

Text-Fabric in context

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2020-02-18

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UNIVERSITY OF
CAMBRIDGE



overview

- the bigger picture
- connections
- evolving context
- knowledge - linked data
- text - fabric - example shebanq
- text-fabric - the system
- shift in sophistication

the bigger picture

the bigger picture

- lots of unconnected data with potential links

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 - e.g. Hebrew Bible and Greek New Testament

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 - e.g. Hurrian to Greek Mythology

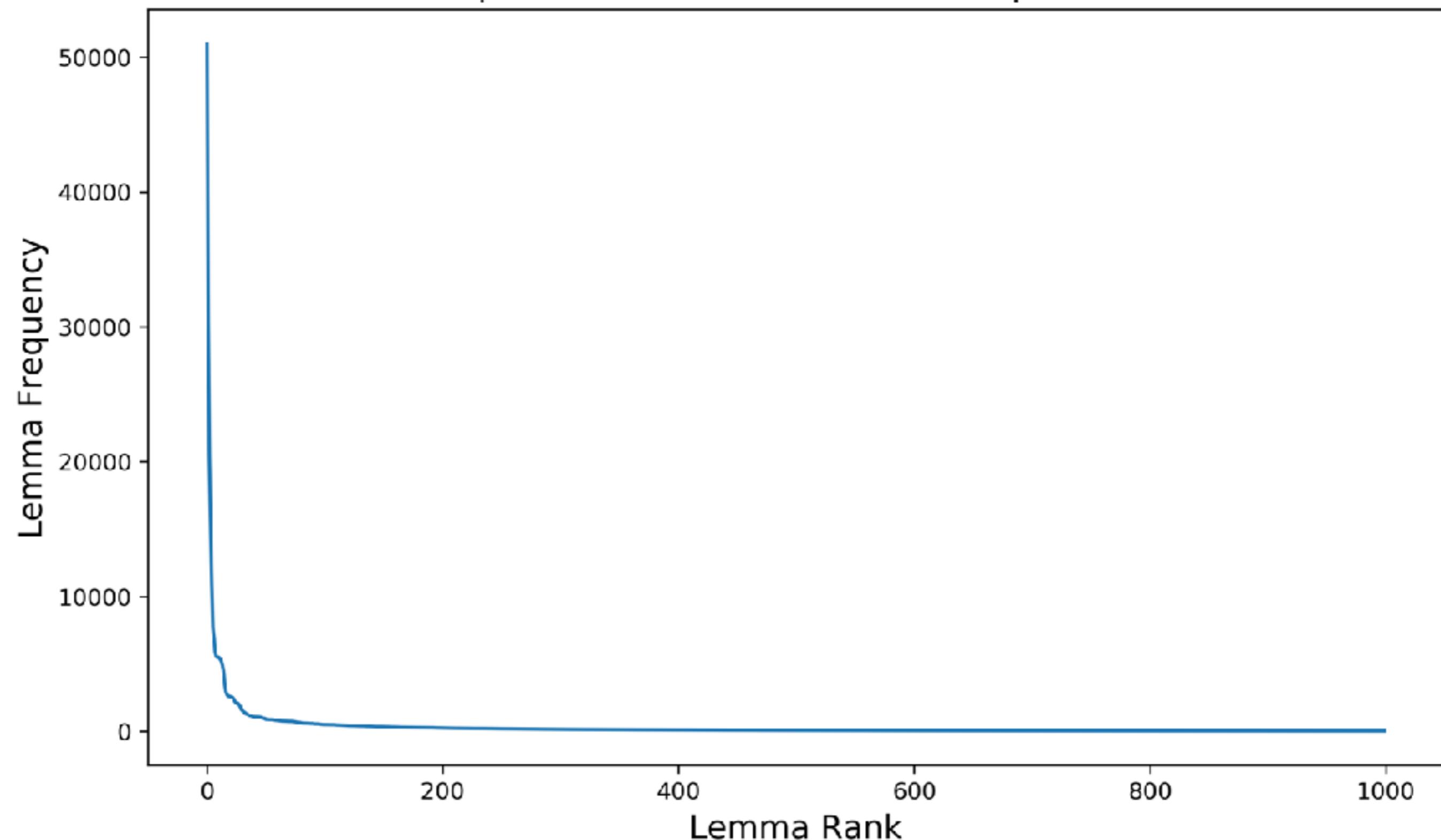
the bigger picture

- lots of unconnected data with potential links
 - e.g. Hebrew Bible and Greek New Testament
 - e.g. Hurrian to Greek Mythology
- common problems when converting / annotating / analyzing datasets

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 - e.g. Hebrew Bible and Greek New Testament
 - e.g. Hurrian to Greek Mythology
- common problems when converting / annotating / analyzing datasets
- unique edge cases that can shed light on other edge cases

Zipfian Curve in Hebrew Word Frequencies



AP C

Ego Speed: 45.56 MPH

time: 1545.461322000

CAL P 0.60 Y 1.20 R 0.00 deg

Vision fps: 18.05 Draw fps: 17.67 Display fps: 21.34

NL(0.00), E(0.93), F(0.07), TF(0.00), S(0.00)

NRW: FLP(0.00), FRP(0.00)

CutInExcited (Prb 0.56)

+0.0001 AUTO_HIGH_BEAM

+0.0000 BLINDED

+0.0002 RAINING

+0.0000 TIRE_SPRAY

+0.0013 WET_ROAD

0.7902 RESTRICTED

0.0934 CONTROLLED_ACCESS

L:0 R:0 F:2 ON:0

W:8.2 AP:1.0 I:0

VS: 46.7 MPH St: 1

merge: 1.0 _1_ 180.2 R



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MAIN -

the bigger picture

the bigger picture

- A Decentralized Feedback Loop

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- A Decentralized Feedback Loop
 - share your work process, not just your data

the bigger picture

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 - share your work process, not just your data
 - shared knowledge graphs

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- A Decentralized Feedback Loop
 - share your work process, not just your data
 - shared knowledge graphs
- Distributed Computation
 - recruit and “evangelize” — exponential growth
- Leverage existing tools (e.g. TF, TAG)

connections

*Perseus is a practical experiment in which we explore possibilities and challenges of digital collections in a **networked** world*

Human readable information

Machine actionable knowledge

Machine generated knowledge

<http://www.perseus.tufts.edu/hopper/research>

connections

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How to connect all this?

