce a sentire!"

"Sai cosa voglio dire, donna. Ora zitta. I miei sensori mi dicono che il ragazzo si sta nascondendo dietro la porta. Probabilmente ha sentito tutto quello che abbiamo detto."

"Mi dispiace," dissi, entrando, sorridendo impacciato.

Tab era là, e si asciugava le lacrime dagli occhi. "Non dispiacerti, Mirek. Sono solo un'anziana e triste donna che non ha mai avuto la possibilità di avere i suoi figli. Non farci caso se mi sono affezionata troppo a te."

In realtà, la cosa non mi dispiaceva. Non mi dispiaceva affatto.

Con l'aiuto delle braccia, mi lanciavi dal portello e acchiappai Tab in un forte abbraccio, stringendola forte quanto ricordavo mi avesse stretto quel primo giorno in cui decisi di restare con la mia nuova famiglia e cercare gli Outbound.

Pianse di nuovo, stavolta di gioia, e dissi a Tabitha e Howard Marshall quanto volevo loro bene, e quanto gli ero grato del fatto che mi avessero trovato e donato una nuova casa quando il mondo mi aveva portato via tutto ciò.

Prima di compiere sedici anni, sospettai che tutto il peso dell'auto-annientamento dell'umanità dovesse ancora sistemarsi sulle mie spalle. Un'importante parte di me rimase insensibile all'idea che avessero tutti smesso di esistere, e che tutti gli oggetti creati dall'uomo su qualunque mondo fossero stati resi polvere dall'antimateria. Era così ironico che forse gli unici cimeli dell'intelligenza umana fossero i rimanenti bot di guerra che continuavano ad aggirarsi con fare predatorio per il sistema solare, alla ricerca di bersagli e nemici che non esistevano. Tali pensieri erano deprimenti, e la depressione divenne ancora una volta una compagna abituale.

Avrei davvero voluto che ci fosse un'altra giovane donna per poterci parlare, per poterla toccare e stringere tra le mie braccia durante la notte. Ma per come stavano le cose, era possibile che non avrei mai più visto un'altra donna oltre Tabitha, e questa finì per diventare la cosa più irritante.

Grazie all'aiuto furtivo di Howard, iniziai a distillare liquori dal grano cresciuto nelle cupole per la coltivazione.

Poco dopo, Howard iniziò a preoccuparsi di avere tra le mani un alcolizzato.

Ma in che altro modo avrei potuto sopportarlo? Il mio passato era morto, e il mio futuro sconosciuto. Ero l'unico giovane uomo in vita in tutto l'universo!

Nostalgia e desiderio astratto rafforzarono la mia depressione, dandole un sapore malinconico.

Iniziai a bere tutti i giorni. Da solo. Nel modulo privato che avevo costruito sulla superficie delle fondamenta dell'osservatorio, dove Tab non poteva avvicinarsi né parlarmi. Trascurai il mio esercizio giornaliero nella spin room. Perché disturbarci? Che futuro mi aspettava ora? Ero giovane quando avevo lasciato la Terra, e sarei rimasto giovane per molti anni. Ma che cos'era la giovinezza senza gioia? Senza una ragazza? Mi ritrovai a sognare ad occhi aperti continuamente di tutte le ragazze più grandi da cui ero stato attratto: i loro volti, le loro espressioni, il loro modo di ridere o di arrabbiarsi, il modo in cui i loro corpi si muovevano sotto i vestiti. Arrivai al punto di pensare che sarei stato euforico se avessi potuto vedere anche una sola femmina che respirasse, indipendentemente dalla sua condizione. Qualcuno che potessi abbracciare, e che potesse ricambiare l'abbraccio, e che non fosse tanto vecchia da poter essere mia nonna.

Mi allontanai sia da Howard che da Tabitha.

Mi stufai di loro, e credo che anche loro iniziassero a stancarsi di me.

Iniziammo a passare dei giorni o anche settimane senza parlarci, e infine mi ritirai nel mio modulo di isolamento quasi del tutto, costringendo Howard a controllare e occuparsi dell'osservatorio tutto da solo, con l'aiuto sempre minore di Tabitha.

Il che andava bene, all'inizio, dal momento che Howard aveva sempre fatto quasi tutto da solo in ogni caso.

Poi, un giorno, arrivò una luce.

Era debole. Niente più che un debole segnale radio, che inviava codice binario.

Howard non riuscì a capire il significato del messaggio, che sembrava davvero casuale – uno e zero in un flusso continuo, senza uno schema.

Andava bene. Era segno che eravamo ancora sulla giusta strada. E fu sufficiente per sconvolgermi e indurmi a una disintossicazione forzata.

Quando raggiungemmo la cometa da cui il transponder inviava il segnale, ero abbastanza sobrio da poter portar fuori una navicella; e abbastanza umano da comportarmi in modo gentile con Tab effettivamente per la prima volta in troppo tempo.

Sulla superficie della cometa trovai una galleria.

In fondo alla galleria, trovai una tomba: sessantotto corpi, tutti perfettamente congelati e disposti con dignità.

Passai giorni a esaminare il luogo. Passai al pettine rispettosamente i cadaveri alla ricerca di qualunque cosa potesse indicare dove fossero andati gli altri sopravvissuti. Erano di eredità razziale e genere misti, e se avessi dovuto tirare a indovinare, avrei detto che erano americani. E non era certo se venissero o meno dal gruppo di Outbounder che stavamo specificamente cercando. Ma la loro presenza era la prima prova assoluta che l'umanità era sopravvissuta fino a quel punto, così lontana dal suo pianeta ormai scomparso.

Ed era sufficiente. Rispettosamente, andai tra i cadaveri, annotando i loro nomi dalle targhette di acciaio attaccate ai corpi e scattando foto digitali.

Quando infine tornai all'osservatorio, ero calmo.

Quasi fin troppo calmo per i gusti di Tab.

Ma i morti dell'Outbound mi avevano aiutato a superare una soglia che non sapevo di avere bisogno di superare, e subito mi riempirono di una rinnovata risolutezza.

In fretta, mi liberai del modulo di isolamento e gettai via l'alcol etilico fino all'ultima goccia.

Poi, iniziai un recupero esaustivo dei compiti che avevo trascurato, alternandoli a scuse profonde e sentite rivolte sia a Tab che a Howard. Non avevo modo di sapere se l'uomo dentro il computer potesse soffrire, ma sapevo che il mio comportamento degli ultimi pochi mesi aveva spaventato e ferito Tab. Certamente li avevo trattati sufficientemente male. Speravo di potermi far perdonare, col tempo. E sicuramente sembravano essere riconoscenti e sollevati nel vedere il mio rinnovato senso di risolutezza.

"Mi perdonate?" dissi infine un giorno, quando l'osservatorio era tornato a posto e io e Tab stavamo mangiando insieme per la prima volta in tanto tempo.

Un silenzio lunghissimo.

"Sei perdonato," disse Tab, con un leggero sorriso che fece corrugare gli angoli della bocca affettuosamente. Allungò una mano tremante, rugosa, e la presi con gratitudine, stringendola.

Durante il decimo anno del nostro viaggio, trovammo la prima nave. Era abbandonata. Saccheggata. Avevano preso fino all'ultimo componente utilizzabile. Uno scheletro di nave, accompagnato da un'altra fossa comune.

Il quattordicesimo anno, trovammo altre tre navi, anche queste ridotte all'osso, e anche queste che facevano da lapide ad altre persone che avevano apparentemente perso – o dato – le loro vite per la causa.

Questa volta, trovai anche dei bambini; ognuno di loro fin troppo giovane per poter essere nato sulla Terra. La vista di quei piccini mi riportava alla mente ricordi inquietanti. Mi ricordava fin troppo bene Irenka.

Per Tab, che era invecchiata tanto da non lasciare più l'osservatorio, i bambini erano invece un segno della provvidenza.

"Il giorno in cui Dio ci toglierà l'abilità di fare bambini, sarà quello il giorno in cui sapremo di essere davvero esclusi dalla Sua grazia."

Riflettei sulle parole di Tab e la guardai muoversi delicatamente per la cucina, coperta strettamente per proteggersi da un brivido nell'aria che non esisteva. Aveva provato nel corso degli anni ad avvicinarmi a Cristo. Eccome se ci aveva provato. In particolar modo quando uscii dalla mia intossicazione da alcool etilico. Ma per qualche motivo, non vidi mai la luce. Sentivo le sue parole e ascoltavo con riluttanza quando leggeva le scritture, ma per quanto rispettassi e addirittura ammirassi la fede dell'anziana donna, non riuscivo a sentire lo stesso.

Mentre Tab sentiva sicurezza nel fine di Dio, io non sentivo... niente. Durante l'adolescenza mi ero spesso interrogato su ciò, sospettando qualche tipo di carenza morale interna. Ma ora mi rassegnavo al fatto di essere troppo simile ai miei genitori –

incapace di mettere da parte la razionalità quanto bastasse per abbracciare il fuoco e, "capire la religione."

E come spessissimo capitava quando io e Tab non riuscivamo a vederla allo stesso modo, ne parlavo con Howard, che sembrava supportare sempre la fede di sua moglie senza dover per forza infervorarsi a sua volta.

"Il papà di Tab era un pastore," disse Howard una notte mentre io e lui conversavamo con calma nel centro di controllo dell'osservatorio. "Dio era importante nella sua famiglia, da suo padre fino al figlio più giovane. Faceva un po' paura, quando ci siamo messi insieme. Mi trascinava a incontri e studi sulla bibbia e io acconsentivo perché anche mia mamma mi aveva letto la bibbia, e non mi dava assolutamente fastidio. E Tabby, beh... Era così dannatamente bella, penso che avrei potuto entrare in una vasca di piranha se ciò mi avesse permesso di sedermi accanto a lei e stringerle la mano.

"Era furiosa con me quando ha scoperto che avevi imparato a distillare. Furiosa quasi quando ha scoperto le immagini dell'e-zine per uomini."

"Tab l'ha scoperto?" dissi, ridendo. "Giuro che non sono stato io a dirglielo!"

"Lo so, figliolo. Sono stato io. Non sono mai riuscito a mantenere un segreto con quella donna, in tutta la mia vita."

Ridemmo insieme, un uomo anziano e un giovane uomo.

Sospirai, e rimasi in silenzio per molto tempo.

"Howard, pensi che avrò mai una moglie?"

Le casse erano silenziose. Rifletteva.

"Se mai riusciremo a trovare gli Outbender di cui seguiamo le tracce, direi di sì. Assolutamente. Qualunque ragazza sarebbe assolutamente pazza per lasciarsi sfuggire un bel ragazzo come te."

"Ma sono comunque un paraplegico."

"Vero. Ma lascia che ti dica una cosa, per le donne l'uomo alto e macho non è la fine del mondo. E in particolar modo, man mano che una donna invecchia, e man mano che va avanti e impara quant'è difficile trovare un uomo rispettabile, apprezzerà quelli buoni quando arriveranno. Non preoccuparti, figliolo. La tua donna è da qualche parte là fuori."

"E se non posso renderla –"

"Lascia che le cose vadano da sé per quello, figliolo. Non agitarti a pensarci ora, soprattutto visto che non abbiamo ancora nemmeno trovato questa gente. Capito?"

"Sissignore," dissi, lasciando perdere l'argomento, anche se continuò a gravare sui miei pensieri.

Un altro lungo silenzio.

"Howard," dissi.

"Sì, ragazzo?"

"Fa male?"

"Prego?"

"Quando ti hanno registrato. E spostato nel computer. Fa male?"

"Non proprio."

"Come ci si sente?"

"È impossibile da descrivere."

"Non puoi nemmeno provarci?"

"Se lo facessi, probabilmente ti confonderebbe e basta. Ma ipoteticamente, immaginati di andare a dormire una notte, e quando ti svegli, il tuo corpo è enorme, ha un centinaio di braccia in più, un centinaio di occhi in più, un centinaio di bocche in più... è una cosa a cui ti devi davvero abituare. Ma no, non fa male."

"Presto dovremo registrare Tab, vero?"

"No. Tabby mi ha fatto giurare che non l'avrei mai fatto. Ha paura che ciò possa impedire alla sua anima di raggiungere Gesù."

"Ma *tu* sei stato registrato."

"È diverso. E credimi, l'unica ragione per cui Tab l'ha permesso è stata perché aveva paura di rimanere da sola più di quanto avesse paura che la mia anima si perdesse nello spazio tra questo mondo e il prossimo. Penso che a lungo andare abbia smesso di preoccuparsi per me. Anche se insiste ancora che quando arriverà la sua ora, niente la fermerà."

"Crede veramente che raggiungerà Gesù?"

"Sai bene che ci crede, Mirek."

"E tu? Lo credi veramente?"

Una pausa.

"*Voglio* crederci, Mirek. Che questo conti o no... non lo so."

Il disastro arrivò all'improvviso, quasi quindici anni dopo aver lasciato Giove.

Una tempesta di micro meteore, composte da molecole di carbonio oscuro così nere e sparse per uno strato così sottile che non riuscimmo mai a vederle al telescopio, né col radar. Un momento stavo aiutando Tab a vestirsi e a pulire la sua stanza, e quello dopo l'osservatorio stava tremando e un suono simile alla pioggia che batteva forte rimbombò per il corridoio esterno.

"Howard, cosa sta succedendo?" gridò Tab.

Quando non arrivò alcuna risposta, io e Tab ci guardammo l'un l'altro con preoccupazione e ci precipitammo alla porta per guardare fuori. Dal soffitto fuoriuscirono scintille e piccoli raggi passarono sotto e attraverso il pavimento. La polvere cosmica – che si muoveva a numerose decine di migliaia di chilometri al minuto, rispetto a noi – stava penetrando numerosi centimetri di lamiera di acciaio e policarbonato. Tab mi afferrò mentre restavamo sulla porta d'ingresso, senza osare muoverci, mentre l'inquietante spettacolo luce continuò per diversi minuti, finché infine terminò, e riuscii a uscire di corsa verso il pannello di accesso del computer più vicino e richiedere un rapporto di stato alla stazione.

Era grave. Metà dell'osservatorio era o off-line o contrassegnata di rosso. Ancora peggio, la workstation stava funzionando solo basandosi sul software locale – tagliata via dal controllo diretto di Howard. Stavamo anche gradualmente perdendo pressione atmosferica, anche se il livello non era sceso ancora tanto da essere considerato pericoloso.

Io e Tab fluttuammo freneticamente per diverse centinaia di metri di corridoio finché raggiungemmo il portello di accesso ai computer principali sepolti nel seminterrato. Notai che il portello aveva numerosi buchi quasi troppo piccoli per essere visti, e caddi di gambe nelle viscere del nucleo del computer principale, dove la mente di Howard – e forse il suo spirito – aveva risieduto per oltre due decenni.

Le banche dati erano sottosopra. Molti array erano fuori uso. Il centro del computer era stato rinforzato per resistere a radiazioni cosmiche e fiamme solari, ma mai in previsione di qualcosa del genere. Lavorai in modo frenetico per tracciare i

percorsi logici dei fail-safe mentre Tab stringeva il corrimano e singhiozzava senza controllo, dicendo, "Howard... oh, Howard..."

Non andava affatto bene. Troppi array erano danneggiati o non funzionanti. Anche se potevo caricare i backup, la sinergia costante tra le banche dati necessaria all'esistenza di Howard Marshall, come persona, era stata arrestata. Se avessimo ricevuto qualcosa indietro, probabilmente non sarebbe stato Howard.

