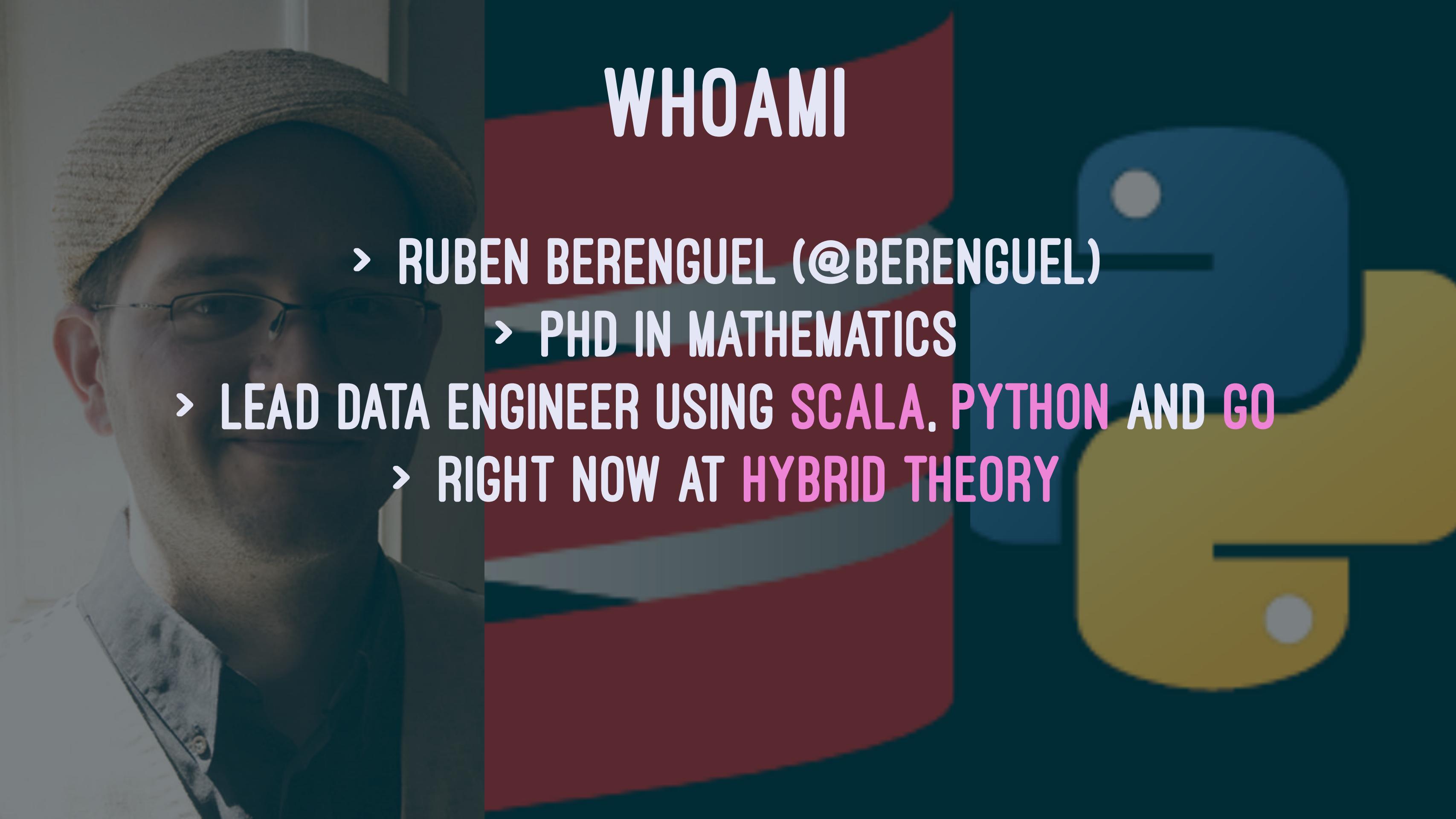


COMMODITISATION AND PROGRAMMING LANGUAGES

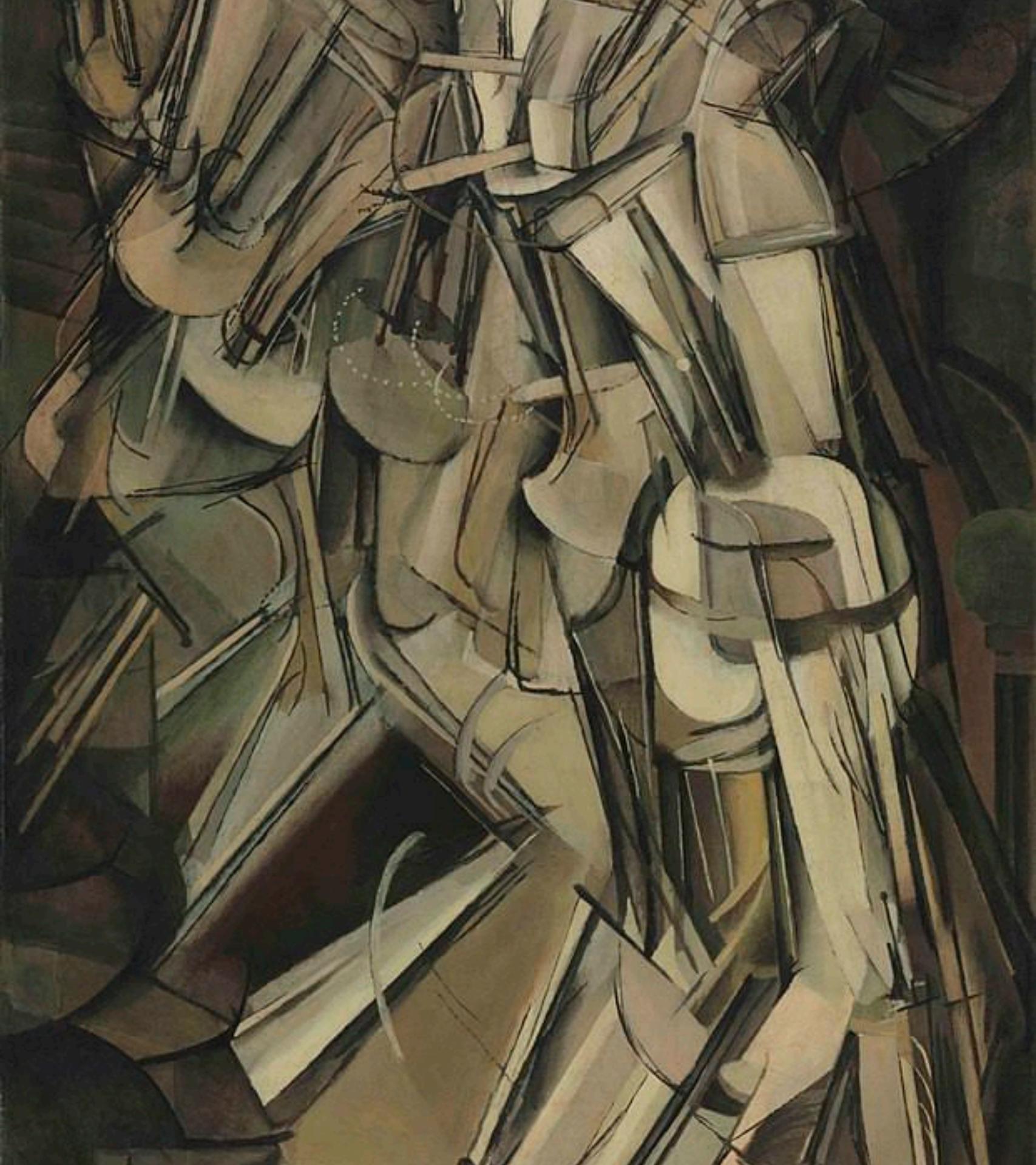
RUBEN BERENGUEL. LEAD DATA ENGINEER

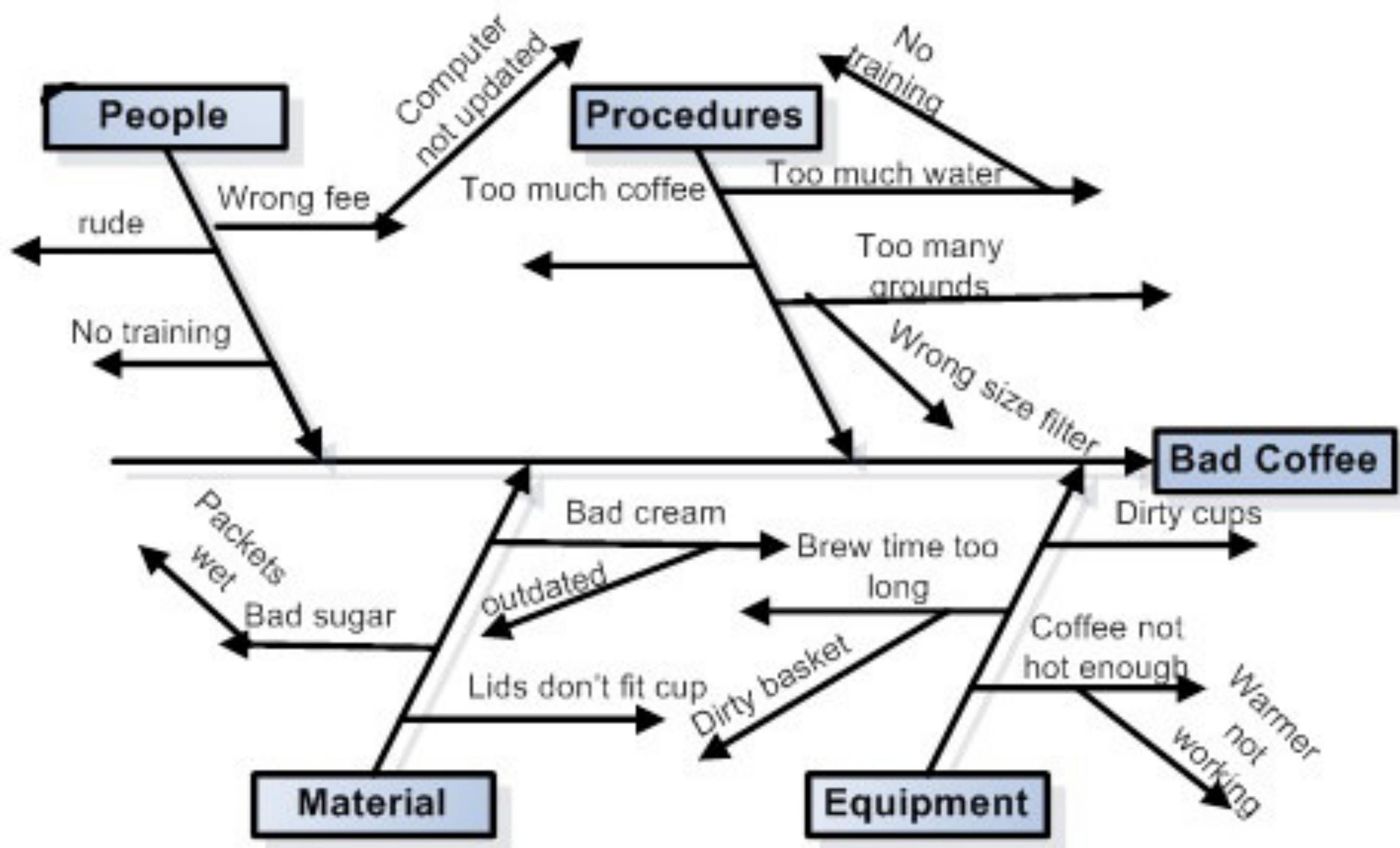


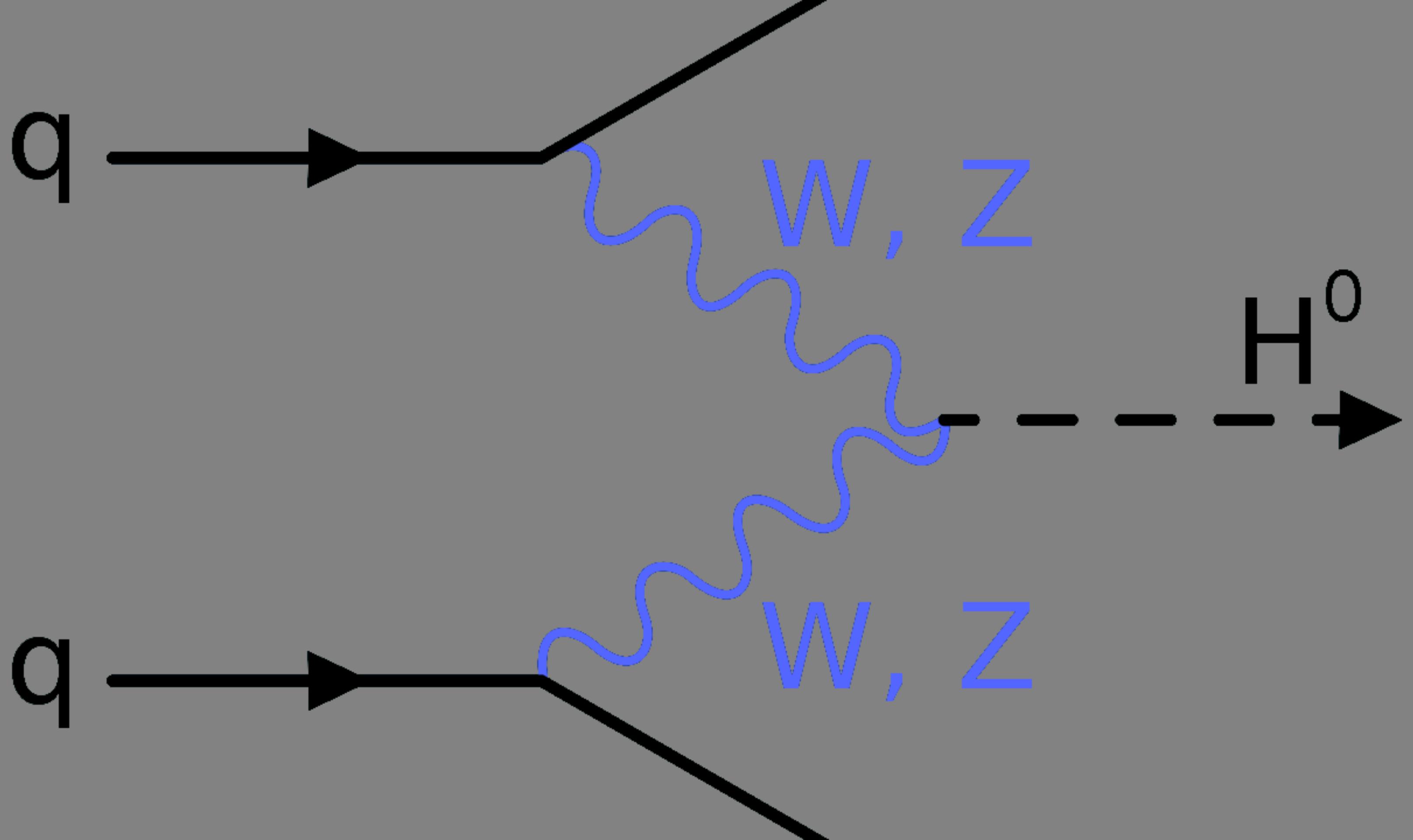
WHOAMI

- > RUBEN BERENGUEL (@BERENGUEL)
- > PHD IN MATHEMATICS
- > LEAD DATA ENGINEER USING SCALA, PYTHON AND GO
- > RIGHT NOW AT HYBRID THEORY

COMMODITISATION AND PROGRAMMING LANGUAGES







