CONLANGS AS A GOAL, CONLANGS AS A MEAN

How to Do Linguistics Inventing Languages

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ABSTRACT • Made popular by highly successful cinematographic and television productions, in recent years conlangs have made their appearance also in formal linguistic pedagogy. Similar and mostly unrelated initiatives have surfaced around the world with the common aim to increase students' interest and motivation in the study of linguistics and enhance their metalinguistic awareness and analytical skills. With those same objectives, from 2019 on the Department of Foreign Languages and Literatures and Modern Cultures at the University of Turin offers an 18 hours workshop in Conlangs and Linguistics. We will present here the premises and the structure of the workshop, as well as what could be considered its first results, showing how such an approach can complement "traditional" introductory courses in linguistics.

KEYWORDS • Conlangs; Motivation; Metalinguistic Competence; Linguistic Pedagogy.

In what follows we will outline the motives and the results of a three-year long experience of introducing conlangs in linguistic pedagogy through a dedicated workshop offered by the Department of Foreign Languages and Literatures and Modern Cultures at the University of Turin. Firstly, we will mark out what we think could be the reasons of the emergence of similar initiatives throughout the 2010s, as well as our own motives to propose such a workshop.[1] The general idea is that, in our view, introducing conlangs as on object of analysis in linguistic pedagogy can help build motivation, while introducing conlanging as a practice can promote active learning. Secondly, we will describe the general structure of our workshop, how we thought of testing its efficacy in teaching linguistics and the results we think we have achieved through it.

1. Conlangs and Linguistic Pedagogy

In recent years, what are nowadays generally called "conlangs", i.e. "constructed languages", and "conlanging", i.e. the invention or creation of constructed languages, have made their appearance in formal linguistic pedagogy in many different universities, especially (but not exclusively!)

[1] The workshop was conceived and held jointly by professors Simone Bettega, Elisa Corino and Roberto Merlo.

in the USA and Canada.[2] Rather than to a shared innovation in academic curricula, the introduction in university syllabi of conlangs as an object of study and of conlanging as a practice seems to be due to the convergence of unrelated initiative of single instructors, eager to experiment in this sense without necessarily knowing that other like-minded colleagues had similar ideas.[3] During the 2010s the interest in the use of conlangs in linguistic pedagogy among professors of linguistics kept spreading and went public, even becoming a subject of inquiry and discussions on academic platforms (Fig. 1):

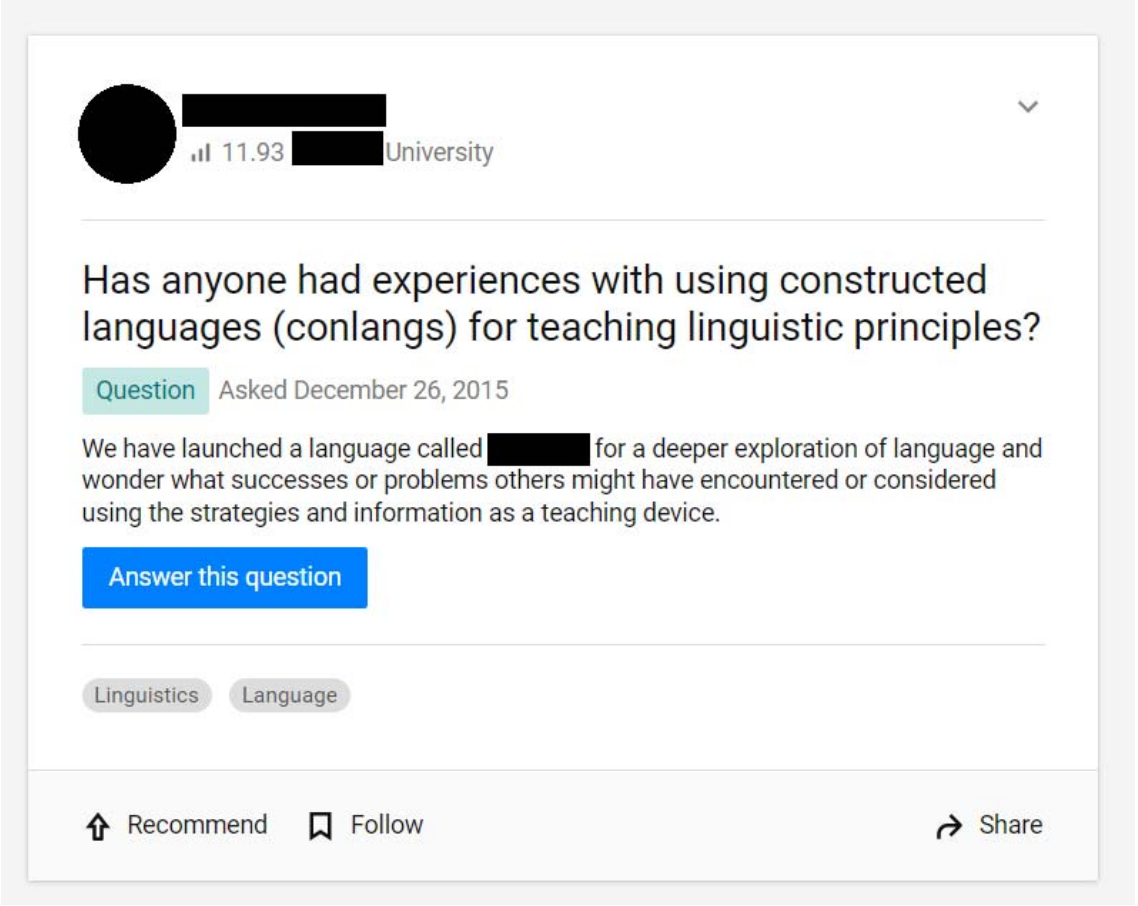


Figure 1. *Post on ResearchGate (December 26, 2015).*

Accordingly, more and more university courses adopting or integrating such an approach were proposed and taught,[4] and their goals also started to move beyond the strict teaching of lin-

[2] A list of over thirty university courses dealing (also) with conlang and conlanging is provided in Sams 2020; the vast majority is from North America.

[3] "While I have been teaching my Invented Languages course for nine years, it wasn't until the past few years that I became more aware of just how many other undergraduate conlang courses were being offered", says J. Sams (2020: 2), who in Spring 2011 offered for the first time a special section of the course *Topics in Linguistics* under the title "Linguistics of Invented Languages".

[4] Among the most recent examples, not included in J. Sams' inventory (Sams 2020), see for instance the *In-*

guistics towards a more interdisciplinary approach.[5] The growing awareness of the existence of such a wide variety of different and mostly unrelated—albeit comparable—academic enterprises involving the introduction of language construction in linguistic pedagogy, as well as the naturally accompanying necessity of a pedagogical/epistemological reflection on the potential and/or actual merit(s) of said enterprises, led to a panel dedicated to the topic of "Teaching Linguistics with Invented Languages" at the 2017 meeting of the Linguistic Society of America (Austin, Texas). From this panel stems the publication in 2020 of the fundamental volume *Language Invention in Linguistic Pedagogy*, edited by J. Punske, N. Sanders and A.V. Fountain, which can be considered a milestone and a turning point in the process of establishing and legitimizing from a scientific perspective the use of conlangs and conlanging in formal linguistic pedagogy.