Tab non aveva bisogno che qualcuno le dicesse quel che era realmente successo.

Fissava semplicemente gli array, su molti dei quali lampeggiavano luci rosse di allarme, e continuava a ripetere il nome di suo marito.

Si trascinò a letto più tardi quel giorno, e sembrava non le importasse delle migliaia di punture microscopiche che stavano facendo fuoriuscire la nostra aria nello spazio. E non le importava nemmeno del resto dell'equipaggiamento danneggiato – le cui riparazioni ora sarebbero state quasi impossibili senza l'aiuto di Howard. Non mi ero reso conto di quanto totalmente io e Tab dipendessimo da quell'uomo, finché non se n'era andato.

In preda alla frenesia, avviai quanti programmi fittizi mi fu possibile, facendoli funzionare su workstation o server locali in modo che il sistema di sopravvivenza e altre funzioni essenziali non si chiudessero. Infine passai i successivi tre giorni a salvaguardare i campi di coltivazione idroponica, i macchinari ciclatori e altre necessità, senza le quali la morte sarebbe stata certa.

Non che avesse molta importanza per Tab.

Ogni volta che controllavo, la sua situazione era peggiorata.

L'ultima volta che mi fermai da lei, era raggomitolata – e fluttuava – vicino al suo letto. Si premeva stretta al petto una vecchia foto incorniciata di lei e Howard quando erano giovani. Dalle sue labbra proveniva lo stesso inno che mi aveva cantato una volta, quando ero scoppiato a piangere.

Dovetti quasi gridare perché mi prestasse attenzione.

"Non ha più importanza, Mirek. Il Signore si è portato via Howard, ed è ora che me ne vada anch'io."

"Non puoi mollare così!" gridai. "Una volta mi hai detto che Dio ci avrebbe giudicati per il modo in cui abbiamo sopportato la nostra sofferenza e i nostri fardelli, no?"

Quelle parole sembrarono farla tornare in sé per un momento, tanto da farle riporre la foto nel suo supporto e spingersi verso il basso per scivolare verso di me.

Lo schiaffo che venne non era previsto, e fu la prima e ultima volta in cui alzò le mani su di me per la rabbia.

Ero troppo sconvolto per arrabbiarmi.

"Non parlare a me di Dio, ragazzo!" disse Tab in modo acido. "Ho passato i miei ultimi anni cercando di aprire un varco nel tuo cuore, perché Cristo potesse entrare. Ma L'hai rifiutato, e con lui una parte di me. Ora vattene e lasciami stare. Sono troppo vecchia per essere d'aiuto in ogni caso."

Non c'era niente da dire, perciò me ne andai, e riuscii a passare poche ore di sonno disturbato prima di tornare nella stanza di Tab.

Il suo corpo era sospeso nel letto a gravità zero. Indossava il suo camice bianco, e teneva gli occhi chiusi, anche se la sua bocca rimaneva aperta fiaccamente mentre il petto non emetteva alcun respiro. Stringeva nella mano fredda un piccolo rotolo di carta.

Tesi la mano tremante verso di esso, e quando lo srotolai, diceva, nella calligrafia di Tab, "Sei un'anima buona, Mirek. Grazie per avermi permesso di averti come figlio."

Non riuscii a pensare per il resto della giornata. Soltanto la serietà della situazione in cui mi trovavo mi manteneva in movimento. Ma la mia mente e il mio cuore erano vuoti e freddi come lo spazio attraverso il quale l'osservatorio ora viaggiava con fatica.

Alla fine misi il corpo di Tabitha vicino a quello di suo marito, nella tomba che avevano preparato per loro sull'altro lato dell'osservatorio. Non ci fu una cerimonia, né parole di encomio. Non ci furono né per papà, né per mamma, né per Irenka dopo di loro. Non sembrava ci fosse niente di appropriato ora, e sentivo che qualunque cosa avessi detto che si avvicinasse anche solo remotamente a qualcosa di spirituale sarebbe stata quasi profana. Tab aveva ragione. Il mio cuore era sordo alla voce di Dio. Sempre se Dio esisteva. Fissavo le porte chiuse dell'ultima dimora dei miei secondi genitori, e dubitavo fortemente che Gesù, o qualunque altra divinità di salvezza, esistesse. Esisteva solo la crudeltà della vita, seguita dal silenzio della morte. Che arrivava

improvvisamente e senza preavviso, e si prendeva sempre quelli che lo meritavano meno.

Quel mese, il mio lavoro sull'osservatorio fu puramente meccanico. Ed essenzialmente inutile. La tempesta di micro meteoriti aveva fatto troppi danni. Senza le capacità estese di Howard – la sua abilità di essere ovunque e vedere e sentire e "pensare" l'osservatorio tutto nello stesso momento - una persona sola non aveva alcun modo di riuscirci.

Il software locale mandò avanti le cose, per un po', ma una volta passati tre mesi divenne chiaro che la coltivazione idroponica si stava guastando, e così anche i ciclatori di rifiuti. Nonostante le scorte che avevamo mantenuto al sicuro nel seminterrato che avevamo scavato nella roccia, in un paio di anni sarei stato a corto di aria e cibo.

Tornai al nucleo del computer principale e considerai le mie opzioni. C'erano abbastanza array buoni per provare a riassemblare un nuovo programma master, utilizzando le impostazioni predefinite di fabbrica che erano memorizzate su disco, ma dal momento che tutto ciò che sapevo sui computer l'avevo imparato a poco a poco mentre aiutavo Howard e Tab, non ero abbastanza esperto per poter fare più di un tentativo inesperto.

Ci provai comunque, e creai un ritardato computerizzato che cancellai subito.

Non pensai neanche di mettere mano a ciò che era rimasto di Howard. Quegli array li mantenni isolati, nel caso ci fosse ancora qualche possibilità di filtrare da loro delle informazioni che avrebbero potuto risultare utili.

Passai giorni a vagare da solo per i corridoi dell'osservatorio, chiedendomi che cosa diavolo ci facessi qui, e perché dovessi continuare a cercare di allungare una vita che sembrava non essere servita a niente.

Che fosse per fortuna o di proposito, fu quello il momento in cui si rivelò il successivo segnale radio.

Come l'altro, era molto debole, ma chiamava debolmente davanti a me, nel ventre della Fascia di Kuiper, come una sirena che attirava un marinaio solitario.

Mi diressi là. Scaricando più antimateria di quanto avrei dovuto nella reazione, avanzai brutalmente, spingendo l'osservatorio su per la scala di velocità relativa, senza curarmi del rischio di incontrare altre tempeste di micro meteoriti. Se c'era uno scopo in questo intero viaggio, un qualunque modo di dare un significato alle vite di Howard e

Tabitha, allora dovevo raggiungere quel segnale, che si trovava a distanza indeterminata, ma sembrava diventare un po' più forte, giorno per giorno.

Settimane più tardi, trovai la boa.

Sembrava essere il primo esemplare di tecnologia concepita dagli Outbounder che avessi mai scoperto. Incredibilmente piccolo, e che sembrava funzionare grazie a una scorta di antimateria – che gli Outbounder originari non avevano mai avuto – il dispositivo mandava segnali di ping tranquillamente all'osservatorio mentre usavo i rimanenti propulsori della stazione in funzione per trascinarci di fianco e far combaciare la rotta e la velocità. La mia interrogazione query via radio suscitò un messaggio laser che venne lanciato verso l'osservatorio. Dovetti armeggiare per alcuni minuti per portare il decoder sul posto – cosa che Howard avrebbe potuto fare di riflesso, con un solo pensiero – e infine il canale audio-video principale prese vita con un messaggio registrato.

Era un primo piano di una giovane donna sullo sfondo di uno schermo blu. Era di discendenza asiatica, e parlava TransCom con un accento che sospettavo essere cinese.

"Se state vedendo e sentendo questo messaggio," disse, "allora vi manca metà strada per raggiungerci. Sappiamo della guerra, e sappiamo che non sareste arrivati fin qui a meno che non cerchiate rifugio. Sappiate che il Quorum ha deciso di concedere asilo a tutti i rifugiati provenienti dai governi della Terra, le località su satellite indipendenti, e tutte le colonie degli asteroidi e dei pianeti gioviani. Ammesso che riusciate a raggiungerci. Ci dispiace inoltre di non potervi offrire delle coordinate precise da seguire, ma se siete arrivati fin qui, conoscete già il resto della strada. Buona fortuna."

Il messaggio si ripeteva, ed ero sia esultante che distrutto.

Fin qui. Ero arrivato fin qui. Tab e Howard avevano sacrificato così tanto. E mi trovavo solo a *metà strada*?

Tornai ai miei calcoli riguardo le scorte e la manutenzione dei campi idroponici. Non c'era modo di poter spremere le risorse in modo da poter viaggiare altri quindici anni, anche se pensavo di poter durare così a lungo da solo senza finire per impazzire. Anche se mi fossi liberato dell'intera riserva di antimateria in un lungo, prolungato

aumento di potenza. Sarebbe stato stupido, perché non avrei avuto altro modo di rallentare nel momento in cui mi fossi avvicinato al termine.

Rimasi vicino alla boa, ed considerai tutto in dettaglio.

La ragazza nel messaggio ovviamente voleva che i rifugiati continuassero a seguire l'ultima traiettoria conosciuta di Pioneer 10. Seguire quella scia di dolciumi era una sciocchezza. Come avrei potuto riuscirci ed essere ancora vivo all'arrivo era tutt'altro discorso.

Impiegai tre giorni a pensare e trafficare per trovare un piano.

Mi terrorizzava, perché era davvero simile ad una missione suicida.

La stanza con l'attrezzatura di registrazione non era stata toccata da molto, molto tempo. Tab l'aveva sigillata in un ambiente a bassa densità di azoto puro dopo aver aiutato Howard a mettersi nel computer, in modo che tutti i macchinari e le console rimanessero incontaminate e in buono stato. Era anche una delle poche stanze che il disastro delle micro meteore aveva risparmiato, e ciò mi diede un po' di conforto mentre iniziavo a preparare il download di me stesso negli array del database dell'osservatorio.

Avevo passato alcune settimane a creare un nuovo rifugio fortificato per quegli array, e li spostai uno ad uno accuratamente dal vecchio nucleo, fino alla nuova postazione, infine accendendoli e sincronizzandoli, con elettricità a ridondanza tripla che avevo rubato dai reattori antimateria.

Se l'osservatorio fosse stato colpito di nuovo, non volevo finire lobotomizzato come il mio vecchio amico.

Le istruzioni per la registrazione erano piuttosto semplici. Il dispositivo stesso era come uno scanner PET compatto che si abbassava sul cranio come un casco asciugacapelli.

L'inganno stava nel fatto che il processo non poteva essere interrotto o ritentato. Il processo di registrazione richiedeva giorni, ed era così elettromagneticamente intensivo che distruggeva i collegamenti neurali alla stessa velocità con cui li memorizzava nelle banche dati. Una volta che il registratore si fosse abbassato sul mio cranio e avesse iniziato a esaminarmi, mi sarei trovato in un viaggio di sola andata. E dal momento che non avevo nessuno che mi aiutasse, e non avevo mai fatto niente del

genere prima, c'era una buona probabilità che avrei finito per diventare niente più che un pezzo di carne senza mente, con tutta la mia vita codificata all'interno del computer.

Mi preparai attentamente. Nel caso in cui non fossi sopravvissuto, avevo programmato una rotta automatica nel sistema di guida. Essendo arrivato fin qui, mi sembrava valesse la pena di assicurarmi che ciò che sarebbe rimasto di me avesse almeno una possibilità di arrivare a destinazione. Collegai anche i server per i sistemi di sopravvivenza e li incrociai con il monitor di registrazione, in modo che se il processo di registrazione si fosse completato senza che mi svegliassi e assumessi il pieno controllo dell'osservatorio ciò che si trovava al suo interno sarebbe stato gradualmente congelato.

A quel punto il mio cervello sarebbe stato vuoto in ogni caso, e non mi piaceva l'idea di lasciare il mio corpo a marcire lentamente sul sedile di registrazione.

Una volta soddisfatto di essermi occupato dei dettagli necessari, mi sedetti e considerai le mie ultime parole. In tutta la mia vita, con tutto ciò che avevo vissuto, non avevo mai davvero pensato a cosa avrei voluto lasciare ai posteri. Era sempre stato qualcun altro a lasciarsi qualcosa dietro per me. Ero sempre stato io a dover raccogliere i pezzi e andare avanti. Mi frustrava star seduto là, di fronte al computer, col dito sospeso sul tasto che avrebbe dato inizio all'archiviazione audio-video, e non avere niente da dire.

Dieci minuti dopo finalmente picchiettai col dito sul tasto e parlai – in TransCom, in modo che le persone che avrebbero potuto recuperare la registrazione capissero.

"Mi chiamo Mirosław Jaworski. È possibile che sia l'unico sopravvissuto ad essere sfuggito alla distruzione della Terra. Se state vedendo questo messaggio, vuol dire che sono morto. Se non è di troppo disturbo, vorrei che qualcuno affiggesse un cartello da qualche parte; per me e la mia famiglia."

Ripetei lentamente il nome e il cognome di mia sorella, mia madre e mio padre, e inoltre quelli dei miei nonni, e diversi familiari anche lontani che erano vivi quando le bombe antimateria avevano spazzato via la Terra. Includerli sembrava una buona idea, dal momento che eravamo tutti vittime e volevamo che le nostre vite venissero ricordate da qualche parte, da qualcuno.

"Non m'importa molto di cosa succeda dopo. Tabitha e Howard Marshall sono sepolti sull'altro lato di questa struttura, e penso che dovrebbero restarci. Siete liberi di fare ciò che ritenete opportuno del mio corpo, e di tutto ciò che si trova in questo osservatorio.

"Out."

Colpii con un pugno il tasto stop, mi assicurai che il file venisse ripetuto per il mio dasy chain composta di workstation autonome, poi mi alzai e mi recai nella stanza di registrazione, dove chiusi lentamente la porta, montai la flebo – avrei avuto bisogno di un'iniezione fluidi durante il processo, o sarei morto di disidratazione prima che la registrazione fosse completa – e mi sedetti sul sedile collegato al registratore.

La "corona" – così avevo finito per considerarla – del registratore era sospesa a pochi centimetri dal mio cranio. Staccai l'interruttore d'attivazione dalla stazione di controllo e lo posizionai su un cavo che mi consentiva di tenere l'interruttore in mano.

Pensai al fatto che Howard avesse dovuto farlo una volta, con solo Tab che monitorasse il suo progresso.

Deglutendo con difficoltà, azionai l'interruttore con il pollice.

E l'universo svanì in un vortice di suoni e colori.

Niente avrebbe potuto prepararmi a quello che successe dopo. Un momento ero immerso in un mare infinito di immagini caotiche in movimento – suoni che rimbombavano per il cosmo da una parte all'altra della mia mente – e il momento dopo sembrava che tornassi improvvisamente in uno stato di realtà completamente fredda e solida.

La differenza era che vedevo l'osservatorio da almeno cinquanta occhi diversi, e sentivo da cinquanta orecchie diverse, e non potevo sbattere le palpebre e nemmeno fermare gli input, quindi cercavo di urlare, ma ciò peggiorò la situazione perché il mio grido proveniva da cinquanta casse diverse, che sovraccaricavano cinquanta microfoni diversi, e dentro la mia testa un grido di feedback simile a un'emicrania risuonava nella mia coscienza.

