

PROGRAMMING LINGUISTIC RELATIVITY

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In Case You Wonder...

It is called
TAKAHASHI
METHOD

高桥流简报法

What is PROGRAMMING LINGUISTIC RELATIVITY?

What is ~~PROGRAMMING~~ LINGUISTIC RELATIVITY?

What is **LINGUISTIC** **RELATIVITY /** **DETERMINISM?**

The Language You Speak Influences / Determines How You Think

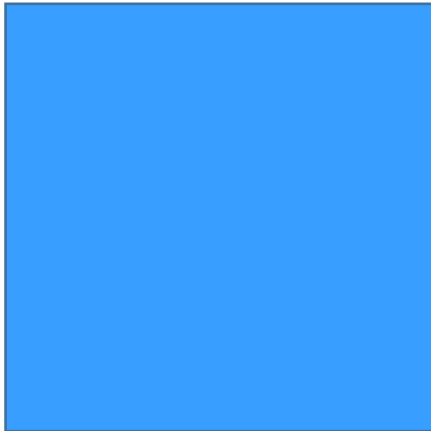
LINGUISTIC DETERMINISM IS

LINGUISTIC RELATIVITY IS EVERYWHERE

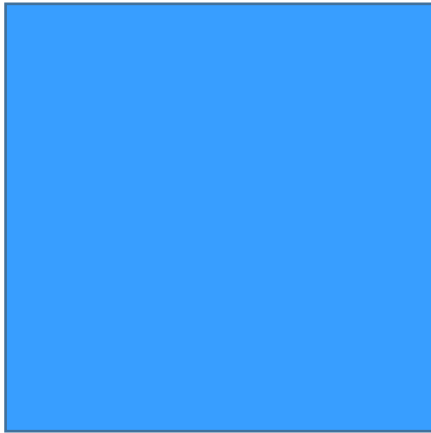
e.g.



What are the names of the colors?



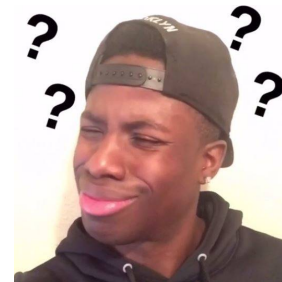
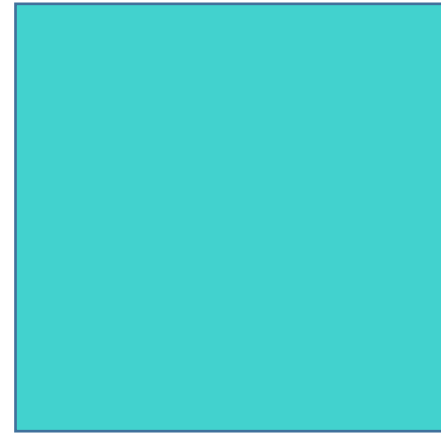
Chinese Speaker:



蓝色



蓝色



MY WIFE CALLS IT TIFFANY BLUE

(But that's irrelevant...)

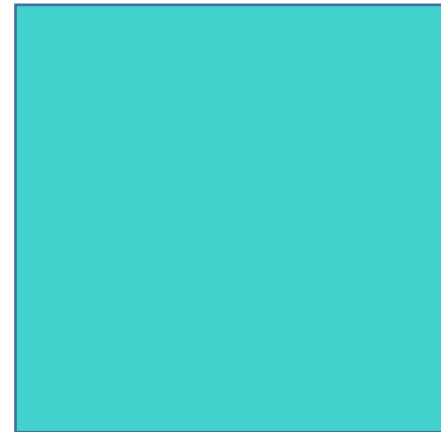
English Speaker:



Blue

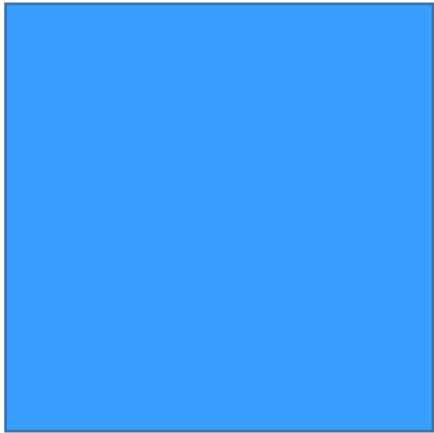


Blue



Turquoise?

