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DYSTOPIAN SCIENCE FICTION AS A MEANS OF TEACHING ENGLISH TO TECHNICAL **DEGREE STUDENTS**

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Introduction: the article deals with various possibilities of using literary excerpts from dystopian narrative in the classroom of English learners from technical institutes. This approach could fit into the traditional and communicative methodology framework for furthering a more informed and deeper understanding of lexical and grammatical formulas, syntactic relations, discursive particulars and extralinguistic concepts. Science fiction texts with a clear dystopian undertone provide a rich material for language-based analysis and in-class discussions inspired by poignant multimodal creative discourse related to the spheres of engineering, robotics, academic research and daily life. Therefore, it could raise students' motivation, professional curiosity and fascination with the English language that is now part of the technical university syllabus.

Materials and Methods: the author uses the theoretical and practical suggestions put forward by Western teaching ideologists and practicionaries of such literature and language approach as well as attempts to summarize her own experience of working as an English teacher at the technical university. Certain literary excerpts from exemplary science fiction novel by Philip K. Dick "Do Androids Dream of Electric Sheep?" (1968) have been chosen for analysis and discussion.

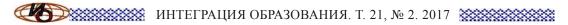
Results: The article showcases language uses and discourse messages in the passages of our choice as potential material for developing tasks, activities and discussions that could contribute to expanding students' linguistic competencies and communicative skills. This could become a way of humanizing technical education and introducing socio-cultural or technological dilemmas.

Discussion and Conclusions: the ideas for grammatical or lexical exercises, entertaining tasks or debate topics can be incorporated into the English courses that make an emphasis on general, specific or academic aspects and seek to avoid overloading their syllabus with non-contextualized or condescending English language textual material. These suggestions could be taken into account for preparing regular lessons, reading sessions or home tasks.

Keywords: student from technical / engineering institutes; literature in ESL classroom; dystopian fiction; science fiction; teaching English; academic discourse

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ДИСТОПИЧЕСКАЯ НАУЧНАЯ ФАНТАСТИКА КАК СРЕДСТВО ПРЕПОДАВАНИЯ АНГЛИЙСКОГО ЯЗЫКА СТУДЕНТАМ ТЕХНИЧЕСКИХ СПЕЦИАЛЬНОСТЕЙ

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Введение: в статье рассматривается возможность использования литературных отрывков из англоязычного дистопического нарратива при работе со студентами технического профиля. Такой подход может быть применен в рамках традиционных и коммуникативных методологических техник с целью более глубокого изучения лексических и грамматических конструкций, синтаксических парадигм, дискурсивных черт и экстралингвистистических реалий научно-фантастических текстов. Цель статьи – разработка лексико-грамматических упражнений и коммуникативных заданий для закрепления языкового материала, изученного студентами в рамках основной программы, развития навыков письменной и устной речи, а также усовершенствования умений свободного общения на заданную тематику в групповом формате. Материалы и методы: при проведении исследования автор опирается на лингвистический анализ языковых единиц, встречающихся в литературном тексте, предполагающий рассмотрение их грамматических, лексико-семантических и коннотативных особенностей. Основополагающим методом исследования стал анализ литературного текста как генератора примеров языкового использования, набора определенных жанровых черт, а также способа личностного развития.

Результаты исследования: исследованы и унифицированы встречающиеся в литературных фрагментах грамматические парадигмы, синтаксические отношения, лексико-семантические единицы как общего, так и технического профилей, коннотативные особенности дистопического жанра, способные лечь в основу стилистического и эстетико-художественного анализа текста для закрепления определенных языковых схем в определенном контексте. Были предложены идеи для возможных заданий на развитие навыков чтения, анализа и интерпретации информации, а также разработаны вопросники и идеологические дилеммы для обсуждения и дебатов.

Обсуждение и заключения: идеи лексико-грамматических упражнений, интерактивных заданий и тематических дебатов могут разнообразить программные языковые курсы и затронуть языковой пласт общего, специального и академического аспектов. Таким образом, произведения научно-фантастического или дистопического дискурса могут быть использованы в качестве материала для отработки различных языковых, интерпретативных и коммуникативных навыков у студентов неязыковых вузов, имеющих прямое отношение к изменениям, происходящим в сфере науки и техники и поднимаемых на обсуждение в научном, псевдонаучном или морально-этическом ключе в произведениях дистопического характера.

Ключевые слова: студент технических / инженерных направлений; английский язык как второй язык; дистопическая литература; научная фантастика; преподавание английского языка; академический дискурс

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Introduction

The context of international and Russian technical education in recent years has been marked by a growing tendency towards the humanization and humanitarization of students' experiences that mostly draw from the technical disciplines' syllabuses and contexts, thus practically encompassing that Chernyshevsky's generic question of 'What is to be done?' and narrowing it down to a more teacher-wise version of 'What to do with technical students in the ESL classroom?' This pedagogical approach is largely informed by the necessity to corroborate and elevate the competence of a learner in terms of his or her multifaceted reality as part of the permeating global mechanisms of socialization, cooperation and integration. The reality of an engineering student, while being heavily packed with the requisite knowledge of core subjects, cannot be regarded as fully complete until there is a significant confidence that this knowledge can be successfully mediated to the target

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receiver and also possesses sociological, philosophical or psychological substance among other requirements, as suggested by supporters of the humanities' role in technical education. This implies that potential links between engineering and humanities subjects cannot be overlooked if engineering school were to cater to revealing a multidimensional, competitive and open-minded personality of a student. These two ends of the scientific spectrum could actually navigate towards each other, creating a precedent for 'collaboration and shared discourse' between humanists and engineers [1, p. 139]. In fact, these ideas gain a crucial importance especially when talking about teaching a foreign language, the process which is nowadays *per say* bound to embrace the many layers of the student's intellectual, psychological and socio-cultural development. Therefore, in the case of studying English as a second language in the classroom of engineering students, we cannot but stress enough the ever-emerging need to seek out new ways of imparting the syllabus that would not only encourage the formal acquaintance with the grammatical and lexical patterns that provide the basis for general and/or specific English courses, but also contribute to the overall fascination with the language itself, the ability to infer underlying meanings, the skills to analyze and apply the recurrent structures and, most importantly, the readiness to participate in communications with fellow students and potential employers. These byproducts of the communicative techniques' use could become a strategic asset for future engineers who would feel more equipped and confident as regards their participation in the globalizing setting of our industry and society. One of the tools for providing such English language skill set could consist in redirecting our attention to alternative texts as a promising material for reading, class discussion and raising multicultural awareness.

