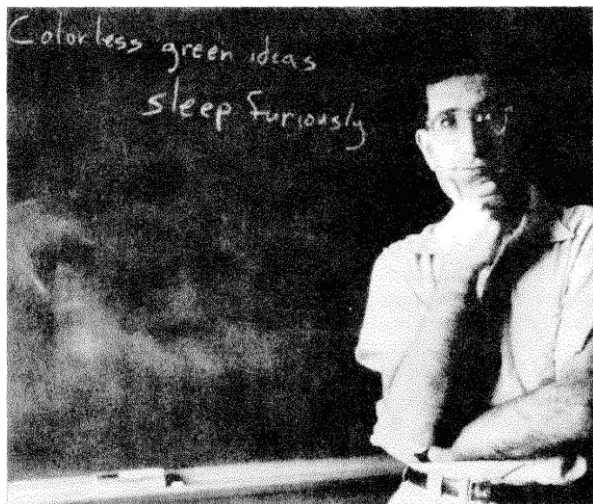Staging Lessons „Universal Grammar with Noam Chomsky"

One-Page Synopsis of the Staging Lessons

The learning object as a riddle: Noam Chomsky 1959 with the exemplary sentence of his theory of syntax

At first, sitting in a semicircle, we're wracking our brains about this thoughtful man: Is he fooling us? We can see that his word sequence on the blackboard is a correct sentence of the (English) language, but it is a constructed nonsense. However, we may wonder about our own language competence if we still recognize a radicalized version of it as a sentence: *Folourless breen nideas cleep muriously.*

Is it so easy to be creative and add new words to a language?! Change the initial consonant so that it still sounds English. Does this also work in German, in French, in Dutch? Let's try it out!

Sure, it works, but what about this playing around? Is it possible to learn something about the functioning of language? Well, a language researcher discovering a new tribe would be confronted with such unknown linguistic structures, as we all were at the beginning of our entering the mother tongue.

The Leading Question: How do we attain Language?

Apparently, Noam Chomsky, with his provocative sentence, asked this question – our leading question, and this three times: How did we, as learning children, enter the language of our environment? How have the languages developed (systematically)? How do we finally get to understand new sentences every day and to utter them ourselves?

Let us move back into the status of babies and listen to a text in a foreign language from which we do not understand a word, but whose sentences we recognize as a (universal) structure.

Let us raed a steecnne lkie tihs for a cgahne and let us divceosr its esteinsal intnrcnoeecotin lkie tihs!

And why can we easily imitate an American pronouncing French sentences or a French speaking German? Obviously, we approach a language from the outside (via listening and imitating), but how did we know, as toddlers, that the verb refers to the subject in each sentence, i.e. to the noun or pronoun in the nominative?

1955: Two years after the end of the Korean War, the US Army sponsored a project for a translation machine at the MIT (Massachusetts Institute of Technology) in Boston. Chomsky, pacifist, and anarchist even then, refused indignantly to participate in this project.

But of course, the basic research problem was of greatest interest to him as a matter: How must a translation machine work that can convert any sentence of any language into a sentence of any (other) language? We need a longer brainstorming of the whole class to help Chomsky.
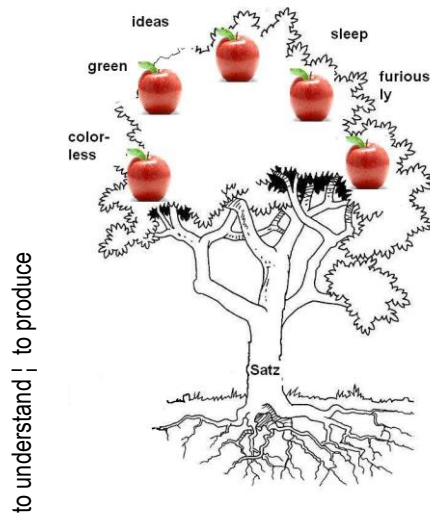
Here an image of nature may help us. What has to work out in a sentence tree until we can reap the fruits of the sentence (i.e. the uttered words)? Each time quite something has to grow and be generated!
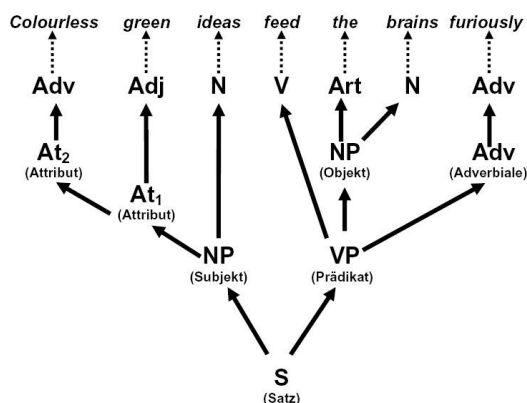
With every sentence we produce (or generate, as Chomsky called it), we also deliver its grammar, which can be represented in a so-called structure tree. And that in every language! Only by "unwinding" this functional interconnection our translation machine keeps going – also if we want to understand a sentence in our mother tongue.

