The amount of literature exploring the phenomenon of Stanisław Lem’s work surpasses the literary legacy of the author of Solaris, which includes not only novels, short stories, and essays, but also articles, reviews of non-existent books, interviews, columns... The creations of the author’s unlimited imagination have fascinated researchers in many scientific disciplines: literary scholars, philosophers, sociologists, astronomers, and futurologists. Linguists had to be included in this group, since Lem, a great dreamer and fantasist, poured his brilliant ideas onto paper and described his invented worlds using not only the existing resources of Polish dictionaries, but also borrowings from foreign languages as well as his own neologisms.
The new worlds had to have a new terminology; nothing could be the same as in real (by the way, the word “real” is also an abbreviation coined by Stanisław Lem, and this synonym for the real world appears already in Return from the Stars written in 1961). Lexicons seemed too poor, so he supplemented them with his own vocabulary, masterfully juggling with cores, prefixes, and suffixes – a linguist’s paradise.

The Internet, a global system enabling users to digitally exchange information and e-books, audiobooks replacing paper books, portable computers and cell phones as one device – all these achievements of modern technology had functioned in Stanisław Lem’s books much earlier than they appeared in reality. The great futurist, however, had not foreseen that language professionals would use his extraordinary linguistic intuition and his ability to give new names to the creations of his phenomenal mind to... teach and learn foreign languages.

Prof. Jolanta Tambor, a linguist from the Institute of Linguistics at the Faculty of Humanities at the University of Silesia, Director of the School of Polish Language and Culture at the University of Silesia, uses Lem’s neosemantication and neologization in language teaching. Prof. Tambor wrote about the language of the author of The Cyberiad in her doctoral dissertation (Język polskiej prozy fantastyczno-naukowej i.e. The Language of Polish Science-Fiction Prose) and many scientific publications. On the basis of the short stories: “How the World Was Saved”; “Trurl’s Machine”; “The First Sally (A), or Trurl’s Electronic Bard”, she developed aids for teaching Polish as a foreign language.

The principle of creating names, presented almost in a nutshell (a description how solaristic terminology is created), woven into the intriguing plot of the novel Solaris, turned out to be an excellent teaching method for exercises on the principles of Polish word formation.

"When creating future worlds, Stanisław Lem first built them in his own imagination, inventing societies of the future," Prof. Jolanta Tambor explains. "He had to create appropriate social and political institutions as well as future technical means. He gave them names, following the principle that the unnamed does not exist. By doing so, he gave more credence to the illusion of the created world. He used virtually all known methods of enriching vocabulary: creating word-forming neologisms, building phrasebses, and borrowing from other languages. Lem was an author and a fantasist who dreamed and gave his dreams names."

What were the sources of his knowledge? After all, he did not study Polish philology, linguistics, grammar, or word formation. For Lem, careful observation was sufficient. He listened to the discussions of linguists and read various types of linguistic advice. Moreover, at the end of the 20th century, language culture was present in every medium. He simply listened and remembered, and a phenomenal linguistic intuition was the tiny but crucial building block.

According to Prof. Jolanta Tambor, Stanisław Lem’s scientific mind could not fail to notice the rapidly growing number of compounds in which one segment is a repetitive element, usually of foreign origin, especially with regard to technology. Since there are astrologists, it seems natural that symmetriads orbiting Solaris had to be studied by symmetriadologists; since there are cosmodromes in reality, transgalactodromes were created in Lem’s world. Using repetitive segments, he let his imagination run wild and equipped new worlds with aeromobiles, televists, a teletrans, or a teleport. Though these names sound familiar, they were created at the beginning of the 1960s and can be found in the novels Solaris (1961) and Invincible (1964), and it is worth remembering that the appearance of Solaris on bookstore shelves coincided with the flight of the first human into space (April 12th, 1961).

Several hundred examples of terms created by Lem allow Prof. Tambor to teach a number of enriching lessons in word formation. Lem was also aware of word formation series and, by flawlessly following the rules, made plausible the existence of lectons, nolarz, nightzebs, nallyrakers, neotremes, and thus the fictitious world
became as real as the computer on our desk. In science fiction, everything is possible; it merely suffices to observe the changing reality, to confront it with your own imagination, and to be willing to share your thoughts.

In Stanisław Lem’s prose, Prof. Jolanta Tambor found another excellent teaching aid. Many lecturers teaching foreigners the Polish language are at a loss at how to explain, especially to English speakers, the grammatical construction of the so-called double negation. They do not understand why negations need to be repeated in Polish. These intricacies are superbly explained by Lem in the short story “How the World Was Saved.” The machine built by Trurl performs actions that begin with the letter “N.” Klapaucius comes to check it and gives orders: “Machine, do Nothing!” When the machine does not perform any actions, an argument arises between the creator and the controller. Klapaucius insists that, in Polish, “doing nothing” and “doing Nothing” (i.e. something) do not mean the same. Lem clearly explains the difference through the mouths of his characters. They fiercely argue about the meaning of the double negation and the single negation, and they almost stop the machine, which understood the command literally and wanted to turn everything into nothing i.e. to eradicate. “After this exercise,” the linguist assures, “I no longer have any problems, and the students do not argue about double negations.”

The linguistic talent of the author of Mortal Engines is not limited only to creating new vocabulary, since it covers also higher i.e. syntactic-semantical and textual levels of language. “Lem had an excellent understanding of the potential of language, the possibility to play verbal games thanks to the use of ambiguity, polysemy, but also syntactic and textual transformations,” the researcher explains. Lem uses numerous synonyms and his language is extremely rich; he draws from literature, scientific journals (due to his deep interest in politics, literary theory, philosophy, biology, cybernetics, astronomy, the progress of technology, medicine, biotechnology), from the media, and resorts to long forgotten texts. The author looked for the forms and genres that suited him most, and in so doing, gave additional authenticity to the lofty style in Tales of Pirx the Pilot, and build a fairytale future, consciously playing with archaic structures in Mortal Engines.

Polish readers were seduced by Lem’s linguistic imagination, and therefore, it is not surprising that his original neologisms, complex grammatical compositions, and archaisms are not an obstacle in the reception of the writer’s works. It could thus seem that his language is hermetic and understandable only to Polish readers, but nothing could be further from the truth. Stanisław Lem is probably the most frequently translated Polish author in the world, both in terms of the number of translations and with regard to the number of languages, of which the writer himself mentioned over forty. How is this possible? Prof. Jolanta Tambor is in contact with many translators from all over the world. Slavs obviously have the least problems, since after all, Slavic languages overwhelmingly feature motivated lexical units with more obvious semantics, which brings them closer to Polish. Authors of English and German translations also find it more convenient to deal with this (neo)terminology, since although new words in these languages are created differently than in Polish and have different suffixes and construction rules, they are still legible and retain Lem’s specificity. Chinese translators face a much more difficult task, as their language has no word formation in our sense, but since they are able to assimilate all technological novelties at the speed of light, they also found a way to deal with Lem’s works. This was proven by Professor Zhao Gang of Beijing Foreign Languages University, who translated Solaris to Chinese.

“A translator must not only convey the plot, but also the mindset which is characteristic for the given language area. This is the reason why Lem requires very good translators, and the popularity of his prose around the world proves that such language specialists exist,” concludes the linguist.

In one interview, Stanisław Lem, talking about his interest in the Polish language, lamented that most people do not really know it in depth. Lem not only knew Polish perfectly but also enriched this language and left his permanent mark in it.