Reihen Nr.	Gruppe I. — R ¹ O	Gruppe II. — R ² O	Gruppe III. — R ³ O ³	Gruppe IV. RH ⁴ R ⁴ O ¹	Gruppe V. RH ³ R ⁵ O ³	Gruppe VI. RH ² R ⁶ O ³	Gruppe VII. RH R ⁷ O ¹	Gruppe VIII. — R ⁸ O ⁴
1	II=1							
2	Li=7	Be=9,4	B=11	C=12	N=14	O=16	F=19	
3	Na=23	Mg=24	Al=27,3	Si=28	P=31	S=32	Cl=35,5	
4	K=39	Ca=40	—=44	Ti=48	V=51	Cr=52	Mn=65	Fe=56, Co=59, Ni=69, Cu=69.
5	(Cu=63)	Zn=65	—=68	—=72	As=75	Se=78	Br=80	
6	Rb=86	Sr=87	?Yt=88	Zr=90	Nb=94	Mo=96	—=100	Ru=104, Rh=104, Pd=106, Ag=108.
7	(Ag=108)	Cd=112	In=113	Sn=118	Sb=122	Te=125	J=127	
8	Cs=133	Ba=137	?Di=138	?Ce=140	—	—	—	— — — —
9	(—)	—	—	—	—	—	—	
10	—	—	?Er=178	?La=180	Ta=182	W=184	—	Os=195, Ir=197, Pt=198, Au=199.
11	(Au=199)	Hg=200	Tl=204	Pb=207	Bi=208	—	—	
12	—	—	—	Th=231	—	U=240	—	— — — —

BUT THERE ARE ALSO UNKNOWN
UNKNOWNNS - THE ONES WE DON'T KNOW
WE DON'T KNOW.