The introduction of conlangs and conlanging in the academic teaching of linguistics is the result of many widespread and profound societal evolutions and intricately interconnected factors, of which two seem to stand out remarkably: on the one hand, in the last 20 years or so conlangs and conlanging have grown into an established and very visible part of the global cinema and television production industry, gaining the curiosity and the attention of mainstream news outlets and—through them—of the general public; on the other hand, roughly in the same period of time, the academic establishment was pushed like never before to look for opportunities to connect with external audiences and the general public.

The invention of languages is a practice with ancient roots and multiple purposes (philosophical, ideological-political, artistic etc.)[6]. Until the last two decades of so, though, it was part of a rather obscure and marginal sub-culture, made up until the mid-90s by largely isolated individuals, which evolved into a "community" only after the rise of the World Wide Web.[7] From the early 2000s on, the huge success of some entertainment media products in which conlangs figured prominently has sparked an unprecedented interest in conlangs, or rather "artlangs", i.e. languages invented for artistic purposes, generally as a part of broader fictional universes.[8] It is probably because of this role that artlangs are today the most widely known type of conlangs among the general

troduction to Linguistics given in 2021 by Jessica Kantarovich at the University of Chicago, which include "a final project assigned halfway through the quarter, which will involve creating a conlang (a constructed language) in a group and drafting a description of it" (https://home.uchicago.edu/~jkantarovich/Syllabus_IntroLing_Spring2021_v2.pdf). Several reports on different experiences of introducing conlangs in linguistic pedagogy are Gobbo 2013, Sanders 2016, Anderson et al. 2017, Pearson 2017, Gobbo 2018, Punske, Sanders, Fountain 2020 (a veritable treasure in this sense) and, more recently, Köylü 2021.

[5] For instance, by reflecting on the possible analogies between speakers of conlangs and endangered languages and between conlanging and linguistic planning for endangered languages, like Romaine 2011 or Schreyer 2011, or by expanding the discussion towards anthropology, showing how conlangs can be used to teach the concepts of linguistic and cultural relativity and how language invention can reveal the inherent connections between language, biology, physics, and culture, like Schreyer et al. 2013 and, more recently, Sanders, Schreyer 2020.

[6] For a thorough examination of the reasons and motivations behind the invention of languages, see Adams 2011b.

[7] For an insider's insight, see the *Introduction* to Peterson 2015.

[8] This specific subtype of conlang/artlang is sometimes referred to as "ficlang", i.e. fictional languages. Analysing the *in-world* functions of the Old Tongue (from Robert Jordan's *The Wheel of Time* series), Quenya and Klingon and arguing that in their own fictional world such languages function *virtually* as natural languages do in the "real" world, Barnes, Van Heerden (2006) proposed for this kind of fictional languages the term "virtual languages".

public (with the possible exception of a couple of IALs, i.e. International Auxiliary Languages, or "auxlangs", i.e. "auxiliary languages", first and foremost Esperanto).[9]

The contemporary interest in artistic or fictional languages can be traced back at least to the *Lord of the Rings* trilogy (1954-55), which set the bar introducing to the public Tolkien's Elvish languages and was followed by the publication of *The Silmarillion* (1977) and—from the 80s on—of a wide selection of Tolkien's immense legendarium, including many papers of linguistic interest, and to *Star Trek III: The Search for Spock* (1984), in which Klingon—introduced as gibberish in previous instalments of the franchise—made its appearance as a full-fledge language thanks to Marc Okrand's creative and scientific performance. Nonetheless—isolated cases aside[10]—artlangs truly became a part of the entertainment industry only from the early 2000s on, starting with immensely popular cinematic production such as Peter Jackson's *Lord of the Rings* movies (2001-2003) (which showcased for a planetary audience Tolkien's Sindarin and—to a significantly lesser extent—Qenya, in the interpretation of David Salo) or James Cameron's Oscar-winning *Avatar* (2009) (with Paul Frommer's Na'vi)[11]. The visual entertainment industry quickly realized that "there's a fan base out there that wants constructed languages," as linguist and conlanger Matt Pearson argued (Chozick 2011), despite that in such productions the *actual* use of the said languages is actually fairly minimal (Queen 2013: 221).

In order to enhance transmedial storytelling, producers started to enlist the help of professional or formally trained linguists to help create or flesh out invented languages for motion pictures, television shows and computer games,[12] so much that language invention truly became an integral part of contemporary transmedial world building, becoming "a natural element" of fantasy and science fiction narratives (Fimi, Higgins 2017: 26-27) and making its appearance even in more

[9] Unlike artistic or fictional languages, whose appearance in academic syllabi is a relatively recent phenomenon, auxiliary languages have a long-standing tradition of presence in European universities, through Interlinguistic and Esperanto Studies. For instance, at Turin University an optional course in *Interlinguistica ed Esperantologia* was introduced in 1994 at the then Faculty of Literature and Philosophy thanks to the effort and dedication of professor Fabrizio Pennacchietti, at the time full professor (now Emeritus) in Semitic Philology (see Gobbo 2014).

[10] For instance, the Paku language (often referred to as Pakuni) created by UCLA linguist Victoria Fromkin for TV series *Land of the Lost* (1974-1976) or the alien Thh:tmaa language invented for the sci-fi show *Dark Skies* (1996-1997) by Matt Pearson, who then went on to become a professor of linguistics at Reed College, or the Tsolyáni language, developed along several others in the mid-to-late 1940s by the future McGill University and later University of Minnesota professor M.A.R. Barker as a part of the fictional world of Tékumel, the setting of his *Empire of the Petal Throne* tabletop role-playing game, published by TSR in 1975.

[11] One might recall also the underappreciated *Atlantis: The Lost Empire* (2001), featuring the Atlantean language created by the same M. Okrand.

