

Steven L. Hanft

# Fachenglisch für Laborberufe





*Steven L. Hanft*

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## Preface

When compared with English, the German language and its lengthy verbatim deals a blow to English speaking natives, but undeniably, English is the *lingua franca* for global business communication. Airlines and airport control personnel, international trade shows or sporting events (World Cup Football, Olympics, European-wide track and field, etc.), life sciences (medical, pharma, biotech), “Rock ‘n’ Roll” music, NATO, as well as the chemical industries rely on English as the common language.

In fact, *Webster’s Third New International Dictionary*, together with its 1993 Addenda section includes some 470,000 word entries (vocabulary).

*The Oxford English Dictionary, Second Edition*, reports that it includes a similar or comparable number of words.

According to Goethe Institute’s Web site, “The German language is constantly producing new words,” known as *neologisms*. Yet it may take several years for a word to be included in the Duden dictionary and various criteria also have to be fulfilled. It is a well-known fact that philologists are cautious to comment on how many words exist in the German language ... 200 000, 300 000, or even 500 000? It’s hard to say, is what you always hear.

But what is clear is that German, as well as French loan words exist in the English language. Some examples of German loan words to English are the following (further discussed in Section 5.2):

- *Angst*, as in fear
- *Arbeiter*, during Richard M. Nixon’s US Presidency, Henry Kissinger was the *Arbiter* of “shuttle diplomacy” between certain Arab factions and Israel
- *Gesundheit*, as in G-d bless you (when someone sneezes)
- *Gneis*, as in the metamorphic rock, *Gneiss*
- *Kindergarten*, first year of elementary (primary) school
- *Schadenfreude*, someone who finds comfort or delight in someone else’s misfortune or unhappiness
- *Schlepp*, as into *schlepp* baggage around.

**Fachenglische für Laborberufe** (Technical English for Laboratory Personnel) is a practical instructing manual specifically for the German-speaking market and with its goal to support one’s English communication skills for everyday use.

**Target groups (Zielgruppen): Management, Science, and Technical Personnel, Administration Personnel**


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Customer Service	Kundenbetreuung, Kundendienst
Documentation	Dokumentation
Procurement, International Sales, and Marketing	Einkauf Material- und Rohstoffeinkäufer
Production	Produktionsleitung und -assistenten
Quality Departments: Quality Assurance, Quality Control, Quality Person	Qualitätsleiter und Mitarbeiter
Occupational Safety	Arbeitsschutz
R&D (lab managers, lab assistants-/technicians)	F&E, Laborleiter, Laboranten,
Regulatory Affairs, Product Safety	Bereichsverantwortliche für REACH, CPR, Produktsicherheit, Dokumentation, Kundendienst

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**Laboratory personnel from the following industries should consider using this book's practical approach:**


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Chemical industry	Chemikalien Industrien
Life science industries; pharmaceutical, biotechnological, medical	Life-Science-Industrien: Pharma and Biotechnologie, medizinisch personal
Food and nutrition	Lebensmittel and Ernährungsmittel
Cosmetic, personal care, consumer health, household products	Kosmetik-, Körperpflege, Verbraucher Gesundheit, Haushaltsprodukten
Testing laboratories	Prüflabor

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This practical innovative teaching manual will provide you with instruction and guidance for:

- Sector industry terminology
- Practical advice for introducing yourself to English-speaking colleagues such as:
  - “Elevator Speech,” which acts as your introductory “tool”
  - Oral presentations to be made at a trade exhibition (Messe), congress, symposium, and so on.
  - “Small-talk” topics and strategy for use with international colleagues
  - Understanding/Interpreting a seminar or webinar’s advertisement
- Basic legal regulatory affairs terminology, something the author believes is unique for laboratory personnel to delve into
- Special technical vocabulary related to prefixes (Vorsilbe)-/suffixes (Nachsilbe), Synonyms ≠ Antonyms
- Lessons for business communication skills such as:
  - tips to improve writing more effective e-mails
  - ways to improve automatic e-mail responses when away from the laboratory
- Comparing British (Oxford)-English<sup>BrE</sup> and American-English<sup>AmE</sup>
- Selected science topics with appropriate terminology for chemistry, biology, biochemistry, laboratory instrumentation, and so on.