Era stato Howard a salvarmi. O meglio, i suoi ricordi.

Nella possibilità che riuscissi ad accedere a ciò che era rimasto dell'intelletto di Howard, avevo messo in collegamento i suoi vecchi array in un gruppo adiacente agli spazi vuoti principali che avevo configurato per me stesso. In un panico disperato, cercai di raggiungere mentalmente Howard, e sentii una veloce scossa di dati correre per il collegamento. Improvvisamente mi trovai di nuovo su basi mentali solide, il mio campo visivo si restrinse rapidamente alla visuale di una telecamera, e la mia capacità uditiva ridotta a una voce singola, neutra che diceva semplicemente, "Accesso ai comandi autorizzato, Mirek. In attesa di istruzioni successive."

Il sistema conosceva il mio nome.

Ce l'avevo fatta.

Solo che non riuscivo a *sentirmi* eccitato per questo motivo. Dal punto di vista mentale, credo che fossi sollevato. Ma il *sentimento* ghiandolare di soddisfazione, di trionfo, che sarebbe dovuto appartenermi, era assente. Tutto ciò che rimaneva era la freddezza di pensiero puro, rapido. Pensiero tanto veloce che mi sentivo spiazzato dalle implicazioni. E le possibilità. Nessun calcolo matematico sarebbe mai più stato oltre la mia portata. Nel momento in cui concepivo un problema, la risposta era nella mia mente in quello stesso istante. La mia capacità di memoria si rivelò immediata allo stesso modo, e mi presi qualche momento per considerare questa realtà, che diede origine a un'ulteriore scarica di informazioni provenienti dalle banche dati di Howard, che si stavano integrando alle mie, ora che avevano una matrice cerebrale affidabile da mappare.

Impiegai solo pochi minuti per padroneggiare la rete, e altrettanti per accedere e testare tutti i sistemi operativi rimanenti dell'osservatorio.

Immediatamente, mi fu ovvio quanto ero stato negligente e disattento. L'efficienza dell'intera struttura era scesa al quarantadue per cento, con una lista di elementi marcati da linee gialle, arancioni e rosse che iniziavano a diventare centinaia. Mentre esaminavo e stabilivo le priorità, ricevevo continue scosse di dati dagli array di Howard. Un momento mi chiedevo come risolvere un certo problema. Quello dopo, la conoscenza arrivava, come se fosse sempre stata là. Come se l'avessi fatto un centinaio di volte prima.

Anche se la sua personalità era appena percettibile nei dati, come un piccolo retrogusto in bocca, Howard era ancora, a tutti gli effetti, morto. Mandai diversi

ringraziamenti mentali alla memoria dell'uomo, poi mi preparai per allontanarmi dalla boa, e iniziai la tappa in discesa del mio viaggio verso gli Outbound.

Una cosa comportava essere una mente computerizzata. Potevo cambiare la velocità dello scorrere del tempo a mio piacimento. Settimane e mesi evaporavano in un battito di ciglia mentre effettuavo le necessarie riparazioni ai reattori e configuravo un programma per suddividere la scorta di carburante, tutto mentre mi spingevo piano su per la curva di velocità relativa, facendo attenzione al fatto che al termine il carburante fosse più che sufficiente per rallentare. Non avevo idea di cosa mi aspettasse là, ma sapevo che sarebbe stato maleducato volare oltre gli Outbounder come un semirimorchio a cui si sono rotti i freni su un pendio ripido.

Indirizzai i segnali radio verso avanti e iniziai gradualmente a vivacizzare il viaggio con saluti a chiunque mi avrebbe incontrato.

Suppongo ci fosse sempre la possibilità di non incontrare nessuno, e che la boa, nonostante avesse promesso, potesse essere stata un inganno, o persino un reperto storico di un tentativo che da allora era fallito. Ma il mio intelletto guidato dal computer non aveva la capacità di provare vera paura. Un'emozione così forte, trovai, era puramente una memoria residua – come una risposta a uno stimolo, ora ritardata. Sapevo che avrei dovuto avere paura, ma si trattava di una conoscenza passata, e non influenzava il mio progresso complessivo, né la mia determinazione nel raggiungere il mio obiettivo.

Cosa sarebbe successo quando fossi arrivato... beh, cercavo di non chiedermelo volutamente. Quanto sarebbe stata utile per gli Outbound una mente computerizzata come me? Non potevo mica rimettermi dentro la mia testa. E non volevo nemmeno, iniziai a pensare. La capacità estesa degli array neurali creava quasi dipendenza, e dopo che furono passati un paio di anni sospettai che se avessi dovuto ritrovarmi limitato a un paio di occhi, un paio di orecchie, un insieme di sensi, tutto ciò mi avrebbe fatto soffrire di claustrofobia a punto tale da farmi impazzire.

Dal momento che il telescopio principale era per lo più distrutto, impiegai il backup e usai i miei cicli in pausa per analizzare e classificare il piccolo frammento della Fascia di Kuiper attraverso il quale ero passato.

Era davvero sorprendente vedere così tanti detriti in una zona dello spazio che la maggior parte degli umani pensavano fosse vuota, addirittura fino a e durante il ventiduesimo secolo. Solo gli Outbound avevano erano stati previdenti e avevano visto questa regione per quello che era realmente: un rifugio dalle catastrofi che avrebbero sicuramente colpito i pianeti del sistema solare – che fossero comete o asteroidi, fiamme solari intense, o come era davvero successo, la stupidità competitiva dell'umanità stessa.

Fuori dalla Fascia di Kuiper, c'era abbastanza spazio da perdersi. Come un eremita che penetra in profondità nelle zone selvagge, cercando abbastanza risorse per sopravvivere e abbastanza distanza per sfuggire dalla follia dell'umanità.

Trovai altre due boe, ognuna con un messaggio simile a quello della prima.

Il mio carburante antimateria superò il punto di non ritorno, rendendomi completamente impossibile tornare nella regione gioviana dello spazio. Ma m'importava poco. Ero Outbound ora, e non ci sarebbe mai stato modo di tornare indietro.

Un altro lasso di tempo della durata di un decennio passò con una facilità surreale, e alla fine di esso, un'altra tempesta di micro meteoriti colpì. Ma avevo salvaguardato i sistemi vitali prima di mettermi nel computer, e tale sforzo diede i suoi frutti. Non venne danneggiato niente di critico, anche se il sistema idroponico e altri sistemi di sopravvivenza non avrebbero più funzionato – troppe micro-crepe.

Mi chiedevo perché i miei messaggi, che avevo lanciato davanti a me come sassi verso un laghetto, non avessero ottenuto alcuna risposta.

Forse era proprio la natura dell'essere Outbound – non rivelarsi mai finché non fosse assolutamente necessario.

Arrivato al ventinovesimo anno dalla mia partenza da Giove, avrei dovuto sentirmi eccitato e nervoso per l'aspettativa.

Sentivo solo spettri indugianti.

Non vidi mai l'altra nave.

Un momento ero da solo nello spazio, quello dopo un cuneo largo cinquanta metri mi raggiunse in rotta e velocità – e non era un'impresa da poco.

Lanciai educatamente dei saluti radio al cuneo, aspettandomi una risposta. Ma tutto ciò che il cuneo fece fu espellere una dozzina di cunei più piccoli, ognuno dei quali

incombette sull'osservatorio come mosche sul didietro di un cane, e improvvisamente venni colpito dalla consapevolezza che ero stato attirato in una trappola per topi colossale.

Ognuno dei piccoli cunei atterrò e scaricò una serie di apparecchi simili a ragni che iniziarono a introdursi di fretta all'interno dell'osservatorio, aprendosi un varco nel metallo e nella roccia come un coltello nel burro.

Le mie chiamate di saluto divennero insistenti, e successivamente frenetiche. I ragni ignorarono ciecamente i miei tentativi e accelerarono verso la crepa dove avevo nascosto gli array della memoria. Le mie telecamere e gli altri sensi li seguirono, e avrei gridato e avessi ancora potuto sentire quel tipo di panico viscerale che mi serviva per farlo.

Ricordo un'ultima visuale della telecamera, che sorvegliava gli array. Guardai un ragno salire in cima di una delle mie banche dati, strofinando insieme avidamente le sue zampe anteriori che culminavano in artigli, poi percepii la mia mente scindersi in parti separate – sembrava il peggior tipo di follia immaginabile – e infine un'oscurità misericordiosa.

La riattivazione fu problematica, perché non mi era permesso vedere, sentire, o percepire qualunque cosa. Non subito. Tutto ciò che avvertii fu l'*impressione* che qualcuno aveva bisogno che fossi paziente, perciò aspettai, testando la qualità dei miei pensieri e trovandoli... troncati. Limitati. La velocità e precisione assolute delle banche dati dell'osservatorio erano assenti. Mi sentivo come se... *sentivo?*

Quando infine aprii gli occhi - ?! – venni accolto da svariate facce diverse, delle quali tutte sembravano essere preoccupate. Mi sedetti - ?! – e guardai gli Outbunder, ognuno dei quali indossava ciò che mi sembrava un camice da medico, anche se la stanza in cui mi avevano portato era insolitamente calda, e non vi si trovava niente che assomigliasse lontanamente a un bisturi o altri strumenti chirurgici minacciosi.

"Sono il dottor Hastel. Come si sente?"

Era una delle donne, che sembrava avere circa quarant'anni.

"Non ne sono ancora sicuro," dissi. "Come... mi avete rimesso a posto?"

"È lungo da spiegare," disse uno degli uomini, un tipo che sembrava essere cinese di circa trent'anni e che s'identificava col nome di Chirurgo Chow. "Ecco, glielo spiegherò in modo semplice."

Non si mosse mai, ma sentii un'improvvisa scarica mentale, come quelle che avevo ricevuto dagli array della memoria di Howard. Nel giro di un singolo secondo, capii improvvisamente tutto sulla procedura degli Outbunder. Mi avevano clonato, usando tessuto estratto dal cadavere congelato che avevano trovato nella stanza di registrazione dell'osservatorio. All'interno del mio cervello clonato avevano installato un nuovo organo: un'interfaccia di connessione diretta. L'avevano usata per trasferire poco a poco la mia matrice cerebrale nella copia del cervello durante la crescita del corpo clonato.

Ora che ero sveglio, la connessione diretta mi avrebbe permesso di accedere alla loro rete pubblica – una volta che avessero ritenuto che fosse sicuro per me farlo. Avevo ancora molto da imparare prima di poter lasciare l'ospedale.

Tutta questa conoscenza arrivava nella mia coscienza con una certezza fredda, come se avessi saputo da sempre tali cose. Ma sentii un brivido teso attraversarmi la spina dorsale mentre abbassai lo sguardo sulle mie gambe.

"Funzionano del tutto?" chiesi.

"Sì," disse Hastel, rivolgendomi un piccolo sorriso. "Non funzionavano prima?"

"No," dissi. "Ero paraplegico."

"Ne abbiamo avuti alcuni," disse. "Li abbiamo rimessi a posto facilmente."

Osai provare a muovere le gambe, che erano state inutilizzabili per tutta la mia vita, e mi resi conto che non sapevo bene come farlo. Anche se, se mi concentravo, riuscivo a sentire la sensazione della leggera corrente proveniente dai ciclatori d'aria sulle cosce, che mi faceva venire la pelle d'oca.

Mi sentii improvvisamente delirare di gioia, le lacrime che mi colavano dagli angoli degli occhi mentre facevo un ampio sorriso.

La mia mente iniziò a sprizzare di domande.

"Ogni cosa a suo tempo, signor Jaworski," disse Chow. "Ci dispiace averla dovuta tenere off-line così a lungo. Anche in genetica avanzata, ci vogliono anni perché un corpo clonato cresca abbastanza per la fase di trasferimento. È stato messo in lista d'attesa il prima possibile."

Una delle altre donne, dai capelli rossi e il viso lentiginoso, fece la domanda successiva.

"Sono l'assistente del chirurgo, la dottoressa Keilor. Cosa vuole sapere per prima cosa?"

"Posso..." mi fermai per pensarci bene. Poi dissi, "Posso avere qualcosa da mangiare, per favore?"

L'intero gruppo mi sorrise raggianti.

Mi guardai intorno. "Era la domanda giusta?"

"Ci puoi scommettere," disse Keilor, prendendomi per mano.

Un'altra scarica mentale, direttamente da lei.

Scivolai giù dal tavolo, e scoprii di saper camminare.

Gli Outbound erano di gran lunga più numerosi e sofisticati di quel che mi aspettavo. Mentre il Sistema Solare si era fatto i suoi affari miopi ed egocentrici, gli Outbound si erano assicurati grandi pezzi della Fascia di Kuiper, sia per attività minerarie che per colonizzazioni. Infine avevano costruito una rete di monitoraggio che era stata inizialmente progettata per tenere d'occhio il resto dell'umanità che viveva "in fondo al buco", come si riferivano, avevo imparato, a tutti quelli che vivevano all'interno dell'orbita di Nettuno.

Era questa rete che aveva rilevato per prima gli Altri, che avevano apparentemente costruito una rete di monitoraggio a loro volta, fin dal ventesimo secolo.

Le cose erano cresciute a vista d'occhio da quel momento in poi.

Attraverso lo scambio di informazioni e di tecnologia con le altre specie senzienti dei sistemi stellari vicini, gli Outbound avevano superato chi di noi si trovava "in fondo al buco", in modo da mascherare facilmente la loro graduale presa di potere sulla Fascia di Kuiper.

Nessuno degli Outbound era rimasto sorpreso dallo scoppio della guerra. Se l'aspettavano da molti anni. La nave a forma di cuneo che aveva intercettato l'osservatorio era uno dei numerosi veicoli sentinella automatizzati progettati per intercettare qualunque cosa arrivasse dal sistema solare, e determinare se fosse ostile o amichevole. Se fossi stato uno dei satelliti assassini, o qualunque altra entità nemica,

sarei stato distrutto. Ma una volta che avevano trovato i miei array di memoria e determinato che ero innocuo, tirarono fuori gli array, campionarono tessuto per la clonazione, riportarono gli array e il campione in un posto sicuro, e il resto fu storia.

L'osservatorio, insieme ai corpi di Howard e Tabitha, poté continuare il suo viaggio eterno verso la vastità della lontana Oort.

Passai il tempo come uno dei tanti Outbunder adolescenti: gironzolando per gli spazi pubblici, abituandomi al mio nuovo corpo e alla sua mobilità rivelatoria, e giocando nel sistema a connessione diretta. Centinaia di migliaia di menti, per lo più umane, alcune aliene, tutte alimentate e interconnesse tramite un sistema di condivisione vasto e basato su peer, senza server ed esteso tanto quanto le apparecchiature di comunicazione consentivano. Non proprio una mente di gruppo, visto che tutti mantenevano delle barriere per la privacy, ma era intrecciata abbastanza da permetterci di imparare e accedere a tante informazioni che era come digerire un intero semestre di college ogni giorno della settimana.

Riuscii anche a rimanere in contatto con la rossa dalle lentiggini del centro clonazione. Fisicamente, Colleen Keilor era molto più grande di me, ma l'età non sembrava importare molto per gli Outbunder.

Col e io andavamo piuttosto d'accordo.