[12] To name just a few: TV shows like *Game of Thrones* (2011-2019) (Dothraki and Valyrian languages, by D.J. Peterson), *Defiance* (2013-2015) (Castithan, Irathient and others, by the same Peterson), *The 100* (2014-2020) (Trigedasleng, by Peterson), *The Expanse* (2015-2022) (Belter Creole, by Nick Farmer), *Beowulf: Return to the Shieldlands* (2016) (Warig and Mere, by David Adger), *Star Trek: Discovery* (2017-), *The City and the City* (2018) (Illitan by Alison Long), *Shadow and Bone* (2021-) (Old Ravkan, Fjerdan and others, by Peterson in coll. with Christian Thalmann), *Foundation* (2021-) (Anacreonian and Thespisian, by Fionnuala Murphy) and GoT prequel *House of the Dragon* (2022-) or *Discovery*'s spin-off *Star Trek: Strange New Worlds* (2022-present); movies such as *John Carter* (2012) (Barsoomian, by P. Frommer), *Thor: The Dark World* (2013) (Shiväisith, the Dark Elves' language, by Peterson), *Bright* (2017) (Övüsi and Bodzvokhan, by Peterson), *Alpha* (2018) (Beama, by Christine Schreyer) and Denis Villeneuve's *Dune* (2021) (Chakobsa, the language of the Fremen, by Peterson); videogames such as *Jade Empire* (2005) (Tho Fan,

"realistic" productions.[13]

"Hollywood Linguistics" (Gobbo 2014) effectively turned language invention from "a secret vice"—as Tolkien famously dubbed his passion for language invention[14]—into a phenomenon of general interest and public curiosity, with a wide coverage in mainstream media, and offered an ideal opening to academic linguists interested in popular culture and/or in search of a connection with the "lay" public, including students moving their first steps in the field of linguistics.

2. "What does a linguist do?"

As such, the last 10 years or so of polycentric introduction of conlangs/artlangs and conlanging in the teaching of linguistics seems to be supported—if not even inspired—by the new-found popularity of cinema and TV fictional languages in global pop culture(s), fostered by the expanding commitment of academia to connect to such culture(s). Due to the popularity of such languages, usually created by trained professionals, the abstract and often abstruse work of the linguist has gained in the eyes of the non-specialist public a sudden tangibility and applicability, a connection with a reality—although fictional and multiple universes or dimensions away—"close to home". The general public's idea of a linguist and of their work is often related to vague notions of "studying" or "working with" "language" or "languages", or, for the more aware, to lexicography, the definition of linguistic norms or even digital applications or translation. Similar vagueness and uncertainty characterize also 1st year students' answers to a short survey about "What does a linguist do?" conducted at the beginning of the introductory course in General Linguistics that every student of Department of Foreign Languages and Literatures and Modern Cultures at the University of Turin must take:

Figure 2. *What does a linguist do?*

by Wolf Wikeley), *The Elder Scrolls: Skyrim* (2011) (Dovahzul, by Emil Pagliarulo), *Far Cry Primal* (2016) (Wenja and Izila, by Andrew Byrd and others) or *Assassin's Creed: Valhalla* (2020) (Isu language, by Antoine Henry).

[13] For instance, the then director of the Centre for African Language Learning in Covent Garden, London, England, Said el-Gheithy, was commissioned in 2004 to create a fictional African language, Ku, for the movie *The Interpreter* (2005).

[14] The expression originates in a talk entitled *A Hobby for the Home*, given in 1931 to a literary society.

The more articulated answer sees the linguist as "a professional in the study of language and linguistic properties" (3), while other describe them as someone who "studies languages and their characteristics" (6) or "a person who studies language and languages" (4), "analyses the language, the grammar" (12), "analyses the language, the grammar and characteristics of various languages" (9), "analyses a text and derives certain observations from it" (1), or—more elaborately—who "examines the language in various aspects and tries to explain content in an exemplary way to people who do not know the language" (5). Some other answers claim that linguists "study languages, in this case the Italian language" (7), or—at the same time very generally and very restrictively—"study foreign languages" (2, 8, 11). The vagueness characterising the notion many people and—more important for us—many students have of a linguist's profession is closely linked to that of the discipline itself. Linguistics is often seen as abstract and distant, not really *pertinent* to real people's life, because it *appears* to be detached from practical and familiar contexts. Hence, most of our students' answers followed the blueprint of their manual, which defines a linguist as a "professional researcher in the field of the human language", possibly adding the idea of "explanation", while a good number—which is somehow to be expected from students of foreign languages—focused solely on the study of "foreign languages".

In our experience of teaching different "second-level" linguistics discipline (Translation: Theories and Practices, Language Teaching and Learning, Romanian Language and Linguistics, Arabic Language and Linguistics) from a wide variety of perspectives (historical linguistics, dialectology, language teaching etc.), we have often come across two things: a feeling of "unrelatability" to linguistics on part of our students, and the fact that, their long acquaintance with standard grammar, their command of basic linguistics notions and practices is more often than not up to standards. There would certainly be much to discuss about the fact that human sciences in general are increasingly valued only by their degree of utilitarian "applicability" to everyday life. But there is also something to be said about how linguistics in particular is often taught in schools and in universities.

One of one hand, one of the main problems of introducing university students to the scientific study of natural languages is the negative legacy brought along by high school programmes. In both the native and the foreign language classroom, "grammar" is frequently presented either as a set of rules to be applied in order to solve exercises or as a ballast to be discard in favour of a communicative approach to language learning. It is not surprising that 1st year university students often look for "practicality" in linguistics (the linguist studies "foreign languages" or "the grammar" in order to teach how to properly *use* a language), or, on the opposite, cannot grasp the practical and everyday fallouts of linguistics and consider it a relic of the past or a predominantly speculative discipline, aiming at the acquisition of knowledge rather than the development of skills.

On the other hand, in a university introductory course in Linguistics students typically have to assimilate the basics of the theoretical and practical understanding of the discipline as well as the specialized language needed to express it. Due to the complexity of the matter and the limited time, in most cases they are trained to recognize linguistic patterns and phenomena according to a set of notions, definitions and examples and to describe them using the proper disciplinary terminology. As a result, students of introductory linguistics tend to acquire a set of theories, princi-

Later revised and given a new title by Tolkien himself, *A secret vice* was published posthumously in the essays collection *The Monsters and the Critics* (Tolkien 1983: 198-223; an extended critical edition is found in Tolkien 2018).

ples, facts and examples, i.e. a knowledge, without developing a corresponding set of competences to be applied in performing tasks or problem solving beyond the textbook examples, i.e. skills. They are able to define a given linguistic phenomenon or structure—for instance allophony, non-concatenative morphology or ergativity—and to give textbook examples of it, but they struggle to identify uncharted instances or to invent abstract exemplification of the same phenomenon or structure. In a sense, it is like they can understand a language pretty well when listening and reading, but they are not able to speak it nor write in it.

All of this boil down to two major issues of linguistic pedagogy: *lack of motivation* and *passive learning*. Students fail to be interested in linguistics because they have a distort notion of what linguistics is or does and of what it can be or do, and because they tend to acquire knowledge and understanding in a passive manner, without being sufficiently trained to apply such knowledge and understanding actively. Encouraged by similar initiatives we saw emerging around us, and united by both a professional interest in linguistics and a passion for fantasy/sci-fi fiction and fictional languages, we thought of trying to address those concerns by introducing artlangs and "artlanging" in the linguistics classroom.