- Laboratory jargon, business expressions, industry abbreviations, and mnemonic devices (Eselsbrücke)
- Spelling, pronunciation, and grammar tips with appropriate quizzes to test your technical English skills.

Authored by an English/German speaker, who is a certified NY State Biology Educator with decades of industry experience as a former specialty chemical sales and marketing manager for a top chemical processor in the New York City metro region; to our knowledge, no book of this kind exists for the German-speaking nations or regions of Europe.

Based on the author's professional experience in developing and implementing a proven curriculum for German-speaking laboratory personnel, this book's topics were selected because of practical work with German-speaking laboratory personnel.

It's been my observation that the method of instructing English is often attempted by non-native speaking educators and without international business experience; thus, the goal here is to stimulate the reader to learn technical English from a more focused perspective. With a little perseverance, you will enjoy and benefit rapidly from this approach, *Der Mut verließ ihn, üben, üben, üben ... Viele Glück/Good luck*

Steven L. Hanft, M.A., President, CONUSBAT ([www.conusbat.com](http://www.conusbat.com))

#### Symbols used in this book

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aka	=	also known as
Ans.:	=	Answer
conc.	=	concentration
ex.	=	example
fyi	=	for your information
i.e.	=	id est (for instance)
Pt.	=	Point, as in freezing or boiling point (pt.)
TM	=	trade mark
vs.	=	versus (gegen)
§	=	law, regulation

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#### Grammar symbols used in this book

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AmE	American-English
BrE	British-English
pl.	plural
s.	singular
n.	noun
v.	verb
adj.	adjective
adv.	adverb

---

**Math symbols used in this book**

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$\sim$	approximately
$\uparrow$	increase or uptake as in Oxygen ( $O_2$ )
$\downarrow$	decrease or poor intake as in Oxygen ( $O_2$ )
$\geq$	greater than or equal to
$\leq$	less than or equal to
$\neq$	unequal

---

## Acknowledgments

**My deep gratitude and thanks goes out to the following people for helping me to write this book.**

Firstly, I wish to thank my wife, Annelie Struessmann, who spent endless hours on what she says is my “hobby,” namely, business communication skills workshops for the German-speaking markets. As a *Muttersprachlerin*, Annelie’s guidance, understanding of the German chemical industry and expertise in EU/Global chemical regulations helped immensely. How she put up with me during the time for writing this book remains a mystery!

**Also, I wish to thank the following family members and mentors for their help, guidance, and support:**

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- Herr Dr. Christopher Habermann for directing me to go “where no one has gone before” in the field of international business communications skills.
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**Last but not least, guidance from two Wiley & Sons, Weinheim, Germany, employees:**

- Ms. Lesley Fenske and Herr Dr. Frank Weinreich at Wiley & Sons Verlag, Weinheim, for their efforts to periodically check in on me, keep this "New Yorker" in line and exchange valid ideas for this book's practical approach.

So, I wish you the reader success in using this practical approach, *üben, üben, üben!*

.... "Alevivo," a New York summer camp chant.

Steven L. Hanft, M.A., President, CONUSBAT, Aachen, Germany



# 1

## English Grammar 101

### 1.1

Parts of Speech: Noun, Pronoun, Adjective, Verb, Adverb, and so on

**When putting your words together to form sentences, would you agree that it is important to know “the parts of speech” used in the sentence or paragraph you are writing?** This means knowing if the word in the sentence is a noun, pronoun, verb, adverb, adjective, gerund, conjunction, preposition, or interjection.

#### QUIZ YOURSELF

What parts of speech are the following words (noun, verb, adjective, etc.)?