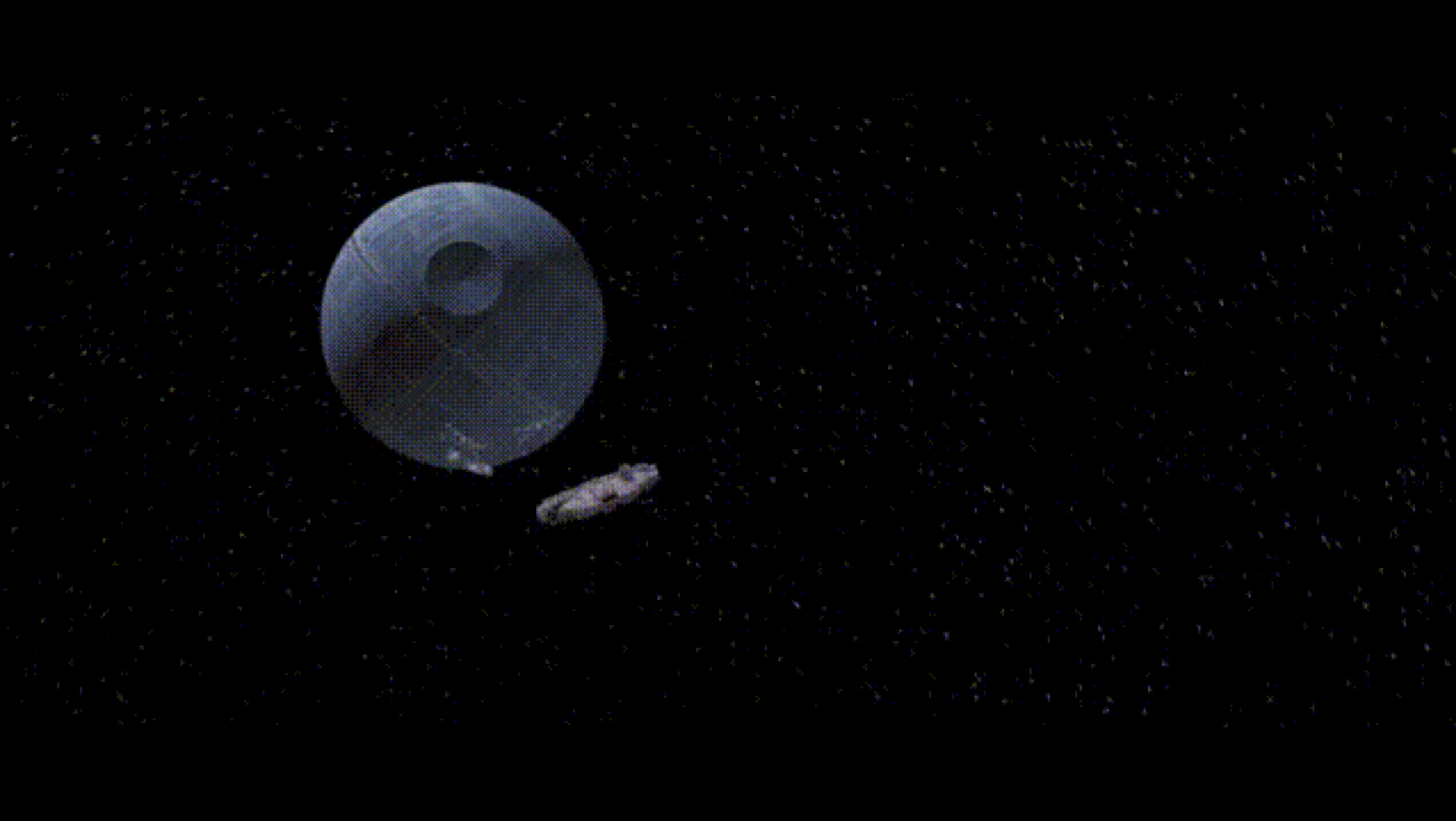
- DONALD RUMSFELD

WARDLEY MAPPING

WHAT HAPPENED
BETWEEN...