Throughout the years of studying English abroad, I have noticed that such courses as language through literature are not alien to the foreign syllabus, especially in

the Modern Philology departments, and emerge quite rapidly as part of the English Studies paradigm. However, I strongly believe that some of the ideas that inspired the introduction of such courses in the first place could prove to be beneficial not exclusively to humanities students, but their lifelong binary counterpart, that is, technical sciences students. First and foremost, reading in itself is a very engaging task that requires a student's active involvement in the understanding of language items, the creating of certain imagery and the responding to its message, those fundamental principles being discussed by Harmer, who *a priori* believes in 'the essentially humanistic and communicative nature of language' as well as the high significance of 'learner input' overall [2, p. 291]. Reading in a foreign language should neither be marginalized nor privileged when it comes to encouraging Russian technical students to read in English, at least as an extracurricular activity, an elective course or a reading session obligatory task. That is why reading specific literature selections could help revitalize lessons, activities or exercises. In this vein, dystopian science fiction is capable of becoming a fulcrum for the teaching English courses particularly to technical degree students who could appreciate (or even evaluate) the technical component of such materials, their highly ideological content and language corpus. The latter does not necessarily have to be overburdened with technical terms but rather highlights specific uses of some grammatical and lexical items and, what is more, inspire the creative thinker in a mostly contained and sometimes extremely reserved engineering personality. It is my belief that using such literature could a certain extent help to find a common ground between technical background students and their English teachers looking for ways to reinvigorate some language exercises and build a bridge into a more multidisciplinary dimension.

There has indeed been research interested in literature as a point of departure for language teaching that seems to highlight the benefits of using narrative fiction,

drama, poetry in an ESL classroom. Nevertheless, it seems that dystopian or science fiction perspective has not been addressed as much in this particular context and even less so in a Russian university setting. For example, A. Yang discussed the value of science fiction for teaching English as a foreign language in a student-oriented environment, but I would like to highlight a more specific approach of using dystopian science fiction oriented for technical degree students who are required to study English throughout a significant part of their studies [3]. Curiously enough, it is not until recently that the very genre of dystopia has been revitalized and gained a new life on the literary and critical scene on a broader scale. Nowadays, it is receiving more and more attention from both critics and amateur readers probably because of the huge success of such dystopian creations as "Hunger Games" (2012) and "Divergent" (2014) blockbusters. These due to their mass culture appeal, enabled the renaissance of interest in technologically advanced futuristic visions provided by different authors as a way to channel powerful critiques on some recurrent practices of modern times. This initial interest to such dimensions and their ultimate messages can really make space for some informed readings on the part of English teachers and their young and enthusiastic students.

Literature Review

In the last four decades different researchers, such as Brumfit and Carter (1986), Collins and Slater (1987), Sage (1987), Lazar (1993), Simpson (1997), Yang (2002), Hall (2015) among others, have been especially interested in the role of literature in language education and teaching English as a second language. They do not necessarily put an emphasis on literary works as a way to reinforce the traditional grammar-translation method or promote the English-speaking world cultural production. They rather look for intersections between creative writings and language teaching syllabuses in their search for the possible beneficial collaboration between literary 'Englishes', students'

motivations and communicative techniques in the plurality of their ideational loads.

As Lazar claims in reference to the perspective of using literature in class, apart from providing a fascinating literary episode open for multiple interpretations, 'we are developing their [students'] capacity to understand the specific meanings conveyed by a grammatical or lexical form in a particular context [4, p. 154]. Moreover, this process may flow very rapidly due to the remarkable peculiarities of a given context in literary texts, that is to say, because a variety of new worlds might unfold in front of learners. In the case of dystopias and science fiction novels, this claim holds even more weight, since they might appeal to students who most probably are not impartial to the "Star Wars" or "Hunger Games" blockbuster creations or the whole computer games industry. As Lamb argues in his illuminating piece on students' motivations and identity formation within the international context of English on the example of Indonesian students, it is to be expected that teachers respond actively and creatively to 'integrative motivation change' [5, p. 15] in learners. Since dystopian narratives' discourse very often equates with the universal paradigmatic problematization and globally representative identity construction as well as controversial technological advances, we hope that learners could find these readings relevant and relatable as well as both conceptually and emotionally fulfilling.

Customarily, the first lesson conducted at the beginning of each semester with new students' groups is devoted to the gettingto-know-each-other teaching ritual and finding out particular likes and dislikes, preferences and challenges that students themselves may point out on account of their previous experiences or future expectations. Going through this part of the lesson, at least in my practice, demonstrates that students of different courses and levels in a strikingly similar manner indicate their willingness to listen to interesting scientific or even 'populistic' videos, watch involving English language series, read original pieces and discuss burning real-life or profes-

sional topics, or in other words merely get a breath of fresh air in between otherwise highly overloaded informative profilerelated sessions. Despite these claims that correspond nicely to the requirements of the communicative methodology approach, Russian technical students I have to deal with at the university for example during their oral presentations, tend to stay overtly reserved and very focused on the highly clumsy chunks of general technical information they might have gathered on the Internet, and in addition to that, they very rarely let themselves open up to conversational topics that could help them learn to express themselves in a more naturalized manner. Thus, it seems that some proposals might indeed be welcome if we were looking for ways to make their learning experience a more balanced, diverse and compelling one in terms of grammar and lexis acquisition, discourse formation and conversational practice. Nonetheless, learners' apparent willingness to be creatively involved in the lesson might still not trump their reluctance and hesitance to actually participate and practice their language more often and more enthusiastically. For this reason some scholars and researchers suggest that language teachers offer both an informative and motivating content and, as an experiment, introduce some carefully selected literature readings that could help students acquire a more profound understanding of the usage of particular items, expand their interpretive abilities as applied to decoding multi-layered literary storytelling signifiers, strike up conversations on topics that are not totally alien to the niche of their own interests and achieve a more fulfilling connection between the language they use and the world picture. Thus, the potential within certain literary pieces is insurmountable, since they might indeed serve as a resource for either a purely linguistic analysis or stylistic and interpretive ones, those asking a student to 'discuss the author's choice of language' or 'present reactions to various elements in the text' [6, p. 128], thus becoming 'a springboard for a variety of language activities, including discussion and writing', according to A. Maley [7, p. 183].