1. analyzing \_\_\_\_\_
2. beaker \_\_\_\_\_
3. to measure \_\_\_\_\_
4. red \_\_\_\_\_

**Answers to the above:**

1. Gerund, *analyzing* is an action word, where a verb is transformed into a noun.
2. Noun, a *beaker* is an object.
3. Verb, *measure* is used in its infinitive form.
4. Red describes the color of an object, and therefore is an *adjective*.

#### Parts of Speech – Sector Keywords

Adjective	Adjektiv
Adverb	Adverb
Conjunction	Konjunktion
Gerund	Gerundium
Interjection	Interjektion
Noun	Substantiv
Paragraph	Absatz
Preposition	Präposition
Pronoun	Pronomen
Punctuation marks (part of grammar, yet related to this topic)	Interpunktionszeichen
Sentence	Satz
Verb	Verb

## 1.1.1

**Noun = Subject (Person, Place, Thing)**

- The **cat** sat on the mat.
- **George Washington** was America's first President.

## 1.1.2

**Pronoun = Expresses a Distinction of a Person**

Pronoun as subject	Pronoun as object	Possessive pronoun	Reflexive pronoun
I	Me	Mine	Myself
You	You	Yours	Yourself
He	Him	His	Himself
She	Her	Hers	Herself
It	It	Its	Itself
We	Us	Ours	Ourselves
You	You	Yours	Yourselves
They	Them	Theirs	Themselves

## 1.1.3

**Adjective = Words That Describe or Modify a Noun**

- The *good*, the *bad*, and the *ugly*.
- The idea is *cool*, yet *crazy*!
- She has *five* shirts, and two are *red* and the rest are *green*.

## 1.1.4

**Verb = Action Word**

- She *washed* her automobile.
- *Did* you *bring* your language dictionaries to this workshop?
- To be or to have, shall/should, will/would, can/may, and so on.

Verb infinitives (the verb in its basic form: To be, to love, to have, to perceive, to say, to speak, to ski, to run, and so on.

## 1.1.4.1 The Use of the Two Verbs; Can vs. May

Can (können)	May (dürfen)
<ul style="list-style-type: none"> <li>• <i>Can</i> you work in my lab today? (ability)</li> <li>• <i>Can</i> you do me a favor? (could)</li> </ul>	<ul style="list-style-type: none"> <li>• You too <i>may</i> borrow my HPLC. (permission)</li> <li>• Due to the late scheduling of the symposium, I <i>may</i> arrive late. (possibility)</li> <li>• Reminder. ... May, the month is a noun! (months are capitalized!)</li> </ul>



**Mr. H's Special Tips**

- 1) Many adverbs in English language end with the suffix, -ly, i.e., similarly, honestly, currently, justifiably, brilliantly
- 2) Consider the fact that in German language many adverbs end with the Nachsilbe, -lich, i.e., ehrlich
- 3) Some adverbs of frequency; always, often, sometimes, daily, weekly, monthly, again.

**1.1.5.1 Good (adj.) vs. Well (adv.)**

Two special words, which are easily confused

**Incorrect usage**

I did *good* on the test.  
She played the game *good*.

**Correct usage**

I did *well* on the test.  
She played the game *well*.

**Mr. H's Grammar Tip**

- Use *good* when describing something or someone.
- Use *well* when describing how something is done or how someone does something.

**Usage of Good versus Well – exceptions**

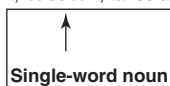
- 1) “Well” may be used when describing if something is proper, healthy, or suitable. As in, “I am well (healthy) today.” However, an exception to this is the following: How are you feeling? I feel good. (think of James Brown’s soul song, “I Feel Good”)
- 2) Another way *well* may be used is when starting a sentence such as, “Well, that explains everything.” In this case, well means “Of course” or “Yes.”

**1.1.6**

**Gerund = Using -ing, an Action Word, a Verb Becomes a Noun**

*Swimming* and *reading* are both fun!