A good way to *create motivation* is to connect linguistic principles and practices to the learner's own experience, introducing personal emotional factors. Today's students are more familiar with the existence of Aragorn's, Daenerys', or Mr. Worf's fictional languages than that of a Tagalog, Hixkaryana or Xhosa speaker (even if this might no longer be true after the 2018 *Black Panther* movie!). Bringing into linguistic pedagogy something many students are interested in, or at least curious about, such as fictional languages showcased in books, movies or TV series, means eliciting the use of personal, social and/or methodological knowledge, skills and abilities. The application of techniques and good practices that have long been used in linguistic pedagogy to a linguistic object like Sindarin, Dothraki or Klingon can help create motivation by engaging students' competences that are more immediately connected to their intellectual, emotional and cultural repertoire. As such, conlangs, and most of all artlangs embedded in engaging fictional worlds, could be a great starting point o, as Goodall (2020: 70) puts it, they can be "the hook that brings students into linguistics […]".

If the introduction of conlangs in the syllabus can help build motivation, conlanging itself is the real pedagogic tool that can *activate learning* by eliciting high cognitive processes through inductive procedures of production of linguistic structures. For students, working together to invent a language using the tools that linguistic analysis puts at their disposal is a stimulating endeavour that contributes to cement and interiorize the knowledge of how natural languages function and evolve. As Sanders (2016: e203) noted, a well-constructed invented language is not only a display of artistic creativity, but also a "demonstration of understanding" of how language(s) work(s): by designing their own fictional languages (or parts of it), students learn about the design of language itself.

In such a perspective, in linguistic pedagogy conlangs can be seen both as a means and as a goal. On the one hand, the analysis of existing conlangs is the "hook" that capture the students' attention and help to cognitively engage them through techniques and good practices that have long been used in language and linguistics teaching—such as task-based learning, problem-based learning, collaborative learning etc.—and are more directly connected to one's own intellectual and emotional sphere. On the other hand, the construction of a brand new, personal conlang is a mindful creative process that activates higher order thinking skills (HOTS) and stimulates long-term acquisition through cognitive engagement and problem solving.

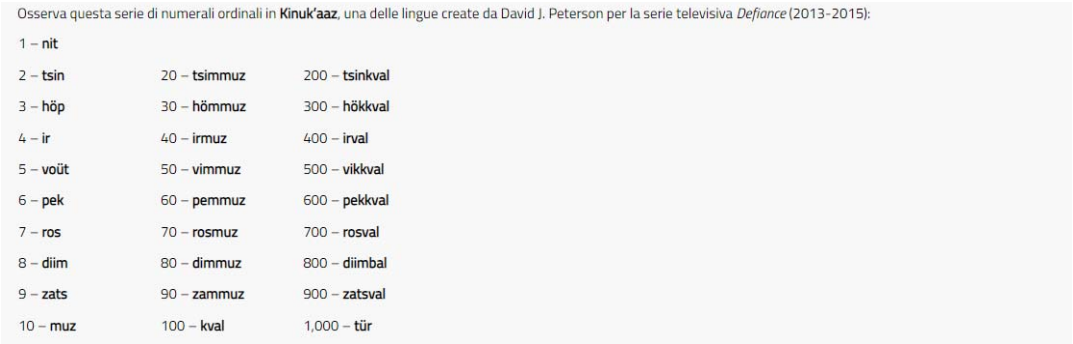
The course *Conlangs e linguistica. Descrivere, analizzare, inventare lingue per universi finzionali* (Conlangs & Linguistics: Describing, Analysing, Inventing Languages for Fictional Universes) started in 2019 as an 18 hours workshop aimed at both BA and AM students of foreign

languages. The only requirement is to have completed at least one linguistics course (General linguistics, Italian linguistics, or both). Our goal was to encourage motivation and engagement in the study of linguistics, as well as to help develop critical thinking skills and a deeper understanding of how language(s) work(s) in a low-stakes environment, where students can experiment with linguistics in an enjoyable way and develop their skills in a supportive and non-threatening setting.

3. The entry point

In principle, the presence of both BA and AM students could result in a multi-level class, where some students have a good enough grasp of the discipline and its methods, while others may struggle with them. Therefore, at the beginning of each course we gave our participants a short entry test designed to evaluate their skills in terms of linguistic analysis at the different levels around which the description—and therefore the invention—of a language can be carried out. The test was meant to assess competences and metalinguistic skills. The full description of the test is beyond the scope of this contribution, but a brief illustration of the type of tasks we ask our students to perform is in order. For the most part, we offer them a linguistic microcorpus on which to carry out various analytical operations. For instance, starting from the following series of numerals:

(1)

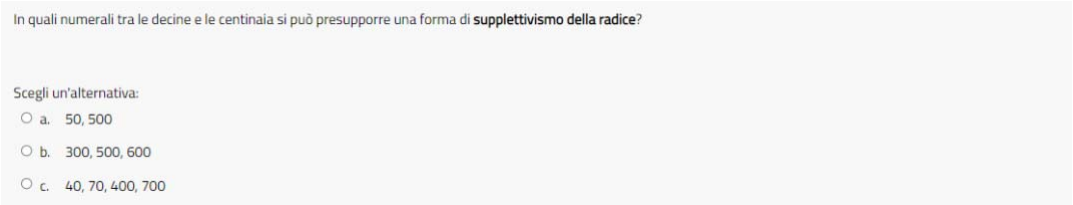

Osserva questa serie di numerali ordinali in **Kinuk'aaz**, una delle lingue create da David J. Peterson per la serie televisiva *Defiance* (2013-2015):

1 – **nit**		
2 – **tsin**	20 – **tsimmuz**	200 – **tsinkval**
3 – **höp**	30 – **hömmuz**	300 – **hökkval**
4 – **ir**	40 – **irmuz**	400 – **irval**
5 – **voüt**	50 – **vimmuz**	500 – **vikkval**
6 – **pek**	60 – **pemmuz**	600 – **pekkval**
7 – **ros**	70 – **rosmuz**	700 – **rosval**
8 – **diim**	80 – **dimmuz**	800 – **diimbal**
9 – **zats**	90 – **zammuz**	900 – **zatsval**
10 – **muz**	100 – **kval**	1,000 – **tür**

Observe this series of ordinal numbers in ***Kinuk'aaz****, one of the conlangs invented by David J. Peterson for the TV show* Defiance *(2013-2015): // […]*[15]

we ask a question designed to test the know-how of morphological segmentation, the understanding of both the terms and the concepts of 'suppletion' and 'root', as well as the ability to apply such understanding to the task of identifying the presence of suppletive forms in the given set of data:

(2)


In quali numerali tra le decine e le centinaia si può presupporre una forma di **supplettivismo della radice**?

