

<https://ashmg.design/posts/W511jfMy>

Year 3 Project based on initial Year 1 "POSTVIRALISM" project

Website page about POSTVIRALISM and the POSTVIRALISM Hub on VRChat:

#realityconstruction #worldbuilding #social #communication #ability  
#equality #communicationdesign #interactiondesign #UX #UI  
#language design #systemsdesign #3ddesign #unity #VRChat  
#virtualworld

POSTVIRALISM:

a social movement, of my design, about making the pandemic count.

POSTVIRALISM is aimed at those affected by the covid-19 pandemic, and the challenging national lockdowns that occurred worldwide, and those with issues similar to those experienced in/around this period, regardless of when they started.

everyone has learnt a lot about mental health, mobility, and isolation, during the pandemic, and the importance of the internet as a tool for overcoming these issues has become overwhelmingly clear.

not everyone made it out of lockdown, and not everyone will.

but by utilising, inventing, and experimenting with, computer-aided forms of communication and presence, many of us can expand our existence far beyond the walls of our residence, and our previous circle of physical, mental, and social ability, creating a culture that explores and welcomes alternative forms of communication and interaction - existing and new.

POSTVIRALISM has a specific focus on those with difficulty leaving the house, or communicating and socialising, for ANY reason.

we hope to utilise digital platforms, alternative communication methods, kindness, and tolerance, to enrich the lives of such people.

to further the movement, I have built an interactive online world, accessible in both VR and PC; a hub for these people to congregate, relax, play, and even heal. It features a two-user UI, allowing participants to communicate in a 122-word logographic language of my own design, placing people of all communication styles on a level playing field.

POSTVIRALISM argues that worlds like these are real, and that these forms of communication are just as valid as any other.

the movement's goal is to seize this exciting new window of awareness into all of the aforementioned issues and more, using it to come together and compassionately form a brighter future, where such people feel deeply supported, included, and understood.

...

WHO IS IT FOR?:

POSTVIRALISM is not just for those affected by the virus directly - i.e. the poor victims who have tragically lost their lives to covid; victims of the debilitating sickness; the bereaved - but also for those affected by complications such as "the long covid".

It is equally for those who have suffered mental health damage, trauma, and domestic abuse due to the lockdowns and restrictions.

It is about those who have struggled with similar issues before the pandemic, and those that will continue to struggle with new issues after.

to repeat: POSTVIRALISM has a specific focus on those with difficulty leaving the house, or communicating and socialising, for ANY reason.

this includes, but is not limited to:

/ people with disabling bodily illnesses, or conditions that limit energy

- including CFS/ME, post-viral fatigue, "long-covid", and other

"spoonies" - including people with more immediately life-threatening illnesses, such as heart disease and cancer

/ elderly people

/ people with physical impairments/disabilities

-such as mobility impairments

/ people with mental disabilities

/ people with mental health problems (not just the palatable ones that get all the press)

/ people that are neurodivergent

-Including Autism, AD(H)D, Tourette's, and Schizophrenia

/ people with different communication/interaction styles and methods

-Including the large community of mute people on VRChat

....

POSTVIRALISM world images show original world functionality:

-Natural setting aided by ivy on walls, plants sprouting through the ground, including large tree centrepiece, creating an overgrown look; plus fake window / porch opening up onto video of a forest with forest sounds, to create the appearance of a forest view - placing the digital cyberpunk world within a natural setting

-forest sounds (including birdsong) tie all the natural elements together, building a strong sense of presence

-Video-window-porch view video player can be replaced with any youtube video, for communal viewing parties

-Button toggles video UI, to create "cinema mode"

// ° // PROJECTS // VIRTUAL PROJECTS // SPEAKERS  
// TIMELINE

*In ter fes*: A boundary across which systems communicate.

a surface forming a common boundary of two bodies, spaces, phases or regions.

the place at which independent and often unrelated systems meet and act on or communicate with each other <the man-machine interface>

the point at which communication between machines or systems can be connected.

the means by which interaction or communication is achieved at an interface. A device to interact or communicate with another system component.

the point at which the operation of different systems or the interests of different groups overlap.

a situation, way or area in which two things or groups can come together and have an effect on each other.

the overlap where two theories or phenomena affect each other or have links with each other.

a boundary or point common to two or more similar or dissimilar command and control systems, sub-systems, or other entities against which or at which necessary information flow takes place.

the communication between a calling program and a subroutine.

the physical or logical connection between a computer and the user, a peripheral device, or a communications link.

a program that controls a display for the user and that allows the user to interact with the system [Syn: {user interface}]

graphical user interface: (GUI) a computer program that enables a person to communicate with a computer through the use of symbols, visual metaphors, and pointing devices. The GUI is now the standard computer interface, and its components have become cultural artifacts.

the equipment or programs used to communicate between different systems or programs. Hardware and associated circuitry that links one device with another The link between parts of a computer system, or between two different systems varies from a simple cable connection to an "intelligent" device which translates protocol. An interface can be between hardware and hardware, hardware and software, software and software, and human and computer [syn: {port}]

Port: (Math.) A process of demonstration in which a general truth is gathered from an examination of particular cases, one of which is known to be true, the examination being so conducted that each case is made to depend on the preceding one: -- called also {successive induction}.

Surface \Sur"face\, n. [F. See {Sur-}, and {Face}, and cf. {Superficial}.]

1. The exterior part of anything that has length and breadth; one of the limits that bound a solid, esp. the upper face; superficies; the outside; as, the surface of the earth; the surface of the body.

"The bright surface of this ethereal mold."

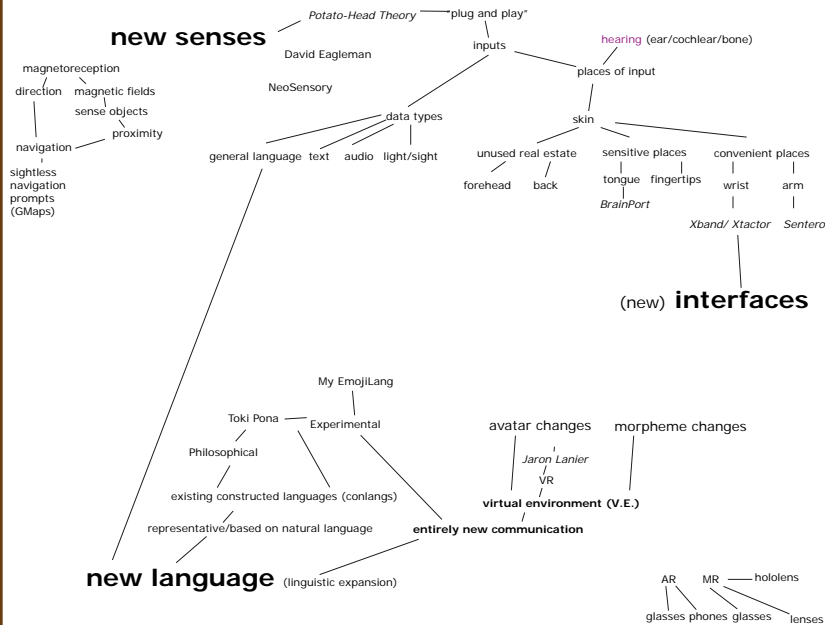
Milton

"The easy menu interaction views cooked data through predefined windows"

El Iblis

Interface - explorer // shared boundaries (no date). Available at: [http://Interface.t0.or.at/in\\_ter\\_fes.html](http://Interface.t0.or.at/in_ter_fes.html) (Accessed: 2 November 2022).