So in connection with the previously stated ideas, it should be noted that due to such literary experience, students, first, could learn some new items, reinforce the already familiar ones and also possibly see them in a new light. They can also simultaneously observe the use of grammar formulas in a more mixed co-text that flows in a cohesive way, similarly to the way stories unfold when we share them on a daily basis, while retelling real-life sequences or writing argumentative essays. Second, students do not only have to decipher and learn these instances but see their functional pragmatic weight as well as make sense out of some discursive particulars. In this light, we can indeed emphasize 'the perspective of reading as interaction' [8, p. 530], the latter showcased by Widdowson as an ability to 'connect language up to contextual conditions of one kind or another' [9, p. 709], infer meanings and respond actively. As a result, this interactive relationship between a reader and a text turns out to be indispensable if we intend to teach students to approach the second language from within, which is only possible through a contextualized version of the language structures we teach. Third, we can strive to achieve the aim of satisfying the value of relevance provided by 'bringing them [students] in contact with both the scientific register they must master and other registers which constitute the discourse of daily life', as stated by Hirvela [quoted in Yang: 3, p. 51].

Prominently enough, the latter manifests itself from a new, critically satisfying angle in the genre of dystopia that manages to create a dimension that by constructing a seemingly far-fetched fantastic reality usually helps to explore the resonating issues of the present. The very term 'dystopia' is associated with 'utopia' that in its turn derives from Greek and means 'a good place', thus making a dystopia its antonym semantically accounting for nightmarish undesirable places. These might pose as utopias themselves from the point of view of their metarealities but in fact they would drive their characters to complete suffocation. In order to construct such worlds, authors recruit technological advances, robotics, space

programs, engineering notions, scientific discoveries, speculations or even manipulations, which is why science fiction becomes a genre that quite naturally emerges as an ally of dystopian discourse. To our benefit, the interest in such issues could echo the technical engineer background, while also addressing the need for more lively and controversial discussions that are essential for uncovering the stream of consciousness that could potentially liberate the English language acquisition process. It is our belief that dystopian pieces might succeed in eliciting students' positive reaction as they may indeed pose 'complicated adult dilemmas,' bring about 'powerful emotional response' or ensure absorbing involvement in the plot itself [10]), those being the rationales discussed by Lazar on the account of literature use in language classrooms. Later Hirvela pinpointed that 'the science fiction stories [in particular] overlapped into the non-literary territory in terms of both language and content' [11, p. 496]. In addition to this, Claffin estimates that science fiction genre has even been influential in terms of teaching sciences themselves and being 'an inspiration for scientists-to-be' [12, p. 54]. Yang more specifically mentioned that [t] he multimedia popularity of the science fiction genre facilitates opinion sharing and value-judging on the novels, thus suggesting an extensive field for further research [3, p. 51]. In addition, the intertextuality of science fiction manifests itself in its devotion to combining different discursive subgenres such as creative writing, scientific discourse and real-life speech. That is why we cannot but agree with Díaz-Santos in that 'the content that shows up in the genre of the science textbook <...> can also be worked on, reinforced and expanded' [13, p. 223], in our case through the dystopian science fiction genre. Besides, dystopias are often considered to possess a positive reading power inducing pleasurable mental activity among young people, as 'these books provide a safe and "liminal" space for playing with challenging societal issues

and ideas through the imaginary world of a story', according to Wilhelm and Smith [14, p. 60]. Thus, the research question we aim to answer is as follows: How can we integrate literary extracts from such narratives into the language classroom so that students from technical institutes end up gaining from that experience both on linguistic and extra linguistic levels?

Materials and Methods

In the vein of this discussion, Lazar emphasized three major approaches to using literature as a point of departure in some class activities: a language-based approach [10, p. 42], literature as content [10, p. 50] and literature for personal enrichment [10, p. 54]. Other researchers who successfully used literature in their classes also observed that the focus of teaching should not come down to a lecture-based dynamics because, first, students might not have had a literary training before and, second, the idea of literature use is supposed to stay practically justified and incorporated for the sake of motivating students for useful language analysis and interaction. Besides, for the latter to come into fruition, Collie and Slater embrace the necessity of group activities that 'serve to shift a reader's attention away from the minute, intensive attack on a single corner of the text, to more extensive concern for gist and overall theme' [15]. It is also true that literary concepts as such might be fascinating for engineering students overwhelmed with other disciplinary knowledge and longing for a more 'humane' and 'humanistic' content, but the teacher should still be able to draw a fine line between teaching vs. using literature and stay tuned into the syllabus requirements abstaining from its possibly tedious realization. Keeping the aforementioned issues in mind, I would like to put forward some suggestions as to how an exemplary science fiction, dystopian novel "Do Androids Dream of Electric Sheep?" [16] by Philip K. Dick can be put to good use in the classroom as a supplementary material¹. The

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¹ Muraveva E. V. Perspectives of using dystopian literary fiction for teaching English as a second language to students from technical institutes. Proceedings of the I International Methodological Training Conference "Innovative ideas and approaches to integrated teaching of foreign languages and professionally-oriented subjects in high education" (March 27-30, 2017). St. Petersburg, 2017. Pp. 307–310.



proposal for such methodological analysis has already been put forward in my abstract written for the proceedings of the I International Methodological Training Conference concerning innovative ideas in teaching foreign languages held in Saint-Petersburg State Polytechnical University of Peter the Great in March, 2017. Having highlighted the perspectives of using science fiction for practically-oriented language courses on the example of Dick's dystopian novel, I hoped to develop this idea into a more complete research paper focusing on the theoretical and practical substantiations for such methodological approach and teaching experimentation as well as the elaboration of real exercises, activities and tasks covering the linguistic and extralinguistic dimensions of the said novel. To have you acquainted with this creative installation, it needs to be noted that the novel presents a world after the World War Terminus that made most people, regarded as intellectually predisposed, emigrate to other planets to escape the ecological disaster. They were given an opportunity to utilize androids as their servants, which in effect had some of the most sophisticated models running to the Earth in their quest for freedom and perfectly humane experiences, where they would most probably end up being 'retired' by bounty hunters. This revolution of a sort paved way for outlining the novel's dilemmas and doubts in the light of human nature, responsibility, elitism and addressing the issue of technology's 'otherness' and humanity's dogmatic referential scheme. According to Kucukalic, one of the fundamental themes of the novel is 'the omnipresence of entropic decay, described in the second law of thermodynamics as the loss of energy' [17, p. 69], which creates a precipice for questioning the relations between humans and machines and hence could 'help deal with science in imaginative ways' [11, p. 498] through a series of communicative tasks. I am, however, deliberately putting more emphasis on the term dystopia in my research, because it opens up for the classroom not only a scientific or academic pondering on the vocabulary or grammar, but invites students to muse

over more philosophical, sociological and psychological problematic as well, thus inviting them to practice their communicative skills more.