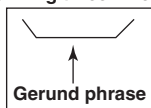
My favorite sport, **baseball**, takes a great deal of effort.



My favorite sport, **running**, takes a great deal of effort.



My favorite sport, **running three miles**, takes a great deal of effort.



## 1.1.7

**Prepositions Indicate a Relation Between Things**

Common prepositions used: of, in, with, on, about, beneath, against, beside, over, during, through<sup>BrE</sup> versus thru<sup>AmE</sup>.

- The weather *in* May in Chicago is generally quite pleasant.
- *On* Tuesday, she was declared the winner of the election.
- The biochemistry book was taken away *from* the student.

**Mr. H's Grammar Tip**

Two prepositions which have homonyms (words which sound the same, but are spelled differently and have other meanings) are the following:

- *to* vs. *too* (also) vs. *two* (2)
- *for* vs. *four* (4).

1.1.7.1 Between (zwischen) vs. Among (unter); **two confusing prepositions**

- 1) **between** (used with either two people or things)
  - a. *Between* you and me, I think we can solve the problem easily!
  - b. The Pyrenees mountain chain lies *between* Spain and France.
- 2) **Among, amongst** (used with three or more people or things).
  - a. *Among* the three of us, I am sure we can resolve the issue between them.
  - b. Living in the rain forest *amongst* other wild animals, gorillas continue to endure.

## 1.1.8

**Conjunctions Connect Two Words, Phrases, or Clauses**

- **And:** presents non-contrasting item(s) or idea(s); "They gamble, *and* they smoke."
- **But:** presents a contrast or exception; "They gamble, *but* they don't smoke."
- **Nor (neither):** presents a non-contrasting negative idea; "They don't gamble, *nor* do they smoke."
- **Or:** presents an alternative item or idea; "Every day they gamble, *or* they smoke."
- **Yet:** presents a contrast or exception; "They gamble, *yet* they don't smoke."
- **So:** presents a consequence; "He gambled well last night, *so* he smoked a cigar to celebrate."
- **For:** presents a reason; "He is gambling with his health, *for* he has been smoking far too long in his life." (though "for" is more commonly used as a preposition).

## 1.1.9

**Interjections: Words of Exclamation, Interjections or Expressions of an Emotion or Sentiment****Some examples of *interjections*:**

- Cheers! Congratulations! Hooray!
- Oh my! Oh dear! Oh my God!
- Uh? Ha! Hey, that's mine!
- Excuse me! Sorry! No thank you!

## 1.2

**Practical Usage of Adjectives and Their Comparative and Superlative Forms**

## 1.2.1

***Citius, Altius, Fortius!* (Faster, Higher, Stronger!)**

Such is the motto of the modern day Olympics, and a good way to look at this chapter's topic, Comparative and superlative adjectives. In German language, one is familiar with these examples of comparatives and superlatives:

- 1) *gut, besser, am besten.*
- 2) *hoch, höher, am höchsten.*
- 3) *kalt, kälter, am kältesten.*

In English grammar, the comparative and superlative of an adjective or adverb is the greatest form it can have, which indicates that something has some feature to a greater degree than anything it is being compared to in a given context.

**Example of using a superlative:** Adam is 45, Bess is 35, and Chris is 25; thus, Adam is the *oldest* of the three.

Naturally, the goal of this book is to help apply one's technical English with practical situations that may arise in the laboratory and beyond. Thus, some examples of comparatives and superlatives expressed in a fictional laboratory situation or setting might be:

- The substance in the graduated cylinder is *colder* than the liquid in the beaker.
- Of all the other potential ingredients used in the formula, this sugar is the *sweetest* in taste, and *whitest* in color.
- A six-carbon chain (hexane) is *longer* than the five-carbon chain (pentane).
- The precipitate from the reaction is the *least* amount produced from the three pilot runs performed today!

**1.2.1.1 One-Syllable Adjectives**

Form the comparative and superlative forms of a one-syllable adjective by adding -er for the comparative form and -est for the superlative.