Un paio di anni dopo essermi svegliato tra gli Outbound, il loro Quorum annunciò la sua intenzione di iniziare a riconquistare il sistema solare. Il Quorum cercava dei volontari per condurre il tentativo, che avrebbe compreso non solo ripulire lo spazio dai satelliti assassini che si aggiravano ancora tra i pianeti, ma anche la terraformazione della Terra distrutta.

Sarebbe stato un tentativo prolungato – la più grande sfida dell'Era Outbound.

Col e io ci arruolammo immediatamente.

Irenka Elaine Jaworski-Keilor è nata nel bel mezzo di un volo di ritorno verso la Terra della Prima Flottiglia di Riconquista. Con gli occhi scintillanti, e un viso e un sorriso che sembravano misteriosamente familiari, dona a me e mia moglie Col tanta gioia. Una volta, Irenka sarebbe sembrata una cosa impossibile. Ma dopo anni passati a cambiare pannolini e insegnarle a leggere e scrivere e fare calcoli matematici e usare la

connessione diretta, ho gradualmente accettato il fatto che le cose impossibili sono ordinaria amministrazione nella mia nuova realtà estesa.

Abbiamo raggiunto Giove, e trovato i resti bruciati dei vecchi insediamenti. Anche i satelliti assassini stavano aspettando, ma li abbiamo liquidati, radiotrasmettendo i nostri progressi alla Seconda e Terza Flottiglia che sono state lanciate sulla nostra scia.

C'è un bel po' di lavoro per i nuovi abitanti del sistema solare.

Spero che un giorno potrò portare Irenka fino alla Terra e mostrarle un mondo che un tempo chiamavo casa, e che spero, in seguito a lunghe ricostruzioni, potrà essere chiamato di nuovo casa.

Fine.

## 4 Translation comment

We shall now analyze some of the most significant stylistic, lexical and morpho-syntactic problems encountered in the translation of the short story and the strategies adopted in order to solve them.

### 4.1 Stylistic problems

In this section I will illustrate some of the passages of the story that were problematic to render in the target text from a stylistic point of view.

#### 4.1.1 Punctuation / pauses

- When the heavy banging noises came through the cabin, some of the kids screamed. **I knew better, though.** We'd undocked from the station because I felt all the gravity go away.
- Quando dalla cabina si sentirono dei boati, alcuni dei ragazzi gridarono. **Io no, però.** Sapevo che ci eravamo sganciati dalla stazione, in quanto sentii la gravità sparire di colpo.

The translation of this passage was made hard by the presence of the short sentence *I knew better, though*, which the author uses to create a pause. In this case, it is clear that the meaning of the verb *to know better* was that the main character did not scream because he *knew better* than the other kids. The interval between the two sentences made it hard to find an equivalent form that would not sound too unusual in Italian. At first, it seemed reasonable to simply merge the two sentences, but this would diverge from the author's choice to create a pause and therefore it would create a different reaction in the reader. To maintain the implications in the first sentence without making it sound too unusual in Italian, I chose to translate the first sentence as "Io no, però", making reference to the previous statement of the kids screaming. By doing so, *though* was kept as *però* after the comma, and the sense of the verb *to know better* is retained in the second sentence, "*Sapevo che ci eravamo sganciati dalla stazione [...]*".

- Our ship was moving. **Fast**.
- La nostra nave si muoveva, **velocemente**.

In this second case, the author chose to split the sentence *our ship was moving fast* in two distinct sentences, thus creating a pause between *moving* and *fast*, to give a sense of suspense in the reader. The adverb is therefore placed in a marked position, which is unusual with regards to the position adverbs take in English<sup>53</sup>. However, we have to consider that this is a literary text, and that literary languages has more freedom with regards to the position of the various elements, because form is generally more important than content. Rega quotes Lotman in distinguishing between "natural language" and "literary language" and argues that because of the mutual relations between the various elements of the text every element becomes semantic, making the literary text unique.<sup>54</sup> Because of this, placing an adverb on its own is an acceptable use in the source text. In the target text, however, this deviation from the norm was thought not to sound as natural in Italian as it does in English, therefore I preferred not to separate so abruptly the adverb from the rest of the sentence, substituting the point with a comma to still create a pause, though shorter than the one in the source text.

#### 4.1.2 Metaphors

The metaphor is a figure of speech used in texts to "imply a comparison between two unlike entities". They are important in literary texts because they are used for "artistic and rhetorical purpose".<sup>55</sup>

The text presented both common metaphors which have become standard in language usage and original metaphors that the author invented himself to convey a certain image or feeling.

Examples:

- I felt a **lump** form in my throat while Tab quietly wept.
- Sentii un **groppo** formarsi in gola mentre Tab pianse in silenzio.

<sup>53</sup> Ramaswamy, E.S. (2004). *Practical English Grammar*. Sura Books (Pvt) Ltd., p. 348

<sup>54</sup> Rega, L. (2001). *La traduzione letteraria : aspetti e problemi*. Torino: UTAT libreria, p. 52

<sup>55</sup> Kövecses, Z. (2010). *Metaphor: a practical introduction*. New York. Oxford University Press.

This metaphor is common and has a direct equivalent in Italian, therefore *lump* became *groppo* in the target text. However, the image slightly changes in the two languages, as we can see if we check the meaning of the two terms: *groppo* is a "Viluppo, groviglio, nodo intricato: fare groppo, di filo, corda o altro che s'avviluppi"<sup>56</sup> while *lump* is "a piece of something hard or solid, usually without a particular shape"<sup>57</sup>.

However, there are cases in which, while the metaphor is common in English and has a direct equivalent in Italian, its natural equivalent could not be used in certain contexts. Example:

- "Boy's a **mess**, Howard,"
- "Il ragazzo è **nesso male**, Howard,"

The metaphor in this sentence is a common one and it is used here to describe a person's bad condition. While the Italian equivalent of this image would be *è un casino*, this image is mostly used to describe an object, or a person's feelings, but not physical condition. Therefore this metaphor could not be translated literally in the target text. I had to search for some form that would transmit the same meaning in the target language. Eventually, the image of *essere nesso male* was used, because it seemed to transmit around the same meaning of the original and be used in the same contexts.

When the metaphors are original, there are cases in which they had to be normalized or re-constructed and others in which they could be kept literal in Italian.

- Elaine and Irenka simply looked at me, their mouths forming **twin oh-shapes** while their hair ruffled in the rush of escaping atmosphere.
- Elaine e Irenka si limitarono a guardarmi, **entrambe** con la bocca in **un'esclamazione di sorpresa** mentre i loro capelli venivano scompigliati dal flusso dell'espulsione dell'atmosfera dalla nave.

In this passage the metaphor *twin oh-shapes* was normalized in the target text in order to maintain naturalness in the target text. To convey the same meaning, *their mouths forming twin oh-shapes* was rephrased to *entrambe con la bocca in un'esclamazione di sorpresa*. *Entrambe* was used to make up for the *twin* adjective in

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<sup>56</sup> [www.treccani.it](http://www.treccani.it)

<sup>57</sup> *Oxford Advanced Learner's Dictionary 8th edition* (2010), Oxford, Oxford University Press

the source text, and *oh-shapes* was rendered simply as *esclamazione di sorpresa*, because it was not possible to maintain that same image in Italian.

- The woman's **mouth sank** to a frown.
- **Gli angoli della bocca** della donna **sprofondarono** in un'espressione corruciata.

In this sentence, to successfully transfer the metaphor and make it clearer to the Italian reader I chose to expand the noun *mouth* as *gli angoli della bocca*, and *frown* as *espressione corruciata* in the target text, in order to keep the image of the verb *to sink* transferred into the Italian correspondent *sprofondare*.

- Eventually I felt the **rumbling** of a terrible cry **struggle up** in my chest. Once it **broke the surface**, I howled for many minutes, snot and tears and blood caking my face and hands.
- Infine sentii il **rombo** di un terribile grido **salirmi su** per il petto. Una volta che **raggiunse la superficie**, gemetti per parecchi minuti, mentre muco, lacrime e sangue mi s'incrostavano sulla faccia e sulle mani.

In this passage, *rumbling* was rendered in Italian with the noun *rombo*, and the verb *struggle up* was rendered in the target text with the verb *salire su per*, thus losing part of the meaning of it (the struggle) in order to keep the image of *breaking the surface* (*raggiungere la superficie*) in the second sentence. The violence of the image conveyed by the *breaking* is also lost in the target text, because no natural and concise equivalent was found that could convey the same image in the target text.

- She literally **flowed** with stories and spunk and an irrepressible good cheer, such that I almost forgot the depression that had sunk its teeth into my heart since Irenka had died.
- **Traboccava** letteralmente di racconti e fegato e di un irrefrenabile buon umore, tanto che mi dimenticai quasi della depressione che aveva affondato i denti nel mio cuore da quando Irenka era morta.

The author uses the verb *to flow with* as a metaphor, meaning that Tabitha was full of stories and spunk and an irrepressible good cheer. In this case it can be translated,

according to Il Ragazzini<sup>58</sup>, with the Italian equivalent *abbondare di*. However, because the verb *flow* on its own means *scorrere* and therefore can supposedly give the reader an image of water or a stream, I eventually chose to use the verb *traboccare*, which also implies an image of water, to try and keep the image as close as possible in the target text.

- But somehow, **I just never found the spark.**
- Ma per qualche motivo, **non vidi mai la luce.**

In this passage, the metaphorical expression *to find the spark* refers to the fact that Mirek never ended up believing in God. While *spark* can be literally translated as *scintilla* in Italian, the noun in this context probably refers to the *light* of God in this context, therefore I chose to translate the last part of the sentence as *non vidi mai la luce*, which is a metaphor familiar to Italian readers.

- I reverently **combed** the dead for anything that might indicate where the other survivors had gone.
- **Passai al pettine** rispettosamente i cadaveri alla ricerca di qualunque cosa potesse indicare dove fossero andati gli altri sopravvissuti.

In this passage, the author uses the verb *to comb* to refer to Mirek inspecting the dead bodies. This verb can mean both *pettinare* and *setacciare* in Italian<sup>59</sup>, and therefore gives a double image to the English reader. To successfully transmit this image in the target text, the verb *passare al pettine* seemed like a good option.

- I only felt **lingering ghosts.**
- Sentivo solo **spettri indugianti.**

The author uses this metaphor to talk about the main character's feelings that are not there anymore, and therefore stay with him as *lingering ghosts*. This image could be literally kept in Italian, it were therefore translated as *spettri indugianti*.

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<sup>58</sup> Ragazzini G. (2009). *il Ragazzini 2010, dizionario inglese-italiano-inglese*, Bologna, Zanichelli

<sup>59</sup> Ragazzini G. (2009). *il Ragazzini 2010, dizionario inglese-italiano-inglese*, Bologna, Zanichelli

### 4.1.3 Different registers

In this story different registers can be found in the way characters speak. The first differentiation is related to age, as children and adults speak in different ways.

- "But **I think** Mama and Papa **aren't alive anymore.**"
- "Ma **penso** che mamma e papà **non sono più vivi.**"

In this case, Mirek tries to tell his sister that their parents are dead, using modulation (*aren't alive anymore* instead of *are dead*) and the verb *to think* to make it sound less shocking than it really is. The verb *pensare* in Italian would require the use of *conjunctive*<sup>60</sup>: *penso che non siano più vivi*. However, because it is a child who is speaking, and he supposedly still has no full command of his language, I thought it would be best to make him express his "opinion" in the *indicative* mood to highlight his age. This choice also makes up for the lack of juvenile slang equivalent for *Mama* and *Papa*, which are used by children and in the text become the Italian standard *mamma* and *papà*.

- "I have **damn** no idea," she whispered.
- "Non ne ho la più **fottuta** idea," sussurrò.

In this passage Elaine, one of the adults, curses. There was doubt whether to render the curse *damn* as *fottuta*, which is the closest equivalent in Italian but it also is a stronger word than *damn* is in English. However, because the woman apologizes "for cursing" afterwards, I eventually chose to keep the curse, even though it is stronger in Italian, in the target text as well.

Of all the characters, the one that speak in the most characteristic way is Howard.

- "But let me tell you something, for women, a man being tall and macho ain't the **end-all, be-all.** [...]"
- "Ma lascia che ti dica una cosa, per le donne l'uomo alto e macho non è la **fine del mondo.** [...]"

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<sup>60</sup> Della Valle V., Patota G. (2012). *Ciliegie o ciliege? e altri 2406 dubbi della lingua italiana*. Sperling & Kupfer editori, p. 235

This sentence told by him presents an idiomatic expression that could not be translated literally: *the end-all, be-all*, which is a way of saying that something is *the most important*<sup>61</sup>. At first, I thought of paraphrasing the sentence to transmit the same meaning while losing this image, but this would also mean removing a specific choice of the author related to Howard's manner of speaking, which is usually very colloquial. Eventually I came up with an equivalent that is idiomatic and similar in meaning and use to the source text expression, *la fine del mondo*.

#### 4.1.4 Onomatopoeias

Onomatopoeias is a term that is used to describe when language sounds like the object it refers to, and it is quite common in both prose and literature.<sup>62</sup>

There are two uses of direct onomatopoeias in the text.

- Then she quickly walked *rip-rip-rip* across the deck.
- Poi si incamminò rapidamente per il ponte, facendo *strap strap*.

In this sentence the author chose to use the onomatopoeia *rip-rip-rip*, placing it right next to the verb, and its aim is to make the reader imagine and hear at the same time, making the image more vivid. I thought it was important to keep this vivid image in the target text as well. However, as placing the onomatopoeia in the same way seems to somehow break the sentence in Italian (*si incamminò strap strap*), in order to make the whole sentence natural in the target text I chose to put the onomatopoeia in its Italian equivalent *strap strap* at the end of the sentence, adding the verb *fare* which in this case means that she emitted a sound.

- She floated limply for a moment before being catapulted over my head and out of sight, followed by a sickening *thump*.
- Fluttuò fiaccamente per un momento prima di venire scagliata oltre la mia testa e scomparire alla vista, seguita da un raccapricciante **tonfo**.

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<sup>61</sup> *Oxford Advanced Learner's Dictionary 8th edition* (2010), Oxford, Oxford University Press

<sup>62</sup> Zhang, X. (2000). *English Rhetoric*. Tsinghua University Press. Beijing Jiaotong University, p.

In this second case, the author uses a direct onomatopoeia to make the whole image even more disturbing. In this case, the word *thump* could be kept in English because it is used in Italian as well, but I thought it would be best to normalize it and render it as a noun that describes this sound, *tonfo*, in the target text. According to Treccani<sup>63</sup>, in fact, *Tonfo* is a "voce onomatopeica" and it is described as a "rumore piuttosto cupo, prodotto da un corpo che cade nell'acqua o anche in terra, e meno spesso provocato da colpi battuti".

#### 4.1.5 Expansion

Here are some examples of passages of the source text that were expanded in the target text in order to make them clearer for the reader.

- I saw one girl **come loose from** her partially-buckled harness and crash into the ceiling.
- Vidi una ragazza **la cui cintura, non allacciata bene, si allentò** e la fece schiantare contro il soffitto.

This sentence was difficult to render in Italian, because the verb *come loose* (lit. *allentarsi*) followed *by from* did not have a direct equivalent in the target language. To preserve approximately the same meaning, I expanded the sentence, starting it in the same way ("I saw one girl") then making the noun *girl* be followed by the relative pronoun *la cui* (*whose*) and to make the noun *cintura* (*harness*) the subject of the subordinate clause.