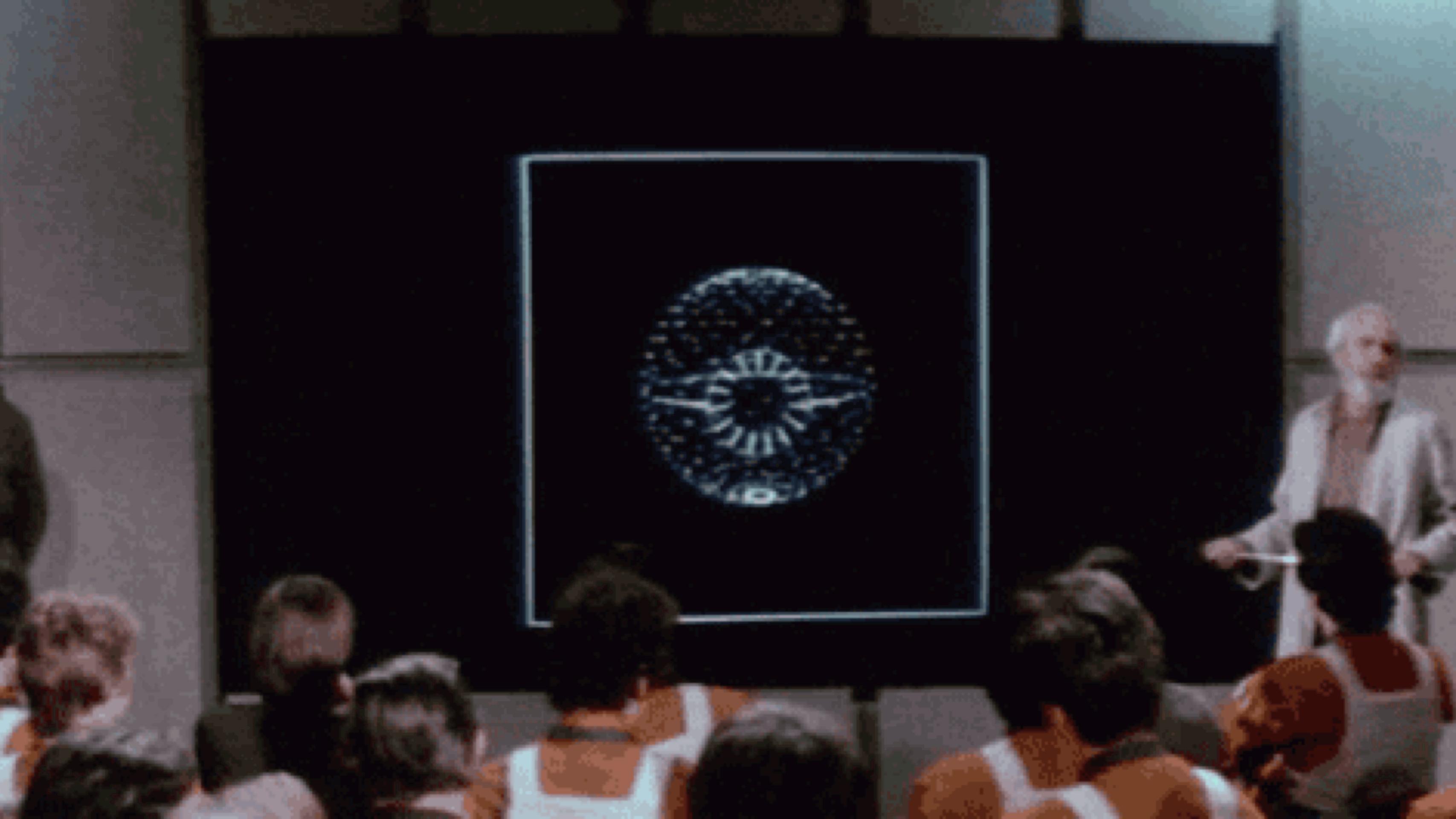
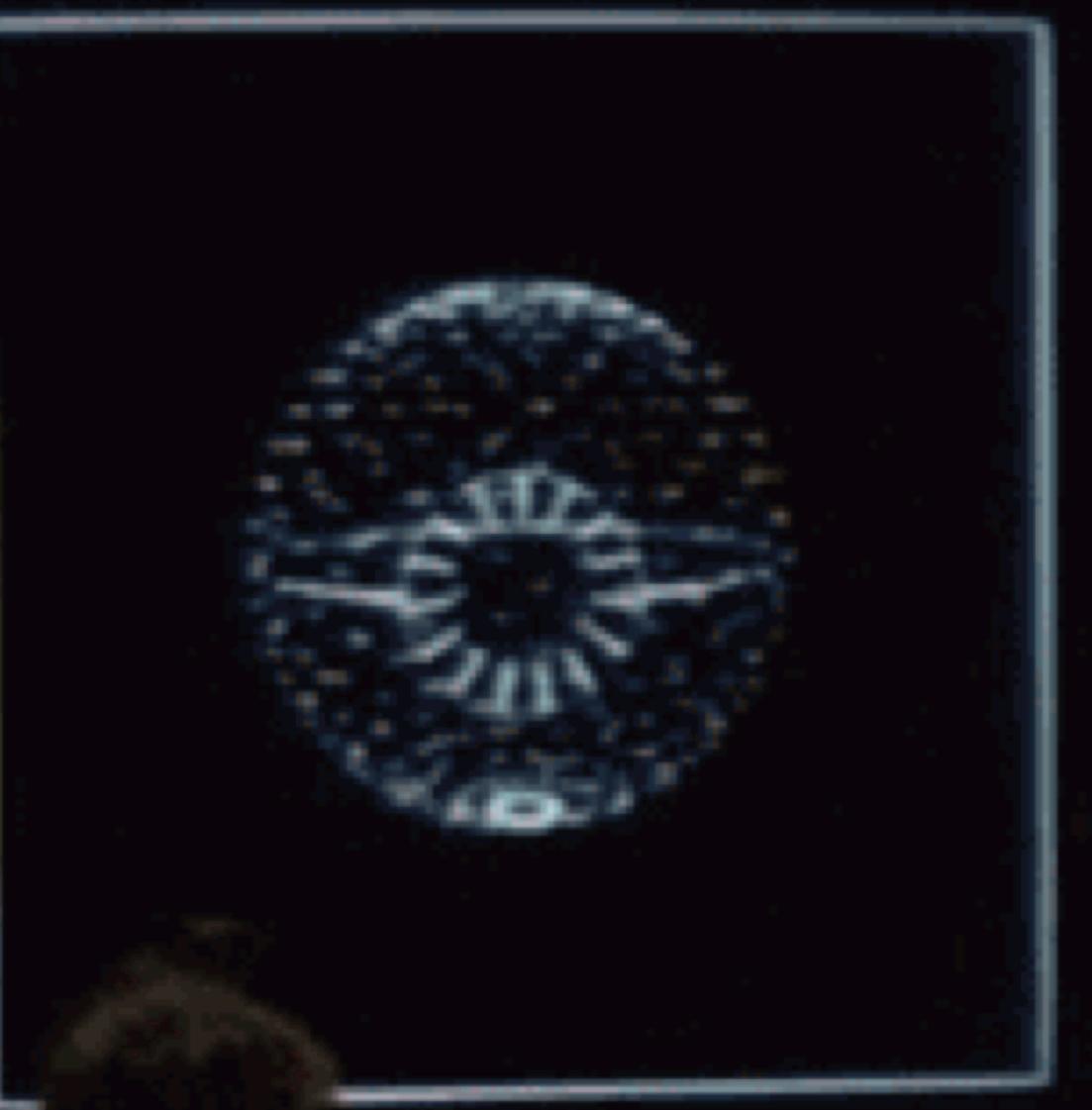
AND THIS



?1

¹ AND IT'S NOT THE FORCE

IT'S ACTUALLY THIS



HAVING A MAP

&

HAVING A PLAN

NOW THAT WE ARE IN A
MAPPING MOOD. WHAT IS
THE PROBLEM SPACE WE
WANT TO ANALYSE?



WHAT ARE THE
LANDSCAPE AND CLIMATIC PATTERNS
OF
PROGRAMMING LANGUAGES?

THIS QUESTION
IS TOO LARGE

FOCUS ON
FIGURING THE
AXES FIRST

WHAT ARE THE TWO EXTREME
EVOLUTIONARY STAGES OF A
PROGRAMMING LANGUAGE?