evolving context

evolving context

philologists



hebrew



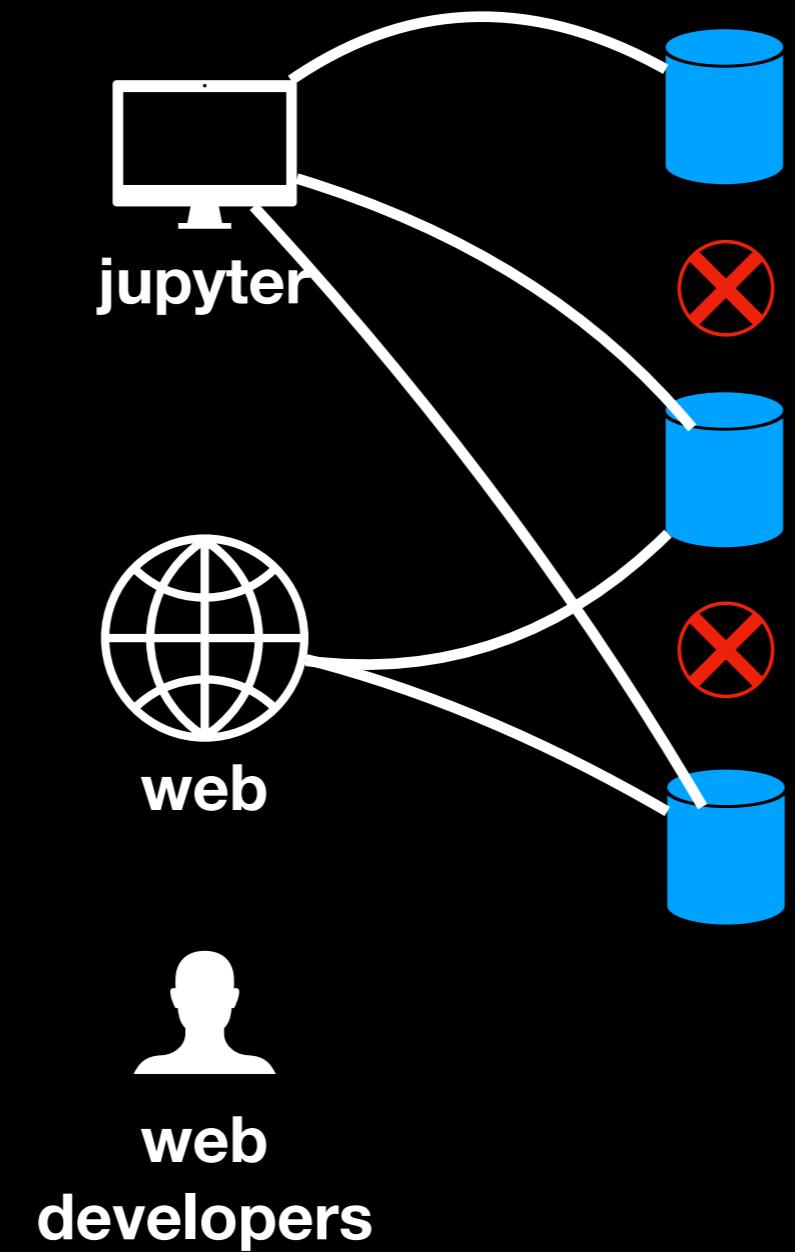
babylonian



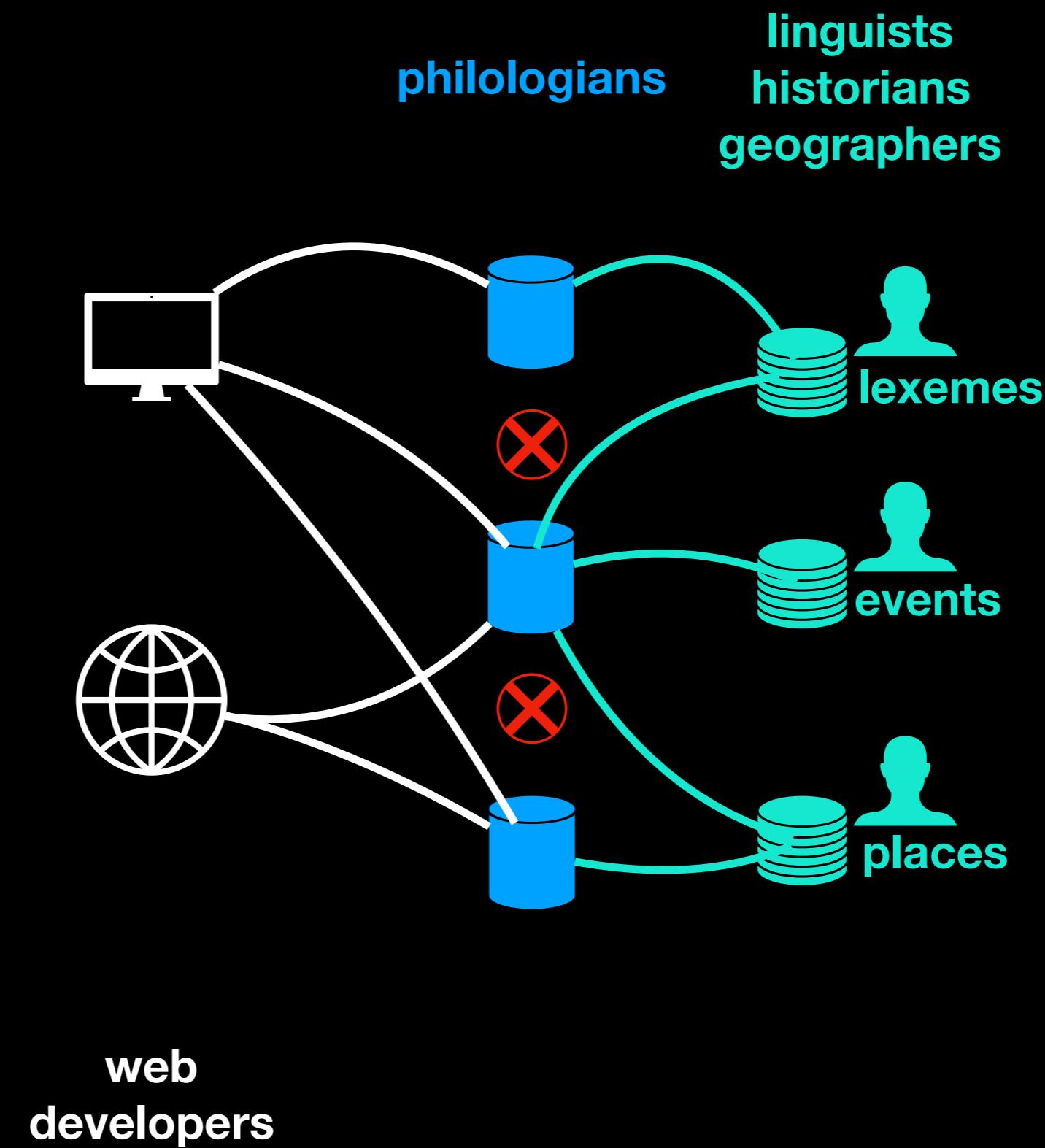
sanskrit

evolving context

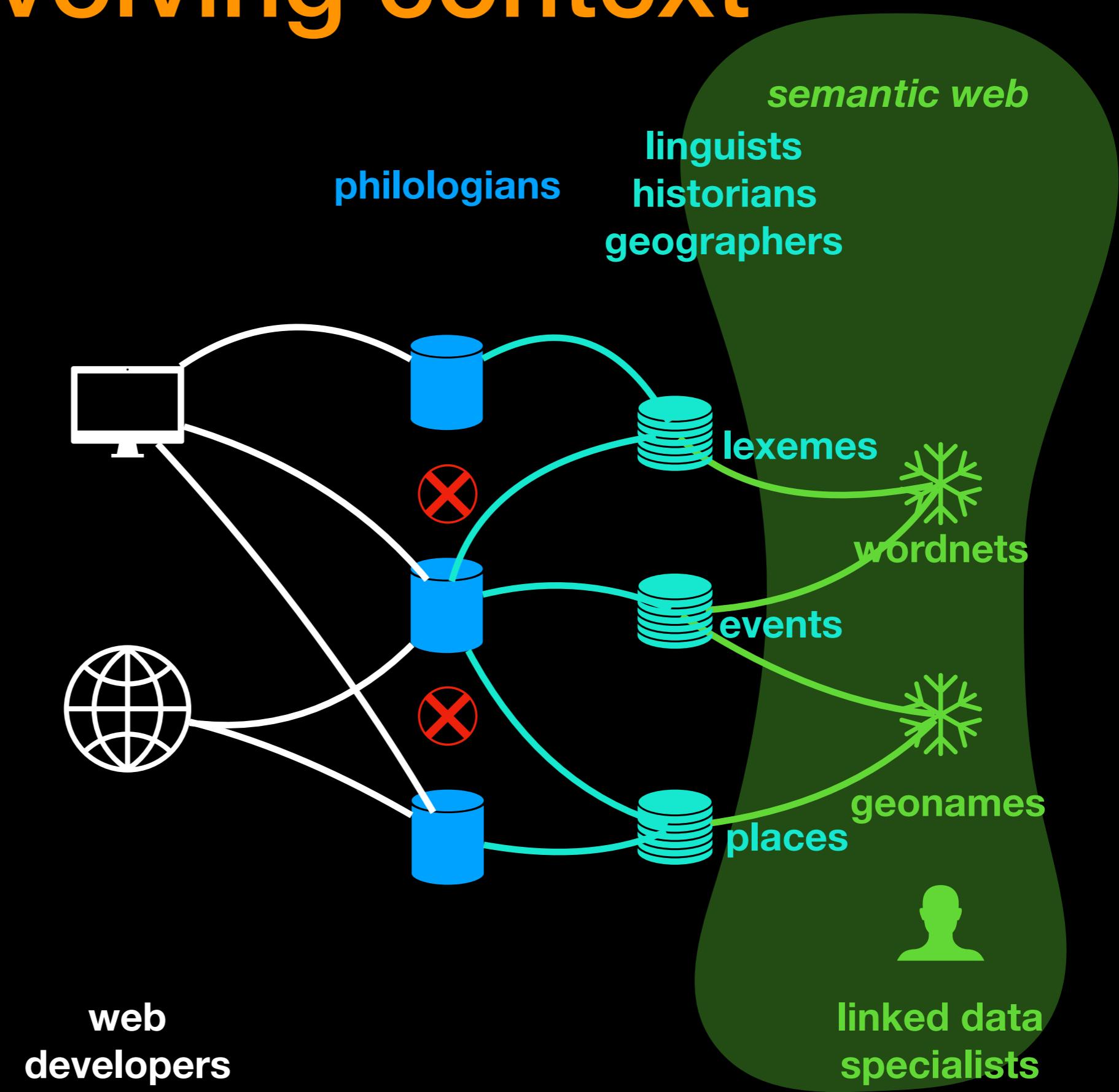
philologists



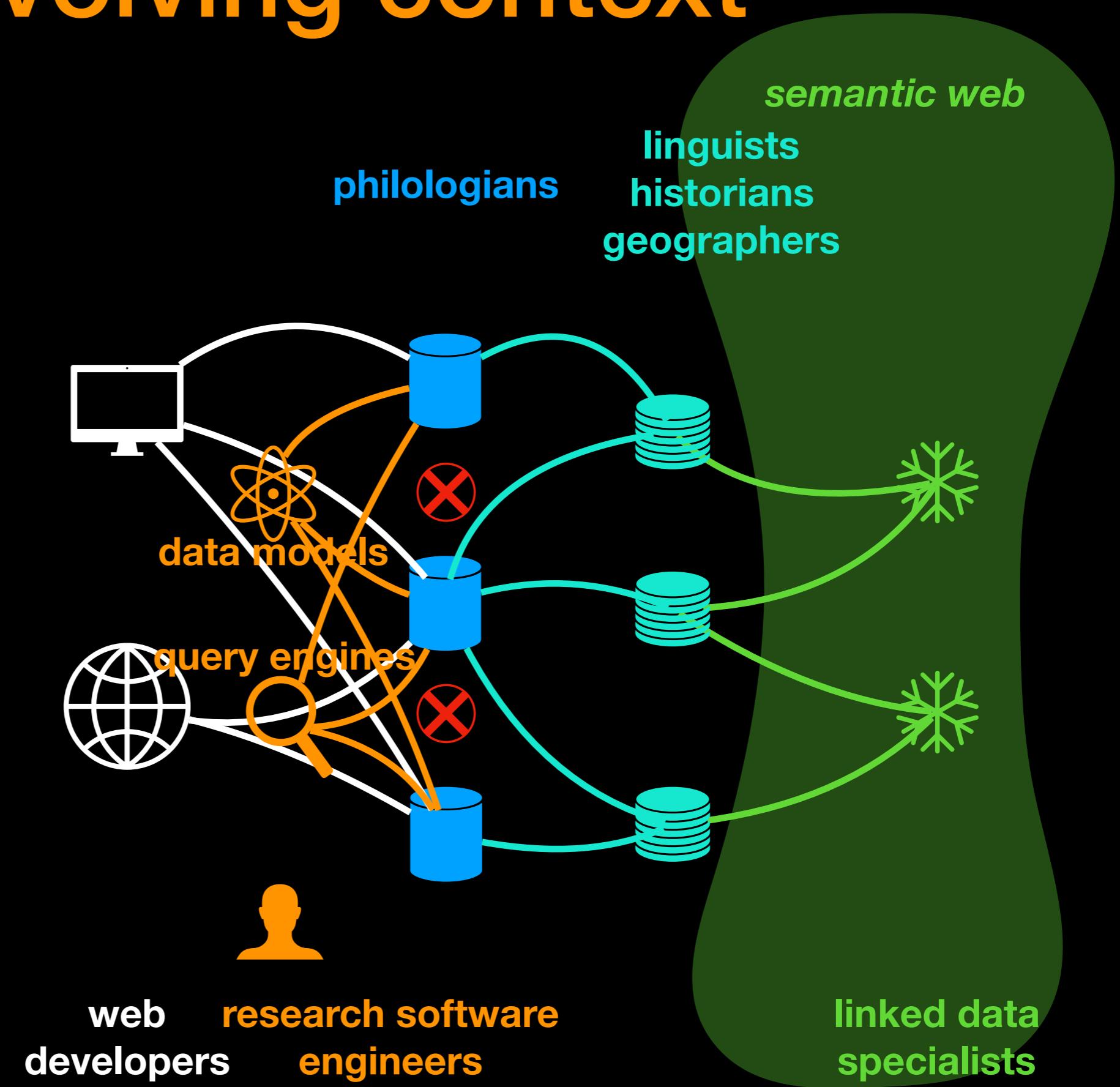
evolving context



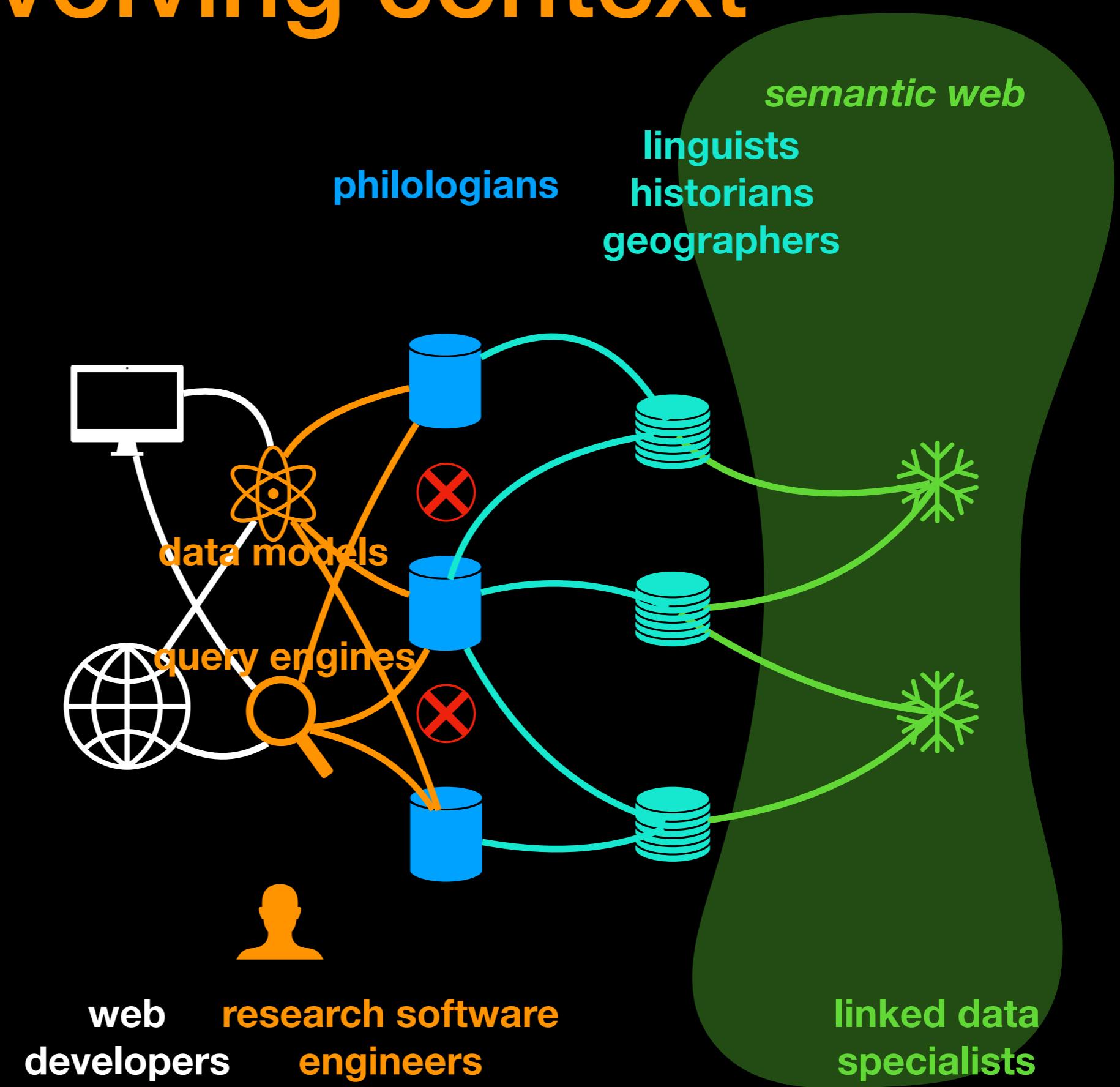
evolving context



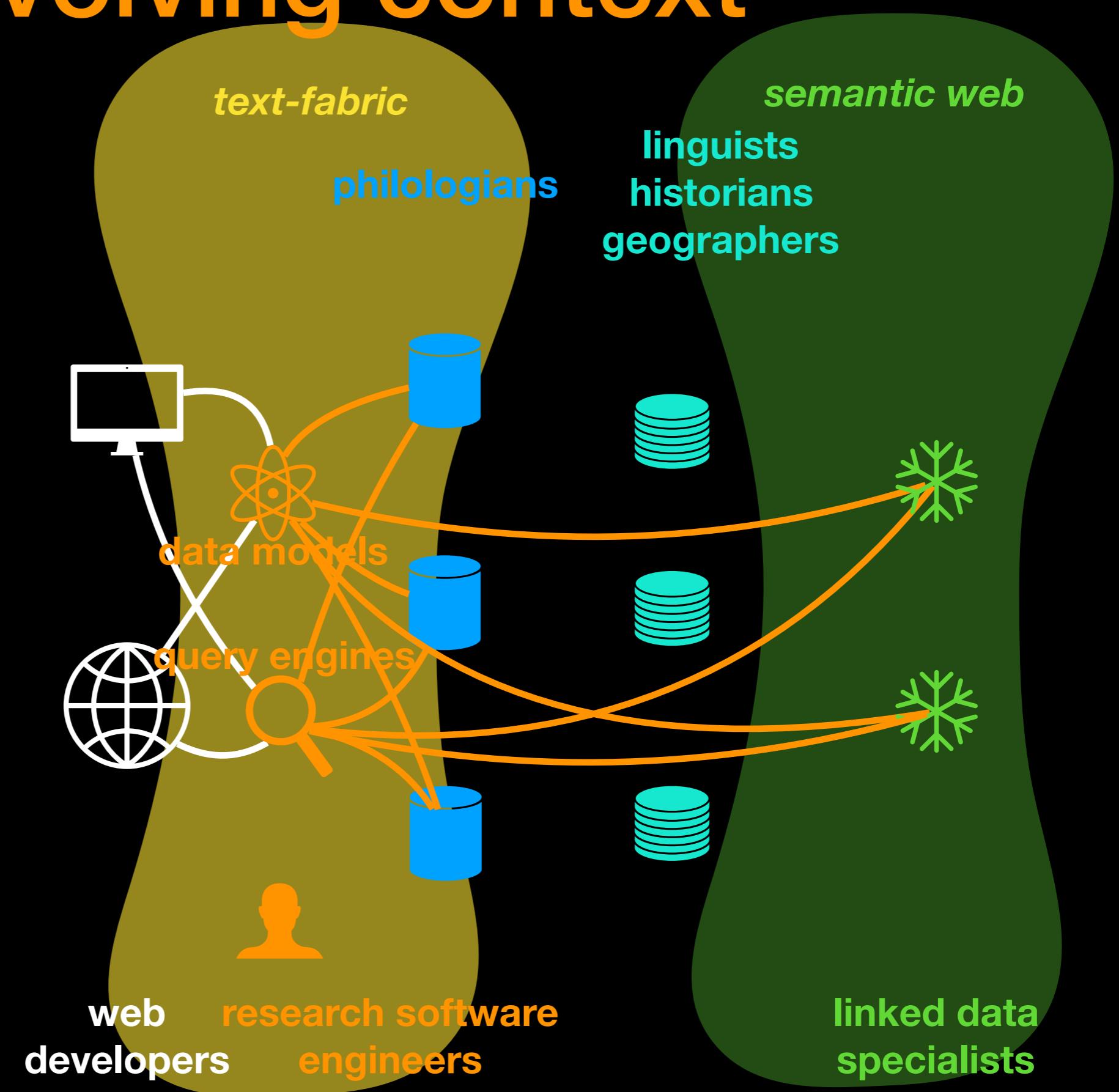
evolving context



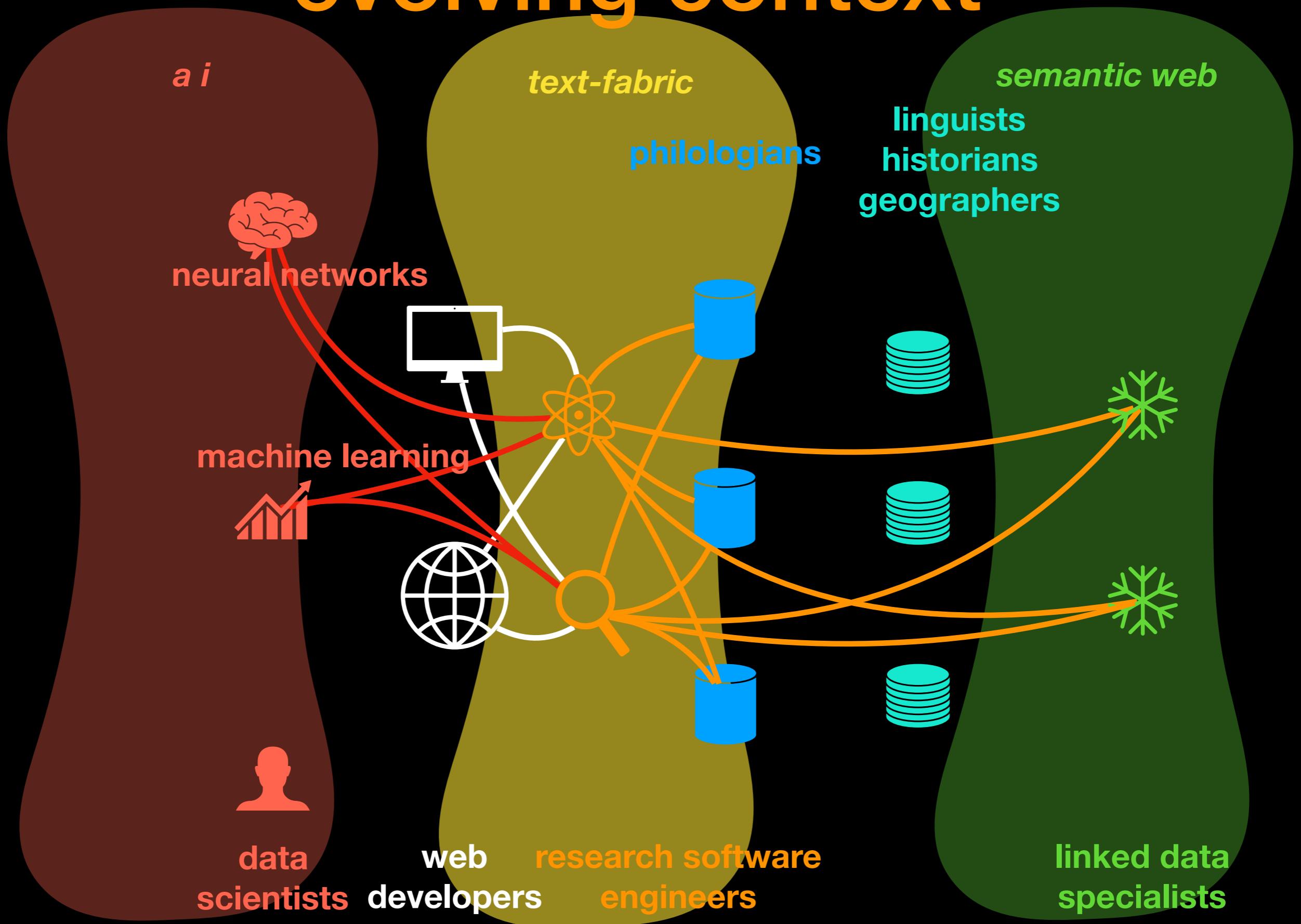
evolving context



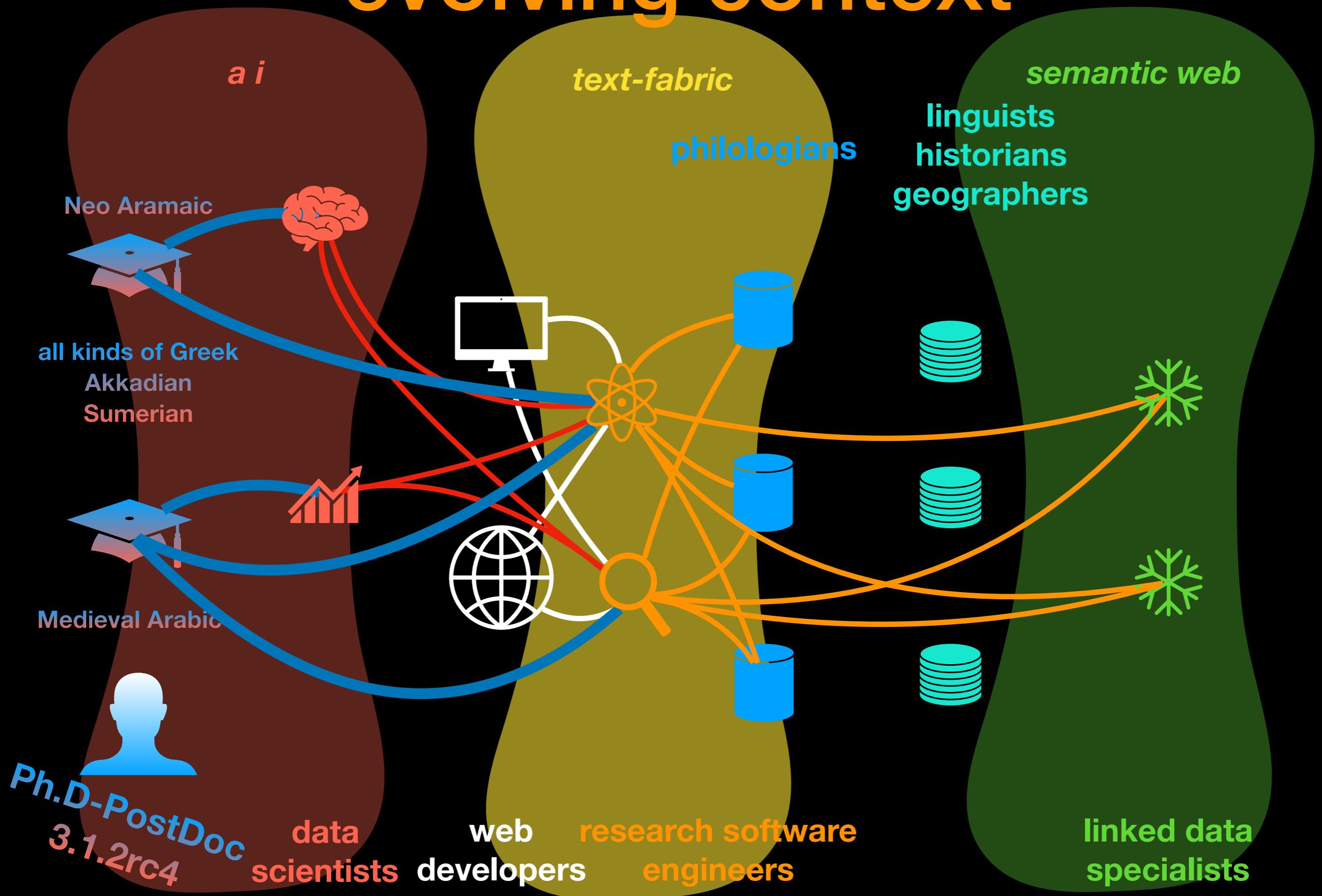
evolving context



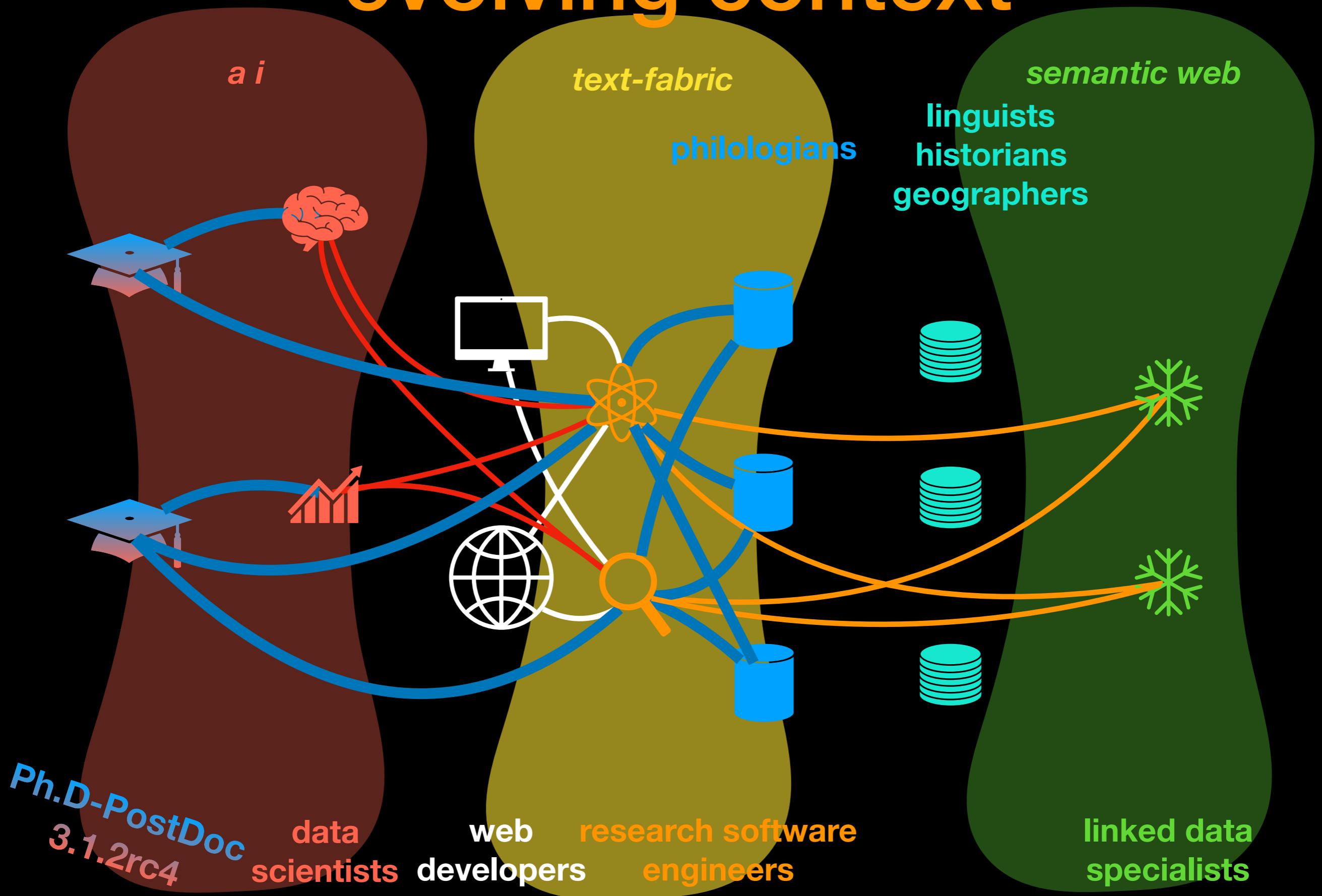
evolving context



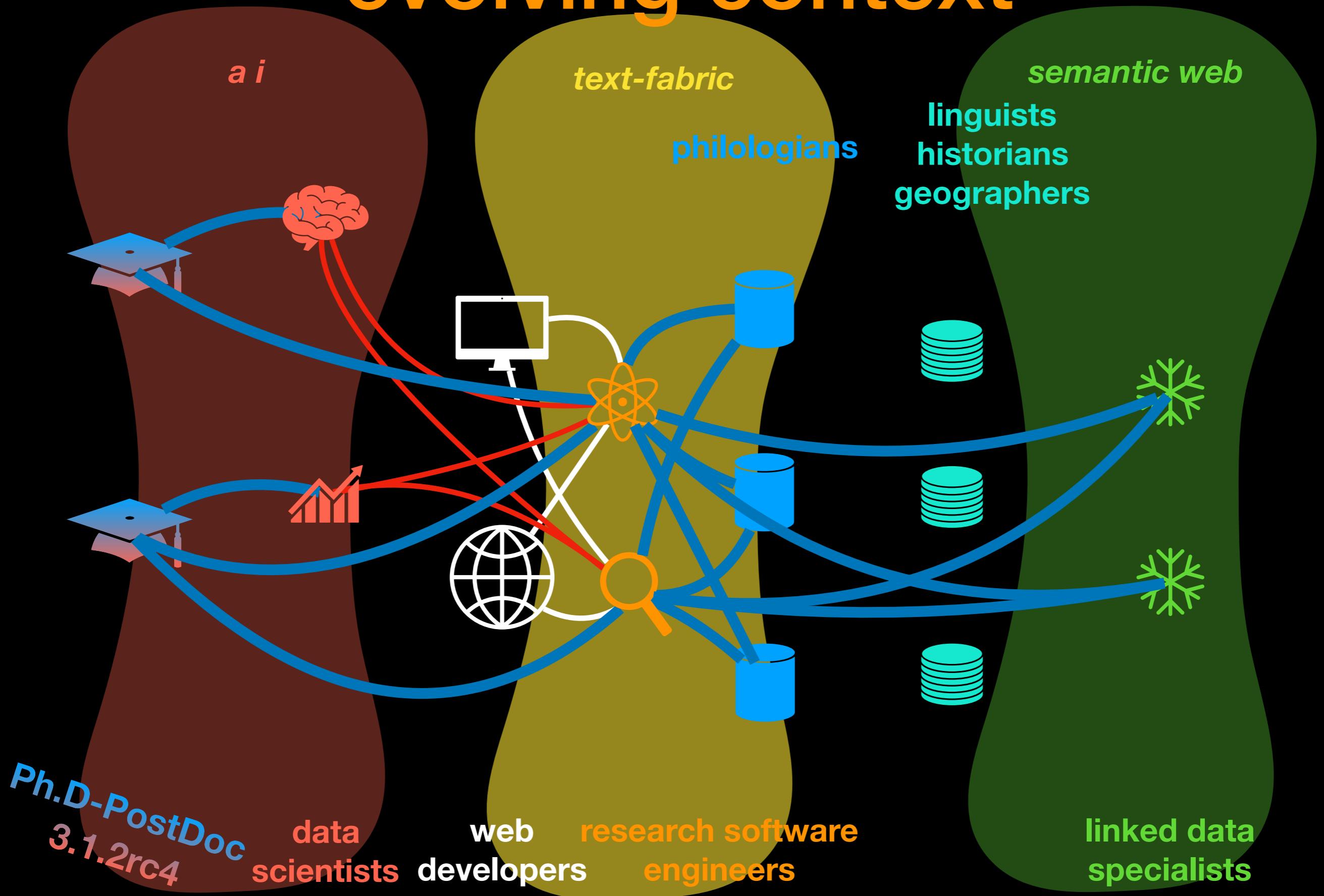
evolving context



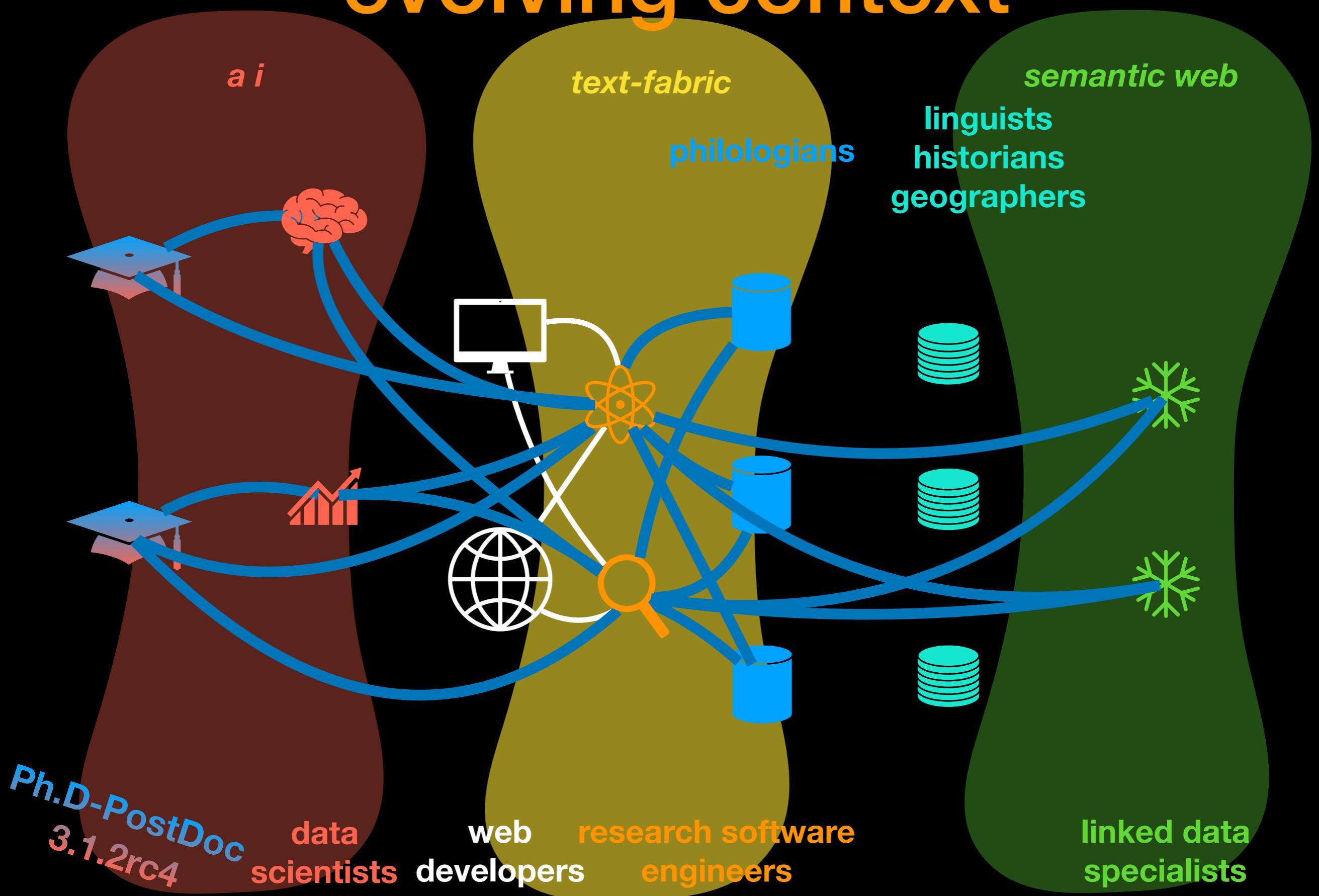
evolving context



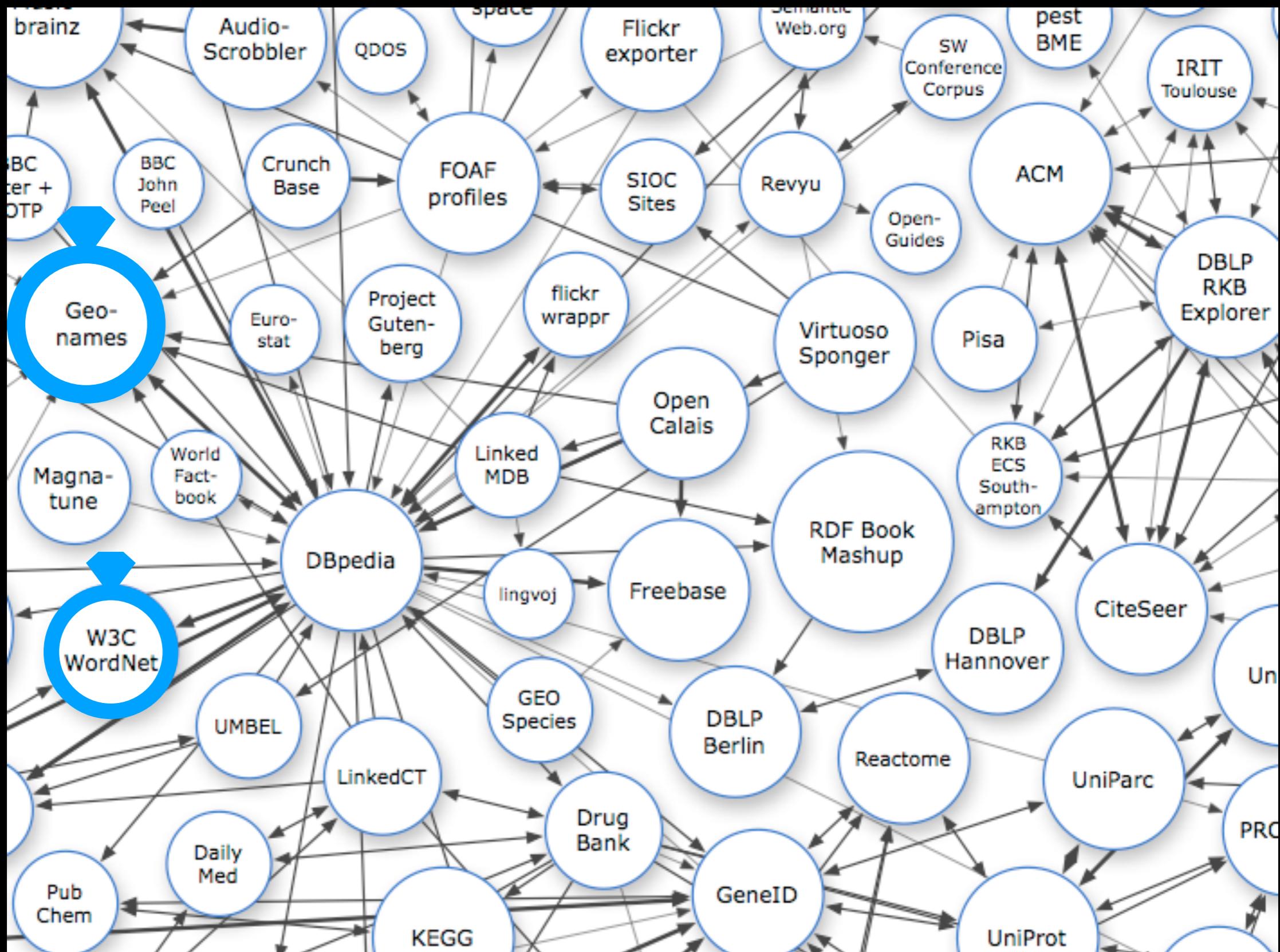
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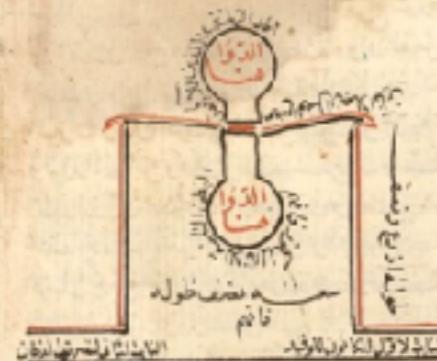
knowledge: linked data



**text -
fabric**