- Then I simply sat and stared out the shield's window, watching the blackness of space and the stars beyond **roll slowly past**.
- Dopodiché rimasi semplicemente seduto e guardai oltre la fessura della tuta anti-decompressione, osservando l'oscurità dello spazio e le stelle più in là **che scorrevano lentamente fino a scomparire**.

The last part of this sentence was challenging because of the verb *roll slowly past* that refers to the movement of the stars. In Italian, it needs to be expanded in order to give the whole meaning of the original. Therefore, the verb *to roll slowly* was kept in

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<sup>63</sup> [www.treccani.it](http://www.treccani.it)

*scorrevano lentamente* and *past* became in the target text *fino a scomparire*, to render its meaning of them moving until they were no longer in sight.

- I flinched for an instant, expecting the vacuum of space, but instead found the **illuminated, metal-ribbed interior** of... another ship?
- Sobbalzai per un istante, aspettandomi di ritrovarmi nel vuoto dello spazio, e invece mi ritrovai in **un luogo illuminato, di metallo ondulato, all'interno di**... un'altra nave?

This sentence was expanded in the target text because of the noun *interior* which is modified by the two adjectives *illuminated* and *metal-ribbed* in the source text. In Italian, *interior* as in "a part on the inside" is *interno*, but this noun would sound strange if modified by the equivalent Italian adjectives. Because of this, the phrase *in un luogo* was added, in order to have it modified by *illuminato* and *di metallo ondulato*, and *interior* was added in the last part of the sentence, *all'interno di*.

- There was no way I'd **squeeze out** fifteen more years, even if I thought I could last that long alone without going insane as a result.
- Non c'era modo di poter **spremere le risorse in modo da poter viaggiare** altri quindici anni, anche se avessi pensato di poter durare così a lungo da solo senza finire per impazzire.

The expression *squeeze out fifteen more years* needed to be expanded in the target text. I kept the image of *squeezing* using the verb *spremere*, then added the object *risorse* in order to clear what is being squeezed, which is missing in the English text but is clear by context in the source text but not in the target text. After that, I chose to add *in modo da poter viaggiare* to link it with *altri quindici anni (fifteen more years)*. Because of the strategies applied, the sentence in the target text ended up being longer by a good extent than the one in the source text.

- Elaine and Irenka simply looked at me, their mouths forming twin oh-shapes while their hair **ruffled** in the rush of escaping atmosphere.

- Elaine e Irenka si limitarono a guardarmi, entrambe con la bocca in un'esclamazione di sorpresa mentre i loro capelli **venivano scompigliati** dal flusso dell'espulsione dell'atmosfera **dalla nave**.

To render *ruffled* it was necessary to expand it in the target text as *gli venivano scompigliati*, and *escaping atmosphere* was expanded by adding the specification *dalla nave* in order not to make it too confusing for the reader.

All these examples show how Italian has a more complex and varied structure than English, as argued by Scarpa<sup>64</sup>, and how the translator often has to add elements in the target text to make things clearer for the reader.

## 4.2 Lexical problems

In this section I will list the main lexical problems I found while translating this text. They relate to neologisms, technical terms and other difficult terms to translate in the source text and the solutions that resulted.

### 4.2.1 The title

The first problem that needs to be taken into account is related to the word *Outbound*. According to Oxford Advanced Learner's Dictionary<sup>65</sup>, this term refers to *travelling from a place rather than arriving in it (in partenza, in uscita in Italian<sup>66</sup>)*. *Outbound* is the title of the short story, and the author gives this word a new meaning, using it to denote a mission in outer solar system. The author also returns to the original meaning of the word at the end of the story, when he mentions an *inbound* travel (the opposite of *outbound*<sup>67</sup>), that is used to refer to a return travel towards the Earth. Being used as a proper name, I chose to keep the word in English in the target text, even though in doing so there is a loss of its intrinsic meaning in the target text. Because the objective of the mission is explained as soon as the word *Outbound* is introduced, it is

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<sup>64</sup> Scarpa F. (2012). *La Traduzione Specializzata. Un approccio Didattico Professionale*, Hoepli, p. 165

<sup>65</sup> *Oxford Advanced Learner's Dictionary 8th edition* (2010). Oxford, Oxford University Press

<sup>66</sup> Ragazzini G. (2009). *il Ragazzini 2010, dizionario inglese-italiano-inglese*, Bologna, Zanichelli

<sup>67</sup> *Oxford Advanced Learner's Dictionary 8th edition* (2010). Oxford, Oxford University Press

reasonable to think that the Italian reader will be able to assume what the English term refers to even though the intrinsic meaning of the word is missing. Furthermore, there seems to be a tendency in science fiction and generally in the scientific field to borrow English terms, mostly because of the dominance of this language in these domains<sup>68</sup>, so it can be also be assumed that the Italian reader, when facing this kind of texts, is mostly used to finding such anglicisms.

#### 4.2.2 TransCom

TransCom is a neologism and supposedly refers to a universal language spoken in the story's world by people of different nationalities to understand one another. It is most likely a compound: *Trans* can hypothetically either refer to *Transmission*, *Transition*, or even *Translation*, while *Com* most likely refers to *Communication*. Because it is the name of a futuristic universal language, I chose to keep the English term in the Italian version. Furthermore, the intrinsic meaning is supposedly understandable for the Italian reader as well and, as it was said before, the use of anglicisms is not unusual in these kinds of texts.

#### 4.2.3 Terms related to spaceships and space travel

##### *Hatch*

According to the Oxford Advanced Learner's Dictionary<sup>69</sup>, it is "a door in an aircraft or spacecraft". It can also be "an opening or a door in the deck of a ship or the bottom of an aircraft, through which goods to be carried are passed" (in this case, *hatchway* is also used to refer to it). According to Il Ragazzini<sup>70</sup>, its equivalent changes whether it is a nautical or an aeronautical term, suggesting *boccaporto* in the first case and *portello* in the second. Because terms related to spaceships often borrow nautical term, there was doubt about which one would be the most appropriate. However, looking at the nautical English definition of *hatch*, it seems that *boccaporto* (whose

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<sup>68</sup> [http://www.treccani.it/enciclopedia/anglicismi\\_\(Enciclopedia\\_dell'Italiano\)/](http://www.treccani.it/enciclopedia/anglicismi_(Enciclopedia_dell'Italiano)/)

<sup>69</sup> *Oxford Advanced Learner's Dictionary 8th edition* (2010), Oxford, Oxford University Press

<sup>70</sup> Ragazzini G. (2009). *il Ragazzini 2010, dizionario inglese-italiano-inglese*, Bologna, Zanichelli

definition in Italian is similar: "Ognuna delle grandi aperture praticate nei ponti delle navi, per dare accesso alle stive del carico o ad altri locali interni, munite di solito di un'efficiente chiusura ermetica" according to Treccani) refers more to goods being moved in and out of a ship rather than people. As the *hatch* in this context is used by the characters to enter and exit a spaceship or to move from a room to the other inside the spaceship, *portello* was therefore thought to be the most suitable equivalent.

### *Gee couch*

A compound composed by the words *gee*, which in physics is the "Abbreviation of gravity; the unit of acceleration equal to that exerted by gravity at the earth's surface"<sup>71</sup>, and *couch*, which denotes "a long comfortable seat for two or more people to sit on"<sup>72</sup>. This compound was difficult to translate because it appeared in very few parallel texts (including *Outbound*). However, all texts it appeared in were related to science fiction and the context makes it clear that it is a term unique to spaceships, used to denote a seat with a buckle that people use in a spaceship in order to keep safe during space travel. Not having found anything similar in Italian, I came up with the Italian compound *sedile gravitazionale*, which seemed like a good equivalent, because it transfers the meaning while keeping the two elements similar, even though *gee* changes into the adjective *gravitazionale* in Italian. Furthermore, this compound in the target language appears in just as few parallel texts as its English counterpart.

### *Thrust* (verb and noun)

In this context, the noun refers to "the force that is produced by an engine to push a plane, rocket, etc. forward"<sup>73</sup>. Its Italian equivalent, according to Il Ragazzini<sup>74</sup> and other parallel texts that have been checked, is either *propulsione* or *spinta*.

The verb refers to the same propulsive force, and in this respect Il Ragazzini suggests as a translation *spingersi* or *avanzare*, the latter of which seemed most fit in this context. Some examples:

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<sup>71</sup> <http://www.wordnik.com/words/gee>

<sup>72</sup> *Oxford Advanced Learner's Dictionary 8th edition* (2010), Oxford, Oxford University Press

<sup>73</sup> *ibidem*

<sup>74</sup> Ragazzini G. (2009). *il Ragazzini 2010, dizionario inglese-italiano-inglese*, Bologna, Zanichelli

- But when we were **thrusting** again [...] - Ma quando la nave tornò **ad avanzare** [...]
- I **thrusted** viciously [...] – **avanzai** brutalmente [...]

There is however one case in which a different equivalent had to be used:

- [...] our ship **thrust away** from it [...]. – [...] la nostra nave **si allontanava** [...]. (ho ricontrollato e ho verificato che thrust può essere usato al passato anche senza –ed)

In this case, *avanzare* could not be used because this verb implies getting close to something, while in this case the ship is said to be moving *away* from it. This is why the verb *allontanarsi* seemed appropriate.

### *Crew jumper*

This compound could not be found in dictionaries, but instead the term *crew-neck sweater* was found, which Il Ragazzini<sup>75</sup> translated as *maglione girocollo*. To verify if they refer to the same thing, parallel texts were checked. This site (<http://it.allsaints.com/men/knitwear/allsaints-gotland-crew-jumper/?colour=107>) seemed to confirm that the term is actually used to denote *maglione girocollo*. Even though it is a specific kind of jumper, in this context it was understood to be referring to a specific dress code of the crew, probably seen and described from the eyes of the main character, who is still a child. In order to make it clearer and to keep the meaning of *crew* (*equipaggio*<sup>76</sup>) in the target text I chose to translate it as the more specific *uniforme dell'equipaggio*.

### *Burn* (noun and verb)

It was difficult to find the meaning of both in relation to spaceships. According to The Free Dictionary<sup>77</sup>, *burn* refers to the "firing of a rocket", and Il Ragazzini<sup>78</sup> also suggests the translation *accensione (di razzo)*. However, in this context it did not seem like a good equivalent, therefore I had to search elsewhere. This thread <http://forum.wordreference.com/showthread.php?t=1647690&langid=14> quotes

<sup>75</sup> ibidem

<sup>76</sup> ibidem

<sup>77</sup> <http://www.thefreedictionary.com/burn>

<sup>78</sup> Ragazzini G. (2009). *il Ragazzini 2010, dizionario inglese-italiano-inglese*, Bologna, Zanichelli

Garzanti and proposes Italian equivalents to both noun and verb. I therefore chose to translate the verb as *aumentare di potenza* and the noun both as *aumento di potenza* and *fiammata* depending on the context. Some examples:

- [...] we adjusted and **burned** in order to drop into a rendezvous orbit [...] – [...] ci adattavamo e **aumentavamo di potenza** per raggiungere un'orbita di rendezvous [...]
- [...] and with regular **burns** for course correction, [...] e utilizzando **fiammate** regolari per correggere la rotta, [...]
- "[...] We'll have to wait awhile longer before I can risk a second **burn**. [...]"
- "[...] Dovremo aspettare un po' di più prima che possa rischiare un secondo **aumento di potenza**. [...]"

#### *Grip shoes*

This is a term that appeared in many parallel texts related to science fiction, but did not seem to have an evident equivalent in Italian. It is clear that they are shoes used in zero gravity to adhere to the ground. After some pondering, I came up with *scarpe gravitazionali* as a possible translation, and after searching this Italian compound I came across a book on Google Books that proposed the same translation for *grip shoes*<sup>79</sup>.

#### *Decompression shield*

This term was found in very few parallel texts, mostly related to science fiction. Because there was no translation available, I sought both words of the compound individually. *Decompression*, according to Online Free Dictionary<sup>80</sup>, refers to "the decrease of ambient air pressure experienced in an air lock on return to atmospheric pressure after a period of breathing compressed air (as in a diving bell or caisson) or experienced in ascent to a great altitude without a pressure suit or pressurized cabin". Il Ragazzini<sup>81</sup> suggests *decompressione* as an equivalent. The definition of *decompressione* given by Treccani<sup>82</sup> is more specific: "In aeronautica, d. esplosiva, passaggio rapidissimo dalla pressione esistente nella cabina di un velivolo pressurizzato alla

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<sup>79</sup> Calefato P. (2007). *Mass moda: linguaggio e immaginario del corpo rivestito*. Hoepli, p. 33

<sup>80</sup> [www.thefreedictionary.com/compression](http://www.thefreedictionary.com/compression)

<sup>81</sup> Ragazzini G. (2009). *il Ragazzini 2010, dizionario inglese-italiano-inglese*, Bologna, Zanichelli

<sup>82</sup> [www.treccani.it](http://www.treccani.it)

pressione effettiva, corrispondente alla quota di volo: può avvenire per una falla di modesta entità della cabina (per es., rottura di un finestrino), oppure per il distacco di parte della fusoliera dovuta ad affaticamento e rottura del materiale, con conseguenze che possono consistere in danni fisiologici gravi per i passeggeri e l'equipaggio, o avere, come nel secondo caso, esiti irreparabili."

*Shield* therefore refers to something that is meant to protect the passenger from *decompression*. The most obvious equivalent, as suggested by Il Ragazzini<sup>83</sup>, is *scudo*, but this term does not seem to be appropriate in this context. In the story it is said that the *decompression shield* "inflates and deflates" around the person. The closest term to a protective covering that may do such a thing that I could find in Italian was *tuta*. Because *tuta* does not have the same intrinsic meaning of protection that *shield* has, I decided to add *anti-* before *decompressione* to make up for it, therefore specifying that what the *tuta* does is avoiding decompression.

#### *Common interplanetary liner*

According to Oxford Advanced Learner's Dictionary<sup>84</sup> *liner* is a "a large ship that carries passengers". However, the translations provided by Il Ragazzini<sup>85</sup> refer to ships that travel by sea: *nave di linea*, *transatlantico*. In this case, the liner is a spaceship, so none of these translations was thought appropriate. Therefore, I chose to simply render *liner* as the hypernym *nave* and translate the whole phrase as *comune nave interplanetaria*, so that the meaning remained clear.

#### *Metal-ribbed*

To translate this compound adjective, I first checked the meaning of the verb *to rib*, and found that it means "to make with ridges or raised markings"<sup>86</sup>. While searching for a possible Italian equivalent, I found this thread on ProZ [http://www.proz.com/kudoz/english\\_to\\_italian/tech\\_engineering/203116-metal\\_ribbed\\_and\\_corrugated\\_innerducts.html](http://www.proz.com/kudoz/english_to_italian/tech_engineering/203116-metal_ribbed_and_corrugated_innerducts.html) in which a translation of the phrase

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<sup>83</sup> Ragazzini G. (2009). *il Ragazzini 2010, dizionario inglese-italiano-inglese*, Bologna, Zanichelli

<sup>84</sup> *Oxford Advanced Learner's Dictionary 8th edition* (2010), Oxford, Oxford University Press

<sup>85</sup> Ragazzini G. (2009). *il Ragazzini 2010, dizionario inglese-italiano-inglese*, Bologna, Zanichelli

<sup>86</sup> <http://www.thefreedictionary.com/rib>

*metal ribbed and corrugated innerducts* is suggested as *condotti interni in metallo ondulati e con scanalature*. Even though it is not the same thing, it was still useful enough to make me come up with the translation of this adjective as *di metallo ondulato*, a compound composed by a adjectival past participle like the English counterpart and a noun that refers to the English adjective.