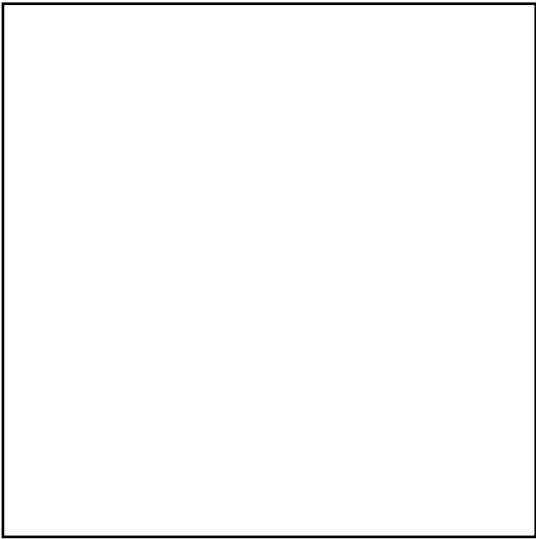




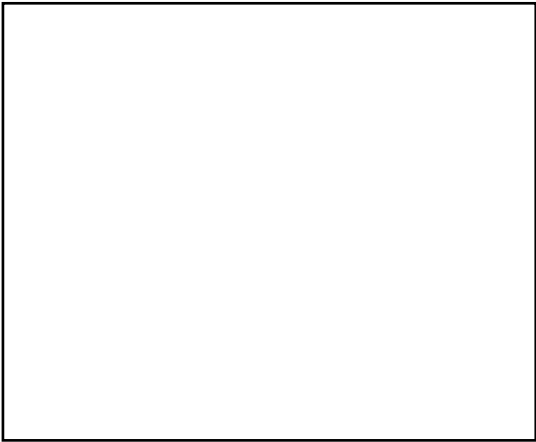
- / Scour Viva and other metamaps for own design ideas
  - \> ask about analogous things w their designs
- / Questions we asked ourself when explaining our work
  - \> scour "present" section of old metamaps (MMs)
  - \> scour "review" section (new page)

/ Select tile with attention  
  \> too fast?  
    \> branching modules |||>  
      > inventive grammar techniques |||>

[Diagrams of stacking radial map menu model for selection of tiles. First a menu of 5 example categories is shown: "concepts, emotions, objects, verbs, grammar". When the user selects "emotions", the category exands with a radial map menu with categories "pleaseand" and "unpleasant". When "pleasant" is selected, two further example categories are expanded: "surprised" and "happy". When "happy" is selected, this expands into the categories "optimistic" and "confident", as well "content" (which is shown a synthesis suggestion for the combination of two existing tiles: "happy" and "peace").



/ could even add suggestions (as limited to 122 ish characters atm) for more complex compound words  
  \> create a 2nd lexicon of "suggested words"/compounds



Modes - general

/ New senses  
  > haptic  
  > magneto-reception  
  > others  
    \> T#5

/ BCI |||>  
  > P-300  
  
  > Multi-modal = combine with below

Body:  
  
/ Heart rate  
  \> increased HR/BCI arousal when arrive at certain morpheme = selection  
  \> stimulates branching of nodes |||>  
  
/ Eye-tracking  
  > gaze  
  
  > pupillometry

WHy BCI?  
  
/ Beware novelty  
  
/ Can other interfaces work better?  
  \> depends on function  
    \> ability tech for locked-in patients = BCI superior

| BCI pros  | Keyboard pros   |
|---|---|
| / Fluid<br><br>/ Subconscious (P-300)   | / Selecting   |
| / Selecting in context of VR<br>\> better than trying to type on keyboard in VR using clunky controllers    > | >    Can we use both?<br>\> additional new keyboard/selector interface WHILE in VR using BCI? |

Hardware  
/ Physical keyboard  
  \> immediately accesible  
    \> not to those with problems pushing buttons  
      > part of the ethos of this was ENABLING LEVEL PLAYING FIELD  
    \> for testing phase?  
      \> could test with Goldsmiths Students more immediately  
      \> time sink  
      > physical buttons can't AUTO-UPDATE with EPD (Emergent Participatory Design)  
      \> screen buttons  
        \> future PRODUCT  
          \> could BE ANSWER TO ||>  
            (how to have OPEN SOURCE/ EPD Ethos while also making it a PRODUCT)  
          \> can PURCHASE physical KEYBOARD ACCESSORY

/ Computer  
  
/ Mobile app/web applet

## Learning how to control the device/use BCI

/ See brainwaves in real time in VR/V.E (virtual environment)

## Using the language

/ Feedback when selecting

/ Feedback of other person's communications - display of messages

> one way communication  
  \> patient to carer

> two way communication  
  \> inter-patient  
  > commercial/recreational  
    \> VRChat etc

## Modes - general (can apply to either above)

/ New senses

> haptic  
> magneto-reception  
> others  
  \> T#5

```
>||| Inventive/Experimental Grammar
```

```
/ Tiles for nouns
```

```
\> grammar = use other input  
  \> emotions  
  > controller movement  
  > eye tracking  
  > gestures  
  > face tracking
```

```
/ What grammar functions do we have?
```

## T#1

```
T|||/ Fill in existing grammar functions of  
EmojiLang  
/ Sum up grammar functions of English  
and other languages  
/ List desired grammar functions  
/ Experiment with grammar function  
methods
```

## Increasing flow using language/interface

- / Detects increased arousal when eye-over desired morpheme or node/category
  - Lore
- / Self-improving?
  - \> AI
    - > software trials 2 or more different methods subsequently
      - \> better one used
    - \> adapts to neurodivergence and disabilities
      - > more processing power
  - > most used nodes increase in size proportionally



## Harry tutorial:

### Ideas from others' projects/group feedback before mine:

/ Garreick - Software vs hardware

### Response to mine:

Cherie: Sky - Children Of The Light

People who aren't friends in the game use the body actions -

/ Noam Chomsky - language - thought and language

/ Do we need symbols

\> symbols vs words

/ ideaspac-

/ symbol poetry -explore meaning

## Structure (#10)

/ **alchemy**

\> "an alchemy of language"?

/ breakdown of each character

Uses:

> proposal of universal writing system

\> define writing system

> quick examples of others

\> note qualities

> why mine fulfils this definition

/ what is possible for the future of language within the context of the digital realm?

/ what affect will/could technology have on the future of language?

/ how far can we take/will evolve naturally language using technology?

Paragraph of intent for Duncan:

/ How far can we take the concept and practice of language using technology? How will language naturally evolve, as a response to existing and emerging technologies, and how can we shape this intentionally, using existing technologies and creating new ones?

Touching on natural spoken language, but with a focus on the exploration into writing systems.

I would like it to be deeply connected to my proposed Emojl/VR language.

I would like to explore Jaron Lanier's concept of a VR avatar-based language, and explore how VR environments/individual user perspectives of them could also be manipulated on the fly, to accomodate new forms of communication, adding flavour with manipulation of colour and actual forms in the environment.

I would like to explore how AI could be used to generate 3d models or modifications of avatars, on the fly, to accompany speech, to aid in communication, adding flavour/tone, but also perhaps to literally convey concepts on its own.