text -
fabric

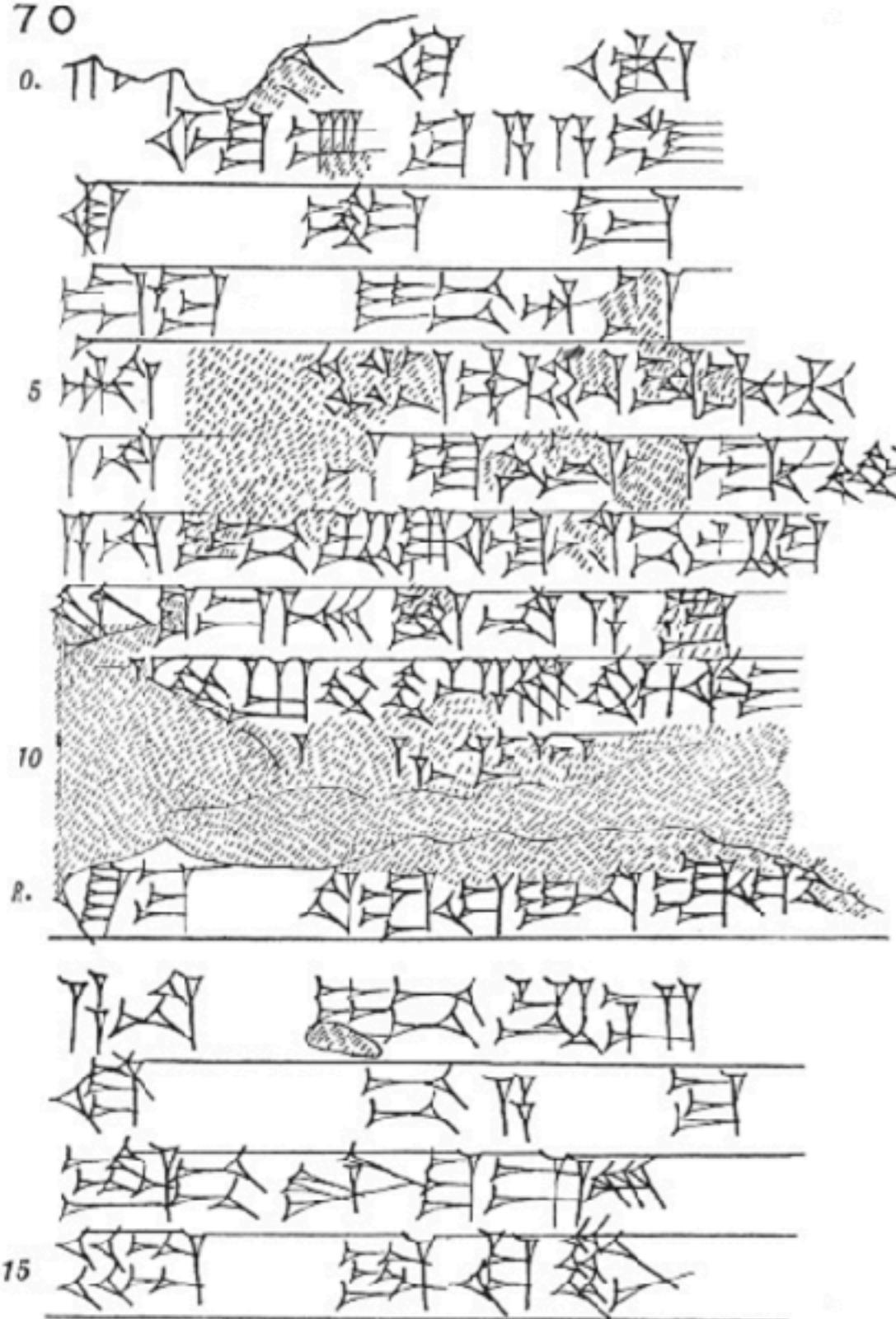
لهم اذ دعك سلطانا لراجحات خلق الارض لكتن الرطوبة
فقالت سمعتني في سخان خالقني سخيف عقلك راضي فرثك
فأخذت غسلة اسماها واركت اول الماء ثم لم يهلاها الغسل
يدركتني بقولها اراك كنا اخرين قبل فصل العرش لا يحيط
غفران سمعي بقوله عذر ما زعمتم منكم ان ينتهي قيل
نهما السرطان التي لا يذهبها فاحتاذ الموارد الى ضرارة
تقى بهما ثم تجدها اذرين بالسلطان لا يحضرها ابدا في المصنوع
من سبع المقادير وثلثين وسبعين الالاف الكربلا محبطة في خطاها والغير
فقط المأمور لا يعطيها اذن معرفتها شارطها على كافلون
لهم اذن اذن اذن لها المروي وذوق الاخر طرق الاذنة وغفرة
منادية لـ اذن المؤمنة غلـ هذا الموضع



مخطوطة
في خواص حاتمة وآدتها
الذى جعله عظاً آخرقة يزور سماً وقضنه فلا يقدر
سرعه الخير بتاليها
الوزي جعلته عظمى العبرة
غير صفاتها كثيرة

text - fabric

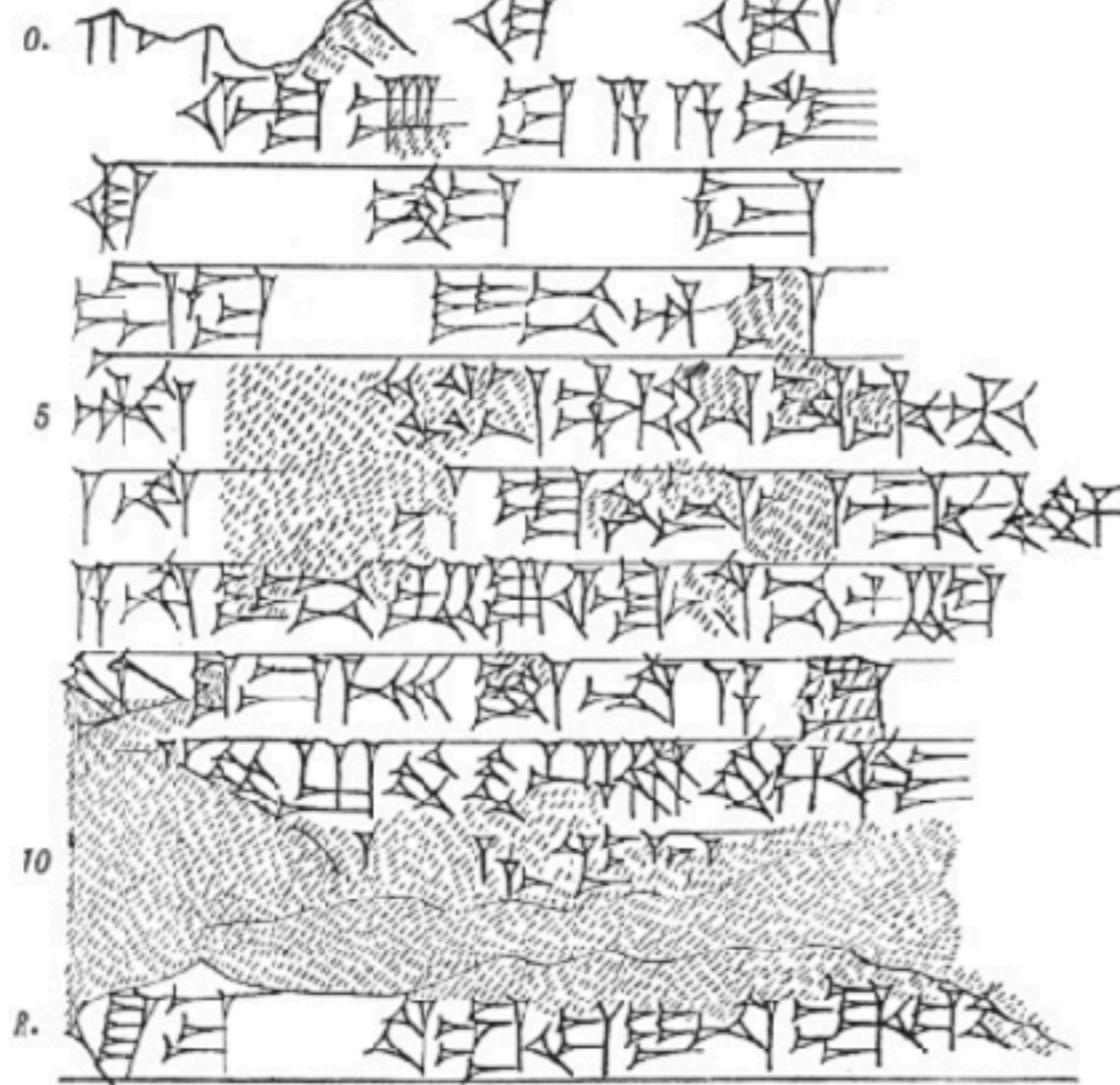




text - fabric

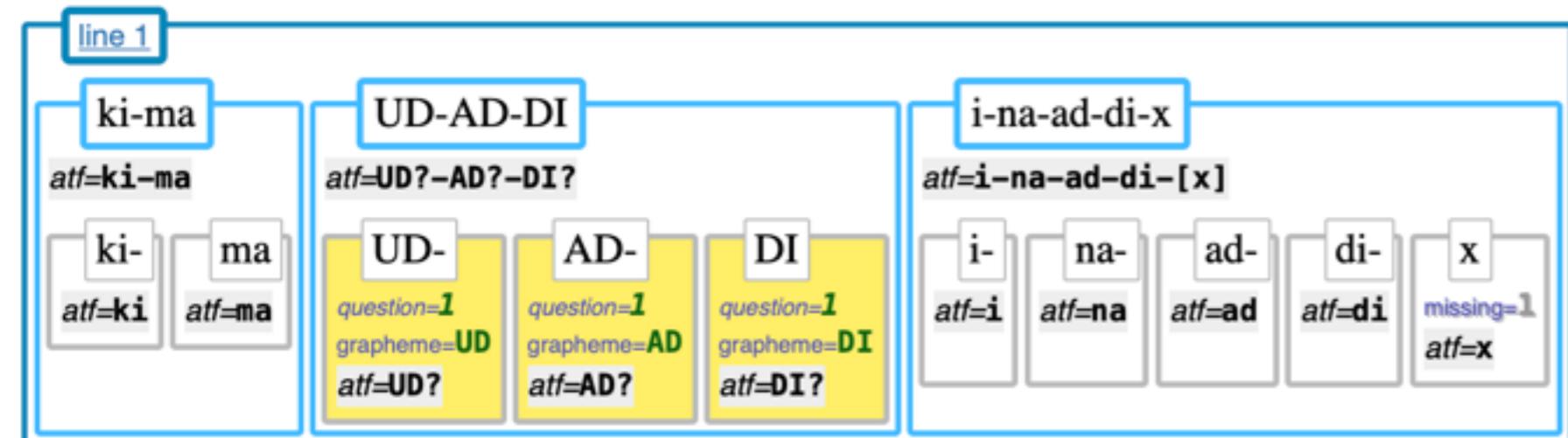


70



P297171 reverse:1 ki-ma **UD-AD-DI** i-na-ad-di-x

P297171 reverse:1



text - fabric



example: shebang

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shebang.ancient-data.org

what is in a text as graph?

-- text !

The screenshot shows a software interface for analyzing Biblical Hebrew text. The top navigation bar includes tabs for 'Text', 'Words', 'Queries', 'Notes', an information icon, and a save icon. On the right, there are links for 'Welcome' and 'Dirk'. Below the navigation is a toolbar with buttons for 'show words', 'show queries', and 'show notes'. The main content area displays a list of 31 verses. Each verse is numbered (e.g., 19, 20, 21, 22, 23, 24, 25, 26, 27) and contains Hebrew text with some words highlighted in green or yellow. Annotations are placed next to specific words in each verse. The interface also includes a status bar at the bottom with various icons and text.