All in all, I am going to explore the novel from the point of view of structural linguistics and systemic functional linguistics so as to elaborate some grammar, vocabulary, and pragmatics exercises. I will also look at the stylistic pattern of the text to see how students can use in their practice such texts' different genre schemes in their general, academic and specific English courses. It would also be important to study such excerpts in the light of their discursive significance, thus providing particulars for discussing sociocultural experiments and writing essays on related themes. Exploiting these exercises and ideas could help create the necessary schemata for engineering students' profile knowledge and skills.

Results

The careful exploration and linguistic analysis of different literary episodes from "Do Androids Dream of Electric Sheep?" showed that they indeed could provide a fascinating platform for in-class, homework or reading sessions' discussion among technical or engineering students in the form of language-based or discourse analysis, questionnaires, argumentative essays, debates and group discussions of the moral implications, technological prospects, human scientific projects and students' own mission in the future of engineering. Overall, this research demonstrated that such literary texts can be used in a myriad of different ways within both traditional and communicative methodology approaches we are going to discuss in detail further on.

It is no secret that following the course book organization, students normally face grammatical topics in a linear sequence. For this reason, exposing them to authentic texts that encapsulate different time frames could only foster a more pragmatically oriented understanding of the English tense system. To this end, the first-course students, who are still working on the gram-

matical corpus of the language, might be given a short passage from the very beginning of the first chapter of "Do Androids Dream of Electric Sheep?" It stands alone as self-contained set-up installation, while exemplifying the use of some grammatical tenses (written in cursive in the passage below), synonymous and antonymous lexical items and specific technical terms (highlighted in the passage below).

A merry little **surge of electricity piped by automatic alarm** from the mood organ beside his bed *awakened* Rick Deckard. Surprised – it always *surprised* him to find himself awake without **prior notice** – he *rose* from the bed, *stood_up* in his multicolored pajamas, and *stretched*. Now, in her bed, his wife Iran *opened* her gray, unmerry eyes, *blinked*, then *groaned* and *shut* her eyes again. "You *set* your Penfield too weak he *said* to her. "I'll reset it and you'll be awake and-" "Keep your hand off my **settings**." Her voice *held* bitter sharpness. "I *don't want* to be awake." He *seated* himself beside her, *bent over* her, and *explained* softly. "If you *set* the surge up high enough, you'll be glad you're awake; that's the whole point. At setting C it overcomes the threshold barring consciousness, as it does for me." Friendlily, because he *felt* well-disposed toward the world his setting *had been* at D – he *patted* her bare, pate shoulder. "Get your crude cop's hand away," Iran said. "I'm not a cop-" He felt irritable, now, although he *hadn't dialed* for it. "You're worse," his wife said, her eyes still shut. "You're a murderer hired by the cops. "I've never *killed* a human being in my life." His irritability *had risen*, now; *had become* outright hostility. Iran said, "Just those poor andys." "I notice you've never *had* any hesitation as to spending the bounty money I *bring* home on whatever momentarily *attracts* your attention." He *rose, strode* to the **console** of his mood organ. "Instead of saving," he said, "so we could buy a real sheep, to **replace that fake electric one** upstairs. A mere electric animal, and me earning all that I've worked my way up to through the years" [16, p. 3].

To begin with, as part of a grammar check-up exercise, students might be asked to comment on the types of grammatical tenses that recur in this passage and what pragmatic functions they perform (consider the outlined expressions). For example, the past simple instances such as 'rose', 'stood up', 'stretched' retell the sequence of actions in order for the reader to follow the morning ritual of the main male protagonist, which is quite realistic in itself and hence fits the general English aspect domain. The present perfect occurs primarily when the character Rick Deckard mentions his general lifetime achievements, stressed by the adverb 'never' that serves as a tense marker in this case. Quite significantly, the past perfect in the text very concisely emphasises the pre-occurrence of some events in comparison with others: 'He felt irritable, now, although he hadn't dialled for it' [16, p. 3]. These grammar points illustrated in a very contained manner in the same linguistic context might help to establish a more embracing tense picture that should to a certain extent dissolve the students' constant complaint at their inability to use the tenses in a connected speech continuum. Further on, the teacher can ask a couple of students to describe their own morning rituals and feelings

using the schematic pattern highlighted in the paragraph.

In order to work on the text's lexical paradigm, the teacher might invite students to try to locate terms that in their opinion might as well belong to the technical register. This could be a light start for first-year students in their preparing for a more bulky terminological corpus that is likely to await them in the near future. In this passage we encounter such technical expressions as 'surge of electricity', 'piped by automatic alarm', 'overcome the threshold' or formal academic ones 'without prior notice'. These items are to be translated into Russian to see their equivalents or looked at from a morphological derivation perspective in the case of 'set'- 'reset', 'setting', etc. This way students are encouraged to grow their vocabulary in the light of establishing connections and schemes. Other terms from the semantic field of electric engineering, measurements and adjustments might be conjured up and used further on.

To deal with the lexical bulk of the text on a deeper level we might make up exercises that cover the synonymous or antonymous relations between items. For example, find below some significant pairs of synonyms that are present in the discussed passage and belong to general or even colloquial English spectrum:

rise	stand up
keep your hand off	get your hand away
friendlily	softly
irritability	hostility

There are also some antonymous pairs to be found:

opened	shut
merry	unmerry
rose, stood up	seated himself
well-disposed	irritable
spending	earning, saving
cops	murderer
human being	andys
real	fake

The last three pairs might become a bridge to a more ideologically charged discussion as to what kind of conflict is bound to serve as the premise of the entire novel and whether it may get any resolution in the story. Students can contemplate this idea and come up with some other synonymous or antonymous conceptual notions in the light of technology vs. humanity dialogue (for instance, dead – live, object – subject, dependant – powerful, repetitive – creative, etc.) and reflect on whether this distinction is as straightforward as it seems.