### *Spin room*

This term is usually used to refer to the room where reporters and debate participants speak after a debate<sup>87</sup>, but in this context that was not the case. It is used to denote a room in which the characters exercise in zero gravity, and no matches were found in parallel texts with regard to this. I chose to keep this term in English because both the word *spin* and *room* are supposedly familiar enough for an Italian reader, and being this a term related to fitness it is not unusual for Italian to borrow the English term (in fact, there is a sport that is called *spinning*). Furthermore, all of the Italian compounds I could think of (*stanza ruotante*, *stanza dei giri*) did not sound nor transmit the image as good as its English counterpart.

### *Dory*

It was a difficult term to translate in the context of the story. According to Online Free Dictionary<sup>88</sup>, it is "a small, narrow, flatbottom fishing boat with high sides and a sharp prow". Il Ragazzini<sup>89</sup> proposes as a translation *barca da pesca a fondo piatto*. However, it is clear that this is not what they refer to when mentioning this term in the source text. The only page I found about *dory* in relation to *science fiction* or spaceships was this <http://community.lacunaexpansion.com/wiki/dory>, but being the only result of that kind I chose not to trust it. The only thing I could do was guessing that it was one of the external ships of the observatory, and therefore I chose to translate it with a the general term *nave*.

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<sup>87</sup> [http://en.wikipedia.org/wiki/Spin\\_room](http://en.wikipedia.org/wiki/Spin_room)

<sup>88</sup> <http://www.thefreedictionary.com/dory>

<sup>89</sup> Ragazzini G. (2009). *il Ragazzini 2010, dizionario inglese-italiano-inglese*, Bologna,

#### 4.2.4 Terms related to astronomy

In the case of some specific places in space, dictionaries did not provide equivalents and therefore the use of encyclopedias or other sites like Wikipedia was needed. For example:

##### *Kuiper belt*

An term related to astronomy. According to the Encyclopedia Britannica<sup>90</sup>, the Kuiper belt is a "flat ring of icy small bodies that revolve around the Sun beyond the orbit of the planet Neptune". Its Italian equivalent is "fascia di Kuiper"<sup>91</sup>.

##### *Micrometeoroid storm*

This term was found in a few parallel texts, but it is clear that it refers to a storm composed of micrometeorites. According to Merriam-Webster<sup>92</sup>, a micrometeorite is "a meteorite so small that it can pass through the earth's atmosphere without becoming intensely heated". Therefore, I chose to translate the compound as *tempesta di micrometeore*.

##### *Gas ice*

In this case, it is not clear whether the author meant to create a neologism that refers to a specific material unknown to us or just forgot to join the two terms with a conjunction. As the terms were found together and no equivalent to such a compound was found on the web, I chose to keep the two words together in Italian as well, translating them literally as *gas ghiaccio*.

#### 4.2.5 Terms related to Information Technology

##### *Off-line*

This adjective was difficult to render in Italian because of the amount of translations proposed by dictionaries. According to Merriam-Webster<sup>93</sup>, it means "not

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<sup>90</sup> [www.britannica.com](http://www.britannica.com)

<sup>91</sup> [http://it.wikipedia.org/wiki/Fascia\\_di\\_Kuiper](http://it.wikipedia.org/wiki/Fascia_di_Kuiper)

<sup>92</sup> <http://www.merriam-webster.com/dictionary/micrometeorite>

<sup>93</sup> <http://www.merriam-webster.com/dictionary/off-line>

connected to or served by a system and especially a computer or telecommunications system".

- Half the observatory was either **off-line** or red-lined.
- Metà dell'osservatorio era o **off-line** o contrassegnata di rosso.
- "We're sorry we had to keep you **off-line** for so long. [...]"
- "Ci dispiace averla dovuta tenere **off-line** così a lungo. [...]"

Because in the first case it was not explained what the adjective exactly referred to, I guessed it referred to the observatory not being connected to a computer (Howard's computerized mind) rather than a telecommunications system, that is why I chose to keep the loan word *off-line*, which as explained by Treccani<sup>94</sup>, is "in informatica, qualifica un'unità di elaborazione non controllata dall'unità centrale o, anche, il trattamento di dati precedentemente registrati". In the second case, it is clear that *off-line* refers to the direct-connect interface that lets Mirek connect to the public network, therefore I chose to keep the loan word *off-line* which is nowadays commonly used in Italian to refer to something that is disconnected from another computer or a telecommunication system.<sup>95</sup>

### *Databank*

According to Oxford Advanced Learner's Dictionary<sup>96</sup>, it is "a large amount of data on a particular subject that is stored in a computer". It is sometimes associated with the term *database*. The term could not be found on Il Ragazzini, and the translation proposed by Collins Italian Dictionary<sup>97</sup> is its literal translation, *banca dati*. According to Dizionario Informatico<sup>98</sup>, a *banca dati* is a "insieme di informazioni in forma testuale, a disposizione del pubblico. Non si confonda il termine banca dati con database (DB) poiché la banca dati viene utilizzata principalmente per la sola lettura e non necessita di tutte le funzionalità offerte da un DBMS".

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<sup>94</sup> [www.treccani.it](http://www.treccani.it)

<sup>95</sup> Ragazzini G. (2009). *il Ragazzini 2010, dizionario inglese-italiano-inglese*, Bologna, Zanichelli

<sup>96</sup> *Oxford Advanced Learner's Dictionary 8th edition* (2010), Oxford, Oxford University Press

<sup>97</sup> Collins Italian Dictionary (1995). HarperCollins

<sup>98</sup> <http://www.dizionarioinformatico.com/cgi-lib/diz.cgi?frame&key=bancad>

### *Array*

According to Tech Terms<sup>99</sup>, "an array is a data structure that contains a group of elements. Typically these elements are all of the same data type, such as an integer or string. Arrays are commonly used in computer programs to organize data so that a related set of values can be easily sorted or searched". Il Ragazzini<sup>100</sup> proposes as translation of this term the same English word. To be sure, I checked parallel texts for the use of the word *array* in Italian, and its Italian definition. According to NoTrace<sup>101</sup>, an *array* is a "matrice, lista di dati, tabella. Un'array, detto anche vettore, è una sequenza di variabili dello stesso tipo (numeri o caratteri). Ogni singolo elemento è accessibile indipendentemente dagli altri."

### *Workstation*

According to Webopedia<sup>102</sup>, a *workstation* is "a type of computer used for engineering applications (CAD/CAM), desktop publishing, software development, and other types of applications that require a moderate amount of computing power and relatively high quality graphics capabilities". Il Ragazzini<sup>103</sup> suggests both *workstation* and *stazione di lavoro* as an equivalent. After checking this thread <http://forum.wordreference.com/showthread.php?t=1755720> and other parallel texts (for example, <https://www.fujitsu.com/it/products/computing/pc/workstations/>) to make sure the term was actually used in Italian, the most appropriate equivalent was therefore confirmed to be the English *workstation*. According to Treccani<sup>104</sup>, "Nel linguaggio dell'elaborazione elettronica, postazione di lavoro dotata degli strumenti e dei programmi necessari per lo svolgimento di una specifica attività da parte di un singolo utente; può essere costituita da un terminale collegato a un elaboratore centrale (ed eventualmente dotato di relativa autonomia di gestione dei dati) o da un elaboratore più o meno potente generalm. collegato a una rete di elaboratori."

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<sup>99</sup> <http://www.techterms.com/definition/array>

<sup>100</sup> Ragazzini G. (2009). *il Ragazzini 2010, dizionario inglese-italiano-inglese*, Bologna, Zanichelli

<sup>101</sup> <http://www.noTRACE.it/glossario/Array/>

<sup>102</sup> <http://www.webopedia.com/TERM/W/workstation.html>

<sup>103</sup> Ragazzini G. (2009). *il Ragazzini 2010, dizionario inglese-italiano-inglese*, Bologna, Zanichelli

<sup>104</sup> [www.treccani.it](http://www.treccani.it)

### *Fail-safe*

Oxford Dictionaries<sup>105</sup> defines it as "a system or plan that comes into operation in the event of something going wrong or that is in place to prevent such an occurrence". Il Ragazzini<sup>106</sup> proposes as possible translations the terms *di sicurezza, che non può fallire, garantito, affidabile*. However, being this a term related to information technology, it was later confirmed, by checking parallel texts, that the English loan word is actually used. Treccani<sup>107</sup> confirms the Italian use of *fail-safe* defining it as "denominazione dei sistemi (apparati, componenti, strutture ecc.) progettati in modo da evitare che eventuali avarie arrechino danni a persone o ad altri sistemi a loro interconnessi od operanti in prossimità".

### *Dummy program*

The word *dummy* is defined by Webopedia<sup>108</sup> as "a placeholder. A dummy variable, for example, is a variable that doesn't contain any useful data, but it does reserve space that a real variable will use later." Therefore, we can conclude that a dummy program is a program works in a similar way. Il Ragazzini<sup>109</sup> proposes the adjective *fittizio* with the example of *dummy variable* translated as *variabile fittizia*. After checking parallel texts to verify the use of the adjective *fittizio* in relation to files and programs, I therefore chose to translate *dummy program* as *programma fittizio*.

### *Daisy chain*

According to Wikipedia<sup>110</sup>, "in electrical and electronic engineering a daisy chain is a wiring scheme in which multiple devices are wired together in sequence or in a ring. The English term has been loaned in Italian to denote the same thing: "Con il termine daisy-chain si definisce un'interconnessione di apparecchiature del computer, di unità periferiche, o di nodi di una rete, in serie tra loro: uno dopo un altro. In analogia

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<sup>105</sup> <http://www.oxforddictionaries.com/>

<sup>106</sup> Ragazzini G. (2009). *il Ragazzini 2010, dizionario inglese-italiano-inglese*, Bologna, Zanichelli

<sup>107</sup> [www.treccani.it](http://www.treccani.it)

<sup>108</sup> <http://www.webopedia.com/TERM/D/dummy.html>

<sup>109</sup> Ragazzini G. (2009). *il Ragazzini 2010, dizionario inglese-italiano-inglese*, Bologna, Zanichelli

<sup>110</sup> [http://en.wikipedia.org/wiki/Daisy\\_chain\\_\(electrical\\_engineering\)](http://en.wikipedia.org/wiki/Daisy_chain_(electrical_engineering))

con un circuito elettrico: il daisy-chain è equivalente a un collegamento in serie tra più impedenze."<sup>111</sup>

#### *Master program*

This term is a neologism, as it was not found neither in dictionaries or parallel texts. Its meaning in context is easy to guess though: it supposedly denotes a program, or a computerized mind (like Howard) that controls and manages all the functions of the computer. I chose to loan the English counterpart in the target text because, as we have seen with previous terms, and as argued by Scarpa<sup>112</sup>, many terms related to Information Technology are borrowed from English.

#### *Direct-connect interface*

According to the Macmillan Dictionary<sup>113</sup>, *direct connection* is "a fast permanent connection between a computer and a system such as the Internet". According to MyMemory<sup>114</sup>, the translation of *direct-connect* is *connessione diretta*. Therefore, the whole compound was rendered in Italian as *interfaccia di connessione diretta*.

### **4.2.6 Terms related to other technologies**

#### *Cycler machinery*

This compound was hard to translate because it was not found on any dictionary nor parallel text. As *machinery* could be simply translated as *macchinari*<sup>115</sup>, *cycler* required a longer consideration. Considering that a *cycle*, according to The Free Dictionary<sup>116</sup>, is "an interval of time during which a characteristic, often regularly repeated event or sequence of events occurs", we can therefore assume that the machinery does something cyclically. For example, a *thermal cycler* is "a laboratory

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<sup>111</sup> [http://it.wikipedia.org/wiki/Daisy\\_chain\\_\(informatica\)](http://it.wikipedia.org/wiki/Daisy_chain_(informatica))

<sup>112</sup> Scarpa F. (2012). *La Traduzione Specializzata. Un approccio Didattico Professionale*, Hoepli, p. 191

<sup>113</sup> <http://www.macmillandictionary.com/us/dictionary/american/direct-connection>

<sup>114</sup> <http://mymemory.translated.net/it/English/Italian/direct%20connect>

<sup>115</sup> Ragazzini G. (2009). *il Ragazzini 2010, dizionario inglese-italiano-inglese*, Bologna, Zanichelli

<sup>116</sup> <http://www.thefreedictionary.com/cycle>

device in which a polymerase chain reaction is carried out repeatedly in cycles which in turn amplifies the sample DNA segments"<sup>117</sup>. The Italian equivalent of *thermo-cycler* is *termociclature*<sup>118</sup>. Later in the text *cycler* is used in relation to waste and air (*air cycler* and *waste cycler*), therefore strengthening the notion that the term refers to the cycling of a certain action related to waste and air. The Italian equivalent *ciclature*, though not common, seemed a good option in this context. *Cycler machinery* was thus translated as *macchinari ciclatori*, *air cycler* as *ciclature d'aria* and *waste cycler* as *ciclature di rifiuti*.

#### *Hydroponics facility / farm*

Oxford Advanced Learner's Dictionary<sup>119</sup> defines *hydroponics* as "the process of growing plants in water or sand, rather than in soil". Its Italian equivalent is, according to Il Ragazzini<sup>120</sup>, *idroponica* or *coltura idroponica*. As no fixed Italian correspondent was found on both *hydroponics facility* and *hydroponics farm*, I chose to translate *hydroponics facility* as *struttura idroponica*, therefore changing the *hydroponics* noun into an adjective in the target text, while *hydroponics farm* was expanded as *campo di coltivazione idroponica* to give it a clearer meaning.

#### *Triple-redundant electricity*

The adjective *triple-redundant* refers to the triple modular redundancy. According to Wikipedia<sup>121</sup>, "sometimes called triple-mode redundancy, (TMR) is a fault-tolerant form of N-modular redundancy, in which three systems perform a process and that result is processed by a majority-voting system to produce a single output. If any one of the three systems fails, the other two systems can correct and mask the fault". The Italian page loans the term from English, and Wikipedia<sup>122</sup> says, "In informatica, il triple modular redundancy (TMR) è un particolare tipo di N-modular redundancy, in cui tre sistemi eseguono un processo, il cui risultato viene sottoposto ad un sistema di voting per produrre un unico output. Se uno dei tre sistemi fallisce, gli altri due sistemi

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<sup>117</sup> <http://www.wordvia.com/dictionary/thermal%20cycler>

<sup>118</sup> <http://it.wikipedia.org/wiki/Termociclature>

<sup>119</sup> *Oxford Advanced Learner's Dictionary 8th edition* (2010). Oxford, Oxford University Press

<sup>120</sup> Ragazzini G. (2009). *il Ragazzini 2010, dizionario inglese-italiano-inglese*, Bologna, Zanichelli

<sup>121</sup> [http://en.wikipedia.org/wiki/Triple\\_modular\\_redundancy](http://en.wikipedia.org/wiki/Triple_modular_redundancy)

<sup>122</sup> [http://it.wikipedia.org/wiki/Triple\\_Modular\\_Redundancy](http://it.wikipedia.org/wiki/Triple_Modular_Redundancy)

possono mascherare e correggere il fault. Un fallimento del voter comporta il fallimento dell'intero sistema.". Checking parallel sites (for example, [http://iom.invensys.com/IT/Pages/triconex\\_tricon.aspx](http://iom.invensys.com/IT/Pages/triconex_tricon.aspx)), I decided to translate the adjective *triple-redundant* as *a ridondanza tripla*, and the whole compound as *elettricità a ridondanza tripla*.