19 גַּם־יִשְׁעָרֵב גַּם־יִרְבֹּקֶר יוֹם רַבִּיעִי: פ
20 נִיאָמֶר אֱלֹהִים יְשַׁרְצֵי חַפְטִים שְׁרֵץ נֶפֶשׁ חַיָּה וְעוֹף יַעֲופֵף עַל־הָאָרֶץ עַל־פְּנֵי רַקִּיעַ
הַשְּׁמִינִים:
21 נִיבְקָא אֱלֹהִים אֶת־הַתְּנוּנִים הַגְּלִילִים וְאֶת קָל־נֶפֶשׁ קַחְיָה | הַרְמָשָׁת אֲשֶׁר־שְׁרֵצֵי חַפְטִים
לְמִינְהָם וְאֶת קָל־עֹוף קָנְךָ לְמִינְהָו וַיְרָא אֱלֹהִים כִּירְטוֹב:
22 וַיְבָרֶךְ אֲתָּם אֱלֹהִים לְאָמֵר פָּרוּ וְרָבוּ וּמְלָאוּ אֶת־הַפְּנִים בְּנֵיכֶם וְקָעוּרִבְּ בָּאָרֶץ:
23 גַּם־יִשְׁעָרֵב גַּם־יִרְבֹּקֶר יוֹם חַמִּישִׁי: פ
24 נִיאָמֶר אֱלֹהִים תֹּצִא הָאָרֶץ נֶפֶשׁ חַיָּה לְמִינָה בְּהַמֶּה וּרְמַשׁ וְחַיְתוֹ־אָרֶץ לְמִינָה גַּם־יִהִיבָּן:
25 וַיְעִשֵּׂה אֱלֹהִים אֶת־חַיָּת הָאָרֶץ לְמִינָה וְאֶת־הַבְּהַמָּה לְמִינָה וְאֶת קָל־רַמֵּשׁ הַאֲדָמָה לְמִינָה
וַיְרָא אֱלֹהִים כִּירְטוֹב:
26 נִיאָמֶר אֱלֹהִים נַעֲשֵׂה אָדָם בָּצָלָמָנוּ כְּדָמוֹתֵנוּ וַיַּרְדוּ בְּרִגְתַּת הָלוּם וּבְעֹוף הַשְּׁמִינִים וּבְבְהַמָּה
וּבָכָל־הָאָרֶץ וּבָכָל־הַרְמָשׁ הַרְמָשׁ עַל־הָאָרֶץ:
27 וַיְבָרֶךְ אֱלֹהִים | אֶת־הָאָדָם בָּצָלָמוּ בָּצָלָמָם אֱלֹהִים בָּרָא אֹתוֹ זָכָר וְנָקְבָּה בָּרָא אֹתָם:

what is in a text as graph?

-- representations

The screenshot shows a digital interface for analyzing a Hebrew text, likely from the Book of Psalms. The top navigation bar includes links for 'Text', 'Words', 'Queries', 'Notes', an information icon, and a code editor icon. On the right, there's a 'Welcome' message and a timestamp '2017 4b 4'. The main content area displays a list of 31 numbered verses. Verses 22 and 27 are highlighted with yellow backgrounds. The interface provides both Hebrew text and its English translation.

show words
show queries
show notes

bhsa c 2017 4b 4
hebrew phonetic text Notes (1/3)

31 verses

18 w^alim^oš, ol bayy'ôm ûvall'aylā 'ûl^havd'îl b,^hen hā?ôr ûv'êñ haḥ^hōšek wayy,ar ?^elōh,îm kî-t'ôv .

19 w'ay^ahî-ç erev w'ay^ahî-v ōqer y,ôm r^ovîç'î .

20 wayy'ômer ?^elōh,îm yišr^os 'û hamm'ayim š,eres n'efeš ḥayy'ā w^aq^of y^eq^of'ēf qal-hā?âres qal-p^on,ê r^oq,îa^h haššām'āyim .

21 wayyivr'ā ?^elōh,îm ?et-hattannîn,îm hagg^odôl'îm w^a?'et kol-n'efeš h'ahayy'ā h'ârōm'ešet ?^aš,er šâr^os, 'û hamm'ayim l^om'înēh'em w^a?'et kol-ç'ôf kān,āf l^omîn'ēhû wayy,ar ?^elōh,îm kî-t'ôv .

22 wayy'ôrek ?ot'ām ?^elōh,îm lē?m'ôr p^or'û ûr^ov'û ûmil?'û ?et-hamm'ayim bayyamm'îm w^ahā?ôf y,irev bā?âres .

23 w'ay^ahî-ç erev w'ay^ahî-v ōqer y,ôm h̄amîš'î .

24 wayy'ômer ?^elōh,îm tōš,ē hā?âres n'efeš ḥayy'ā l^omîn'āh b^hhem,ā wār'emeš w^ah'ay^atô-?eres l^omîn'āh w'ay^ahî-k'ēn .

25 wayy'añaś ?^elōhîm ?et-ḥayy,at hā?âres l^omîn'āh w^a?et-habb^ohem,ā l^omîn'āh w^a?'et kol-r,emeš h'ā?adām,ā l^omîn'ēhû wayy,ar ?^elōh,îm kî-t'ôv .

26 wayy'ômer ?^elōh,îm n'ař^os,eh ?ād'ām b^osalm,ēnû kid^omût'ēnû w^ayird,û vid^og,at hayy'om ûv^os'ôf haššām'ayim ûvabb^ohem,ā ûv^okol-hā?âres ûv^okol-hār,emeš h'ârōm,ēs qal-hā?âres .

27 wayyivr'ā ?^elōh,îm ?et-h'ā?ād,ām b^osalm'ô b^os,elem ?^elōh,îm bār'ā ?ot'ô zāk,ār ûn^oqēv,ā bār,ā ?ot'ām .

what is in a text as graph?

-- underlying data

The screenshot shows a digital interface for analyzing Biblical Hebrew text. At the top, there are tabs for 'Text', 'Words', 'Queries', and 'Notes'. Below the tabs is a toolbar with icons for search, refresh, and other functions. The main area displays a verse in Hebrew:

וַיְהִי־עָרֶב וַיְהִי־בָּקָר יוֹם רַבִּיעֵי: פ
נִאָמֵר אֱלֹהִים יְשַׁרְצֻוּ הַמִּינִים שְׁرֵץ נֶפֶשׁ חַיָּה וְעוֹף יַעֲזֹב עַל־הָאָרֶץ עַל־פָּנֵי רְקִיעַ
הַשְׁמִינִים:
וַיּוֹבֵרָא אֱלֹהִים אֶת־הַתְּפִינִים הַגְּדוֹלִים וְאֶת כָּל־נֶפֶשׁ קַחַתְּה | הַרְמָשָׁת אֲשֶׁר־שְׁרֵצִי הַמִּינִים
לְמִינָהֶם וְאֶת כָּל־עֹור כְּנָוף לְמִינָהוּ וַיַּרְא אֱלֹהִים כִּרְטּוֹב:

Below the text, there is a detailed analysis table:

אַתָּם	יְבָרֹךְ	וְ
yōt'ām	yāv'ārek	wa
את	bless	WA-
>OT@91M	J:B@94REK:	and
<object marker>		
prep	verb	conj
NA NA NA NA NA NA	m sg p3 NA wayq piel	NA NA NA NA NA NA
11086 4	327 152	50273 0
det Obj NA 253 3	NA Pred NA 252 2	NA Conj NA 251 1
?	?	?
N WayX NA 4 1.7.3.1 200 87 1	N WayX NA 4 1.7.3.1 200 87 1	N WayX NA 4 1.7.3.1 200 87 1

what is in a text as graph? -- query results

Text Words Queries Notes  

Welcome Dirk -

show words hide queries

 > D Bakker.. Main Clauses..
  > A Barrient.. this is my t..
  > J Dyk NTN with obj..
  > C Erwich.. To speak
  > O Glanz.. Jer 4:2 obj..
 > Jer 4:2 object of to bless (God=subject) by Oliver Glanz
Jer 4:2 object of to bless (God=subject)

select all objects where [clause [phrase FOCUS function = PreO [word lex =

> O Glanz.. Jer 4:2 subj..
 > O Glanz.. OTIST610 <su>..
 > O Glanz.. OTIST619 <su>..
 > O Glanz.. Pl-Sg Incohe..
 > O Glanz.. pronominal s..
 > O Glanz.. To whom does..
 > O Glanz.. tutorial: int..

show notes

bhsa i c 2017 4b 4 hebrew phonetic text Notes (1/3)   

31 verses

נִיחַעֲרֵב נִיחַבְקֵר יוֹם רַבִּיעֵי: פ [19]

נוֹאָמֵר אֱלֹהִים יְשַׁרְצֵוּ הַמִּינִים שֶׁרֶץ נֶפֶשׁ תְּנִיה וְעוֹלָף יְעוֹפֵף עַל־הָאָרֶץ עַל־פָּנֵי רַקְיעַ [20]

הַשְׁמָמִים: [21]

נוֹבְרָא אֱלֹהִים אֶת־הַפְּנִים הַגְּדוֹלִים וְאֵת כָּל־נֶפֶשׁ תְּנִיה | הַרְמָשָׁת אֲשֶׁר־שְׁרַצּוּ הַמִּינִים לְמִינָהֶם וְאֵת כָּל־עֹזֶף קָנֵל לְמִינָהוּ נִירָא אֱלֹהִים כִּיטּוֹב: [22]

נוֹבְרָך אַתָּה אֱלֹהִים לְאָמֵר פָּרוּ וּרְבוּ וּמְלָאֵי אֶת־הַפְּנִים בִּימָיו וְהֻזֵּף וּרְבָב בָּאָרֶץ: [23]

נוֹחַיְעָרֵב נִיחַבְקֵר יוֹם חַמִּישֵׁי: פ [24]

נוֹאָמֵר אֱלֹהִים תֹּצֵא הָאָרֶץ נֶפֶשׁ חַיָּה לְמִינָה בְּהַמָּה וְרַמְשָׁ וְחוּיוֹת־אָרֶץ לְמִינָה נִיחַרְכוּ: [25]

נוֹעַשׂ אֱלֹהִים אֶת־חַלִּית הָאָרֶץ לְמִינָה וְאֶת־הַבְּהַטָּה לְמִינָה וְאֵת כָּל־רַמְשָׁ הָאָדָם לְמִינָה נִירָא אֱלֹהִים כִּיטּוֹב: [26]

נוֹאָמֵר אֱלֹהִים נַעֲשֵׂה אָדָם בְּצַלְמָנוּ כְּדֹמוֹתֵנוּ וַיַּרְדֵּן בְּדָגַת הַיּוֹם וּבְעֹזֶף הַשְׁמָמִים וּבְבְהַמָּה וּבְכָל־הָאָרֶץ וּבְכָל־הַרְמָשָׁ הַרְמָשָׁ עַל־הָאָרֶץ: [27]

נוֹבְרָא אֱלֹהִים | אֶת־הָאָדָם בְּצַלְמוֹ בְּצַלְמוֹ אֱלֹהִים בְּנָא אֹתוֹ זָכָר וְנִקְבָּה בְּרָא אֹתָם: [28]

נוֹבְרָך אַתָּה אֱלֹהִים וְיֹאמֶר לְהֶם אֱלֹהִים פָּרוּ וּרְבוּ וּמְלָאֵי אֶת־הָאָרֶץ וּכְבָשָׂת וְרָדוּ בְדָגַת

what is in a text as graph?

-- annotations (man-machine)

Text Words Queries Notes  

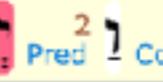
Welcome Dirk

 show words show queries hide notes  D Roorda.. example  N Winther.. Texthierarchy..

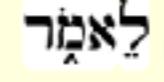
31 verses

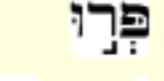
bhsa c 2017 4b 4 hebrew phonetic text Notes (1/3)  

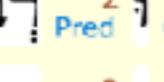
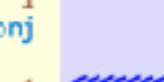
22   

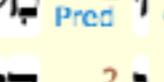
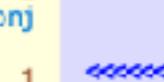
אלְהִים  4 Subj אַתֶּם  3 Objc בָּרָךְ  2 Pred וְ  1 Conj  N WayX

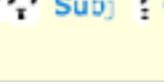
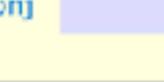
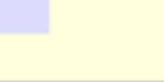
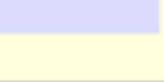
check this is an anomalous result. (test comment)

לְאֹמֵר  1 Pred  N InfC

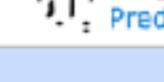
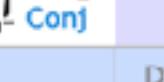
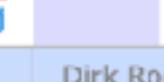
פָּרוּ  1 Pred  NQ ZIm0

רָبָּו  2 Pred וְ  1 Conj  NQ WIm0

מְלֹאָו  2 Pred וְ  1 Conj  NQ WIm0

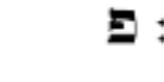
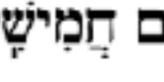
הַעֲזֹר  3 Loca יְרַב  2 Pred וְ  1 Conj  NQ WCYq

23   

יְהִי  3 Subj עֲרָב  2 Pred וְ  1 Conj  N WayX

crossref «Genesis 1:13 ~89%» , «19 ~84%»

יְהִי  3 Subj בָּקָר  2 Pred וְ  1 Conj  N WayX

יּוֹם חַמִּישִׁי  1 PreC  N NmCl

what is in a text as graph?

-- links to other interfaces on the same data

what is in a text as graph?

-- links to other interfaces on the same data

The screenshot shows the Bible Online Learner interface. At the top, there is a navigation bar with links to Home, Text and Exercises, User Access, Language (set to Hebrew), and Variant. Below the navigation bar is a sidebar with buttons for Word, Phrase, Clause, Sentence, and Clear grammar. A large blue button labeled "to this chapter in Bible Online Learner" contains the number "31 verses". The main content area displays the first chapter of Genesis in Hebrew, starting with "בראשית ברא אלֹהִים את השמנים ואת הארץ:". The text is annotated with numbered superscripts (1, 2, 3, 4, 5, 6, 7) pointing to specific words or phrases, likely indicating grammatical analysis or cross-references. The background of the main content area is light purple.