Another possible proposal related to this text might be the treatment of the transitivity pattern in some verbs, since we have the example of 'he *rose* from the bed', '[h]is irritability *had risen*' which account for the intransitivity of 'rise' as opposed to 'raise'. The verb phrase 'a surge awakened Deckard' as it contains a transitive verb is different from the both transitive and intransitive verb 'wake (up)' and the adjective construction 'be awake' or 'find yourself awake'.

Among many other possible directions we might take to appropriate the literary text is also finding examples of using the word 'one' as substitute for a noun, which we have encountered in the text ('fake electric one'), or as an impersonal pronoun for generalization purposes. Such use is not alien to technical writings as well. Overall, as it might have already become evident, there are multiple ways we can brainstorm various tasks in an ESL classroom based on some textually visual instances or even conceptually insignificant grammatical details and, as a result, work on the linguistic competence of a student.

With the view to striking up a more profound conversation and fostering pleasureinducing activities, the students may be asked to muse over the following questions that are both content-based and open to further discussion:

1. What device is being introduced and discussed by the characters? What is its purpose?

2. Do you sometimes wish you had such a device to go through the day?

3. What might the author be critical about by mentioning this kind of technology as regards the state of humanity? Did he manage to predict anything about our generation?

4. What binary oppositions has the author established in this set-up paragraph? What is the characters' predisposition towards these concepts?

5. What potential conflicts have already been outlined in the first passage?

6. Have you mentioned any stereotype thinking on the part of the characters?

7. What would you suggest are the professional occupations of the characters? How would you describe their relationship with each other?

This set of questions is only provisional both in terms of its content and level of difficulty. They can also be given as part of class work within the topics of the *Language Leader* intermediate course book as an example, for it is being used at the technical university my teaching experience stems from, those being 'Engineering', 'Work', or 'Personality', or as home tasks in the line of the mentioned topicality².

Probably the most rewarding thing about the idea of teaching language through

² Cotton D., Falvey D., Kent S. Language Leader Coursebook: Intermediate. Pearson Longman; 2008.

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science fiction is that it paves the way for innovative thinking on the part of students and invites them to think of the possible future inventions. Based on the patterns established by the fevered imagination of science fiction writers, they can themselves go on to ponder in this direction. As Zhang, Callaghan and Wang suggest, they could even work in the vein of Science Fiction Prototyping approach (adopted by Kohno & Johnson) and engage in exploring their creative skills by writing their own fictional stories set in the future and seeking out new products or inventions [18, p. 179].

In fact, the most important aspect of dystopian narrative is its dedication to inventing a technologically justified environment. That is why second-year students might be able to enjoy a more extensive reading passage that, according to my judgment, summarizes quite nicely the precipice of the entire novel, for it presents a test that is supposed to determine whether someone is an android or not. It is being conducted on Rachel Rosen, a niece of the Rosen Corporation executive, a company that actually manufactures androids. The fifth chapter in particular includes a number of lexical items that could be studied as part of measurement-related units, because it contains a series of functional items such as 'the testing apparatus', 'use as indices', needles/ gauges registered/moved/palpitated/swept out a wide path across the dials' 'the test functions', 'feeble tremor', 'showed an amplitude'. It is important to note that the beauty of studying literature as a means to an end is that it is in fact a compilation of

language that is not inherently literary, because 'the concept of "literary language is a chimera', as Simpson so observantly put it [19, p. 7]. What literature does is to jungle with different registers and discourses, while promoting its own agenda, which is beneficial for teachers and students either way. First and foremost, the students could attempt to identify these stylistically specific items and divide them into several groups depending on the vocabulary of the narrative discourse that employs the terms, the potential register of which may be very diverse. Using the terminological concepts discussed by Halliday and Hasan, this type of literary texts themselves could contain the lexical bulk belonging to the 'field' of technical disciplines, academic research or familiar everyday interactions or the 'mode' of written or spoken communications. These aspects are interesting to us because by working with the lexical domain of the text, we can study items of general, academic or specific technical nature at the same time, which corresponds to the aspectual division of English language courses often imparted at the university.

This exercise could help students develop a more informed view of lexical items available to them and their possible functioning both in familiar settings and in a more subject-specific arena. Below there is a provisional scheme of a distribution table that illustrates the relevance of some lexical expressions encountered in a literary text and invites us to contemplate the registers they could potentially move into or oscillate between.

General	Academic	Specific
report (the person) including (his killing jar) discover (a wasp) (the police) are watching drawings I suppose (somebody got hurt) (the entrée) consists of informed (her – or rather it)	to outline a number of express a reaction use as indices make a jot of notation turning to the eighth question made a note failed to indicate a reaction concentrate on other factors watched (the needles) =ob- served	the beam of light shone the wire-mesh disc adhered twin gauges testing apparatus capillary reaction profile scale the needles moved less/palpitated the gauges showed an amplitude within

This particular text would ensure lexical gains in terms of being able to use the outlined language to describe the workings of measurement devices (for example, 'showed an amplitude', 'needles moved' or 'palpitated' among some others), analyze data and draw conclusions after undertaken experiments or research ('outline', 'consider', 'indices'), write stylistically appropriate passages about the matter and contemplate the multimodality of some expressions ('discover', 'drawings', 'detect' 'watch'). This particular passage could significantly enrich a student's vocabulary, which is especially the case by virtue of the fact that it continuously indulges in repetitions of lexical expressions whereas the narrator proceeds with commenting on the experiment. It is also noteworthy that studying such items in a literary framework could be a lighter version of ESP or EAP genre-based teaching techniques. As An mentioned, the ultimate task of these approaches is rematerializing the awareness of the product linguistic representation and 'performing genre' in their own writings [20, p. 86]. In my modest opinion, working on these representations through a literary text is one way to create a more affective marriage between the syllabus requirements and communicative 'breathers' solidifying the necessity to raise students' technical English literacy and appeal to their communicative capacity.

If we were to suggest any other possible applications of the discussed text, we would also like to include the grammatical concept of second-type conditional sentences that are recurrently used there to formulate hypothetic inquiries about the experiment subject's behavior in a proposed scenario. The example is as follows: 'You are given a calfskin wallet on your birthday." "I wouldn't accept it," Rachael said. "Also I'd report the person who gave it to me to the police." "You're sitting watching TV," he continued, "and suddenly you discover a wasp crawling on your wrist." Rachael said, "I'd kill it' [16, p. 23]. The teacher might use this as an opportunity to revise the conditional sentences and alternative forms of expressing hypothesis that in spoken language do not necessarily require a constant use of the past simple tense but also the present simple with the implicature on the part of the user that it was still an imaginary situation.