How tese technologies and languages could evolve emergently as a form of Participatory Design

Directions:

/ Can we chase up Jenniffer form Senselab and the other similar labs?

\> Can I help by sending an email/in response to Duncan introducing us via email?

/ What can I read by Stiegler about how humans organicity can't keep up with technology  
> and how can I integrate other readings in the area of neuroplasticity in a positive way as an answer to this  
\> posthumanism / biohacking  
> sensory expansion

As you can see in my COntext REview ( [https://docs.google.com/document/d/1nhiz1PvyleWUVwVhDR\\_n9EChkETFovv5hMODuYgkTs/edit](https://docs.google.com/document/d/1nhiz1PvyleWUVwVhDR_n9EChkETFovv5hMODuYgkTs/edit) ) the main ideas I'm GENERALLY interested - should these intersect well with the above, are as follows:

/ Collective consciousness  
/ The Collective Unconscious / archetypes  
/ Gaia hypothesis  
/ Hive mind meta-thoughts of cultural movements  
/ Egregores  
/ Hegel  
/ Bergon's Qualitative Multiplicity  
/ Foucault - social spaces - internal logics  
/ Levi-Strauss - unity of contradicting forces as shown by multiple mythological accounts being seen as true simultaneously  
/ General postmodernist relativist bs aka anthropology  
/ Idealism  
/ Ideospace  
/ The Imagination  
/ Supervenience Theory / supervenience in general  
/ Supervenient dimensions (e.g. Ideospace)  
/ Emergence  
/ Neuroplasticity  
/ Sensory expansion  
/ Digital voice of individuals  
/ Spirituality and paganism  
/ Chaos magic  
/ Parallels between magic and technology - technology, branding, language, REPRESENTATION ITSELF as a form of magic  
/ Models and representation  
/ The ontology of symbols  
/ Structuralism  
/ Systems  
/ Democratisation of communication  
\> neurodivergence  
> cultural/linguistic barriers  
  
/ Emergent participatory design

maybe "communication" - as allows other forms - esp telepathically and abstract AI stuff - think AI latent space category communication

Paragraph of intent for Duncan:

/ How far can we take the **concept** and **practice** of **language** using **technology**?

\> how far can we take the concept of language using tech?

\> how far can we take the practice of language using tech?

**How will language change, as a response to existing and emerging technologies?**

**Existing Technologies:**

/ existing technologies that will affect GENERAL LANGUAGE evolution (maybe put at end of the 3 as conclusion)

\> how will this happen naturally?  
\> neuroplasticity  
> culture

\> how can we shape this intentionally?  
\> biohacking  
\> sensory expansion

/ existing technologies that will affect GRAMMATOLOGY/WRIT-ING SYSTEMS evolution

\> emojis  
\> how will this happen naturally?  
\> neuroplasticity  
> culture

\> so far  
> going forward

\> how can we shape this intentionally?  
\> biohacking  
\> sensory expansion  
\> so far  
\> Participatory Design  
> other?  
> going forward  
\> Participatory Design  
> other?

/ existing technologies that will affect SPOKEN LANGUAGE evolution

\> how will this happen naturally?  
\> neuroplasticity  
> culture

\> so far  
> going forward

\> how can we shape this intentionally?  
\> biohacking  
\> sensory expansion  
\> so far  
\> Participatory Design  
> other?  
> going forward  
\> Participatory Design  
> other?

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**Emerging Technologies:**

/ emerging technologies that will affect GENERAL LANGUAGE evolution

\> how will this happen naturally?  
\> neuroplasticity  
> culture

\> so far  
> going forward

\> how can we shape this intentionally?  
> direct design  
\> biohacking  
\> sensory expansion

> designing for emergence/evolution  
\> neuroplasticity  
> culture

\> so far  
\> Participatory Design  
> other?  
> going forward  
\> Participatory Design  
> other?

-----

"Touching on natural spoken language, but with a focus on the exploration into writing systems."

**Intentionally Designed Technologies:**

creating new tech to shape language

\> previous attempts  
\> biohacking  
\> sensory expansion

\> intentional affects

---  
> direct design  
\> biohacking  
\> sensory expansion

> designing for emergence/evolution  
\> neuroplasticity  
> culture

\> so far  
> going forward

---

|> how evolve naturally?  
\> neuroplasticity  
> culture

\> so far  
> going forward

|> new tech we can create  
\> biohacking  
\> sensory expansion

> new languages

\> Emojilang Keyboard  
\> Emojilang BCI keyboard  
> VR language  
> avatar  
> abstract  
> VR language with AI graphical representations spawned

|> what type of communication?

> direct communication  
> flavour/tone  
\> important role of Emojis today  
> how?

\> environment (use the semiotic forms/other categories - see

Design as Magic essay] - T#9

\> colour  
> texture  
> shape

> user  
\> perspective  
>

> avatar  
\> colour  
> texture  
> shape

> environment  
\> colour  
> texture  
> shape

> generated forms  
\> colour  
> texture  
> shape

\> intentional affects

---  
> direct design  
\> biohacking  
\> sensory expansion

> designing for emergence/evolution  
\> neuroplasticity  
> culture

\> so far  
> going forward

---

|> how evolve naturally?  
\> neuroplasticity  
> culture

\> so far  
> going forward

T#9

See Design as Magic essay for semiotic forms and other categories for this bit

# Harry tutorial 2 (V#12)

## Harry tutorial:

hARRY 2:

FOr Review 5th ish

Committment to actions, forms of realisation of my idea that allow me to

Test it - idiot

Get other people to use it

See how others cope with it

See how it changes the way they think etc

Standardized feedback form - research

\> questionnaire

Contact Harry's 2nd year

Background reading on linguistics

Emoji books

Read the papers recommended by that person

Chat to her the professor

Joanne Long check ittt

- Research other conlangs

Inter language communication attempts outside of language

Sign language

## Long term goals (#13)

Long term goals:

/ Interview Sonja Lang - Toki pona creator

/ Interview other conlang creators

/ pro-moji movement

## logogram:

a written character that represents a word or morpheme

<https://en.wikipedia.org/wiki/Logogram>

## pictogram:

graphic symbol that conveys its meaning through its pictorial resemblance to a physical object

<https://en.wikipedia.org/wiki/Pictogram>

## ideogram:

graphic symbol that represent a graphic symbol that represents an idea or concept, independent of any particular language, and specific words or phrases

<https://en.wikipedia.org/wiki/Ideogram>

/ often by combining pictographs

Quoted in: "The History of Writing: The Rise of Written Language in the Age of the Internet. Bloomington: Indiana University Press (2013). Available at: <https://books.google.co.uk/> under the Creative Commons License

## alphabets:

/ set of "graphemes" (letters - e.g. "n" or "g")

stand for "phonemes" (speech units - e.g. "ŋ")

- linear - directional (other types less so as not phonetic)

/ pictographic first

\> later evolved into logographic, ideographic, alphabetic systems

/ 1,000 BCE - switch to alphabets

\> Marshall McLuhan (1962) - first true cognitive paradigm shift in human history

\> marks migration from tribal societies to first civilisations

\> became dependant on written transactions and documents

\> establishing foundations

> enabling survival/workability as a system of communal life

/

Future possibilities:

/ 2nd paradigm shift (after pictographs > alphabets) to hybrid writing system

\> pictographic-logographic + alphabetic | hybrid writing system

## Notes on Emoji - I:

/ emoji etymology: Japanese - "e" (picture) + "moji" (letter, character) = "picture word"

/ Uses: from Advertising, to political campaigns

/ the Print Age imposed exclusive use of alphabetic writing

\> Internet Age encourages diff modes of writing

\> visual and audio

> use in tandem with scripts (alphabetic and non)

\> blended writing system

As a writing system:

> Logographic and pictographic

/ LIKE EMOJILANG their "base iconicity can be expanded to include other modalities as the situation might require"

\> e.g. hand emoji - pictographic emoji

\> iconic use - pictogram - moon

> indexical use - ideogram - night

/ Race - colour - yellow obviously "stylistic ploy to remove recognizable facial features associated with race or ethnicity"

/ Current usage - providing nuance in meaning and tone

\> "reinforce, expand, annotate the meaning of written communication"

\> usually by enhancing the friendliness of the tone,

> or else by adding humorous tinges to it"

[Dowen, H. (2017) The Language of the Future. Bloomington: Indiana University Press. Available at: <https://books.google.co.uk/books?id=Ujg5CAAKQBAJ>]

\> study participants - "why do you add emoji to your text messages?"

\> "to make them fun"

\> "in unison"

\> add "utterance meaning" to written text

## Emoji keyboards

/ - exist?

## Emoji Languages

/Joe Hale - Emoji Language?

/ "crypto-semantics"

Evens, V. (2017) The Emoji Code: The Linguistics Behind Smiley Faces and Scandty Cats. Picador. Available at: <https://books.google.co.uk/books?id=f11ndwaAQBAU>.

/ translated Alice in Wonderland and Peter Pan into Emoji

#Refining-analysing the original keyboard - Test 1

TESTS WITH ELLEN/SAYURI:

/



## proposals:

An Essay towards a Real Character, and a Philosophical Language (1668) by John Wilkins.  
<https://en.wikipedia.org/wiki/Ideogram>

## attempts:

### Blissymbols

- Charles K. Bliss in 1949  
\> currently includes over 2,000 symbols

## positives:

/ many symbols

## shortcomings:

/ many symbols - no hierarchy

/ no spoken language - no pronunciation |||>

## why EmojiLang is better:

/ set amount of symbols

/ synthetic

\> simple to learn - few symbols

/ emergent evolution

\> language evolves constantly to fit needs of user-base and participants

\> adapts to changes in :

>time - the times -era as communications change

\> see "technology"

>groups - accomodates diff needs in diff groups

\> ability groups

> mute, locked-in (BCI), ASD, deaf

>technology

\> accomodates different tech

\> just starting language again - will end at same place -

what's point

\> this new language is consciously constructed

>knowing what we know now about how language affects society and thinking

\> overcome issues

> more inclusive of disabilities

> global - inter-linguistic / international

> constructed in tandem with technology and writing

systems

\> arguably writing systems as they are today

evolved at least alongside vocal language

\> if intentional

> better coherence / working together

between writing and language

> more efficient

\> shape writing to tech (take advantage of existing tech)

> shape tech to writing ( create tech for it)

/ BCI integration

/ VR / VEs

>||| "no spoken pronunciation"

\> not meant to be spoken

> meant to be thought

|| \> new kind of speech

\> telepathic

\> real world?

\> designed to help create a future where everyday wearable BCIs and AR devices are commonplace - worn everywhere

||

> or used in certain situations/use cases

\> e.g. using VRChat to communicate with mute people

> e.g. medical - locked-in patients

> maybe it could develop a pronunciation

\> in certain dialects

\> defeats object of universality

\> keep dialects from diverging too far due to online

publishing of development of language

\> standardisation

## A History of Writing - Steven Roger Fischer

/ leibniz's system

m \> some want to extend now to a global visual language

\> argue would aid in processing language faster

> images with text undoubtedly help convey complex ideas better

\> visual information and verbal info = different pathways

\> if use both at once, communication =

\> faster

> better/clearer

> more memorable/recallable

> visual language is everywhere

\> car: speedometer, odometer, fuel gauge, battery indicator, seatbelt sign, radio programme, temperature

\> weak in detail and precision

\> cannot convey all of human thought

\> as they ARE (this not even emoji)

## Designing culture (#18)

/ Propagate use of Emojis and bring about the  
2nd paradigm shift

\> #promoji ||>

# Promoji (#19)

**Aim: Propagate use of Emojis and bring about the 2nd paradigm shift**

/ Battle tyrannical antiquated conventions laid by the Print Age

Methods:

/ Email signatures - include #promoji to highlight and explain usage of emoji in formal and informal communications alike

# Language/writing systems affect society and culture (#20)

## Affect culture

/

/ how do gods

rationality is not natural its a designed thing

## Affect society (culture > society)

/

\> Foucault the apparatus

\> folk psychologically accepted as the main thing

## Affects thinking

/ [SOC pg11] Helprin 2009 - abbreviations and quickening of communication to accomodate written synchronous communication (IMs etc), "produce an **addictive affect** on how people process information, rendering them **less pensive and reflective**"

/

/ prehistoric or mayan, scripts

\> pictographic

\> how affects thought

\> mythology

/ paragraph that describes what IM doing

\> and the structure

\> reading

/ Linear?

\> yes

>directionality?

\> left to right?

> can be used either way

\> signal to denote?

/ Synthetic

>alphabets

[Grosz, M. (2017) The Semiotics of Emojis: The Rise of Visual Language in the Age of the Internet. Bloombury Academic (Advances in semiotics). Available at: <https://books.google.co.uk/books?id=UQgnEAAGBAU>] + HEREAFTE + SOE

allow concatenation of singularideas into complex inter-related ones in some rule-based arrangement (Trager 1974)

\> due to(Naomi Baron 2010) writing matching syntax of the language it transcribes

>pictographic systems less dependent on syntax of verbal lang

\> versatile in representation of sequential stages of episodes and actions, such as narratives [Dzinger, D. (1948) Alphabet is key to the history of mankind. Available at: <http://archive.org/details/dukeupress-ca-1287> (Accessed: 30 November 2022)].

]

/ add ability to spell - key to toggle to normal keyboard

\> for names etc

\> most systems are mixed-modal - Schele 1979 [SOE]

>evolves

\> evolutionary AND revolutionary

\> constructed large intentional shift PLUS designed for evolution

\> best of both worlds

> evolutionary

> adapts to suit situation

> constructed / revolutionary

> designed with current knowledge of language and society and culture (and their interrelations) in mind

# Positives and negatives of implementation of EmojiLang (#22)

## Positives:

/ Synthetic nature of only 122 > ECONOMICAL

/ Pictographic systems less dependent on syntax of verbal language (Mallery 1893 - Danesi pg 7)

\> versatile in representing sequential stages of episodes and actions, like narratives (Diringer - Danesi p7)

..

/ Visual depictions feel more powerful than words (esp in the mixed text - Danesi p 38-39)

\> esp in visual metaphor vs verbal metaphor  
\> perhaps because verbal metaphors lost their rhetorical force due to habituation

/ More easily interpretable INSTANTLY with NO KNOWLEDGE of the SIGNS or RULES (of the code/lang)

\> not completely  
\> MUCH more INSTANTLY than ANY NATURAL LANGUAGE

/ We already USE emoji - 40% Insta posts (at Danesi year) contain emoji - check now

/ Reading disorders - DYSLEXIA UNKNOWN in PICTOGRAPHIC-IDEOGRAPHIC cultures like China  
\> primarily in ALPHABET cultures (Shlain 1998 - Danesi p 91)

..