Scegli un'alternativa:

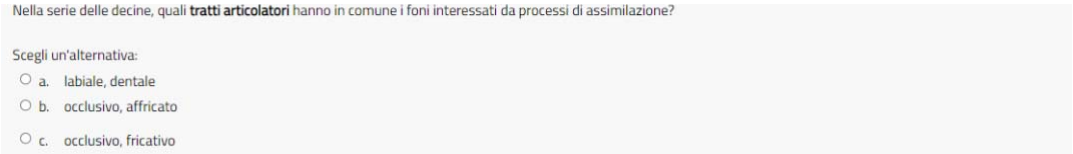
- a. 50, 500
- b. 300, 500, 600
- c. 40, 70, 400, 700

In which ten(s) and/or hundred(s) can we assume a form of ***root suppletion****? // Choose an alternative: // […]*

[15] The linguistic material was taken from Peterson's own post about *Kinuk'aaz Numbers* on *Imeimei*: https://dedalvs.tumblr.com/post/123744096138/kinukaaz-numbers (accessed November 2022).

The same microcorpus of numerals is used to assess the knowledge of articulatory features and of phonological processes, like assimilation:

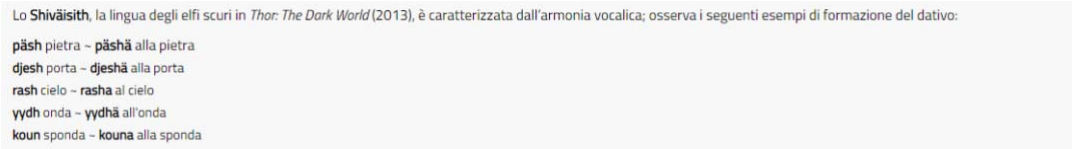
(3)



In the ten series, what ***articulatory features*** *do the phones affected by assimilation processes have in common? // Choose an alternative: //* a. *labial, dental //* b. *occlusive, affricate //* c. *occlusive, fricative*

Having as a starting point another small set of examples (extracted from Peterson 2015):

(4)

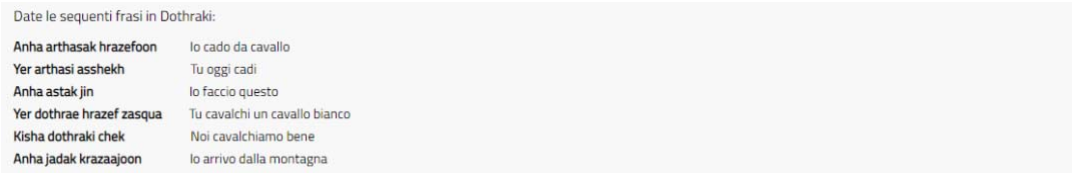


Shiväisith, *the language of the Dark Elves in* Thor: The Dark World *(2013), is characterized by vowel harmony; look at the following examples of dative formation: //* **päsh** *stone ~* **päshä** *to the stone //* **djesh** *brings ~* **djeshä** *to the door //* **rash** *sky ~* **rasha** *to the sky //* **yydh** *wave ~* **yydhä** *to the wave //* **koun** *shore ~* **kouna** *at the shore*

we test basic knowledge and skills related to the interface between phonology and morphology (morphological segmentation, vowel harmony), asking, for instance, to produce the dative forms of *jöh* 'knife' and *jov* 'woman'.

Using as a reference point the following data (based on Peterson 2014):

(5)



Given the following sentences in Dothraki: // **Anha arthasak hrazefoon** *I fall off my horse //* **Yer arthasi asshekh** *You fall today //* **Anha astak jin** *I do this //* **Yer dothrae hrazef zasqua** *You ride a white horse //* **Kisha dothraki chek** *We ride well //* **Anha jadak krazaajoon** *I come from the mountain*

we ask "How do you say in Dothraki *Today I ride*?", "Which morpheme(s) indicate(s) motion from a place?" and "What is/are the first person singular morpheme(s)?" and other similar questions designed to explore out prospective conlangers' level of knowledge and skills in morphosyntactic analysis.

Over the three years of the workshop the test has been taken by 69 students, and the results are not encouraging. The results of the entry test showed that there isn't any significant difference between BA and MA students, as both categories' performances were, generally speaking, suboptimal. Overall, both the mean and the median located around 4 points out of ten (Fig. 2):

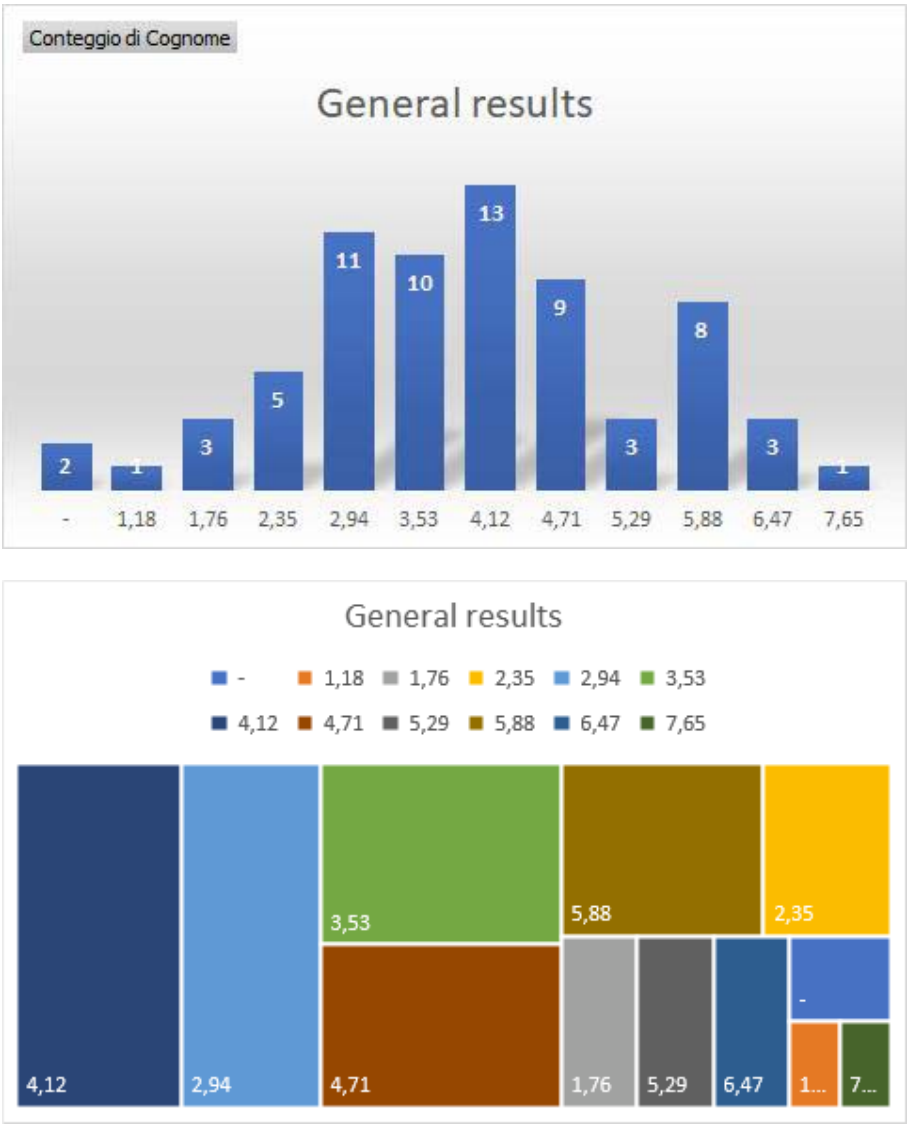


Figure 3. *Workshop entry test – overall results*.