To make this task a more interactive one, the students might be invited to answer these questions themselves and devise their own scenarios to make sure whether their group mates are androids or not in an almost anecdotic fashion. This could end up being a highly fascinating activity, as it gives enough freedom to students to improvise while practicing useful grammatical patterns. They could also prepare dialogues in pairs echoing the proposed scheme in the novel and then play them out in front of others. Furthermore, the following discussion questions may appear in the form of a questionnaire.

1. Do you think this is an effective test model?

2. What are the basic differences between humans and androids, as suggested by Philip K. Dick?

3. What might be the novel's target of attack, according to this frame of mind? (the teacher is required to explain Dick's main standpoints referred to in the general plot)

4. In what ways do you envision the future of technology and robotics and the relationship between people and androids?

Likewise, to encourage a creativity streak in engineers and motivate them to improve their forms of expression, students could be given a task to write reflective essays on the following topics:

1) I am an Android and this is my testimony.

This one is expected to be elaborated from the point of view of an android articulating his/her defensive discourse, while using the argumentative language and different types of conditional sentences. Consider the following model proposals of language expression that might stem from such contemplation: If I were a human being, which I obviously cannot, I would allow other forms of existence to have freedom of choice. If you ask me, I believe I can be part of society on my own terms for the period of a life circle I am given. On the one hand, I understand why humans are afraid of us, but on the other hand, they themselves are not as innocent as they view themselves.

2) The future of androids industry: opportunities and challenges.

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This one may be devised from the point of view of a human being who either approves of or disapproves of the androids' uprising for rights and freedoms. Gathered from my personal experience, the more implausible or striking is the topic, the more satisfying is the audience response, as the essay on the topic of 'Can a woman be President of Russia?' illustrated in my personal practice. It is simply more entertaining to create your own opinionated piece and, metaphorically speaking, get students to play 'to recover [their] seriousness,' in the expression of Nietzsche (quoted in [21, p. 14]), without disregarding the structural models or hedging devices being studied as part of the academic English lesson plans.

I can assume that especially students from robotics' department might find this proposition especially interesting if they were to build a connection between technology and social sciences as well as envision their own contribution and social mission in terms of their future occupation. The lesson plan could also include some *YouTube* video cuts from significant popular culture discourses. Some of the videos that I have already used in my lessons include an anecdotic situation that took place in the Boston dynamics centre when one of the employees pushed a robotic dog in a rude, potentially unethical manner³. Another video portrays robot Sophia whose emotional reaction mimic is reminiscent of the real human beings' one⁴. Interestingly enough, in one of the interviews conducted with her, she pointed out that she would destroy the human kind, which was apparently programmed into her brain, but could still raise an array of students' monologized or dialogized speculations on the matter. Another possible video material for discussion has to do with the British series "Black Mirror"⁵ where one of the heroines requested to create an android that would basically become a clone of her recently

departed husband. The discussion could move on from this personal and egocentric perspective brought to the fone by this character's experience and navigate around the functions of androids students themselves would like to consider if they were involved in this particular area of work in the future. In addition, this is also a prospective context for studying the Complex Object that makes use of the constructions aimed at encapsulating the text's message and increasing language density such as, for instance, 'I want (require) my robot to...'. Another activity option would suggest that learners ponder on the advertising patterns for some android models. The teacher in this case would be supposed to prepare printed pictures of existing robots or androids and provide the grammatical or lexical schemes to promote the product. This activity could be performed in groups with or without prior home preparation. Apart from the merely functional linguistics approach, this particular thematic area provides food for thought and inspired interaction, as these video sequences and Dick's speculation muse over 'the establishment of technological agency' or power relations manipulations that arise from the constant technological upgrade and subordination claims on the part of humans and artificial intelligence, according to Sims [22, p. 69].

Moving on, we should also mention that second-year students often have to deal with texts that touch upon the topic of environment and its highly probable endangerment coming from the human race. As dystopian science fiction almost always proposes catastrophic scenarios of human existence caused by ecological disasters or nuclear explosions, it might be rewarding for students to read and sum up some literary excerpts that are reader-friendly in terms of their content and linguistic density but also lexically enriching, grammatically illustrative and ideologically poignant. As Berne and Schummer rightfully point

³ "Introducing Spot." 9 February 2015. Available at: https://www.youtube.com/watch?v=M8YjvHYbZ9w. ⁴ "Hot Robot At SXSW Says She Wants To Destroy Humans/The Pulse/CNBC." 16 March 2016. Available at: https://www.youtube.com/watch?v=W0_DPi0PmF0

⁵ Brooker C., Harris O. Be right back [Television series episode]. C. Brooker & A. Jones (Producers). Black Mirror. UK: Channel 4; 2013.

out, '[s]cience fiction can help students to approach an understanding otherwise inaccessible, except through the realm of intuition, emotion, and imagination' [23, p. 462] and this premise is exactly what can make a learning experience a more creative process. Probably the urge to look up already existent topics for class work can be diminished in case the teacher is to offer a positively challenging speculation task.

From a grammatical point of view such text is a perfect example of using the Past Perfect tense that, as mentioned earlier, is likely to pose problems as to when to use it properly. I would assume that passage devoted entirely to the consequences of the World War Terminus might provide a remarkable insight into its both form and function, since, as Sánchez-Hernández wisely observed 'just because a function is covered in the coursebook does not mean that learners have internalised it for authentic, unrehearsed use in the real world' [24, p. 238]. Since the text is dealing with the world as it had been before the hypothetical war, it is a fruitful setting for establishing a tense pragmatic meaning ('had existed', 'had originated', 'had descended') and, in addition, its bulky passive voice extension as well ('had been modified', 'had been maintained').

This excerpt in particular is also a compilation of non-verbal forms that, being a recurrent device for de-personalizing technical texts, are thoroughly studied by upper level engineering students. The students might be encouraged to identify these forms, that is to say, participles, gerunds and infinitives ('decaying buildings', 'deformed Earth', 'strictly speaking', 'if accepting sterilization', 'pegged as special'; loitering on Earth'; 'able to function', 'had ceased to shine', 'made it easy to emigrate') and translate them into a naturally sounded Russian, while pondering on their syntactic function as adverbial or adjectival modifiers, subjects, objects or specific structures such as introductory *it* infinitive construction. This sounds like a potentially useful application of a translation approach, for it studies the aforementioned forms inside of a familiar context, not as out-of-touch

linguistic artefacts, as I would assume their usual connotation goes due to the grammar books' application. To remark this, I would like to agree with Cook who seems to believe that contrasting both languages in an explicit manner should not be marginalized following the celebration of the communicative techniques' acclaimed leadership: 'Successful English language speakers often need to code-switch and translate, to operate bilingually rather than monolingually' [25, p. 9]. So, occasional literary getaways would make this practice even more revitalized in case we were going to shy away from the traditional translation approach features.