Genesis 1

בראשית ברא אלֹהִים את השמנים ואת הארץ:
וְהָאָרֶץ קָוָתָה תְהֻלָּה וּבָהּ וַיַּשֵּׁד עַל־פָנֵי תְהֻום וְרֹוח
אלֹהִים מְרַחְפָת עַל־פָנֵי הַמְּאֹםִים: ³נוֹאָמֵר אֱלֹהִים יְהִי
אֹור וַיְהִי אֹור: ⁴נוֹרָא אֱלֹהִים אֲתָה־הָאֹור כִּידָטוֹב
וַיַּבְהַל אֱלֹהִים بֵּין הָאֹור וּבֵין הַחַשָּׁה: ⁵נוֹקָרָא
אֱלֹהִים לֹא־וָיְהַלְלֵל יְמִין וְלֹא־שָׁדֵךְ קָרָא לִילָה וַיְהִי־עָרָב
וַיְהִי־בָקָר יוֹם אֶחָדר: פ ⁶נוֹאָמֵר אֱלֹהִים יְהִי רְקִיעַ
בְּפָטוֹת הַמְּאֹםִים וַיְהִי מִבְלָיל בֵּין מִינִים לְמִינִים: ⁷נוֹעַט

what is in a text as graph? -- links to other interfaces on the same data

Bible Online Learner

Home Text and Exercises User Access Language Variant

Word Phrase Clause Sentence Clear grammar

to this chapter in Bible Online Learner
31 verses

to this chapter in ParaBible
31 verses

Genesis 1

בראשית בָּרָא אֱלֹהִים אֶת הַשְׁמִינִים וְאֶת הָאָרֶץ:¹
וְהָאָרֶץ קָוָתָה תְּהוֹן וּבָהּ וְחַשֵּׁךְ עַל־פָנֵי תְהוּם וְרֹוחַ²
אֱלֹהִים מְרֻחֶפֶת עַל־פָנֵי הַמִּינִים: ³נוֹאָמֵר אֱלֹהִים יְהִי
אֹור וְיִהְיֶא אֹור: ⁴נוֹירָא אֱלֹהִים אֶת־הָאֹור כִּידּוֹבָ
וַיַּבְקַל אֱלֹהִים בֵּין הָאֹור וּבֵין הַחַשָּׁךְ: ⁵נוֹיקָרָא
אֱלֹהִים לֹא־זָמֵן וְלֹחֵשׁ קָרָא לִילָה וְיִהְיֶא־עָרָב
וְיִהְיֶא־בָּקָר יוֹם אֶחָד: פ ⁶נוֹאָמֵר אֱלֹהִים יְהִי רְקִיעָה
בְּפָטוּךְ כְּמִים וְיִקְרַבְתָּ לְמִים לְמִים: ⁷נוֹעֲטָה

ROOT ארץ
PART OF SPEECH Noun
NUMBER Singular
SEMANTIC DOMAIN Land
PARALLEL LEXEME אָרֶץ
GLOSS earth

BHS + NET + LXX

Search Search Tools View

+ Create Search Term

בראשית בָּרָא אֱלֹהִים אֶת הַשְׁמִינִים וְאֶת הָאָרֶץ:¹ וְהָאָרֶץ
קָוָתָה תְּהוֹן וּבָהּ וְחַשֵּׁךְ עַל־פָנֵי תְהוּם וְרוּסָם אֱלֹהִים
מְרֻחֶפֶת עַל־פָנֵי הַמִּינִים: ²נוֹאָמֵר אֱלֹהִים יְהִי אֹור וְיִהְיֶא אֹור:
נוֹירָא אֱלֹהִים אֶת־הָאֹור כִּידּוֹבָ וַיַּבְקַל אֱלֹהִים בֵּין הָאֹור
וּבֵין הַחַשָּׁךְ: ³נוֹיקָרָא אֱלֹהִים לֹא־זָמֵן וְלֹחֵשׁ קָרָא לִילָה

text-fabric: the system

text-fabric: the system

garden

github.com/annotation

text-fabric: the system

garden

github.com/annotation

tutorials

nbviewer.jupyter.org/github/annotation/

text-fabric: the system



tutorials / lorentz2020

Name



images

dss.ipynb

oldbabylonian.ipynb

quran.ipynb

start.ipynb

garden

[github.com/annotation](https://nbviewer.jupyter.org/github/annotation)

tutorials

nbviewer.jupyter.org/github/annotation/

hands-on

[tutorials/blob/master/lorentz2020/start.ipynb](https://nbviewer.jupyter.org/tutorials/blob/master/lorentz2020/start.ipynb)



browser - search

line pad

P509373

node pad

100,101,102

search pad

document
sign reading=szum

expand all lines
expand all nodes
expand all results
400 current position
20 results per page

Total 1210

300 390
310 391
320 392
330 393
340 394
350 395
100 396
200 397
300 398
380 399
1 400
400 1000
400 400
1210 600
600 401
700 402
800 403
900 404
440 405
450 406
460 407
470 408
480 409

n document sign

► 390 P292761 obverse:4 document P292761 | [star] |

► 391 P292761 obverse:10 document P292761 | [star] |

► 392 P292761 reverse:2 document P292761 | [star] |

► 393 P292758 obverse:5 document P292758 | [star] |

► 394 P292754 obverse:13 document P292754 | [star] |

► 395 P292754 obverse:15 document P292754 | [star] |

► 396 P292986 reverse:2 document P292986 | [star] |

► 397 P292986 reverse:5 document P292986 | [star] |

► 398 P292942 reverse:5 document P292942 | [star] |

► 399 P292797 reverse:5 document P292797 | [star] |

► 400 P292863 obverse:4 document P292863 | [star] |

▼ 401 P292765 obverse:6 document P292765 | [star] |

document P292765 AbB 9 214

line 6

[star] [star] [star]
[star] [star] [star]
[star] [star] [star]

damage=1 reading=szum
damage=1 reading=ma
reading=a reading=bi
reading=at reading=ta

► 402 P292932 obverse:4 document P292932 | [star] |

► 403 P292932 reverse:1 document P292932 | [star] |

► 404 P292932 reverse:11 document P292932 | [star] |

browser - view in context

The screenshot shows a digital interface for viewing historical manuscripts. On the left, there are three panels: 'line pad' (top), 'node pad' (middle), and 'search pad' (bottom). The 'line pad' contains the identifier 'P509373'. The 'node pad' contains the identifiers '100,101,102'. The 'search pad' has a search term 'document sign reading=szum'.

The main area displays a list of 1285 documents, with 'obverse' selected as the view mode. A specific line, 'line 6', is highlighted with a yellow border. This line contains the text 'szum#-ma# a-bi at-ta'. The word 'szum#-ma#' is annotated with 'damage=1' and 'reading=szum'. The word 'a-bi' is annotated with 'reading=a'. The word 'at-ta' is annotated with 'reading=at'.

Below the highlighted line, a list of other lines is shown:

- 1 a-na lu2-igi-sa6
- 2 q12-bi2-ma
- 3 um-ma ba-nu-u2-um-ma
- 4 _gan2_-lum i-na e-s,e2-di-im
- 5 ga-me-er
- ▼ 6 szum#-ma# a-bi at-ta
- 7 a-na nu-ur2-{d}suen
- 8 q12-bi2#-ma lu#-ta#-al-kam
- 9 i-na _e2-qal_-li-ia
- 10 la tu-re-qa2-an-ni
- 11 a-la-ki-a-am

app framework

athenaeus	Greek	Works of Athenaeus	80 - 170	Deipnosophistae	Ernst Boogert
banks	modern english	Iain M. Banks	1984 - 1987	99 words from the SF novel Consider Phlebas	Dirk Roorda
bhsa	Hebrew	Hebrew Bible	1000 BC - 900 AD	Biblia Hebraica Stuttgartensia (Amstelodamensis)	Dirk Roorda + ETCBC
dss	Hebrew	Dead Sea Scrolls	300 BC - 100 AD	Transcriptions with morphology based on Martin Abegg's data files	Dirk Roorda, Jarod Jacobs
nena	Aramaic	North Eastern Neo-Aramaic Corpus	2000	Nena Cambridge	Cody Kingham
oldbabylonian	Akkadian / cuneiform	Old Babylonian letters	1900 - 1600 BC	Altbabylonische Briefe in Umschrift und Übersetzung	Dirk Roorda, Cale Johnson
peshitta	Syriac	Syriac Old Testament	1000 BC - 900 AD	Vetus Testamentum Syriace	Dirk Roorda, Hannes Vlaardingerbroek
quran	Arabic	Quran	600 - 900	Quranic Arabic Corpus	Dirk Roorda, Cornelis van Lit
syrrt	Syriac	Syriac New Testament	0 - 1000	Novum Testamentum Syriace	Dirk Roorda, Hannes Vlaardingerbroek
tisch	Greek	New Testament	50 - 450	Greek New Testament in Tischendorf 8th Edition	Cody Kingham
uruk	proto-cuneiform	Uruk	4000 - 3100 BC	Archaic tablets from Uruk	Dirk Roorda, Cale Johnson

programming library

```
In [2]: from tf.app import use
```

programming library

```
In [3]: A = use(
    'bhsa',
    mod=(
        'etcbc/valence/tf',
        'etcbc/lingo/heads/tf',
        'ch-jensen/Semantic-mapping-of-participants/actor/tf'
    ),
    hoist=globals(),
)

Using TF-app in /Users/dirk/github/annotation/app-bhsa/code:
    repo clone offline under ~/github (local github)
    connecting to online GitHub repo etcbc/bhsa ... connected
Using data in /Users/dirk/text-fabric-data/etcbc/bhsa/tf/c:
    r1.6 (latest release)
    connecting to online GitHub repo etcbc/phono ... connected
Using data in /Users/dirk/text-fabric-data/etcbc/phono/tf/c:
    r1.2 (latest release)
    connecting to online GitHub repo etcbc/parallels ... connected
Using data in /Users/dirk/text-fabric-data/etcbc/parallels/tf/c:
    r1.2 (latest release)
    connecting to online GitHub repo etcbc/valence ... connected
Using data in /Users/dirk/text-fabric-data/etcbc/valence/tf/c:
    r1.1 (latest release)
    connecting to online GitHub repo etcbc/lingo ... connected
Using data in /Users/dirk/text-fabric-data/etcbc/lingo/heads/tf/c:
    r0.1 (latest release)
    connecting to online GitHub repo ch-jensen/Semantic-mapping-of-participants ... connected
    downloading https://github.com/ch-jensen/participants/releases/download/1.3/actor-tf-c.zip ...
    unzipping ...
    saving data
    could not save data to /Users/dirk/text-fabric-data/ch-jensen/Semantic-mapping-of-participants/actor/tf/c
    Will try something else
    actor/tf/c/actor.tf...downloaded
    actor/tf/c/coref.tf...downloaded
    actor/tf/c/prs_actor.tf...downloaded
    OK
Using data in /Users/dirk/text-fabric-data/ch-jensen/Semantic-mapping-of-participants/actor/tf/c:
    r1.3=#1c17398f92c0836c06de5e1798687c3fa18133cf (latest release)
```

built-in: research data exchange

shift in sophistication



Hebrew Bible @ WIVU Amsterdam: 1970-2012

shift in sophistication



Hebrew Bible @ WIVU Amsterdam: 1970-2012

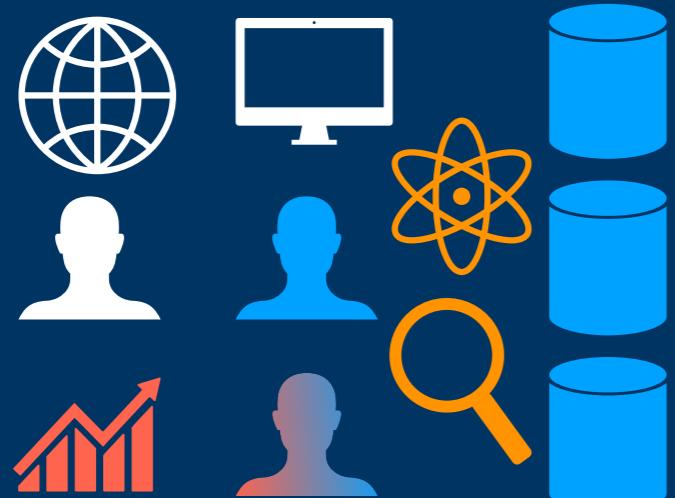
the graph is bigger than you and your database/webapp

shift in sophistication



Hebrew Bible @ WIVU Amsterdam: 1970-2012

the graph is bigger than you and your database/webapp



ETCBC Amsterdam: 2012-2020
BHSA - Dead Sea Scrolls - Peshitta

NINO Cunei: 2017-2020
Uruk - Old Babylonian - Old Assyrian
RU Utrecht: 2019
Q'uran