The most problematic questions (D.12-15 in Fig. 4, below) were those where, to answer correctly, students should have been able to observe the existence and nature of patterns and to draw from them certain inferences about the morphosyntactic properties of the language. In D.12-13, for instance, students were given a list of Sindarin singular nouns along with their ablaut-based plural and asked to infer the rule of plural formation, whereas in D.14-15 students had to scan the examples from Dothraki in (5). Such exercises, which require to peruse a set of related examples, make the problem-solving task more complex and require a cognitive algorithm made of different steps: deconstruction first, then identification followed by categorization, and finally reconstruction.

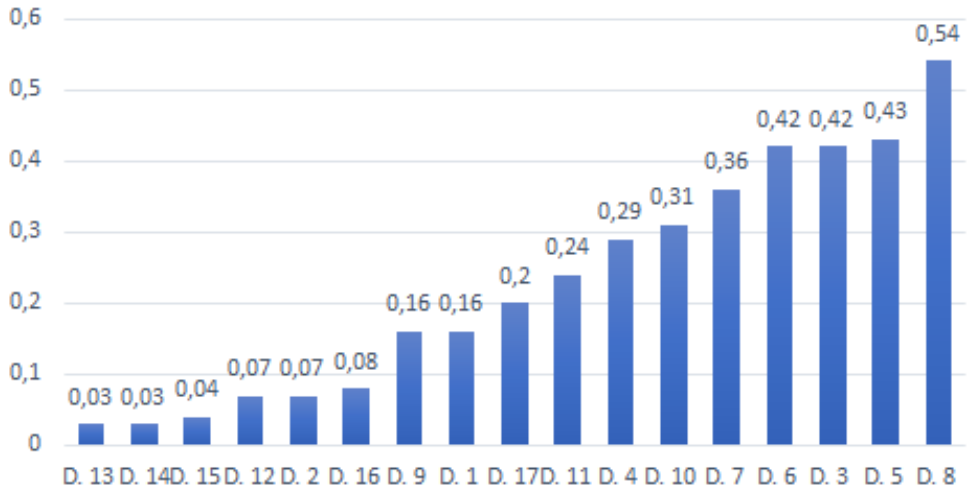


Figure 4. *Workshop entry test – detailed results.*

On the contrary, the most successful answers proved to be D. 5,6, and 8, where students had to deal with single words and to focus on one level of analysis at a time, e.g. to produce the dative form of a noun (see 4 above), or where the answer required the recognition of an item based on theoretical knowledge, e.g. in order to identify the superordinate term (hypernym) within a series.

As a consequence of the initial evaluation results, which has not changed significantly from one year to another, we have organized our workshop in four thematic modules, corresponding to the macroscopic layers of linguistic analysis. We start with phonetics, phonology and phonemic inventories, add some notions of general lexicology (to provide a ground for vocabulary creation), and continue with morphology and morphosyntax—which are closely intertwined with language typology—and finally introduce some sociolinguistic elements, to provide an insight into the use of language and the possible creation of linguistic varieties (social, regional etc.). The 18 hours workshop consist of six 3 hours sessions, each one divided in two parts: an introductory interactive lecture, in which the instructor(s) brushes up the fundamentals of a given topic and then delve along with the students, divided in groups, into the discussion of an example-based set of linguistic structures and phenomena related to the topic at hand, in both conlangs and natural languages; and a hands-on workshop, where each group is asked to carry out creative tasks germane to the content of the first part, with the final goal of building up a grammatical sketch of their own fictional language: e.g. to establish phonotactic constraints, allophonic variation and syllable formation rules; to fill out a list of basic vocabulary;[16] to flesh out morphosyntactic structures;[17] to invent or translate short sentences; and so on. The ongoing linguistic creation process and its results are commented and discussed among students and with the instructor(s). The results of the various

[16] As a task, we ask our participants to fill the Leipzig-Jakarta list (see Haspelmath, Tadmor 2009 and Tadmor, Haspelmath, Taylor 2010) of basic vocabulary creating words in accordance with their established phonological inventories, phonotactic constraints, syllabic structure etc.

[17] For this part we used different sources, amongst them selected chapters from WALS – World Atlas of Language Structures (https://wals.info/) and examples from its conlang counterpart CALS – Conlang Atlas of Language Structures (https://cals.info/).

tasks, revised, organized and rounded out with extralinguistic data about the fictional speech community, its history etc., is an outline of the original conlang created by the students themselves. As they allow some interesting considerations around linguistic formation and biases, we will discuss some aspects of such outlines below.

4. The exit point

At the end of the workshop we give our participants a second test. The structure and rationale are the same as the entry test, and the questions are similarly designed to assess the students' understanding of linguistic structures and their ability to deconstruct them and reconstruct their pieces into functional answers. In this case, however, most of the exercises were extracted from a well-known Italian General linguistics textbook (Berruto, Cerruti 2022). As for the entry text, we purposefully avoid asking for definitions, examples and the like, proposing instead tasks of practical linguistic analysis.

The results of the exit examination are a mixed bag. Overall, the final performances are slightly better than the initial ones (mean and median of the exit test are pretty similar to those of the entry test, although a little higher). However, the graph (Fig. 5) shows a different distribution of worse and better results: more average scores appears in the central area, fewer participant scored in the lowest part of the grading scale, and in general with higher results (with one 9, while the top grade in the entry test is 7,65):

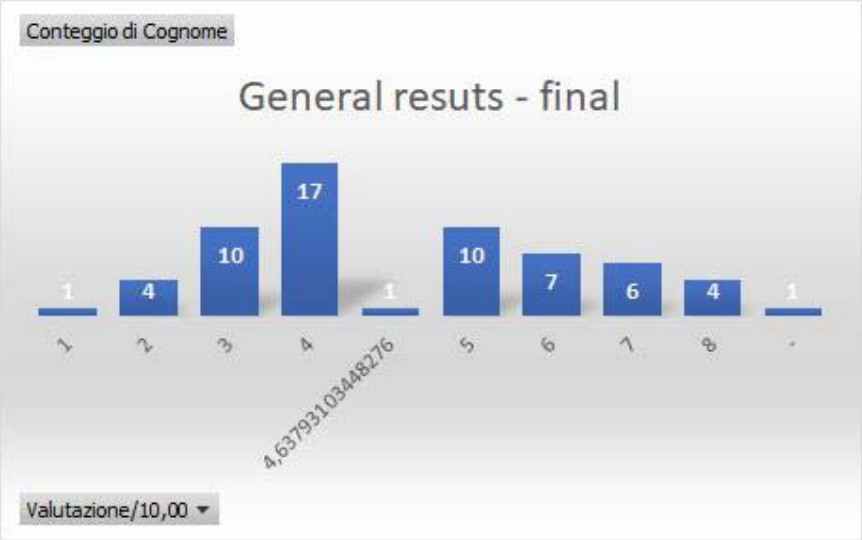


Figure 5. *Workshop final test – overall results.*

Also, in the exit test the questions that are answered correctly more frequently are those where students had to recognize parts of speech or single out pieces of the morphological system of a language (eg. D. 4, 1 in the figure below).