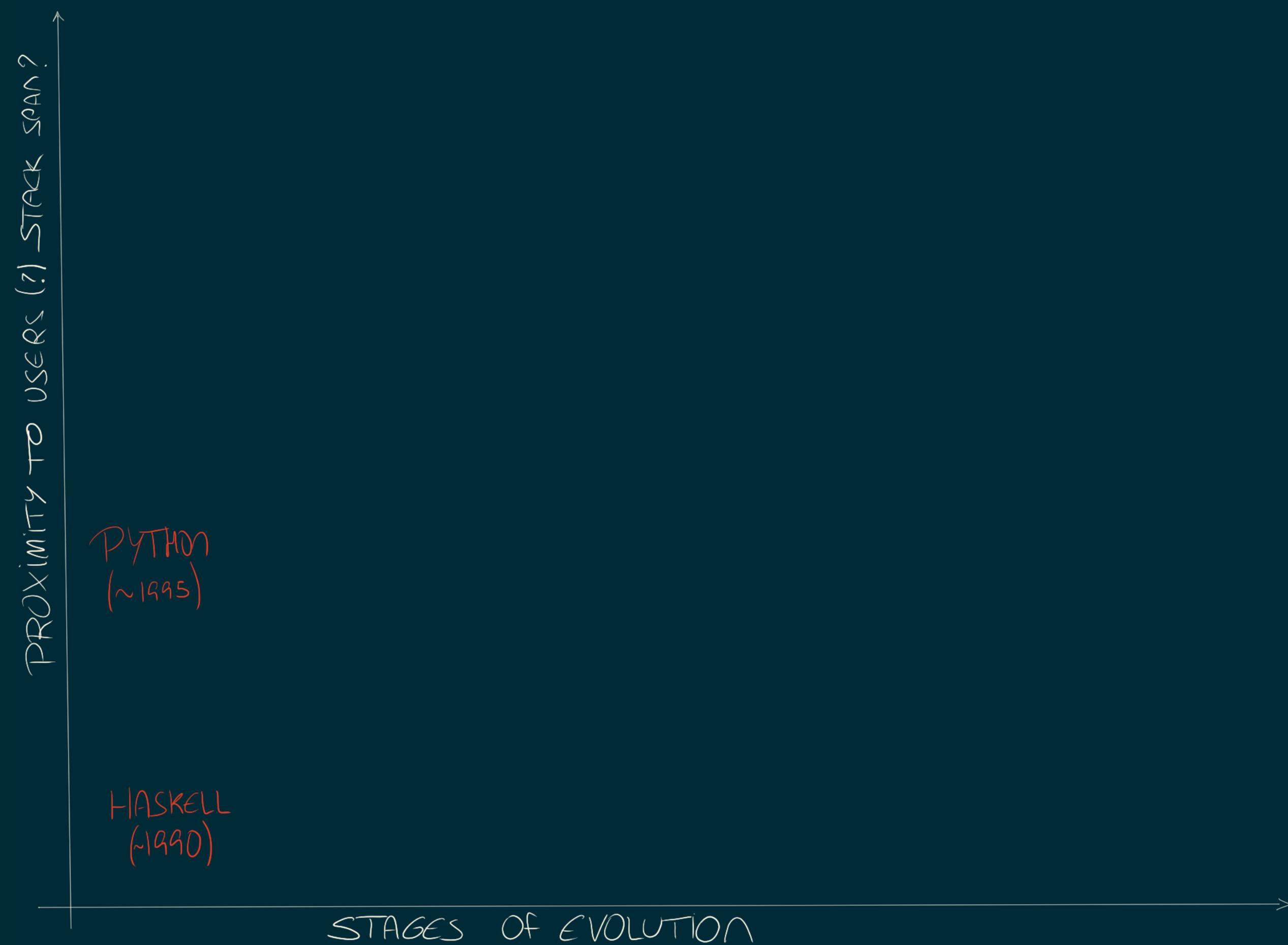
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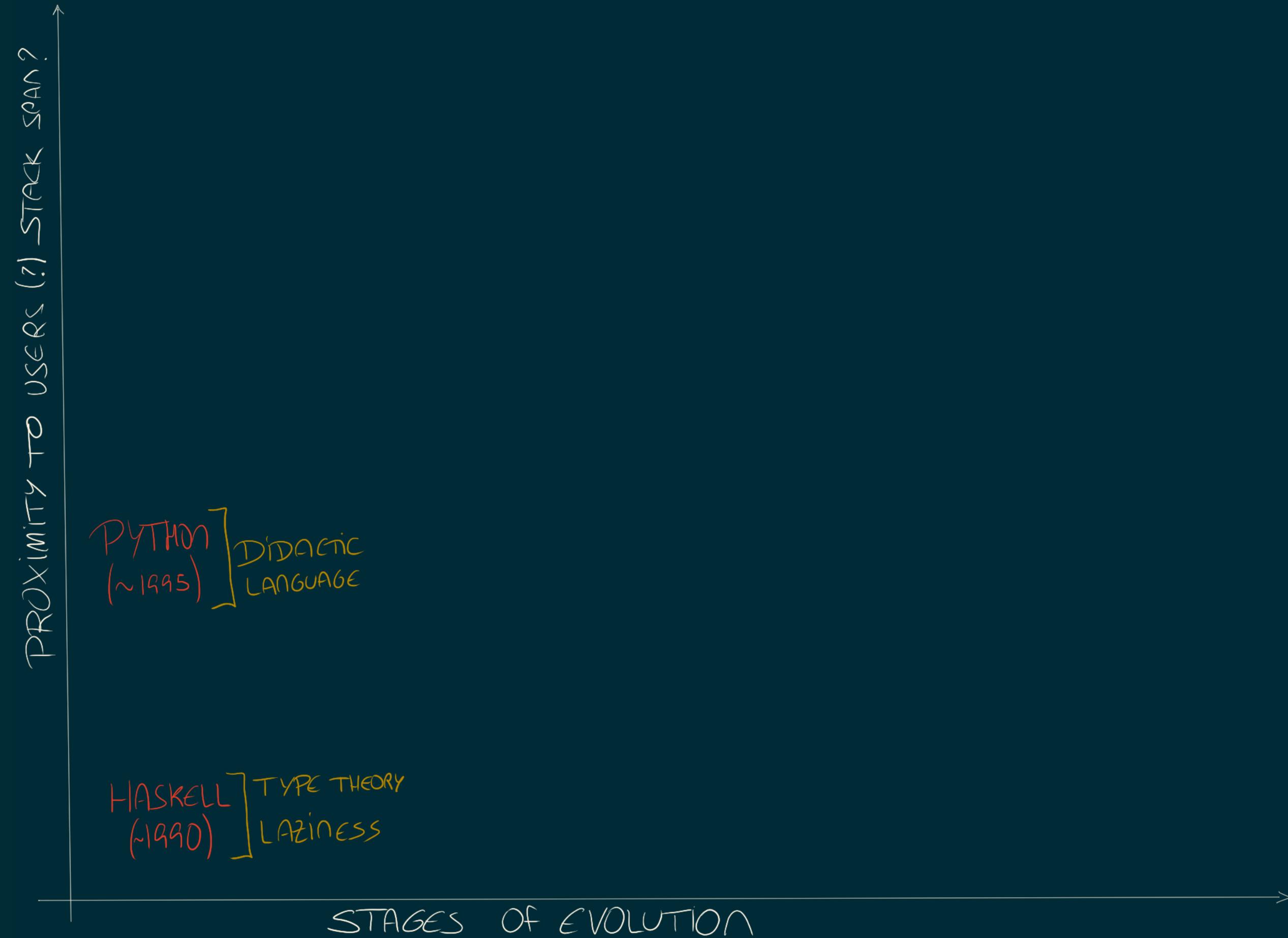
WHAT ARE THE TWO EXTREME EVOLUTIONARY STAGES OF A PROGRAMMING LANGUAGE?