## Positives of Emojis in general:

- Study - University of Toronto - Nadia Guarino, Soli Doubash, Lily Che, Yvone Tuan
- Balanced gender
- 50 males, 50 females
- 18-22
- 323 personal texts, tweets, and social media materials

(Danesi, M. (2017) The Semiotics of Emoji: The Rise of Visual Language in the Age of the Internet. Bloomsbury Academic (Advances in semiotics). Available at: <https://books.google.co.uk/books?id=UQp8EAAQBAJ>.)

Why often prefer text messaging over oral communication among friends

- 1."It's like talking, but better, because I can edit the message before sending it."
- 2."I can go back to my message to see what I wrote so that I can make sense of my friend's own message"
- 3."I prefer it to speaking, which can be dangerous because I can't take back my words; this way I can, and with emoji I always try to make sure my friends understand"

## Negatives of implementing EmojiLang:

/ [SOC pg11] Helprin 2009 - abbreviations and quickening of communication to accommodate written synchronous communication (IMs etc), "produce an **addictive affect** on how people process information, rendering them **less pensive and reflective**"

/ Not good for long stretches of text - e.g. novels

\> Olson (Olson, D.R. et al. (1974) Media and Symbolic: The Forms of Expression, Communication, and Education: the Seventy-third Yearbook of the National Society for the Study of Education. National Society for the Study of Education (Yearbook of the National Society for the Study of Education). Available at: <https://books.google.co.uk/books?id=U6-PAEACAAJ>.)

"utterance meaning" vs "text meaning"

\> utterance meaning" - comprehensible only in context where utterance occurs

> "text meaning"

\> entails dislocation from context  
> greater control of language and content

\> EL designed mainly for utterance meaning

\> still possible to use text meaning  
\> example: EmojiLang poems

/ Ambiguity

\> dangerous

\> esp internationally

/ Electracity - electronic media literacy  
 \> electricity + trace (Derrida)

> multimedia  
 > hypermedia - e.g. Internet  
 > social software  
 > virtual worlds

Derrida's "trace":

Developed from angle of grammatology - the study of writing systems

Shift from orality > literacy used as analogy for shift from LITERACY > ELECTRACITY

Electricity (2022) Wikipedia. Available at: <https://en.wikipedia.org/w/index.php?title=Electricity&oldid=1105827694> (Accessed: 7 December 2022).

.....

.....

Seeing the society/the spectacle , rise of entertainment, the new media  
 through lens of **apparatus theory**  
 \> now = emergence of a NEW APPARATUS

\> new tech / APPARATUS as a **social machine**

**social machine**

\> **cameras, alphabet, printing press**

\> **partly machine**

> **partly social**

\> invented in context of a civilisation with needs/wants

|> e.g. invention of writing - Egypt + ancient civls  
 \> often empire to keep track of grain harvests  
 \> record keeping  
 > Chinese writing invented to keep track of **DIVINATION**  
 \> ideograms recordings of readings of turtle shell divination (baked and cracked in certain way)

|> writing wasn't invented to write Moby Dick

\> **what if it could be**

\> **idea of form lagging behind ever-changing functions**

\> **can new script/EmojiLang be adaptable**

\> **designed with constant evolution in mind**

\> **how will it evolve over time? |||>**

....

Apparatus theory -

/ need to make an argument  
 - evidence the research

Apparatus as a social machine:

/ look at mark scheme

/ 3 interactive elements in a matrix

/

> the technology

> institutional formation  
 \> practices of the institution developed to use the tech

> subject/identity formation  
 \> individuals within new institution, participating in its practices  
 > begin to experience their lives in new way

||> e.g. orality - oral peoples over long period invented (tech of)  
 > tech: natural language - symbol formation  
 \> institutional formation: religion  
 \> practices of institution: ritual  
 \> way of structuring information so it can be remembered and tapped into

> subject formation/identity experience: spirituality  
 \> oral people experienced themselves through spirit  
 \> e.g. Native American shamans, e.g. Black Elk - Battle of Little Big Horn  
 \> no firm boundary separating them from natural world - permeability between self and world  
 \> Homer's epics  
 \> when Odysseus or Agamemnon or someone has an idea, recorded as voice of a God  
 \> Terrence McKenna - Food of the Gods - idea of Ego as a late development  
 \> for oral peoples the world is magic / alive and speaking to them  
 \> bird tweeting might as well be the voice of a God

||> no idea of the individual  
 \> to kill an oral person - ostracise them

||> e.g. literacy - Greeks

> tech: alphabetic writing (though they wrote in other ways before)  
 \> speech could be recorded and repeated

> institutional formation: School  
 > Plato invents the academy  
 \> new form of behaviour  
 \> new associated practices: method (Plato's Phaedrus)  
 \> equivalent of ritual (orality)  
 \> formal procedure for organising through dialectically

> Socrates the first individual / first person to experience themselves as the "self" in the way we think of it

John Craig Freeman (2011) Ulmer on Electricity (2 04 - Ulmer Topics). Available at: <https://www.youtube.com/watch?v=1L2938t3kA4> (Accessed: 7 December 2022).

.....

# Designing EmojiLang within context of society and culture (#23)

## Race

/ Yellow supposed to be neutral

\> closer tonally to white

\> make blue?

> rely on/emphasize how yellow has gone beyond  
symbolising skin tone

## Current technologies:

/ Digital colonialism

/ Tech technocracy and Unicode

\> take the power back

## Emojis contain embedded cultural meanings

/ Required to understand

/ Enable valid communication of a culturally-significant  
meaning

\> some Emoji are higher on a "universality scale"  
than others

## Affects thinking

/



# How will EmojiLang evolve over time (#25)

## Designing for evolution

/ Language is synthetic

\> the constant creation of new words is BAKED INTO the GRAMMAR and syntax / general usage

\> relies on this

\> need protocol for building in permanent new words

\> needs to maintain 120ish characters for simplicity

\> 1 in 1 out

\> software

\> most commonly used combinations become temporary hotkey

\> hotkey section displays handful of hotkeys

\> must be cross-user

\> top hotkeys from each user shared

\> can view "top hotkeys" from all users

\> sorted by popularity

\> integration method

\> most popular integrated into language temporarily

\> where/how?

\> extra key for "tempKey"

\> what are the logograms called? |||>

\> most popular replaces least popular if exceeds usage

/ Many emoji are CODED as COMBINATIONS/modifications of specific emoji

\> Individual emoji

> Zero Width Joiner "zwjgde" - Unicode character - joins characters together (if supported - otherwise displays in turn)

> modifiers

\> SKIN TONE modifiers - Fitzpatrick scale (condensing lightest 2)

\> 2014 - Apple and Google proposed > implemented Unicode in 2015

\> some emoji can act as MODIFIERS when ZWIDGED > emoji sequences >combined (when supported)

\> "female sign" ♀

\> converts many "gender neutral" emoji to female (same with male)

\> many emoji started as gendered, then made neutral w modifier

\> "Always" campaigning - men = police officers/athlete - women = haircuts/coy

\> Michelle Obama - calls for "girl studying emoji"

> "Women with Bunny Ears" 🐰 (2010 Unicode 6.0 - 1st to support Emoji) >

"People With Bunny Ears" + m/f variations (2016 Emoji 4.0)

\> Japanese "bunnygirl" (< Playboy sexualised bunny suit) - subservient

women with sex appeal

\> Western: female friendship / girl's night out

\> third-wave feminism

||> use this engineering - allows grams to evolve together - branching pattern

# Harry tutorial 3 (V#26)

## Harry tutorial:

/ same example for concepts

/ 2 needed parts of project:

- > language
- > brain switch

..