The Future - 2024



The Future - 2024

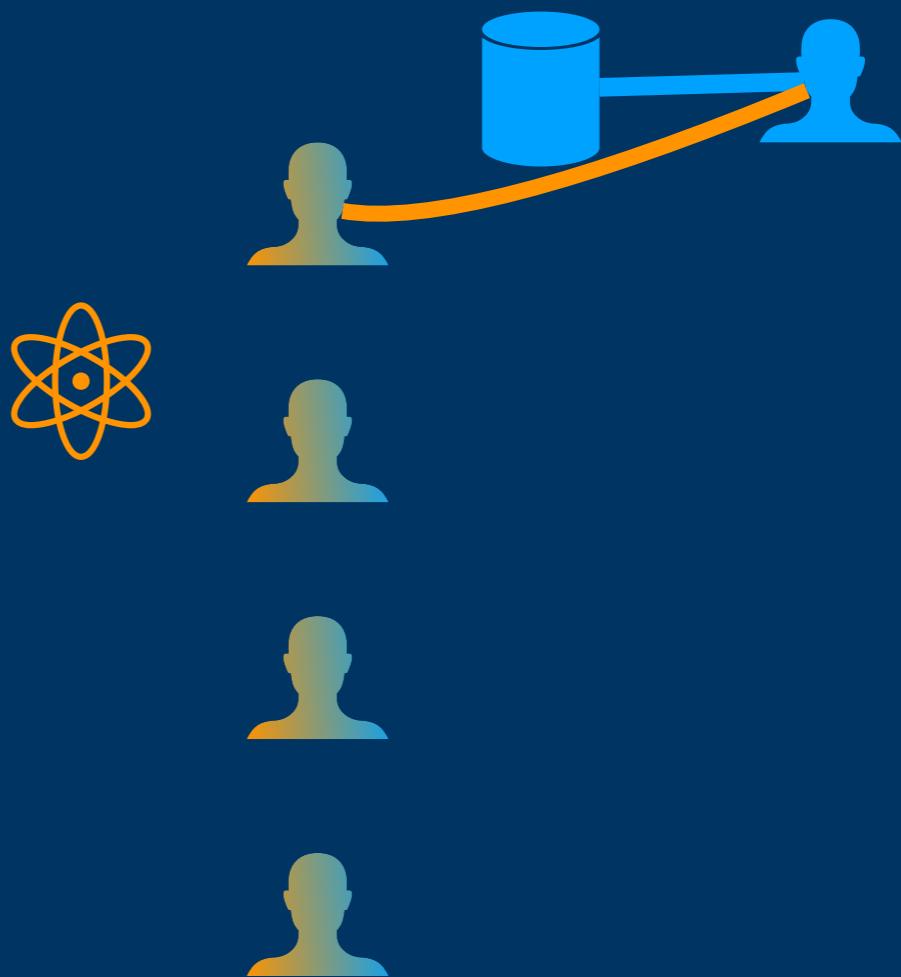
30 yrs of work



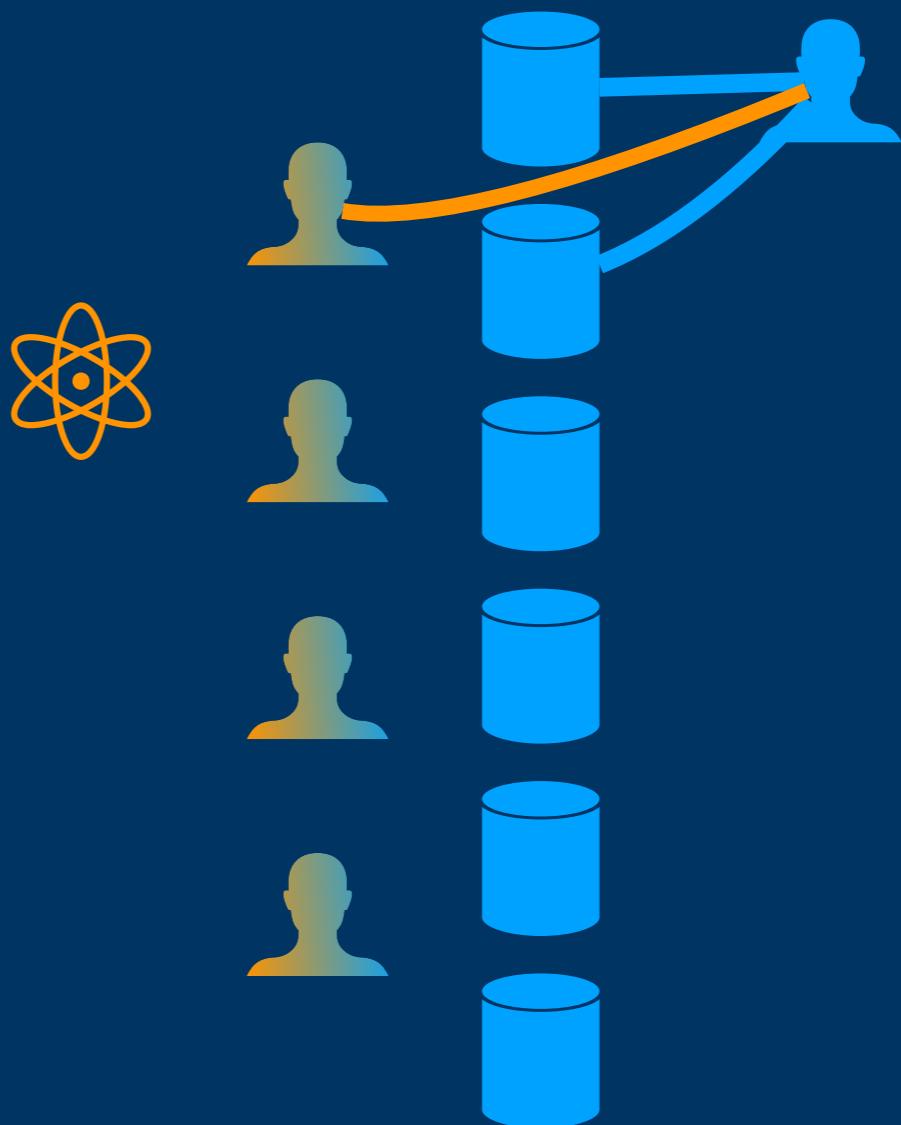
The Future - 2024



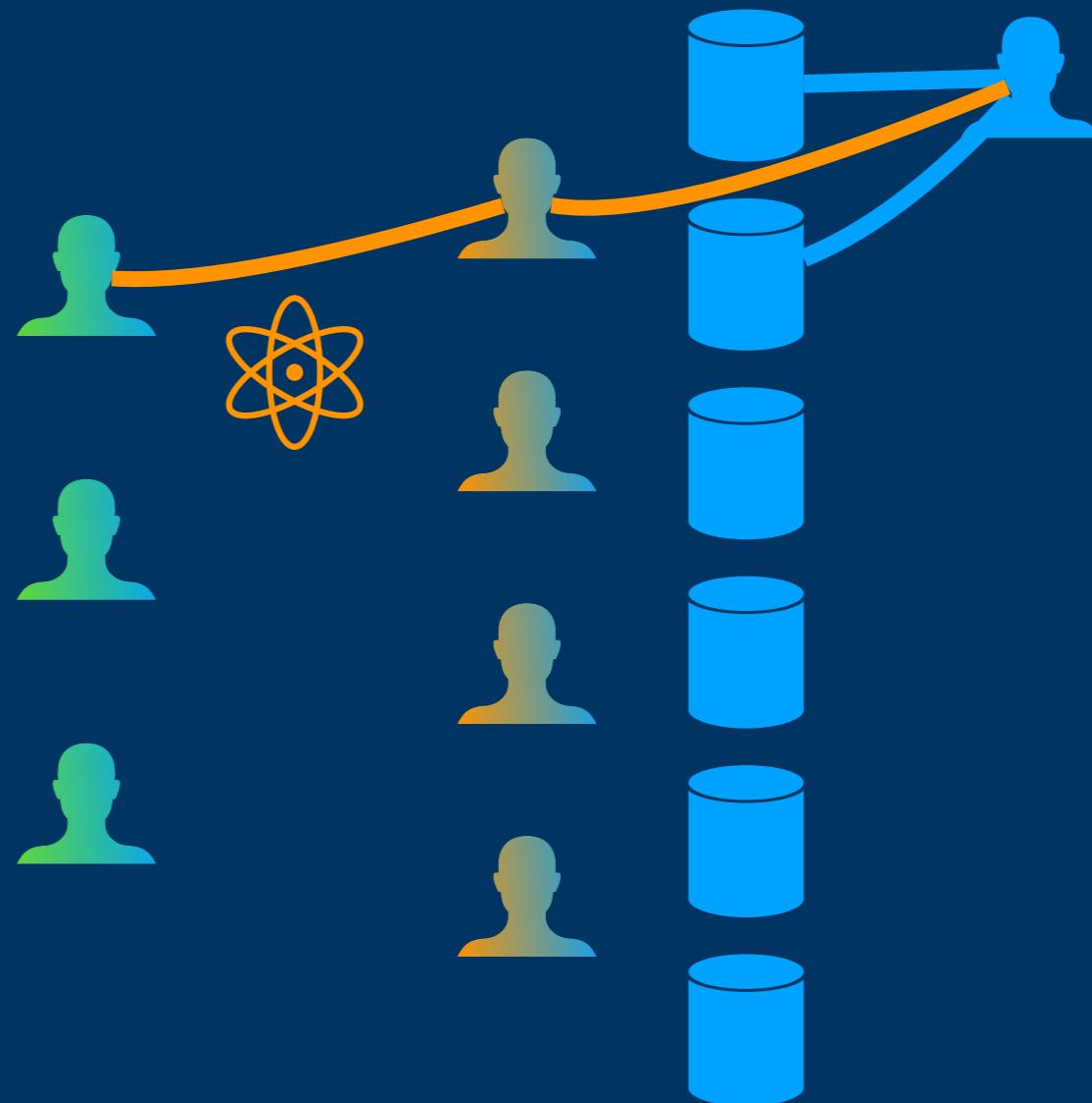
The Future - 2024



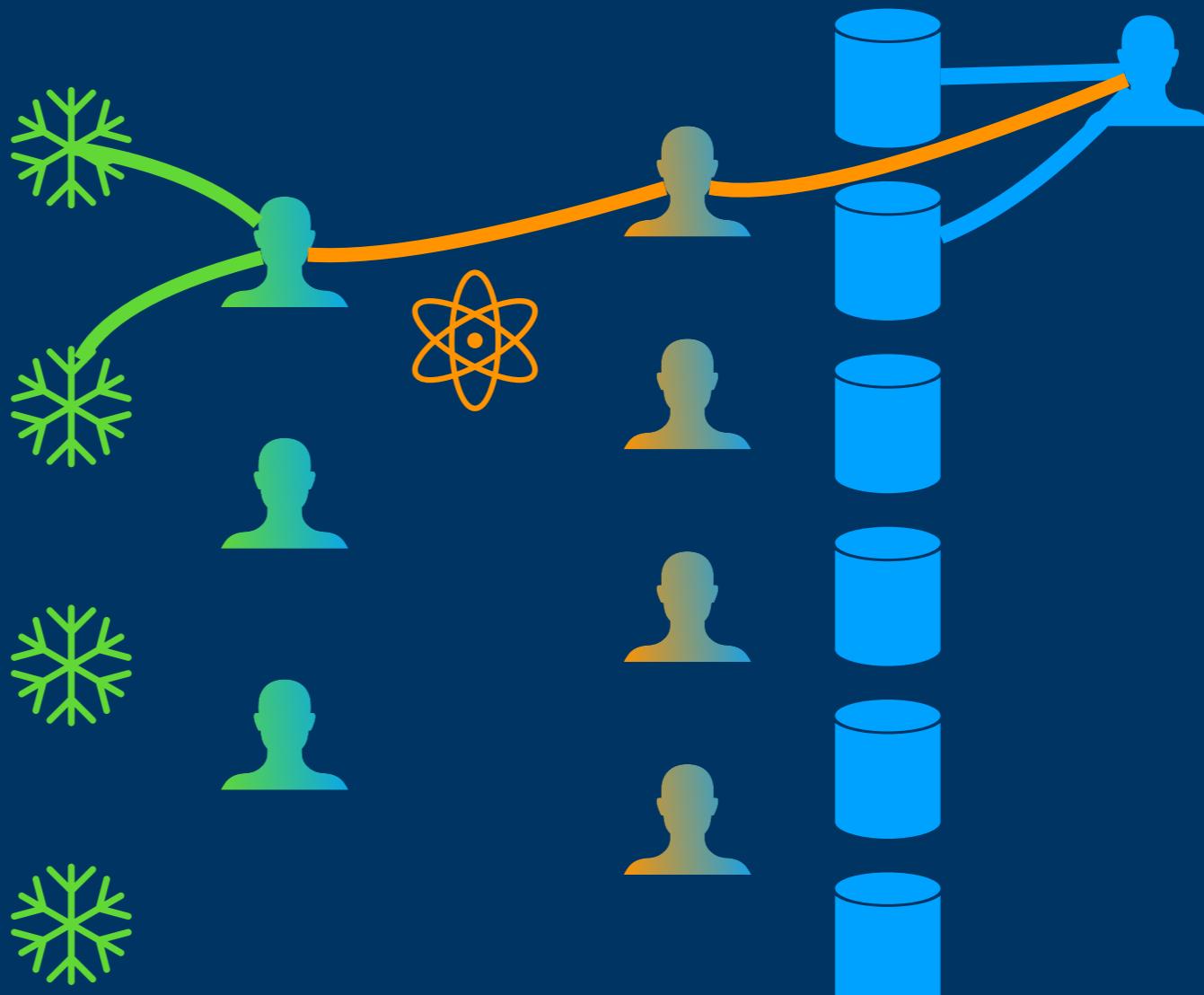
The Future - 2024



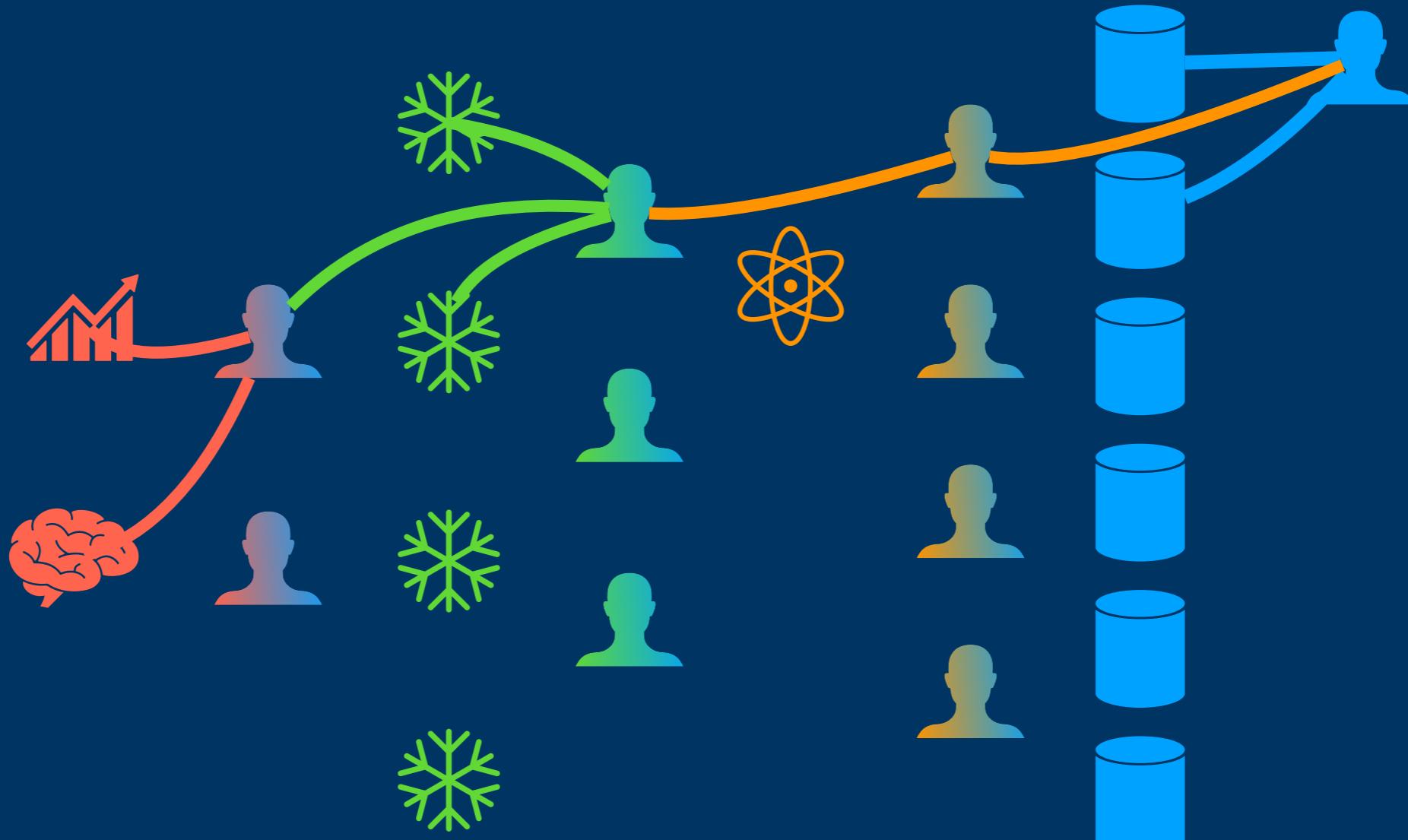
The Future - 2024



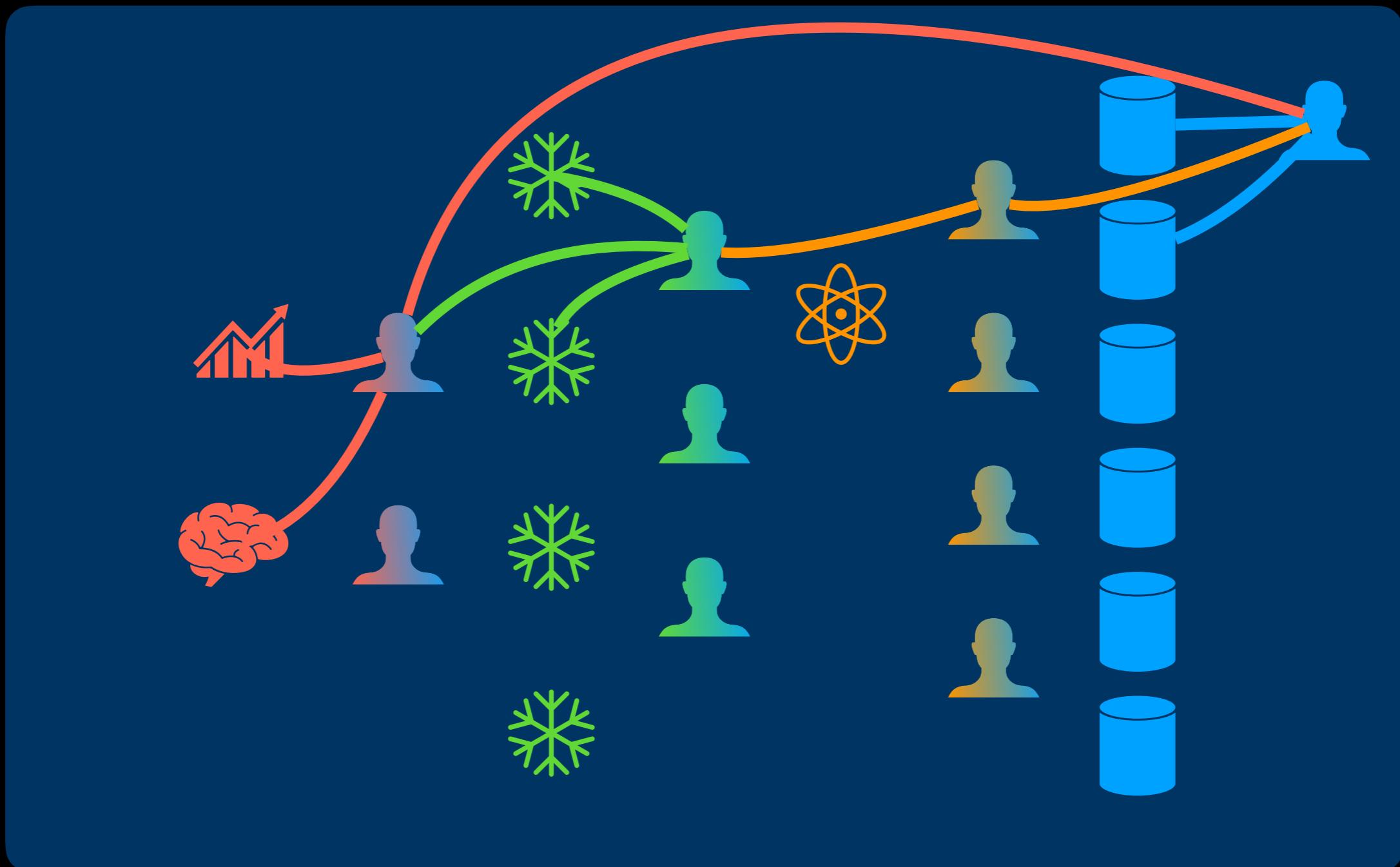