This short passage does not fail to provide a source and demonstration of discursive markers that help to build up argument in a more conscious and structurally logical way, a skill that engineering students need to acquire in order to be able to write academic essays or give presentations to the classroom audience. Discourse markers basically encompass those lexically valuable phrases or individual items that grammatically may belong to the classes of adverbs, conjunctions, prepositions, even participles but all serve the purpose of linking sentences and, broadly speaking, concepts and ideas into an intrinsically connected whole. Fraser perfectly summarized their most important property that in my opinion makes them a matter of the utmost importance for technical students whose professional discourse hinges on their ability to produce cohesive utterances to guide themselves, their readers or clients through technical instructions, process descriptions and other specifically marked formulations: 'they impose a relationship between some aspect of the discourse segment they are a part of, <...>, and some aspect of a prior discourse segment, <...>' [26, p. 938]. Depending on the context they appear in, they acquire a certain pragmatic meaning that allows them to function as a cohesive device in a text. Among these we may mention such potentially cohesive entities, thoroughly discussed by Halliday and Hasan [27] and, as causal conjunctions ('in effect', 'in con-

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nection with'), additive conjunctions ('in addition', 'in a similar way', 'in dubious addition to'), adversative conjunctions ('despite', 'strangely', 'however', 'but', 'and yet', 'in any case'), temporal conjunctions ('first', 'finally'), comparative references ('like', 'as') and, apart from those, some hedging devices for generalization ('mostly') or expressing confidence or uncertainty ('logically', 'potentially', 'evidently', 'of course', 'perhaps', 'possi-bly', 'strictly speaking', 'in fact'), all those encountered in the chosen extract. Students might attempt to add more items under these 'umbrella' labels, look for synonyms and get an overall understanding of how they could also talk or write (the literary texts are likely to provide sources of both spoken and written language mode instances) so as to sound reasonable and consistent. Working on these expressions in a context could also contribute to strengthening reading comprehension skills and the skills to organize information into passages properly, as students learn to identify and apply 'common transition words', the importance of which is also stressed by Anderson [28, p. 47]. The semi-formal style that may appear in a literary excerpt would in this case turn out to be an advantage for students who would want their discourse to be academic to a certain extent but transcend the status quo of a purely scientific speech so that the emphasis can be made on interacting

with their peers or colleagues. These devices enable a student to see the application of 'the concept of cohesion [that] accounts for the essential semantic relations whereby any passage of speech or writing is enabled to function as text' [27, p. 13], as suggested by Halliday and Hasan. I firmly believe that studying texts in the multiplicity of the schematic patterns they might contain should be part and parcel of engineering students' profile as well.

Besides decoding the relations between different elements of the text, we can analyze them on a more conceptual level. One of the tasks intended to develop students' ability to extract meaningful bits of information so as to manage it from a more analytical standpoint would be to make them enumerate the phenomena that occur in this dystopian installation and take notes of the most essential lexical terms used to present and describe them. This could be a way to revise the necessary topic by using mind maps, as suggested by Deller and Price [29, p. 56]. Related vocables and concepts are supposed to be added to such mind map according to the subject of discussion, thus helping students to organize information and be able to opportunely extract it from their mind later, once it has been stored there as 'high-frequency chunks' [30, p. 30]. Here below you may find a provisional table attempting to present and distribute the lexical bulk of the discussed passage in its relation to different phenomena.

Phenomena	Characteristic lexical chunks
World War Terminus	ruin, decaying buildings, a costly war, scientific vessel, the corporation, come about
Migration and colonization	migrated, a colony world, an alien world, colonization programme had been underway, entered a new phase, a weapon of war able to function, modify, emigrant, incentive, declined to migrate, non-emigrant
Ecological catastrophe	the dust had contaminated the earth's surface, the dust had originated, the owls had died, medieval plagues, dead rats, the sun had ceased to shine, the radioactive fallout, Earth deformed, the tent of dust, deplete, abandoned suburbs
Android invention	humanoid robot, organic android, mobile donkey engine, an android sub- type, receive possession, the android servant, under U.N. law
Biological redistribution	classed as biologically unacceptable, a menace to the pristine heredity of the race, a citizen, a special, sterilization, part of mankind, individuals, urban areas, constellate, mutual presence, sane ones, peculiar entities

This would equip students with the skill to process and analyze information

that, as a bonus, does not appear too condescending. Probably, this might prove to be a more advantageous way of recording lexical units, as in such manner they appear contextualized and schematized in contrast with a thoughtless drilling of wordlists. They could be asked to form their own sentences bases on this scheme as a way to summarize the passage in an overview or detailed manner. Perhaps, it would be a good idea to conduct such activities as part of the habitual reading sessions with upper-level students.

To account for the students' curiosity about a new and unusual setting, we could also use the following dialogue as a starter for the further discussion about the issue of pollution. It occurs between the Earth's resident John Isidore and an android seeking an escape in his building:

"The apartments in which no one lives – hundreds of them and all full of the possessions people had, like family photographs and clothes. Those that died couldn't take anything and those who emigrated didn't want to. This building, except for my apartment, is completely kipple-ized". "Kipple-ized'?" She did not comprehend [16, p. 30].

The students are to be asked whether they can guess from the context the meaning of a neologism invented and coined by the author himself to refer to the supposedly self-reproducing type of rubbish, after previously having set the context of the aforementioned passage. The teacher could also make use of the presented opportunity and comment on the usability of the derivative suffix -ize and brainstorm a number of items formed in a similar way such as 'energized', 'mobilized', 'politicized', 'advertized', 'mechanized', 'industrialized', 'computerized', 'fossilized' among many others and their Russian language equivalents. This would create a pattern of using the suffix that conveys the semantic meaning of making something acquire a certain property or changing a state, which is no doubt a recurrent phenomenon in technical areas.

After hearing out the students' suggestions we may turn to the explanation given by the character himself, check their understanding of the concept and make inquiries about whether, despite being an invented term, it relays a message about our contemporary societies.