Brain control already do this:

- my project is about augmenting their existing system to a language
  - \>

/ \its about showing a demo of what can be done - and how it can emergently get better in time

/ history of language book

To do:

CONstructed language research

HANG OUT WITH SOMEONE WHO DOESNT SPEAK ENGLISH

- |> record of relationships crested through this language

- \> DESIGN PROBLEM: MAKE FRIENDS WHO DON'T SPEAK ENGLISH

- \> NEED THE NECESSITY- like learning language in the country

- \> maybe university departments - contact other people

- \> make avatar into a sign and go around VRCHAT

///

Viva:

Explain other

//

Want to design language so affords creation of individual micro-dialects, for certain use cases

- \> .e.g vrchat dialect

- > eg hospital dialgect

..

? ITS NOT ABOUT BRAINCONTROL - the work is right here!

## Harry tutorial:

/ auto-ethnography ?

/ me: been thinking about how grammatology affects thought/culture:

D:  
rationality is not natural its a designed thing

\> Foucault the apparatus

\> folk psychologically accepted as the main thing

Me:  
/ prehistoric or mayan, scripts  
  \> pictographic  
    \> how affects thought  
      \> mythology

D: SEND:  
/ paragraph that describes what IM doing

\> and the structure  
  \> reading

...

# Modalities for VR language 1 (#28)

## Possible modalities for communication in VR/VEs

/ Avatar

\> avatar meets EMOji - bitmoji + facebook + Samsung/Apple personalised avatars to enact emojis or animated emojis/sticker functions

/ Environment

/ Generated forms

## Increasing flow using language/interface

/ Avatars are ICONIC ?

- \> semiotic sense- form represents what it stands for
- \> religious/worship sense - represent without direct resemblance
  - \> generic way
  - \> omits details that would give it a distinctive human personality (Danesi p 12)

\> not most of them

\> **do have personality as chosen to represent personality/mood**

- \> people already change avatar to show their current mood
- \> evidenced by easy access to favourite avatar in VRChat popup menu
- \> just taking this to its natural conclusion

## Avatar modifications + meaning/- signifier + signified

OWN AVATAR:

/ antennae/horns = symbolises connection to  
SPIRITUAL/AETHERIAL

\> could represent an ABSTRACT/FIGURATIVE MODE of  
speaking

- > e.g. aroused = grow horns
- > robot antennae = receiving/broadcasting DIGITAL or  
LOGICAL or LITERAL information
  - \> afk? researching?
- > bug antennae = receiving/broadcasting SOCIAL  
information
  - \> ants - eusociality
- > antlers
  - \> SPIRITUAL mode

OTHER'S:

20/03/23

[Image: conversation with friend in which I realised some examples for avatar modification as a form of mood communication - horns, antlers, antennae, to communicate (respectively) arousal, transmission or receipt of information, and transmission or receipt of social information]

/ Emoji code arguments

Arguments for Emojis (already) as a LANGUAGE

/ EVOLVING subject to adaptive change (Danesi p 42)

- \> ?reduced universality status
  - > "shaped by specific experiences of particular communities of users"
  - \> more like a lang?
  - \> like a natural lang. undergoing change NOT TO DO WITH COMMUNICATION but meeting SPECIFIC DEMANDS
  - \> Bullae envelopes/record keeping

\> sensitive to pressures - FIND OTHER EXAMPLES - T#12

- > political
  - \> Michelle Obama called for "girl studying emoji" in response to:
  - > cross-cultural
  - \> "Always" feminine hygiene ad campaign - "Like a girl"

/ Taken seriously as communication

> Legal case - emoji at end of sentence

> Teen arrested for **"terrorist threat" in Emojis** - emojis of guns pointing at police officers

\> CNET: "Emojis are words too. Indeed, some might see them as a very modern, exalted form of digital cursive script. That seems to be the view of the New York Police Department, after it viewed the Facebook page of 17-year-old Osiris Aristy from Bushwick, Brooklyn."

> "As a result of this conduct, the defendant has caused the informant and other New York City police officers to fear for their safety, for public safety, and to suffer alarm and annoyance."

(https://www.cnet.com/news/teen-arrested-after-alleged-facebook-emoji-threats/ (Accessed: 13 January 2023))

> Emoji Death threat

**Economically**

/Marketing companies, app developers, and multinationals "spend thousands" studying usage patterns.

(The Linguistics Behind Smiley Faces and Scammy Cats. Picador. Available at: https://books.google.co.uk/books?id=-f1n0uAA2BAI (Accessed: 13 January 2023))

**Culturally**

/Andy Murray EMOJI ONLY TWEET morning of wedding

(https://www.bbc.com/news/health-54444444 (Accessed: 13 January 2023))

<> #30

/ Taken seriously as communication / ubiquitous

> Legal case - emoji at end of sentence

> Teen arrested for **"terrorist threat" in Emojis** - emojis of guns pointing at police officers

\> CNET: "Emojis are words too. Indeed, some might see them as a very modern, exalted form of digital cursive script. That seems to be the view of the New York Police Department, after it viewed the Facebook page of 17-year-old Osiris Aristy from Bushwick, Brooklyn."

> "As a result of this conduct, the defendant has caused the informant and other New York City police officers to fear for their safety, for public safety, and to suffer alarm and annoyance."

(https://www.cnet.com/news/teen-arrested-after-alleged-facebook-emoji-threats/ (Accessed: 13 January 2023))

> Emoji Death threat - Journalist Fletcher Babb - gun pointing at dead face emoji

\> threatening emoji could warrant a criminal case - Justin Pizzello, Ph.D., a professor of criminal justice at the University of Wisconsin-Eau Claire

(https://www.cnet.com/news/teen-arrested-after-alleged-facebook-emoji-threats/ (Accessed: 13 January 2023))

> Man imprisoned for 3 months in France - emoji death threat to ex girlfriend (gun emoji)

[1] Apple changed from gun to water pistol

> BBC Newsbeat emoji only news

(https://www.bbc.com/news/health-54444444 (Accessed: 13 January 2023))

> Radio station WNYC - live subway "Agony 1Ndex" - shows status of lines

**Politically**

/Australian Minister for Foreign Affairs - Julie Bishop - POLITICAL INTERVIEW IN EMOJI

\> asked to characterise world leaders - PUTIN = RED ANGRY FACE

(https://www.bbc.com/news/health-54444444 (Accessed: 13 January 2023))

/Michelle Obama



Babb, K. (2015) Andy Murray predicts entire wedding day in epic emoji 'blast'. Metro, 11 April. Available at: https://metro.co.uk/2015/04/11/andy-murray-predicts-entire-wedding-day-in-epic-emoji-blast-51444444/ (Accessed: 13 January 2023).