The Future - 2024



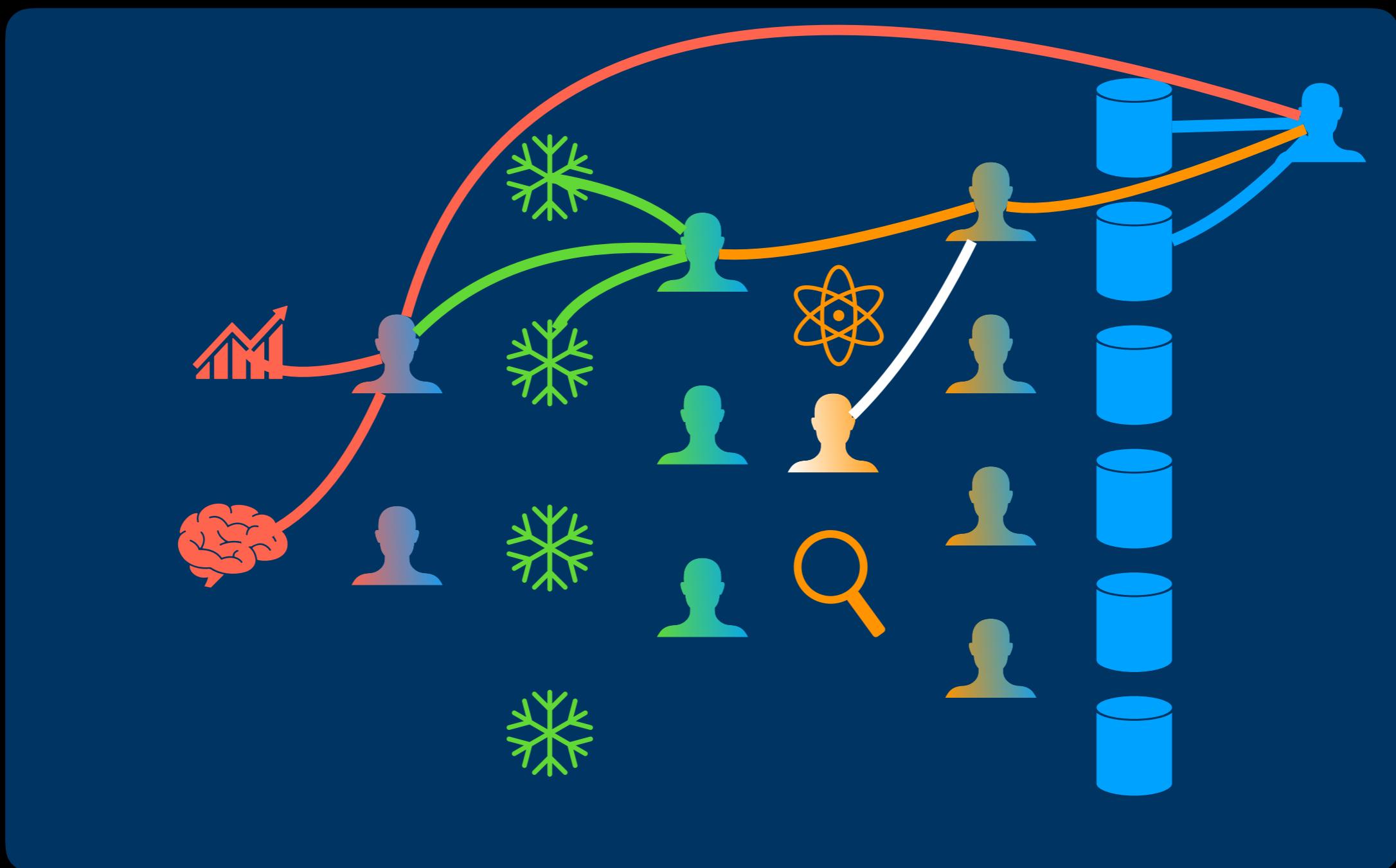
The Future - 2024



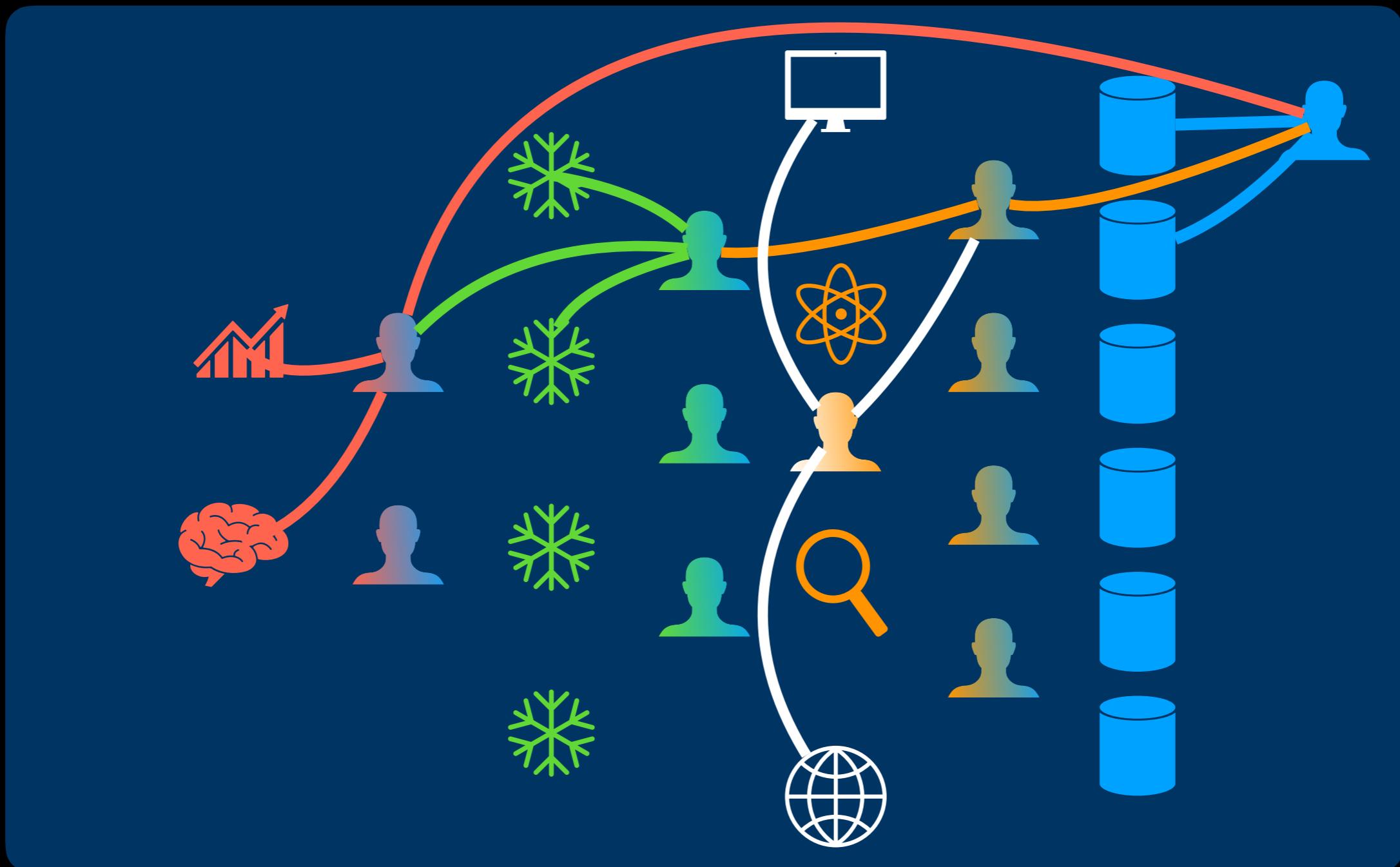
The Future - 2024



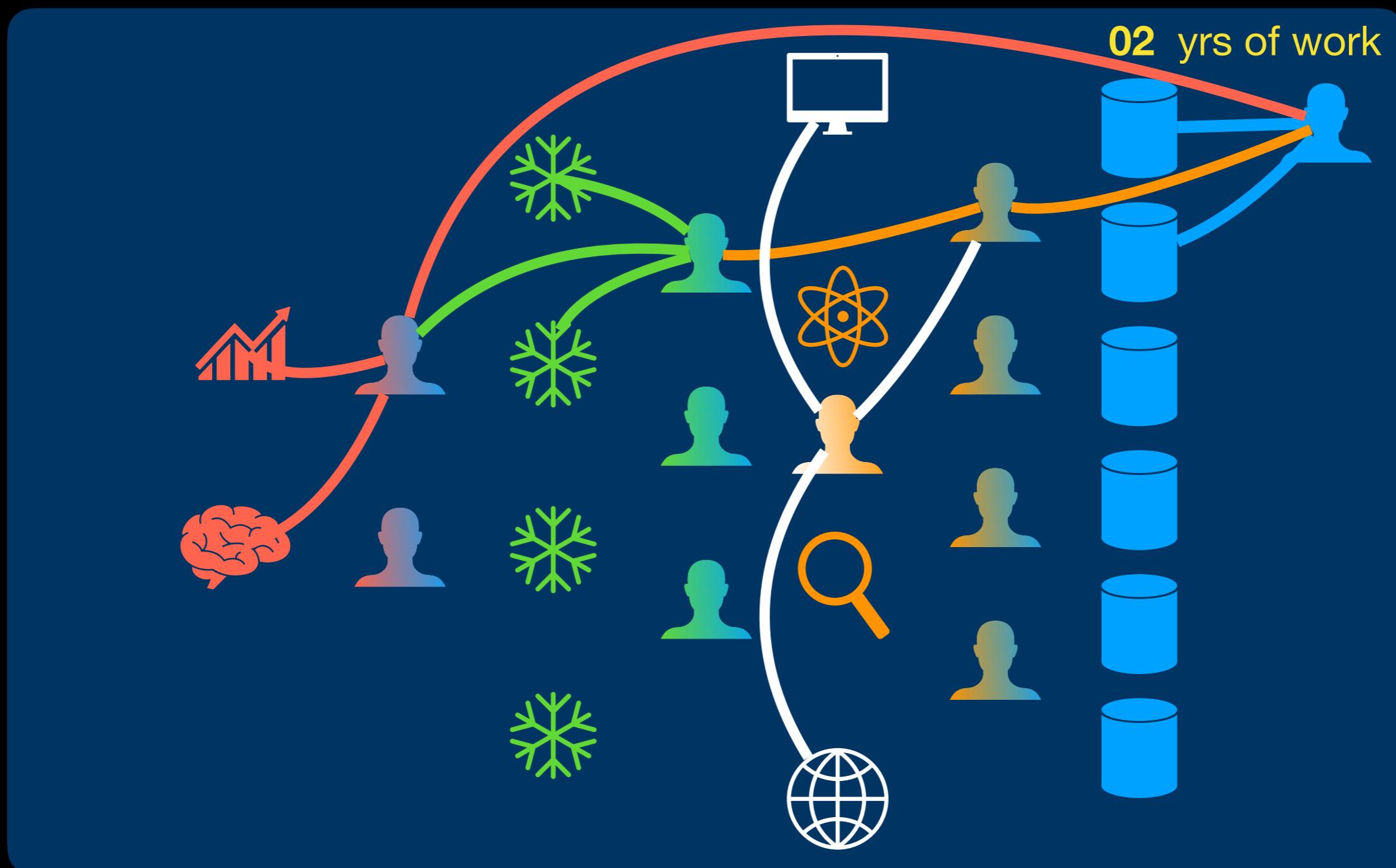
The Future - 2024



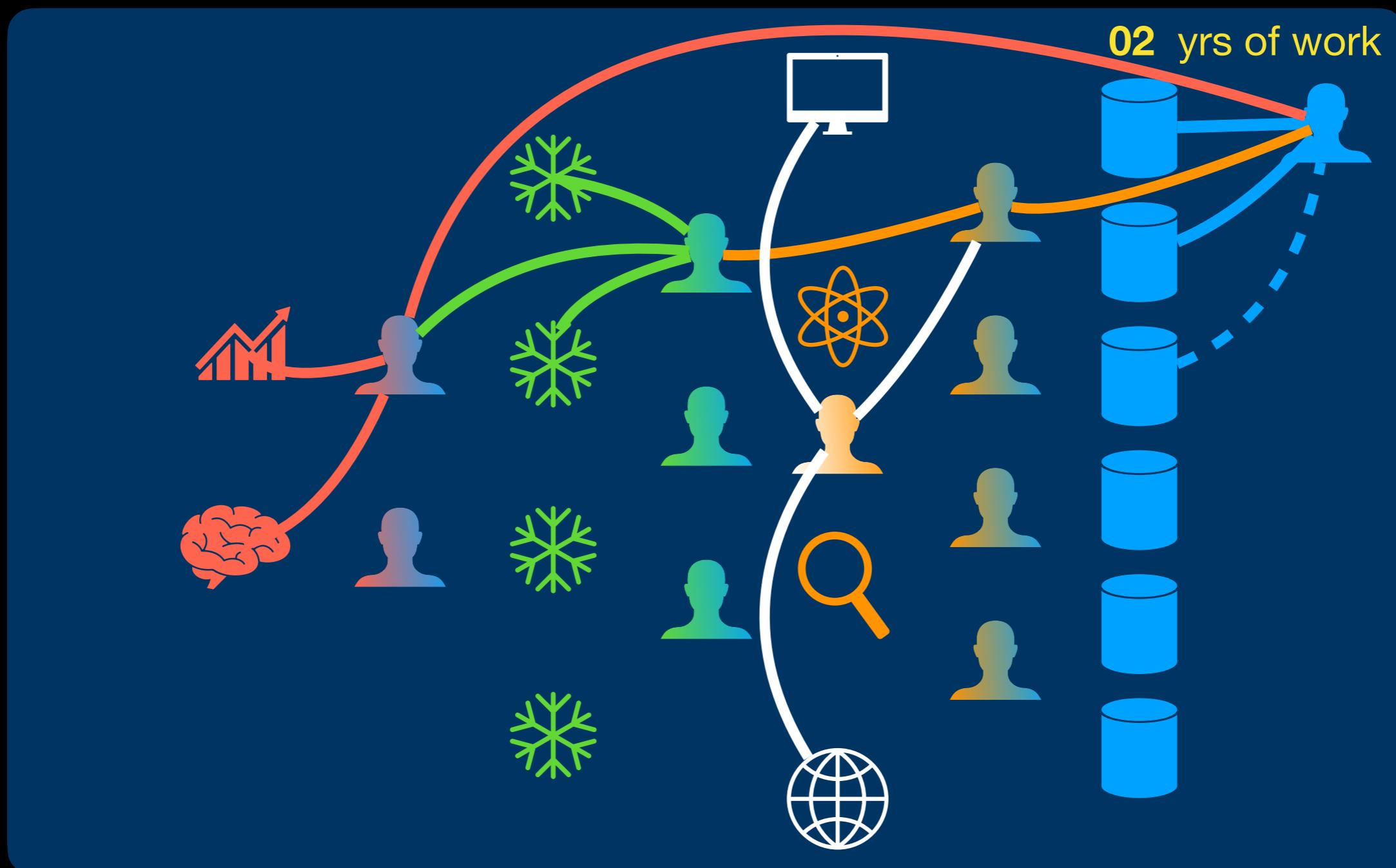
The Future - 2024



The Future - 2024



The Future - 2024



The End

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