Finally, we find ourselves again on familiar terrain – now we regain the parts of the sentence, the parts of speech, the attributes: Chomsky's exemplary sentence (supplemented by an object) forms 13 branchings on the syntactic level in our head – and still cannot be heard as a sound sequence. But we already see why the language is our most creative tool: We make unlimited use of its limited means.

How can we Teach Grammar at School?

The proposal: In a staging lesson with Noam Chomsky's Generative Transformational Grammar

What is a staging lesson?

Staging lessons are medium length teaching units that are self-contained, multi-dimensional or interdisciplinary and equally open to experience, discoveries and action. Appropriate learning objects for staging lessons are found all over the school subjects, in natural sciences, especially in mathematics, in the first language – mainly in literature, but also in arts, music, sports, philosophy, history, geography, ethics and religion. Staging lessons are composed according to Martin Wagenschein's methodological triad of "Exemplary - Genetic - Dramaturgical".

What is the methodological triad in Lehrkunst didactics?

EXEMPLARY	GENETIC	DRAMATURGICAL
"Getting to know a decisive moment of the human learning history"	**"Discovering a product in its originating process"**	**"Experience the drama of a learning process"**
The learners climb a peak of knowledge under careful guidance, learning about the mountains *and* the climbing, contents and methods.	The learners perceive the object in their own learning as a learning process of the human and of the individual knowledge: from the first astonishment to one's own understanding.	The learners are struggling to make the learning object accessible to themselves, and the object struggles with the learners about its present comprehensibility.
In a carefully chosen topic, the lessons immerse the learners so deeply and broadly that the whole of a concept, a model or a notion becomes visible and learnable.	*Just as important as the results of science are the correspondent methods that have led to these results. These are the ways the pupils themselves learn to discover and to describe.*	*The learning situations and learning tasks form correlating actions which lead to the new concepts, models or notions, and examine them – with a cautious side glance on the theatre.*

How do the staging lessons „Universal Grammar with Noam Chomsky" implement these methods?

EXEMPLARY	GENETIC	DRAMATURGICAL
Grammar deals with the production rules of language. The language is our main cognition and communication tool.	**Producing and understanding speech language means to generate or regenerate sentences out of thoughts according to specific generation rules.**	**Starting with a vexing piece of language, presented to us by the most famous linguist of the 20th century, we discover the ways how we enable ourselves to understand and to speak languages.**
"Lehrkunst" didactics claim to bring topics to the classroom which concern every human being. The interconnection of thinking and language is such a universal topic since we are all given the ability to produce thoughts and to utter them in sound language. By choosing our everyday language as a starting point for research expeditions to our brains, the students are involved in the topic from the start to the finish.	*Noam Chomsky's proposal in the sixties of the last century shifted the focus in grammar from a descriptive and behavioristic approach to a genetic one. The simple question responsible for this turn is: How does language production and understanding work? Chomsky's claim to find a mathematically exact model for the generative process of language production led him to his three stage grammar of a deep structure, a transformation part and a surface structure of language.*	*After a prelude with a competence test that proves us that we master our mother tongue perfectly, we are beginning to explore our intrinsic knowledge of the rules of speech production and comprehension. Each of the 3 acts starts with an extended Socratic dialogue whereby our questions open up a vast field of research. In the finale, we will regain our familiar grammar terms in a new light.*