1. JUST CREATED. A TOY. AN EXPERIMENT. AN IDEA.

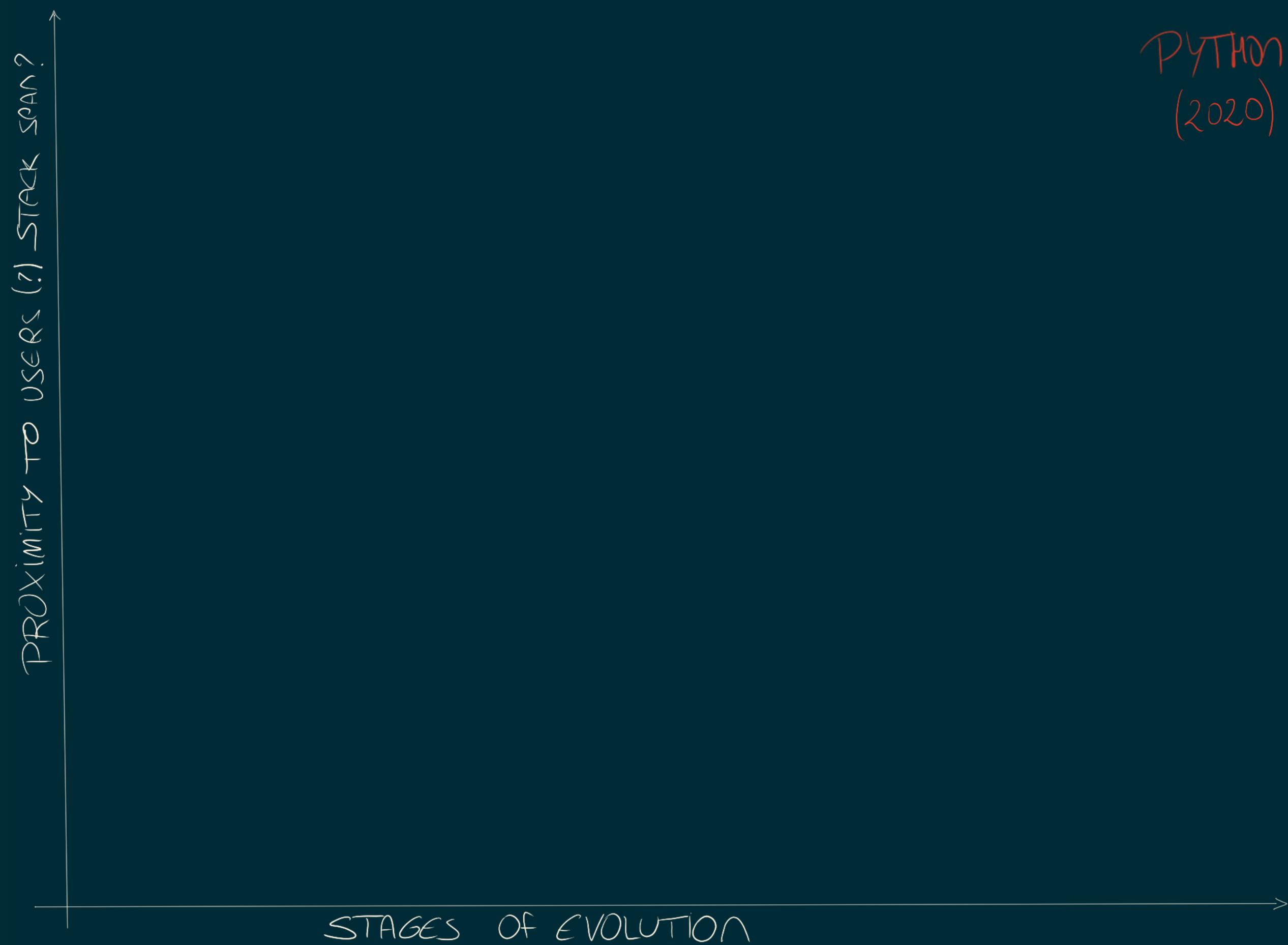
WHAT ARE THE TWO EXTREME EVOLUTIONARY STAGES OF A PROGRAMMING LANGUAGE?