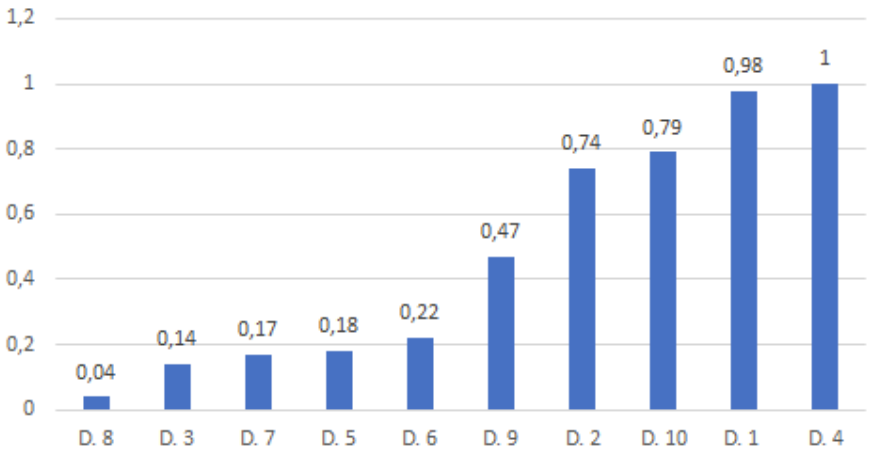


Figure 6. *Workshop final test – detailed results.*

For instance, D.4—see (6) below—has been answered correctly by all the students who took the test (the same microcorpus was also used in D.1 to test the understanding of syntactic typology and constituent order):

(6)

Siano date le seguenti frasi in una lingua immaginaria, con la traduzione in italiano:

1) tan tan zang dumb dumb	i topi spaventano le ragazze
2) tan tan bjen me zang kwa Jana	i topi grassi non hanno spaventato Gianna
3) toj bwang kwa tan	(io) ho visto un topo

COME SI DICE *topo*?

Risposta:_____

Given the following sentences of an imaginary language, with Italian translation: // […] // HOW DO YOU SAY mouse*? // Answer:* _____ (Berruto, Cerruti 2022: 266)

Even in questions which apparently received mostly incorrect answers, as D.8—(7) below—we could observe an improvement in students' competences.

(7)

L'alto valyriano classico è una lingua flessiva; sulla base degli esempi dati:

Ābra vale jemas	la donna guida l'uomo
Ābri valī jorrāelzi	le donne amano gli uomini
Azantys vokti ojehiksa	il cavaliere benedice il prete
Azantyssy voktī majaqis	i cavalieri ammirano i preti
Riña taobe rȳbas	la ragazza sente il ragazzo
Riñi taobī urnesi	le ragazze vedono i ragazzi
Taoba riñe urnes	il ragazzo vede la ragazza
Taobi riñī rȳbis	i ragazzi sentono le ragazze
Vala ābre jorrāelza	l'uomo ama la donna
Vali ābrī jemis	gli uomini guidano le donne
Voktys azanti majaqsa	il prete ammira il cavaliere
Voktyssy azantī ojehikis	i preti benedicono i cavalieri

(1) QUALI SONO I MORFEMI DELLA TERZA PERSONA SINGOLARE E PLURALE? (indicare nell'ordine prima i singolari e poi i plurali, separati da virgola NON seguita da spazio)

High Valyrian is an inflective language; on the basis of the following sentences: // […] // WHICH ARE THE MORPHEMES OF THE 3RD PERSON SINGULAR AND PLURAL? (Write them in order, first singulars then plurals, separated by a comma WTHOUT spacing)

The very low score of this question is somehow misleading, as it is in part due to the automatic assessment system, which failed in considering different orders and redundant – though correct - answers. In fact, most students got it right, correctly identifying the required morphemes (*-as, -sa, -s, -za, -zi, -is, -si*).

In conclusion, we think that an in-depth analysis of the data can show an improvement in our students' linguistic analytical skills: as we can see in Fig. 7, each student performed *generally* better at the end of the course, with some considerable deltas between the first and the second test for some of them.

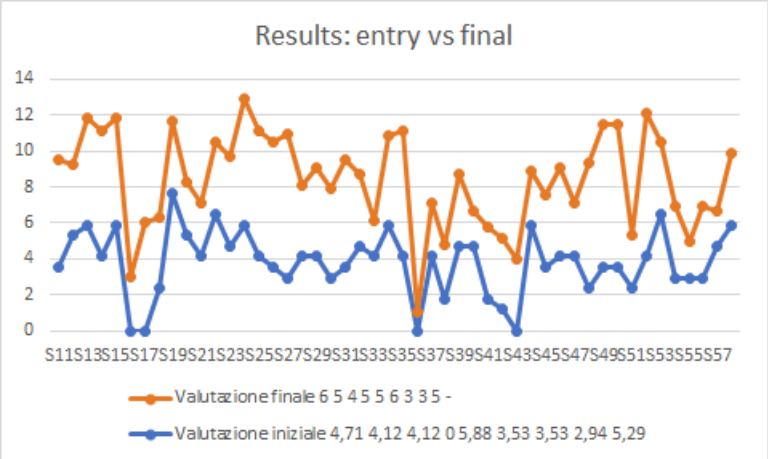


Figure 7 *Entry test vs Final test*

Since both tests were design to assess linguistic knowledge and competences not directly, but rather through practical analytical tasks, we think that the specific kind of improvement described above, such as it is, can be attributed to the active, project-based activities carried out during the workshop. Although it maybe not be as decisive as we might have hoped for, the introduction of artlangs and "artlanging" in linguistic pedagogy can be said to have a measurable positive impact on our participants' understanding of how (natural) languages work and on their ability to actively apply such understanding to linguistic analysis. At any rate, the workshop consists of 18 hours only: with more time at our disposal, we believe that the benefits would be greater and more visible.

5. Samples form students' artlangs

During the workshop, students were assigned into groups and had to create for their artlang a phonological system (complete with some allophonic rules, syllabic constraints and prosodic features, such as stress or tone) and a (sketch of a) morphosyntactic structure, as well as some elements of cultural and historical background. In addition to being interesting as a documentation of disciplinary knowledge and skills, the resulting grammatical outlines were also a compelling evidence of the nature of the linguistic landscape our students live in, of the presence and prominence of different languages in their own education and experience.