#### *PET scanner*

*PET* is an acronym for *positron emission tomography*. According to Wikipedia<sup>123</sup>, "Positron emission tomography (PET) is a nuclear medical imaging technique that produces a three-dimensional image or picture of functional processes in the body. The system detects pairs of gamma rays emitted indirectly by a positron-emitting radionuclide (tracer), which is introduced into the body on a biologically active molecule. Three-dimensional images of tracer concentration within the body are then constructed by computer analysis". Checking the Italian page<sup>124</sup>, it is defined as such:

"La tomografia a emissione di positroni (o PET, dall'inglese Positron Emission Tomography) è una tecnica di medicina nucleare e di diagnostica medica utilizzata per la produzione di bioimmagini (immagini del corpo). La PET fornisce informazioni di tipo fisiologico, a differenza di TC e RM che invece forniscono informazioni di tipo morfologico del distretto anatomico esaminato. Con l'esame PET si ottengono mappe dei processi funzionali all'interno del corpo". Therefore, we can see that the acronym is the same as the source language. After that, I checked if the term *scanner PET* was used in Italian by browsing parallel sites, like [http://www.chirurgiatoracica.org/per\\_pazienti/esami/p\\_e\\_t.htm](http://www.chirurgiatoracica.org/per_pazienti/esami/p_e_t.htm). As I confirmed its use, the translation I chose was *scanner PET*.

#### *Radioactive decay generator*

This technology is generally known as *radioisotope thermoelectric generator*<sup>125</sup>, with its Italian equivalent according to Wikipedia being *generatore termoelettrico a radioisotopi*<sup>126</sup>. Since the author used another wording though, I chose to render it in

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<sup>123</sup> [http://en.wikipedia.org/wiki/Positron\\_emission\\_tomography](http://en.wikipedia.org/wiki/Positron_emission_tomography)

<sup>124</sup> [http://it.wikipedia.org/wiki/Tomografia\\_a\\_emissione\\_di\\_positroni](http://it.wikipedia.org/wiki/Tomografia_a_emissione_di_positroni)

<sup>125</sup> [http://en.wikipedia.org/wiki/Radioisotope\\_thermoelectric\\_generator](http://en.wikipedia.org/wiki/Radioisotope_thermoelectric_generator)

<sup>126</sup> [http://it.wikipedia.org/wiki/Generatore\\_termoelettrico\\_a\\_radioisotopi](http://it.wikipedia.org/wiki/Generatore_termoelettrico_a_radioisotopi)

Italian as *generatore di decadimento radioattivo* in order to stay faithful to his choice and because it is still understandable for the reader.

#### 4.2.7 Colloquial terms

##### *Mercy*

This exclamation made by Tabitha was quite difficult to render in Italian. While it was clear that it was a religious exclamation, it was difficult to come up with a similar exclamation in Italian. According to the Oxford Dictionaries, it is an archaic exclamation that is "used in expressions of surprise or fear". Therefore, I thought a similar term that is related to religion and can be used to express surprise or fear could be *oh cielo*.

##### *Pops /Moms*

They are colloquial terms and therefore could not be found in the monolingual dictionaries I used as reference. According to Urban Dictionary<sup>127</sup>, *pops* and *moms* are affectionate ways of calling respectively one's father and mother. *Pops* could not be found in Il Ragazzini, but WordReference<sup>128</sup> suggested the equivalent *babbo*, and it seems to be fitting as its Italian definition according to Treccani is "Padre, papà", and it adds that it is a "voce fam. e affettuosa", and that it is especially used in Tuscany.

The female counterpart *moms* does not seem to have an equivalent affectionate term as *pops* with *babbo*. Dicios<sup>129</sup> suggests *mamma*, but I thought it would be fitting had the speaker been a child rather than an adult.

Because of the regional connotation of *babbo* and the absence of an equivalent for *moms*, to maintain coherence between the two terms I chose to translate them as *papà* and *mamma*.

#### 4.2.8 Other lexical problems

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<sup>127</sup> [www.urbandictionary.com](http://www.urbandictionary.com)

<sup>128</sup> [www.wordreference.com](http://www.wordreference.com)

<sup>129</sup> <http://it.dicios.com/enit/mommy>

### *Night pants*

It was impossible to find a direct translation for this term in dictionaries, but after looking for the meaning in various sites that explain what they are and are used for (for example, <http://bedwettingchildren.com/what-are-night-pants/>) it became clear that this term refers to what in Italian is called *mutandina assorbente*. ([http://www.spaziomamma.com/articolo/salute/30732\\_pipi-a-letto--puo-capitare.html?lang=it](http://www.spaziomamma.com/articolo/salute/30732_pipi-a-letto--puo-capitare.html?lang=it))

- It was a **crime** that Irenka wasn't here.
- Era una **disgrazia** che non fosse qui.

In this context, *it was crime* cannot be translated literally (*era un crimine*), because it would alter its meaning. This expression in fact refers to the situation of Irenka's death that in that moment it sounds awfully unfair to Mirek. My first attempt to translate it was *era una vergogna*, but I eventually thought that *era una disgrazia* would sound more natural to the Italian reader and also similar to the original meaning the author had in mind.

- The expanded capacity of the neural arrays was almost intoxicating, and after a couple of years had passed I suspected that if ever I had to be restricted again to one **set** of eyes, one **set** of ears, one **set** of senses, I might feel so claustrophobic about the whole affair, I'd go mad.
- La capacità estesa degli array neurali creava quasi dipendenza, e dopo che furono passati un paio di anni sospettai che se avessi dovuto ritrovarmi limitato a un **paio** di occhi, un **paio** di orecchie, un **insieme** di sensi, tutto ciò mi avrebbe fatto soffrire di claustrofobia a punto tale da farmi impazzire.

In the last section of the sentence, there is a repetition of the word *set* that could only partially be rendered in the target text. While *set* can be used to indicate two or more things in a group, its Italian possible equivalents *gruppo*, *insieme* cannot be used to refer to groups composed of two elements, like *eyes* or *ears*. Therefore, the first two times *set* appeared I chose to translate it as *paio*, and the third time as *insieme*. The repetition was only partially achieved and had to be sacrificed in order to make the

sentence sound natural in the target text. Furthermore, while in English repetitions are common, Italian seems to prefer a more lexical variety, as argued by Scarpa<sup>130</sup>.

These lexical examples show how in translating a science fiction text there are many terms related to various technologies that in order to be translated require a much deeper research through the web rather than just checking dictionaries.

It was shown that most of the terms related to spaceships are borrowed from the nautical world and that they mostly match with the Italian equivalents. It was proven that the field that is most open to loans from English is the field of information technology, as argued by Scarpa<sup>131</sup>.

It was also shown that, being this a literary text, there are certain terms, compounds which are not common or completely invented by the author, and new uses of already existing terms. In these cases, there is no fixed equivalent because of the lack of parallel texts<sup>132</sup> and they require for the translator to choose and sometimes create an equivalent that may be fitting and understandable for the reader. In some cases, rather than a semantic strategy, a communicative strategy had to be applied, because translating literally some terms may not convey the meaning successfully (for example, in the case of *decompression shield* or *grip shoes*).

### 4.3 Morphosyntactic problems

As this is a short story and much focus is put on the events and the actions of the characters, it is clear that one of the main morphosyntactic problems encountered is in the inflection of verbs. Some verbal forms in English do not match in Italian and therefore cannot be translated literally in the target text. Furthermore, some other, like the *simple past* usually results in various options of translation. Here are some examples of these verb-related problems and what has been done to solve them.

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<sup>130</sup> Scarpa F. (2012). *La Traduzione Specializzata. Un approccio Didattico Professionale*, Hoepli, p. 156

<sup>131</sup> Ibidem, p. 191

<sup>132</sup> Rega, L. (2001). *La traduzione letteraria : aspetti e problemi*. Torino: UTAT libreria.p. 51

### 4.3.1 Continuous form

The first examples are related the use of the *continuous form* (which in these cases uses the present participle) in some segments of the source text:

- I remember the curved corridor being filled with adults: **screaming, fighting and yelling**.
- Ricordo il corridoio curvo colmo di adulti: **gridavano, litigavano e urlavano**.

In this sentence, the *continuous form* of the source text, which is indefinite, was changed to the Italian *indicative imperfect* in the target text, becoming finite. This is because in Italian the equivalent use of the present participle (*gridanti, litiganti, urlanti*) is not used and therefore would sound extremely unnatural.

A similar case is this:

- Would it be like this forever? Always **seeing** Irenka, dying a million deaths, with me unable to help her?
- Sarebbe stato così per sempre? **Avrei continuato a vedere** Irenka morire un milione di volte, senza poterla aiutare?

In this passage, for the same reason as the first example, the *continuous form* needed to be changed into the *condizionale passato* in Italian to become finite. Because of this, *with me* was not rendered because it would sound redundant to repeat what in Italian is already implied as the subject of the question.

There are many cases in which the *continuous form* is used in relation to certain elements of the text (mostly nouns), in which case it must be rendered as a relative clause in Italian to be understandable in the target text. For example:

- We all slammed from side to side, up and down, screams and shouts and crying **filling** the cabin.
- Sbattemmo tutti da una parte all'altra, su e giù, grida e urla e pianti **che colmavano** la cabina.
- Tab looked at me with a raised eyebrow, her steel-gray, close-cropped hair **pocking out** in a mass of springy ringlets.

- Tab mi guardò con un sopracciglio alzato, i suoi capelli corti color grigio acciaio **che spuntavano** fuori in una massa di riccioli elastici.
- The woman stood up, her special shoes **gripping** the floor, and affectionately stroked my hair one more time.
- La donna si alzò, le sue scarpe speciali **che aderivano** al pavimento, e mi accarezzò i capelli con affetto ancora una volta.
- The older woman almost run down the aisle, her grip shoes **making rip-rip** sounds as she went.
- L'anziana donna quasi corse lungo il corridoio, le sue scarpe gravitazionali **che facevano strap strap** ad ogni passo.

#### 4.3.2 Past simple

As this story is written mostly in the past tense, how to render certain verb forms is also an issue for the translator. For example, the *past simple* can be rendered in three different ways in Italian: the *imperfect*, the *passato remoto* and the *passato prossimo*. *Imperfect* is used for continuative actions, *passato remoto* for actions that ended in the past, and *passato prossimo* for actions ended in a close past. The use of the past simple in English is different than the one in Italian. While in a narrative text if the narration is in past simple it results in *passato remoto* and *imperfetto*, in a dialogue the past simple usually corresponds to either *imperfetto* or *passato prossimo*. In this respect, Russi quotes Gambarara in saying that in colloquial Italian, the opposition between *passato remoto* and *passato prossimo* is only vital in central varieties, while in the rest of the peninsula only one of the two is actually used (*passato remoto* in the South and *passato prossimo* in the North). "The standard language seems to have opted for *passato prossimo*, certainly in the spoken register".<sup>133</sup> Therefore, translators must pay special attention to the *past simple* because, when context does not help, they must resort to their own judgment to render it in the target language.

Some examples:

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<sup>133</sup> Russi C. (2008). *Italian Clitics: An Empirical Study*. Berlin. Walter de Gruyter, p.14

- Howard **stopped** monitoring the inner solar system at sixteen months. **There were** no more human cries for help. All that **remained** were the automated signals of the few surviving death machines [...].
- Howard **smise** di monitorare il sistema solare interno dopo sedici mesi. **Non c'erano** più grida umane di aiuto. Tutto ciò che **restava** erano i segnali automatici delle poche macchine di morte rimaste [...].

In this passage, there is an example of both an action that happened and ended at one moment in the past (*Howard stopped monitoring*) and that was rendered with *passato remote* in Italian, and the others (*there were, all that remained*) that give a sense of continuity in the past, and were therefore rendered in with *imperfetto*.

- "When they **recorded** you. And **moved** you into the computer. Does it hurt?"
- "Quando ti **hanno registrato**. E **spostato** nel computer. Fa male?"
- "Tabby **made me swear** to never do that."
- "Tabby **mi ha fatto giurare** che non l'avrei mai fatto."

Being found in dialogues, in these sentences the *past simple* became *passato prossimo* in Italian in order to make them sound natural and more dynamic, as *passato prossimo* makes what is being said more actual.

In this last example, the use of the *past continuous* along with other *past simple* forms in the following sentence was especially challenging:

- Only, **I was seeing** the observatory through at least fifty different eyes, and hearing with fifty different ears, and **I couldn't blink** nor turn off the input, so that **I was trying** to scream, but that just **made things worse** because my scream **bellowed** from fifty different speakers, which **overloaded** fifty different microphones, and within my head a feedback squeal like a migraine **peeled across** my consciousness.
- La differenza era che **vedevo** l'osservatorio da almeno cinquanta occhi diversi, e sentivo da cinquanta orecchie diverse, e **non potevo sbattere le**

**palpebre** e nemmeno fermare gli input, quindi **cercavo** di urlare, ma ciò **peggiorò** la situazione perché il mio grido **proveniva** da cinquanta casse diverse, che **sovraccaricavano** cinquanta microfoni diversi, e dentro la mia testa un grido di feedback simile a un'emicrania **risuonava** nella mia coscienza.

In this passage, the author describes a very particular experience of the main character. He uses the past continuous (*I was seeing, I was trying to scream*) to refer to events that protracted for a long time, and therefore are continuative and rendered in the target text with the *imperfetto*. There is one verb that has a finished sense, and that is *to make* in the clause *that only made things worse* that I rendered with the *passato remoto*. The other verbs (*bellowed, overloaded, peeled*) express a continuative sense as the ones in the past continuous and were translated in the *imperfetto* as well.

### 4.3.3 Would

Another change is related to the use of *would* in a past context. In English, when used to express a past supposition, *present conditional* (would) is mostly used rather than *perfect conditional* (would have been). In Italian, in this context it is usually equivalent to the *condizionale passato* and not its direct equivalent *condizionale presente*. Some examples:

- Staying here **wouldn't make** the pain **go away**, that was for sure.
- Restare qui **non avrebbe fatto andar via** il dolore, quello era sicuro.
  
- [...] and Tab and I **would have** enough food to eat and air to breath for decades.
- [...] io e Tab **avremmo avuto** cibo da mangiare e aria da respirare a sufficienza per decenni.

The modal *would* in a past context can also be used to refer to an action that was habitual and therefore it should be rendered in the target text with the *imperfetto*.

Some examples:

- At which point **she'd take off** for the little indoor playground the crew had built in the lower cargo hold, and I **wouldn't see her** for an hour. Until **she'd come sulking back** to our couch, **apologize** for being mean to me, and **we'd end it** with a great big hug.
- A quel punto **se ne andava**, diretta alla piccola area giochi che l'equipaggio aveva costruito nella stiva più in basso, e **spariva dalla mia vista** per un'ora. Finché, tenendo il broncio, non **tornava** al nostro sedile, **si scusava** per essere stata cattiva con me, e la cosa **finiva** con un lungo abbraccio.
- One moment, **I'd be wondering** how to fix a certain problem. The next, the knowledge **would be there**, as if it had always been there.
- Un momento mi **chiedevo** come risolvere un certo problema. Quello dopo, la conoscenza **arrivava**, come se fosse sempre stata là.