1. JUST CREATED. A TOY. AN EXPERIMENT. AN IDEA.
2. USED ALL OVER THE STACK. NOT SHINY IN A RESUMÉ.



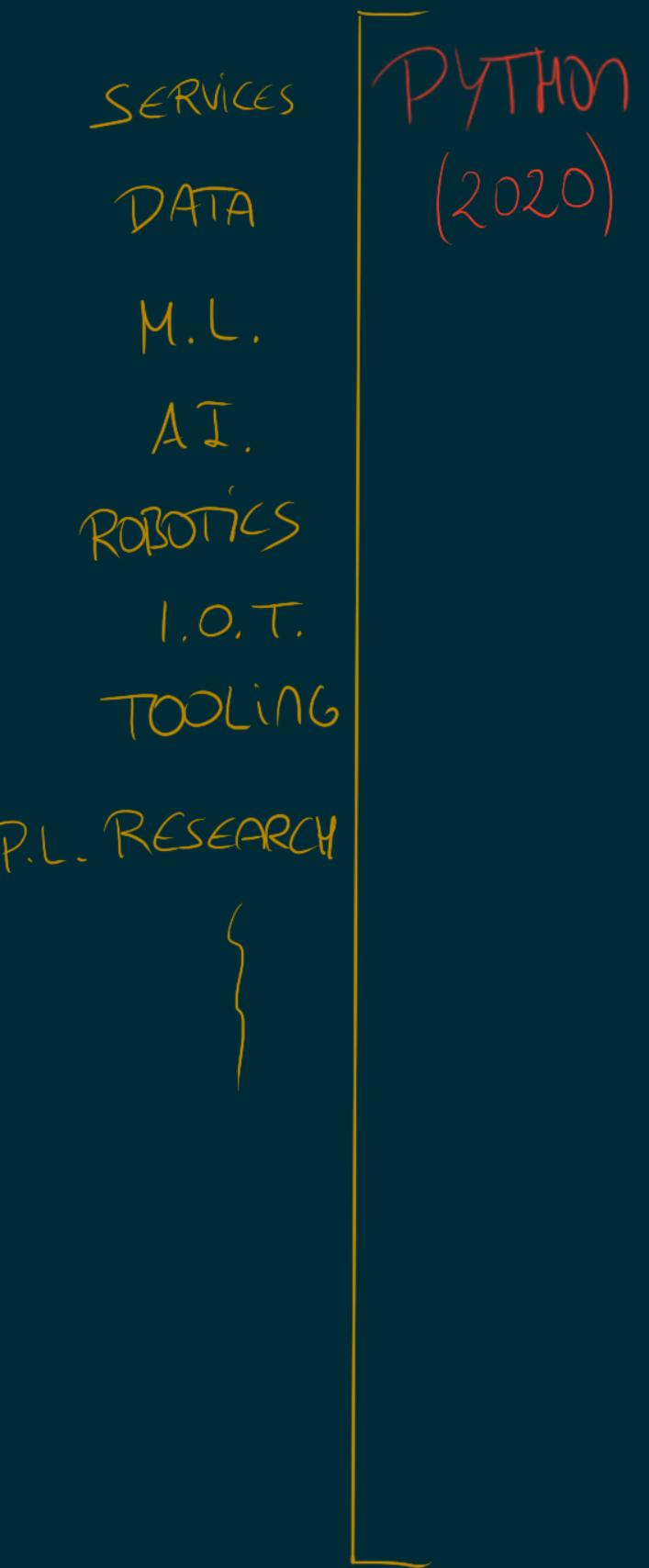


PYTHON
(2020)



PROXIMITY TO USERS (?) STACKSPAN?

STAGES OF EVOLUTION





IN A NORMAL WARDLEY MAP WE WOULD CALL THESE
TWO STAGES

1. GENESIS
2. COMMODITY (OR UTILITY)

ARE THEY?

WHO IS THE USER?

OPTION A: THE COMPANY CHOOSING THE LANGUAGE TO USE

OPTION B: THE DEVELOPER CHOOSING
THE LANGUAGE TO LEARN

OPTION A: THE COMPANY CHOOSING THE
LANGUAGE TO USE

OPTION B: THE DEVELOPER CHOOSING
THE LANGUAGE TO LEARN

OPTION A: COMPANY

COMMODITY COULD MEAN:

OPTION A: COMPANY

COMMODITY COULD MEAN:

- > ACCESS TO A LARGE POOL OF TALENT (LARGE MARKET)

OPTION A: COMPANY

COMMODITY COULD MEAN:

- > ACCESS TO A LARGE POOL OF TALENT (LARGE MARKET)
- > ACCESS TO A VARIED POOL OF TALENT (RANGE OF SKILLS)

OPTION B: DEVELOPER

COMMODITY COULD MEAN:

OPTION B: DEVELOPER

COMMODITY COULD MEAN:

- > USABILITY ACROSS A RANGE OF PROBLEMS (GENERALITY)

OPTION B: DEVELOPER

COMMODITY COULD MEAN:

- > USABILITY ACROSS A RANGE OF PROBLEMS (GENERALITY)
- > LARGE INDIVIDUAL DEMAND (ABILITY TO CHOOSE)

FEEDBACK LOOP

OR

DEADLOCK?

AS EASY AS THAT?
TEACHING?

OPEN QUESTIONS

OPEN QUESTIONS

- > WHAT DRIVES PROGRAMMING LANGUAGE ADOPTION FEEDBACK LOOPS. IF IT IS NOT TEACHING?

OPEN QUESTIONS

- > WHAT DRIVES PROGRAMMING LANGUAGE ADOPTION FEEDBACK LOOPS. IF IT IS NOT TEACHING?
- > ARE THERE ANY OTHER CLIMATIC PATTERNS TO IDENTIFY IN THE PROGRAMMING LANGUAGE LANDSCAPE?

OPEN QUESTIONS

- > WHAT DRIVES PROGRAMMING LANGUAGE ADOPTION FEEDBACK LOOPS. IF IT IS NOT TEACHING?
- > ARE THERE ANY OTHER CLIMATIC PATTERNS TO IDENTIFY IN THE PROGRAMMING LANGUAGE LANDSCAPE?
 - > HOW DO PROGRAMMING LANGUAGES DECAY?

SOME RESOURCES AND INTERESTING REFERENCES

- > [S. WARDLEY.](#) WARDLEY MAPPING ONLINE BOOK
- > [M. NIELSEN.](#) THOUGHT AS A TECHNOLOGY
- > [D. MEADOWS.](#) THINKING IN SYSTEMS
- > [M. LIMA.](#) VISUAL COMPLEXITY: MAPPING PATTERNS OF INFORMATION
- > [K. IVERSON.](#) NOTATION AS A TOOL FOR THOUGHT

QUESTIONS?



THANKS!

GET THE SLIDES FROM MY GITHUB:

github.com/rberenguel/

THE REPOSITORY IS

commoditisation-languages

FURTHER REFERENCES

- > S. WARDLEY. PLAYING CHESS WITH COMPANIES (OSCON 2017. ON
SAFARI BOOKS ONLINE)
 - > S. WARDLEY. CROSSING THE RIVER BY FEELING THE STONES
- > G. ADZIC. SKIP THE FIRST THREE MONTHS OF DEVELOPMENT FOR YOUR
NEXT APP

EOF