Some of the final artlangs presented well-developed ideas, e.g. Gɔhtɛngɛhɔnan, an inflectional, sometimes agglutinative language with an OVS structure, or the language of Bish, an agglutinative language with SVO structure, to quote some examples. Some of the most daring groups went so far as to introduce sociolinguistic elements such as formal vs informal varieties, as in Gɔhtɛngɛhɔn greetings (8), or to work on different ways to express modality, as in the Gunga verb system (9) and the Tunabai verbal morphology (10):

(8) formal → *landam* / informal → *ƙƙpuvan*

(9) certainty: V base form / uncertainty: prefix *mer-* / possibility: prefix *for-* / obligation: prefix *kur-*

(10) causative: V+*axer* / potential: V+*aker*

Overall, a sizable improvement in students' competences is registered in phonology. While in the entry test their skills in term of phonological analysis came out as quite poor, consisting mostly of examples memorized without a real understanding of the *phenomena* they exemplify, their final sketches showed a much better understanding of processes such as metaphony or coarticulation, as can be observed in the phonological description of Chato:

(11) 1. Voiceless [ʧ] become voiced [ʤ] between two vowels: /mʔiˈʧo/ ⇒ [miˈʤo] 'small'
2. Dental [n] followed by front vowels become [nʲ]: /nɛˈʔɔ/ ⇒ [nʲɛˈʔɔ] 'new'
3. Glottal occlusive [ʔ] preceded by occlusives [p, t, k] assimilates completely to the preceding stop, which is therefore doubled: /ˈpʔɪŋ.gɪs/ ⇒ [ˈppɪŋ.gɪs] 'penguin'

As for the morphological level, all the conlangs produced include affixes of various kinds to be added to lexical roots to create verbal systems expressing tense and aspect, as well as noun derivation and composition. Rheibe, for instance, is an agglutinative/affixive language with a VSO structure that changes into SVO when the subject has a complex structure; Rheibe verbs are each composed of three distinct morphemes:

(12)

grammatical morpheme	**lexical morpheme**	**inflectional/lexical morpheme**	
χi- (this prefix indicates the V as PoS)	*-tufaʃi-* ‘see’	*-paʧu* [pasu] ‘old’	**Distant past**
		-fu ‘yesterday’	**“Normal” past**
		-ø	**Present**
		-χaki [χaχi]	**Future**

Despite the positive results and the students’ enthusiastic engagement in the creative endeavour, the recurrence in the conlangs produced of certain features show that adjustments should still be made. In fact, considering for instance the verbal systems, we notice that all of them revolve around a tripartite tense scheme based on the familiar past-present-future model. There were some attempts to encode perfective vs imperfective aspects (mostly in groups that included students of Slavic languages), as in Ilakɔf, a language spoken by the Kofutankif alien population. As in (13), the apparent overlapping between the concepts of tense and aspect and the difficulty to separate their functions is rather common: perfective is an aspect mainly related to the past form and “imperfect” - a tense - is opposed to “perfective” and, while it is true that conlangs can be extremely creative, there is no linguistic basis to aling present perfective and future simple.

(13) (Ilakɔf) Verb conjugations: -ʌ, -at/-ut’/-wt’, -ɛt’/-it’
Perfective forms the past as imperfective, and the future corresponds to the present form of the verb
The past tense is formed in the same way for all conjugations
ɯsʌ ‘to go’ (imperfect) - *tɯsʌ* ‘to go’ (perfective) present imperfective = present; present perfective= future simple

The same remark can be made about the personal pronouns scheme, which does not generally go beyond the students’ comfort zone, most of the time listing a first, second and third person singular and plural, as in Tunabai (14), or adding some collective pronouns at most, or as the dual such as in Gɔhtɛngɛhɔn (15), which also shows prefixation.

(14)

ɾexe ‘I’	*misu* ‘you’	*kaɲo* ‘he/she/it’
ɾexef ‘we’	*misuf* ‘you’	*kaɲof* ‘they’

(15)

xɛsu ‘I’	*ɛsu* ‘you’	*gɛu* ‘he/she/it’
gehɔ ‘we’ (dual)	*dehɔ*‘you’ (dual)	*tɛhɔ* ‘they’ (dual)
gehɔn ‘we’	*dehɔn* ‘you’	*tɛhɔn* ‘they’

The heavy influence of the natural languages students already know or are exposed to surfaces in the nominal morphology as well. No groups attempted to create an isolating or a polysynthetic language, most conlangs being fusional or agglutinative. And even if a case-based system is chosen, in most cases students stick to the familiar accusative, genitive and dative, as well as some locative complements; lesser familiar possibilities like Finnish and Hungarian allative or adessive, and even the (possibly) more familiar Latin ablative or vocative, were not present. All in all, their creativity was limited by their familiarity with crosslinguistic variability: even after being confronted with features not present in the major Romance, Germanic or Slavic languages they know or study, such as the noun classification system of Bantu languages and Irathient, or

the vowel harmony of Turkic and Uralic languages and of Shiväisith, they preferred to remain on familiar ground, operating within a pretty limited linguistic space even when trying to stray from SVO types and inflectional languages by assembling agglutinative structures with uncommon constituent orders.

In fact, the agglutinative morphological type proved to be a very popular choice, possibly because for Italian native speakers familiar to some degree with different Western European languages it represented the closest and most accessible linguistics Otherness, due to languages such as Hungarian or Turkish being often used as examples of agglutinative morphology in introductory courses in linguistics. Agglutination proved to be not so easily manageable, though, as students tended to insert inflectional traits in it: a quick look at the number of constituents of the sentences in Hepok (OVS agglutinative language) proves that the language is indeed more inflectional than agglutinative:

(16)

Hepok	**Translation**
Taka naka tekna Hepok.	Hepoks know technology well.
Artʔekos ɥata hiharo.	I drank some water.
Harorakmenik huharoaŋ.	We won't burn.
Kune taqqaɬ haraaŋ.	You come from far away.
Weɬepiɴ ake pekaaŋ.	All the children are crying.

6. Conclusion

The use of conlangs to boost motivation and enhance students' interest in linguistics is a pedagogical approach which is quickly becoming an established good practice in the academic community. We tried to show what the benefits of this approach have been in our experience, illustrating the initial and final results of a short workshops in Conlangs and Linguistics we offered for the past three years at the Department of Foreign Languages and Literatures and Modern Cultures at the University of Turin. Though impacted by the limited number of hours at our disposal (18 in one semester), the results obtained suggest how effective such an approach could be in terms of increasing linguistic awareness and analytical skills (although the conlangs created by our students still suffer from a visible "imprinting effect" generated by the linguistic landscape they live in and the languages they are more familiar with).

For the future, we believe that broadening the spectrum of the nat- and con-langs discussed in class could prove fruitful, in order to provide our students with a variety of diverse features to pick their inspiration from. In this sense, by opening to spaces, languages and cultures perceived as "other", conlanging also provides an important opportunity to create and stimulate awareness of the richness and diversity of the actual cultural and linguistic heritage of humankind.

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