## Core Lexicon

/ Elaborated concretely by Swadesh (1951, 1959, 1971)  
/ Data from archaeology and anthropology

/ Universal / linguistically primordial words

/ Set of concepts from which all languages draw their original words  
  \> concepts useful to humanity since beginning  
    \> categories of things common to life everywhere  
      \> mother, father, animals, plants, parts of the body, tools, weapons, etc

# Biohacking technologies (#32)

## Neurological technologies

### Fields:

#### Neuroergonomics

Application of neuroscience to ergonomics

In contrast to traditional PSYCHOLOGICAL perspectives

<sup>1</sup>Neuroergonomics (2022) Wikipedia. Available at: <https://en.wikipedia.org/w/index.php?title=Neuroergonomics&oldid=1124991183> (Accessed: 12 January 2023).

/neurostimulation

/ mental workload assessment

/adaptive automation

\> HUMAN-MACHINE system

\> real-time assessment of operator's workload to enhance performance

\>human-robot team better at controlling air/ground vehicles over either alone

#### Bionics/prosthetics

#### Sensory restoration/substitution

/Cochlear implants

/BrainPort

#### Sensory expansion



# Linguistic technology and the brain (#33)

**Neuroplasticity and technology general**

/

Neuroplasticity and tech - language

**Neuroplasticity and language - children/developing brain**

/ Chat with Graeme Moffat

Cognixion are doing a similar thing

\> limited interface to facilitate communication in the ability space

/ OpenBCI have the resources and infrastructure for collaborations like mine

/ DESIGN is RESPECTED as a role in the industry - this type of collaboration IS possible

/ The only marketable BCI products are PASSIVE BCI, not ACTIVE

\> System-2 is passive

/ fNIRS has been scrapped by any company who have tried it

\> not fast enough - low temporal resolution

> low spacial resolution

/ The market is lean - not a hopeful time

\> obviously the recession

Cognixion - ONE AR communication interface

Cognixion ONE [no date] Cognixion One. Available at: <https://one.cognixion.com/> (Accessed: 12 January 2023).

[Image of Cognixion ONE AR Communication interface]

# Existing Analogous Communication Technologies (#35)

## Cognexion

### Cognexion ONE:

/ AR language

/ "Assisted Reality"

\> blend of assistive technology and AR

#### Capabilities

>Speech assistance

>AI assistant

\> home automation control

#### Input

>Head pointing

>BCI

\>VEPs - Visual Evoked Potentials

>Switch

### Cognexion ONE AR communication interface

Cognexion ONE (no date) Cognexion ONE. Available at: <https://one.cognexion.com/> (Accessed: 12 January 2023).

[Image of Cognexion ONE AR Communication interface]

#### Interface:

>Predictive keyboard

\> displays text on outside of visor

> QWERTY, ABC, Linotype

>Radial sentence builder tools

#### Market

>complex communication disorders

\> CP

> ALS

> many others

>people previously reliant on

>switch

>eye control

>other conditions

# Why Emoji are significant culturally/economically (#36)

## Economically

/Marketing companies, app developers, and multinationals "spend thousands" studying usage patterns

Evans, V. (2017) The Emoji Code: The Linguistics Behind Smiley Faces and Scaredy Cats. Picador. Available at: <https://books.google.co.uk/books?id=f1InDwAAGBAJ>.

<> #30

## Culturally

/Andy Murray EMOJI ONLY TWEET morning of wedding

Baillie, K. (2015) 'Andy Murray predicts entire wedding day in epic emoji tweet', Metro, 11 April. Available at: <https://metro.co.uk/2015/04/11/andy-murray-predicts-entire-wedding-day-in-epic-emoji-tweet-5144999/> (Accessed: 13 January 2023).

/ Taken seriously as communication / ubiquitous

>Legal case - emoji at end of sentence

>Teen arrested for **"terrorist threat" in Emojis** - emojis of guns pointing at police officers

\>CNET: "Emojis are words too. Indeed, some might see them as a very modern, exalted form of digital cursive script. That seems to be the view of the New York Police Department, after it viewed the Facebook page of 17-year-old Osiris Aristy from Bushwick, Brooklyn."

> "As a result of this conduct, the defendant has caused the informant and other New York City police officers to fear for their safety, for public safety, and to suffer alarm and annoyance."

Malyszczak, C. (no date) Teen arrested after alleged Facebook emoji threats, CNET. Available at: <https://www.cnet.com/culture/teen-arrested-after-alleged-facebook-emoji-threats/> (Accessed: 13 January 2023).

>Emoji Death threat - journalist Fletcher Babb - gun pointing at dead face emoji

\> threatening emoji could warrant a criminal case - Justin Petchin, Ph.D., a professor of criminal justice at the University of Wisconsin-Eau Claire

Hiscoff, R. (2014) Yes, Emoji Death Threats Are Admissible in Court, Mashable. Available at: <https://mashable.com/archive/emoji-death-threat> (Accessed: 13 January 2023).

>Man imprisoned for 3 months in France - emoji death threat to ex girlfriend (gun emoji)

||> Apple changed from gun to water pistol

>BBC Newsbeat emoji only news

Evans, V. (2017) The Emoji Code: The Linguistics Behind Smiley Faces and Scaredy Cats. Picador. Available at: <https://books.google.co.uk/books?id=f1InDwAAGBAJ>.

>Radio station WNYC - live subway "Agony INdex" - shows status of lines

## Politically

/Australian Minister for Foreign Affairs - Julie Bishop - POLITICAL INTERVIEW IN EMOJI

\>asked to characterise world leaders - PUTIN = RED ANGRY FACE Stefano, M.D. (no date) Julie Bishop Describes Serious Diplomatic Relationships With Emoji, BuzzFeed. Available at: <https://www.buzzfeed.com/markd استفانو/emoji-diplomacy> (Accessed: 13 January 2023).

/Michelle Obama

Baillie, K. (2015) 'Andy Murray predicts entire wedding day in epic emoji tweet', Metro, 11 April. Available at: <https://metro.co.uk/2015/04/11/andy-murray-predicts-entire-wedding-day-in-epic-emoji-tweet-5144999/> (Accessed: 13 January 2023).

[Notes from the book "The Semiotics of Emoji" by Marcel Danesi, with some thoughts from me, Ash]

## The Semiotics of Emoji: The Rise of Visual Language in the Age of the Internet

Danesi - "the rise and rapid spread of emoji might signal an incipient paradigm shift in how people perceive writing, literacy, and communication today"

Print age- encouraged and IMPOSED exclusive use of alphabetic writing

Internet age - encourages different forms of "writing" - visual and audio - used in tandem with alphabetic (and non alphabetic) scripts

Implications:

- / Print age over?
- / manifestation of unconscious forces at work in evolution of human communication systems and practices

Emojis can be seen as new kind of universally usable writing code

Since McLuhan said shift from pictography to alphabetic writing 1,000 BCE was first true cognitive shift in human history > and marked shift from tribal societies to CIVILISATIONS

\> so emoji shift = NEW CIVILISATION - common visual writing system

\> shift in human consciousness from LINEAR and LITERAL > holistic and IMAGINATIVE mode

R> or passing fad  
\> decorative

P: Vygotsky 1962 - started making art and language at same time + children same  
\> evolutionary trait - guides language development

Most linguists think spoken language > written  
\> writing means of recording speech

