

## On an open issue of programming language phonetics

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### Abstract

For decades or more, a vexing question has plagued vocally-inclined mathematicians wishing to communicate in accepted variants of the English language: how properly to pronounce the word “tuple”. The issue has recently taken on a new urgency with the introduction into Eiffel of a widely used notion of *TUPLE* type. Yet progress towards a solution has been painfully slow. We propose a novel approach that we hope will answer the question for generations to come.

### 1 THE PROBLEM

When considering the wealth of literature, conferences and curricula devoted to matters of programming language syntax and semantics, one cannot fail to be struck by the paucity of quality material available on programming language *phonetics*. The consequences on the state of the software industry are there for everyone to contemplate. How should software engineers be expected to convey the correct meaning of a program to a *computer* if they cannot even read it aloud to a fellow *human* in an unambiguously understandable form? Imagine a C programmer shouting, across the cubicle lane, a typical informative text such as “Ampersand Star Star Bracket Curly Curly Plus Plus”; what if the listener was trained as a logician, to whom “Curly” might sound as “Curry”; or as a quantum physicist, to whom a Bracket is a very special kind of operator? Or as an astronomer? In the absence of reliable statistics — another telltale sign of the dismal state of research in this neglected discipline — one can only speculate how many software failures follow from such cases of programming language mispronunciation.

Nowhere is the situation more damaging than for *tuples*, an important programming language concept now widely used in Eiffel, and borrowed from mathematics in both concepts and terminology. Experts disagree, sometimes acrimoniously, on the proper rendering of the “u”: as in *Bunny*, or as in *Dude*? Both forms, indeed, are commonly heard from seasoned tuple practitioners, their distribution straddling the usual linguistic divisions such as British vs. American.

The present work proposes an original, highly poetic solution to this critical issue which we hope will both address the practical concern of industry and spur a fresh growth of innovative research in programming language phonetics.

## 2 THE ANSWER

### Pronounced differences:

#### Story of a romance, from model to muddle

She pronounced “a Tupple”, he said always “Toople”,  
But both knew that in life one *has* to be supple.  
Before long they huddled while browsing Google or watching Ted Koppel,  
And all thought there wasn’t more perfect a couple.

He was from just Seattle, her folks straight from the Shtetl,  
Yet their love — so it seemed — could suffer not even a ripple,  
For he kept to the rule: be nimble, don’t ogle her nipple,  
And don’t ever discuss the phonemes of “Tuple”.

Each morning they parted for the city bustle,  
He walking the poodle, she coding in Eiffel at Apple;  
Alas! Nights at home saw the fights redouble  
When she brought up tupples and he cried “It’s *Toooooople!*”.

From splits most subtle, a marriage can topple:  
First rabble, then rubble, theirs soon wasn’t worth a ruble.  
She stuck hard to Tupple, he pushed still for Toople;  
Two tickets to Reno corrected the trouble.

## ACKNOWLEDGMENTS

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## REFERENCES

- [Meyer 03] Bertrand Meyer: *Men Are From Tooples, Women are from Tupples: Towards a Poetic Ontology of the Politics of Gender in Object-Oriented Phonetics*, in *TOOPLE/TUPLE* (Tacky Object-Oriented Poetry from Lithuania, Estonia, Tampere, Uppsala, Petersburg, Poland, Latvia Etcetera), Baltic Literary Object-Oriented Proceedings, Edited and Revised (BLOOPER), Riga, scheduled to appear April 1st, 2003.

### About the author



**Bertrand Meyer** is a consultant specializing in pronunciation issues for object-oriented concepts. Rates available upon request (specify language).