"Kipple is useless objects, like junk mail or match folders after you use the last match or gum wrappers or yesterday's homeopape. When nobody's around, kipple reproduces itself. For instance, if you go to bed leaving any kipple around your apartment, when you wake up the next morning there's twice as much of it. It always gets more and more." "I see." The girl regarded him uncertainly, not knowing whether to believe him. Not sure if he meant it seriously. "There's the First Law of Kipple," he said. "'Kipple drives out nonkipple.' Like Gresham's law about bad money. And in these apartments there's been nobody there to fight the kipple." "So it has taken over completely," the girl finished. She nodded. "Now I understand" [16, p. 30].

It is important to lay focus on the fact that science fiction texts often rely on intertextuality as a literary technique that accounts for revisiting previously studied ideas, characters, concepts, authors, devices, etc. with the view to grounding on the epistemological tradition or challenging it. In our case, science fiction authors may be successful in using the internalised scientific discourse and already existent linguistic patterns from actual technical or scientific manuals. Dick, for example, relies on the terminology of laws, while introducing a new concept. Intertextuality may also refer to the rethinking of the past technologies and their upgrading in this new futuristic society, as would be the case with the revolutionized space programs. For this reason, I would agree with Catana that 'an interdisciplinary approach of literary concepts, such as intertextuality or the creative recontextualization of the past' [31, p. 163] could indeed review the student's existent knowledge, reinforce linguistic competence in the field and stimulate their critical thinking.

The discussion could also dwell on the fact that this is an American author voicing his concerns and, with this in mind, go on to compare the respective Russian or worldly shortcomings. The latter would be even more entertaining if the students happened to be somehow familiar with

the dystopian works by Russian-language authors such as I. Azimov, V. Pelevin, D. Bykov, D. Glukhovsky, to name a few. This short installation of an environmental issue could undoubtedly spice up otherwise emotionally neutral texts about the challenges of pollution, the 'tenor' of which normally transmits no attitudinal semantics. We could also use this short explanation by the 'chickenhead' John as a translation exercise to train the skill of rephrasing and giving definitions for an unknown term in a more 'humane' manner, which is likely to prove useful for the interactions between future engineers, their employers and clients coming from non-technical spheres. This passage succeeds in combining formal and non-formal stylistic means to create the scientifically sounding pretext for a real-life phenomenon in the vein of creative writing techniques. The former are indicative of defamiliarisation mechanisms discussed by Russian Formalists as a distinguishing factor between literary and non-literary creations. Whereas formally we are being transported into an unusual dimension, we learn to see how the line between the unfamiliar and the familiar gets blurry. 'Even genres, like science fiction, initially energised (especially in America) largely by optimistic visions of the possibilities inherent in technological progress, have taken a dystopian turn in recent years,' [32, p. 7] as stated by Booker, hence 'the socially critical nature of dystopian works' and 'the influence on technology on post-utopian culture' [33, p. 69] – the points that could make reading dystopian fiction a rewarding task. It seems to be equally satisfying in terms of arousing a sense of curiosity and intrigue in a student as a reader, providing a source of informative material for a student as an engineer and giving some food for thought and discussion to a student as a human being. Even the very title of the novel "Do Androids dream of Electric Sheep?", apart from its grammatical and lexical density that could still give some space for making informative points ('dream of' vs. 'dream about') could provide a case-study of its oxymoronic inquiry for engaged students.

Discussion and Conclusions

As a conclusion, it should be commented that in this research I hope to have hinted and elaborated on some of the ways that literary pieces or simple mentions of linguistic instances that are likely to emerge in dystopian and science fiction discourse could present a both rich and satisfying authentic material. For example, Hall optimistically observes the following: 'In my current work in China I very much enjoy exploring with students resonances, similarities and differences in languages, cultures and literatures and can vouch at least anecdotally for the value of such an approach for all participants in the classroom' [21, p. 22]. I believe this would ring especially true if we were to at least consider potential outcomes that using this specific type of literature could bring to the classroom even in a rudimentary state. Such texts could go hand in glove with regular teaching materials from course books or creative platforms or serve as a logical continuation of in-class work, become a supplementary entity or stand its own ground as part of reading sessions. The latter would respond to the ever-arising student question 'What would you recommend me to read?' and become a point of departure for group work and fascinating discussions based on 'the reader response', that is, 'the range of experiences and knowledges' readers themselves would be applying to texts [34, p. 6].

Applying the previously mentioned Lazar's model of approaching literature in a language learning classroom, the argument is to be made in favour of its use for the following reasons. First and foremost, the language that is stored in literature as a whole would be compelling for both general and specific courses, for it is embedded with useful grammar and lexis blocks of knowledge. This language-based approach especially makes sense if we were to dive into a more technological language that is inevitably present in dystopian projects that such literature explores to the core. Second, we can make the literature itself descend onto the engineering personality and challenge it with 'real' or imaginary



science, thus even questioning the scientific value of such literature, its ethical substantiation and personal implication. Third, in this case the literary genre we have got a glimpse into would also be channelling a socially important impulse of a reading that enriches one's mind and an interpreting that navigates around the themes that are both relevant and ambivalent enough to be eagerly discussed. In addition, we firmly believe that having learners to study and memorize some particular items or their uses through texts that are not as dense as technical discourse normally is but rather contain localized terminological manifestations and, moreover, create a certain symbolic imagery would only ultimately benefit their apprehension and a long-term vocabulary storage. Alluding to the words of famous language learner and user Vladimir Nabokov, 'I don't think in any language. I think in images. I don't believe that people think in languages' (quoted by Zsuzsa Hetényi, personal communication)⁶. When put together, these points seem to fit into the overall discussion about humanising engineering students experience and rais-

ing their motivation. In some respects, these ideas have already been applied in some of my lessons as a teaching experiment. To put an example, the students were expected to read the introductory paragraph to Dick's novel and, facing an array of unknown words, identify the genre of this work as well as some technological advancements mentioned there such as an electrical mood organ or humanoid robots. The task was aimed at developing the skill of reading for specific information and interpreting the general text postulates. It also fit well into the grammar revision section of the semester and helped refresh the basic patterns related to past tenses and conditional sentences. In addition to this, it indeed helped strike up a discussion about human daily practices, our inertialike states, self-control, self-reliance, etc. All things considered, the theoretical and practical suggestions outlined by the article need to be studied in more detail so that they can gain further practical weight for the informed application in an interactive language classroom with engineering profile students.

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