Russian Speaker:



Голубой



синий



бирюзовый

CONSEQUENCE:

**RUSSIAN SPEAKERS HAVE
BETTER ABILITY ON
COLOR DISCRIMINATION**

TL;DR
LANGUAGE YOU USE
LIMITS **HOW YOU CAN**
THINK AND WHAT YOU
CAN DO

Not necessarily
A BAD THING

**A Tribe whose language
do not have the concept
of LEFT or RIGHT**

**“Hey! An ant is walking
on your LEFT leg!”**

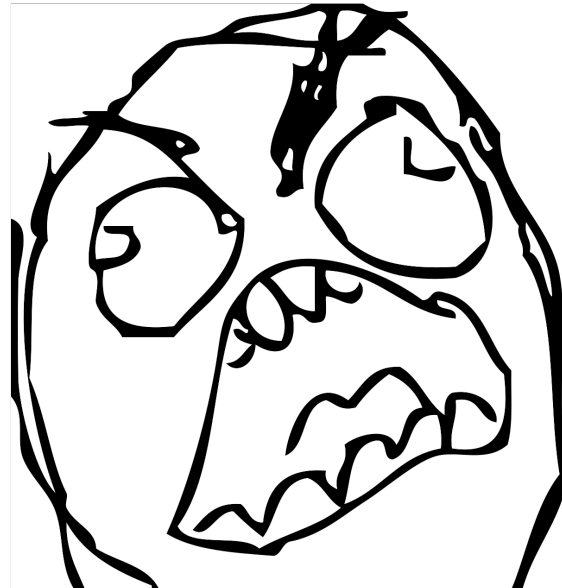
**“Hey! An ant is walking
on your leg that points
to NorthEast !”**

CONSEQUENCE:

**They have superpower of
knowing directions
anytime – even if they
close their eyes**

**In Pure (Functional)
Programming, you **can**
only compute, you
cannot mutate**

HOW DOES THIS EVEN WORKS?!



FFFFFFF
FFFFFFF
FFFFFF
FFFUU
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UUUU
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UUUU-

You **Don't Write Iteration;
You Write Recursion, and
Compiler Translate that to
Iteration**

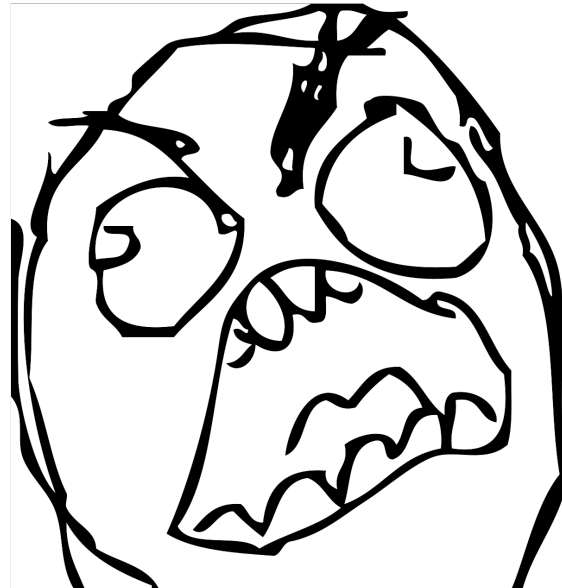
**Actually Compiler Has
Much More Freedom to
Optimize for Pure
Functional Programming**

Tail Call Optimization

Lazy Evaluation

Immutability

IMMUTABILITY?!



FFFFFFF
FFFFFFF
FFFFFFF
FFFUU
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Born Thread-Safe
“Clone” by Sharing Pointer
Good for HashTable Keys
Easy for Equality Check



ImmutableJS原理



Not necessarily
A BAD THING;
But it is IMPORTANT TO
KNOW ITS LIMITATION

BASIC don't have For-Loop: HOW TO CODE?

USE GOTO

**If a man is holding a
hammer, everything
looks like a nail**

You will **fail to
appreciate tools in
other PLs**

Another e.g.



**What does it
mean by **ASYNC**
in JavaScript
and GoLang?**