#### 4.3.4 Pluperfect

There is also a problem when it comes to the *pluperfect* uses in the short story. There are cases in which the *pluperfect* has an equivalent use to the *imperfetto* in Italian rather than its logical equivalent *trapassato remoto*. Furthermore, the use of the *trapassato remoto* does not always sound natural in certain contexts.

Some examples:

- It was the first time someone **had held** me – really **held me** – since Papa.
- Era la prima volta che qualcuno mi **stringeva** – **stringeva** sul serio – dalla scomparsa di papà.

In this case, the author uses the pluperfect form to refer to what the main character has experienced throughout his life. However, the action *to hold* gives a sense of continuity, and the *imperfetto* seems to render the experience just as well as the pluperfect does in the source text, so I eventually chose to render *had held me* with *stringeva* in the target text.

A similar case to this is:

- As so often happened when Tab and I failed to see eye to eye, I discussed it with Howard, who **had always seemed to support** his wife's belief without necessarily going great-guns himself.
- E come spessissimo capitava quando io e Tab non riuscivamo a vederla allo stesso modo, ne parlavo con Howard, che **sembrava supportare sempre** la fede di sua moglie senza dover per forza infervorarsi a sua volta.

Here the pluperfect is used to give a similar sense, in this case of the overall behavior Howard has towards Tabitha throughout the time Mirek has known him until the moment described in the story. In Italian, this continuative sense is kept with the *imperfetto*, therefore *had always seemed* became *sembrava sempre* in the target text.

- Mama and Papa **had been** physicists.
- Mamma e papa **erano** fisici.

Here, the pluperfect is used to refer to a past anterior to the events told in the story. However, the *imperfetto*, other than sounding better overall, is helped by context so that the reader is able to assume that the event has happened before the events told in the short story.

- [...] how their bodies **had moved** under their clothes.
- [...] il modo in cui i loro corpi **si muovevano** sotto i vestiti.

Like the anterior example, the author refers to something that happened before the events in the short story, but there is still a sense of continuity in this past, therefore the *imperfetto* is preferred and sounds better than the *trapassato remoto*.

#### 4.3.5 You

In many of the dialogues, the use of *you* is problematic because it can either be translated as *tu*, *voi* or *lei* (honorific).

Some examples:

- "Mirek, **you're** the oldest. **You** have to take care of Irenka. [...]"
- "Mirek, **sei** il più grande. **Devi** prenderti cura di Irenka. [...]"

In this case, it is clear that Mirek's father is talking only to him, because he calls him by his name, therefore *you* is rendered in the target text as and implied *tu*.

- "Do **you** speak TransCom?"

"Yes," I said.

"Good. Can **you** please tell me **your** names and ages?"

- "**Parlate** TransCom?"

"Sì," dissi.

"Bene. **Potete** dirmi, per favore, nome e età?"

"Miroslaw Jaworski. Questa è mia sorella, Irenka. Ho undici anni, lei ne ha quattro."

In this passage, it is reasonable to think that the woman is talking to both Mirek and Irenka, especially because in the second questions she mentions their names and ages in the plural form.

- "I'm not sure yet," I said. "How did you... put me back?"

"It's a long explanation," said one of the men, a Chinese-ish fellow in his thirties who identified himself as Surgeon Chow. "Here, I'll make it simple for **you**."

[...]

"All in good time, Mister Jaworski," said Chow. "We're sorry we had to keep **you** off-line for so long. Even with advanced gen, it takes years to grow a clone body to the decanting stage. **You** were put into the queue as soon as possible."

- "Non ne sono ancora sicuro," dissi. "Come... mi avete rimesso a posto?"

"È lungo da spiegare," disse uno degli uomini, un tipo che sembrava essere cinese di circa trent'anni e che s'identificava col nome di Chirurgo Chow. Ecco, **glielo** spiegherò in modo semplice."

[...]

"Ogni cosa a suo tempo, signor Jaworski," disse Chow. "Ci dispiace **averla** dovuta tenere off-line così a lungo. Anche in genetica avanzata, ci vogliono anni perché un corpo clonato cresca abbastanza per la fase di trasferimento. **È stato messo** in lista d'attesa il prima possibile."

In this case, Mirek is talking to the doctors that saved his life. I was unsure whether to translate *you* as *tu* or *lei*, but after seeing that one of them calls Mirek Mister Jaworski, it became obvious that they were being formal with him, and therefore *you* had to be translated as *lei*.

#### 4.3.6 Theme/rheme

Another problem is related to the focus in certain sentences of the source text.

- "**Orbital stuff**'s been hit,"
- "Hanno colpito della **roba in orbita**."

Here, the passive form is used to put focus on the term *orbital stuff*. In the target text this form has been changed in the active voice to make it sound more natural. In fact, using the Italian passive form and keeping the English structure subject/new information would sound too unnatural, as in passive sentences Italian usually postpones the subject thus losing the information structure of the original.

The subject of the active clause has remained an vague implied "they" to preserve the unknown nature of the agent in the source text.

- **Days I spent** wandering alone through the halls of the observatory, wondering just what in the universe I was even doing here, and why I should keep trying to extend a life that seemed to have amounted to futility.
- **Passai giorni interi** a vagare da solo per i corridoi dell'osservatorio, chiedendomi che cosa diavolo ci facessi qui, e perché dovessi continuare a cercare di allungare una vita che sembrava non essere servita a niente.

In this passage, the theme of the sentence is *days*, which is put in a marked position with respect to the verb. Translating the first part as *giorni passai* would not be correct in Italian, and to keep the focus on the past event I put *giorni* after the verb, therefore rendering the sentence as unmarked in the target text. To make up for the change of focus, *interi* was added after *giorni* to put more emphasis on the noun.

- **What he said, exactly**, I can't recall.
- **Quel che disse, esattamente**, non riesco a ricordarlo.

In this other case, both the marked position of *what he said* and *exactly* could be maintained in the target text, resulting in *quell che disse, esattamente*.

#### 4.3.7 Modulation

- **Shutting down everything but the bare minimum** increased these time frames by a factor of three.
- **Tenere acceso il minimo indispensabile** allungava questi periodi di tempo di tre volte.

In this sentence, it was thought that inverting the perspective of the sentence would make it sound less complex in Italian. Instead of mentioning what was shut down, the target sentence therefore mentions what was kept running (the bare minimum).

- Tab **needed no one** to tell her the reality of what had happened.
- Tab **non aveva bisogno che qualcuno** le dicesse quel che era realmente successo.

This sentence was changed in the target text in order to sound more natural to the reader. First, *no one* became *qualcuno* in Italian because the negative connotations of the noun were retained by making the verb negative (*non aveva bisogno*) and using *nessuno* would sound redundant in the target text.

- "If you are seeing and hearing this message," she said, "Then **you are halfway** to us.[...]"  
[...] Tab and Howard had sacrificed so much. And this was only *halfway*?
- "Se state vedendo e sentendo questo messaggio," disse, "allora **vi manca metà strada** per raggiungerci. [...]"  
[...] Tab e Howard avevano sacrificato così tanto. E mi trovavo solo a *metà strada*?

To successfully transmit the meaning, the clause *you are halfway to us* had to be expanded in Italian, becoming *vi manca metà strada per raggiungerci*. In the last sentence, the subject *this*, that refers to the place the character has arrived in, could not

be rendered in Italian and had to be changed to the first person to make it sound natural. The focus is thus put on the main character, becoming *mi trovavo solo a metà strada*.

- In my entire life, through everything I'd experienced, I'd never really thought about what I'd want to **leave behind** for the future. It had always been someone else leaving something behind for me.
- In tutta la mia vita, con tutto ciò che avevo vissuto, non avevo mai davvero pensato a cosa avrei voluto **lasciare ai posteri**. Era sempre stato qualcun altro a lasciarsi qualcosa dietro per me.

The meaning of *to leave behind* in this context is tricky, because it is intended as leaving something to the ones that will come after him. Therefore, translating it simply as *lasciarsi qualcosa dietro* would sound slightly different in meaning (*to forget*) with respect to the original. This is why I chose to render it as *lasciare ai posteri* in the first sentence. In the second sentence, I translated it as *lasciarsi qualcosa dietro* because I thought it was clear that he is talking about the people who already died and left something for him.

#### 4.3.8 Other changes

There are many cases in which the syntax was changed in the target text in order to make it sound more natural in Italian.

Some examples:

- **Irenka would have liked Tab.**
- **A Irenka Tab sarebbe piaciuta.**

The sentence in English consists of a subject (Irenka) followed by the verb (would have liked) and a direct object (Tab). In Italian, it had to be changed because of the different construction that requires the Italian verb *piacere*. Irenka had to become the indirect object of the verb, and since Irenka was the main focus in the English sentence, this indirect object was placed at the beginning of the sentence. Tab became the subject and the verb matches with this subject unlike what happens in the source text, in which the subject is Irenka.

- **We got me bathed**, and dressed in an oversized smock similar to the one Tab wore [...].
- **Mi aiutò a farmi il bagno**, e mi fece indossare un camice di qualche misura più grande simile a quello che indossava Tab [...].

This sentence was difficult to render in Italian because the wording of the action: in fact, the pronoun *we* is subject of the main sentence, with the construction get + object (*me*) + past participle (*bathed* and *dressed*). Such a construction with the first person plural pronoun as subject and the first person singular object pronoun does not exist in Italian and thus a literal translation would sound very awkward. Because the pronoun *we* refers to both Mirek and Tabitha and that the pronoun *me* refers to only Mirek, it is clear that the author chose this construction to mean that Tabitha helped Mirek to bath and dress himself. To transfer approximately the same meaning I chose to make Tabitha the subject of the sentence in the target text and to paraphrase the original construction mentioning that she *helped* Mirek bath and dress himself (*Mi aiutò a farmi il bagno*).

#### 4.4 Misprint

A probable misprint was found:

- "We're not far enough **for** Jupiter yet."
- "Non siamo ancora abbastanza lontani **da** Giove."

Reading this passage without context it could mean that the characters are heading to Jupiter. However, because in the story it has been clearly stated that they are running away from Jupiter, it was assumed to be simply a misprint by part of the editor or author. In a professional situation this misprint would have to be pointed out to the editor, but this not being the case I simply chose to correct it in the target text.

## 5 Glossary

<b>English</b>	<b>Italian</b>	<b>Spanish</b>
Aisle	Corridoio	Pasillo
Antimatter	Antimateria	Antimateria
Armrest	Bracciolo	Brazo
Array	Array	Vector
Asteroid	Asteroide	Asteroide
Atmosphere	Atmosfera	Atmósfera
Backup	Backup	Copia de seguridad
Binary	Codice binario	Código binario
Buckle	Allacciarsi	Abrochar
Buoy	Boa	Boya
Burn	Fiammata, aumento di potenza	Aumento de potencia
Cabin	Cabina	Cabina
Carbon	Molecola di carbonio	Molécula de carbono
Cargo hold	Stiva	Bodega
Centripetal gravity	Gravità centripeta	Gravedad centrípeta
Cerebral matrix	Matrice cerebrale	Matriz cerebral
Comet	Cometa	Cometa
Cosmic dust	Polvere cosmica	Polvo cósmico
Cosmos	Cosmo	Cosmos
Course	Rotta	Curso
Crewperson	Membro dell'equipaggio	Miembro del equipaje
Cycler machinery	Macchinario ciclatore	Máquina cicladora
Daisychain	Daisy chain	Daisy chain
Data	Dati	Datos
Databank	Banca dati	Banco de datos

Database	Database	Base de datos
Day side	Lato diurno	Lado diurno
Debris	Detriti	Detritos
Deck	Ponte	Cubierta
Decompression	Decompressione	Descompresión
Direct-connect interface	Interfaccia di connessione diretta	Interfaz de conexión directa
Dummy program	Programma fittizio	Programa ficticio
Earth	Terra	Tierra
Fail-safe	Fail-safe	Sistema a prueba de fallos
Fissile	Fissile	Fisible
Flotilla	Flottiglia	Flotilla
Fuel	Carburante	Combustible
Fusion drive	Motore a fusione	Motor de fusión
Gee	Gravità	Gravedad
Gee couch	Sedile gravitazionale	Asiento gravitacional
Grip shoe	Scarpa gravitazionale	Zapato gravitatorio
Harness	Imbracatura	Arnés
Hatch	Portello	Puerta
Headrest	Poggiatesta	Reposacabezas
Headset	Cuffia	Auriculares
Hydrogen	Idrogeno	Hydrógeno
Hydroponics	Idroponica	Hidroponía
Inbound	Di ritorno (verso la Terra)	De llegada
Input	Input	Entrada
Isotope	Isotopo	Isótopo
IV system	Flebo	Infusión intravenosa

Jovian	Gioviano	Joviano
Jupiter	Giove	Júpiter
Kuiper Belt	Fascia di Kuiper	Cinturón de Kuiper
LCD	Schermo LCD	Pantalla LCD
Lifeboat	Scialuppa	Bote salvavidas
Maneuver	Manovra	Maniobra
Micrometeor	Micrometeora	Micrometeoroide
Module	Modulo	Módulo
Moon	Luna	Luna
NASA	NASA	NASA
Network	Rete	Red
Neural pathway	Collegamento neurale	Conexión neuronal
Night side	Lato notturno	Lado nocturno
Nitrogen	Azoto	Nitrógen
Observatory	Osservatorio	Observatorio
Off-line	Off-line	Fuera de línea
Oort	Oort	Oort
PDA	Palmare	Ordenador de bolsillo
Peer	Peer	Par
PET	PET	PET
Petri dish	Piastra di Petri	Placa de Petri
Pioneer 10	Pioneer 10	Pioneer 10
Planemo	Planemo	Planemo
Pluto	Plutone	Plutón
Polycarbonate	Policarbonato	Policarbonato
Query	Interrogazione query	Interrogación
Radar	Radar	Radar
Radioactive	Radioattivo	Radioactivo

Reaction mass	Massa di reazione	Masa de reacción
Receptor dish	Decoder	Receptor
Relative velocity	Velocità relativa	Velocidad relativa
Satellite	Satellite	Satélite
Seat	Sedile	Asiento
Sensor	Sensore	Sensor
Settlement	Insediamiento	Asentamiento
Ship	Nave	Nave
Ship-to-ship	Da nave a nave	Barco-barco
Slingshot burn	Manovra di fionda gravitazionale	Honda gravitatoria
Software	Software	Software
Solar flare	Fiamma solare	Llamarada solar
Solar system	Sistema solare	
Space station	Stazione spaziale	Estación <i>espacial</i>
Spacesuit	Tuta spaziale	Traje espacial
Speaker	Cassa	Altoparlante
Synergy	Sinergia	Sinergia
Telescope	Telescopio	Telescopio
Thrust	Propulsione, spinta	Propulsión
Toggle	Interruttore	Interruptor
Triple-redundant electricity	Elettricità a ridondanza tripla	Electricidad con redundancia triple
Trojan asteroid	Asteroide troiano	Asteroide troyano
Undock	Sganciarisi	Desacoplar
Warhead	Testata	Ojiva
Wedge	Cuneo	Cuña
Workstation	Workstation	Estación de trabajo
Worldlet	Planetoide	Planetoide
Zero-gee	Gravità zero	Gravedad cero

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