\> view product of ALPHABET using societies  
\> archaeological evidence (lowering of larynx 100,000 years ago) language as a MENTAL FACULTY developed before speech  
\> gesture and pictography  
\> then speech + gesture  
\> still use gesture  
\> + gesticulate when speaking  
\> complement each other - not mutually exclusive  
\> can gestures and VR avatar language COMPLEMENT written Emojiling? ||||

\> living Linguistics evidence  
\> Japanese - characters + hirigana/katakana  
\> supplement characters  
\> writing not arbitrary way of encoding speech  
\> adaptive and culturally sensitive TOOL for ENCODING INFORMATION

. writing + speech used for  
> encoding  
> storage  
> transfer  
\> what other ways - digital methods - how can we extrapolate of information

Pictographic + logographic = one degree of separation/representation  
\> pictographic - PICTURES > visually represent > OBJECTS  
\> ideographic - PICTURES and SYMBOLS > represent OBJECTS + IDEAS  
\> logographic - SYMBOLS > represent WORDS > represent OBJECTS + IDEAS  
\> homonyms

Most writing systems have balance between VISUAL and PHONETIC  
\> eg Maya

\> MIXED MODAL  
\> can Emojiling be MIXED MODAL (multi-modal) - e.g. gesture, avatar/environment modification, Emojis  
\> multi-modal BC's popular  
\> examine all modes  
\> heart rate  
\> eye tracking  
\> input, not output  
\> research MULTIMODAL outputs in VR and BCI

Emojis add "visual tone"  
/ Not profane as seen to be  
/ annotative code

Synchronous vs asynchronous temporalities in writing  
\> EL somewhere in between

Synchronous digital communication (IMs) require RAPID WRITING  
\> led to abbreviations  
\> MUST MAINTAIN interlocutor's ATTENTION  
+  
> flow of conversation

\> Helprin 2009 (D pg 11) THIS style MAKES PEOPLE LESS PENSIVE AND REFLECTIVE  
\> laziness

/ Utterance vs text meaning  
\> D: Emojis mainly UTTERANCE

Advantages of SMS over oral - according to D's study  
> can edit before sending but still like talking (EDITABLE UTTERANCE)  
> TEMPORAL - can "rewind" - go back to check other's prev message  
> ? can "take back my words"

Modalities of writing systems:  
> iconic - forms RESEMBLE something  
> indexical - INDICATE or point to something  
> symbolic -

\> Peirce's semiotics

Emojis good because extra modalities writing systems don't have:  
/ Colour (red angry face, green ill face)  
/ Value (line thickness)  
/ Perspective

Original purpose of emoji was globalisation

Ambiguity:

/ When using common language between users of others (e.g. English as common language) ambiguity can be problematic  
> impart culture-linguistically specific meanings into the common lang  
> accidentally imply inappropriate/incomprehensible meanings due to lack of knowledge of full range of possible connotations/readings of a word

\> e.g. "Involved in an affair right now, cannot help you out"

/ Nail polish emoji - non-English connotations are sexual and offensive  
\> English = nail polish / sassy - used after a sentence to show person believes self to be (in moment) sassy, blasé, or unapologetically/ruthlessly egoic, selfish, or "saying it as it is"

/ Thumbs up emoji  
\> offensive in Middle East, West Africa, Russia, South America  
> pass passive aggressive in West

/ Emojis concretise negative cultural biases  
\> prev no female professional emojis  
\> not enough emojis to "show what girls do" (Danesi p34)  
\> create checklist for representing all groups  
\> test with different groups

. Positives (add to section)  
/ Visual depictions feel more powerful than words (esp in the mixed text - Danesi p 38-39)  
\> esp in visual metaphor vs verbal metaphor  
\> perhaps because verbal metaphors lost their rhetorical force due to habituation

/ More easily interpretable INSTANTLY with NO KNOWLEDGE of the SIGNS or RULES (of the code/lang)  
\> not completely  
\> MUCH more INSTANTLY than ANY NATURAL LANG SCRIPT

/ We already USE emoji - 40% Insta posts (at Danesi year) contain emoji - check now

/ Reading disorders - DYSLEXIA UNKNOWN in PICTOGRAPHIC-IDEOGRAPHIC cultures like China  
\> primarily in ALPHABET cultures (Shlain 1998 - Danesi p 91)

Evolution of the EMOJI CODE - EMOJIS are already a CODE:

"the emoji code is evolving into something different than its original intent to provide a simple picture-word system of universally comprehensible symbols for facilitating global communications" - Danesi

/ The "Emoji Code" has evolved in a few years

/ "knowledge of how to use this code is now an unconsciously crystallizing system with its rules, much like those of natural languages"

Code: a system of signs or sign forms and specific rules for using them - Danesi  
\> a system of signs that are perceptually distinct and that can be combined in specific ways to make words - Danesi  
\> use of any CODE requires "LINGUISTIC COMPETENCE"

/ There is now an "emoji competence"  
\> how to use these images to  
> make messages  
> read messages that are easily interpretable by receivers

/ Displacement of emojis in a text can be seen as anomalous or nonsensical  
\> implies set of rules for image  
\> like a natural language  
> have EMERGED THROUGH USAGE like a nat lang

\> If code continued to be used broadly, its SYSTEMATICITY would be INSTITUTIONALISED (SEE ULMER) in  
> EMOJI GRAMMARS  
> EMOJI THEORIES  
> currently these RULES  
> implicit  
> emerge through usage  
\> aided by following natural language SYNTAX and SEMANTICS

\> also involves "communicative competence" - knowledge (K) of how the forms enact communicative functions  
\> tacit K of how to use the forms effectively

/ Emoji Code can be used  
> ADJUNCTIVELY to add to a text  
> SUBSTITUTIVELY of a text

### SUBSTITUTIVE use

/ Even when can't understand a fully SUBSTITUTIVE text (written entirely in Emojis), one can surmise its general content, at least tone  
[Emoji Birth Story Danesi P36]  
\> immediately EMOJI CODE MORE UNIVERSAL than ANY ALPHABETIC SCRIPT (without K of it)  
\> D: "Would take VERY LITTLE training to impart emoji competence to VIRTUALLY ANYONE"  
\> contrasted with a natural lang  
\> "due to its 'picture-word' nature"

/ First line shows speaker is female - more info than pronoun "I" in English  
\> DISSECT/ANALYSE chosen logograms from Emojiling and show how are superior in this way  
\> use semiotics to show broadest undeniable interpretations (e.g. explosion/fire = explosive reaction) ----T#10  
\> then break down further and show a (diagram?) spectrum of poss interpretations to the "intended"/suggested one/s

/ SYNTAGM - linguistic unit of a set of forms in sequential relationship  
\> hatching + celebration e.g. - CREATE OWN EMOJI STORY and use as EG --- T#11

/ Constructing a text (any) requires  
> selection  
> combination  
> associative relation

### Adjunctive use

/ Easier and more broadly comprehensible  
\> discussion of comprehensibility vs interpretability  
\> all/most reading is inherently INTERPRETATION not COMPREHENSION  
\> something is always lost in the process  
\> communication theories

. 5 canons of rhetoric:  
> Invention  
> Arrangement  
> Style  
> Memory  
> Delivery

. 3 features that define a CODE:  
> Representationality - SIGNS and RULES stand for something defined  
> Interpretability

...

Emoji code has a CORE and ADAPTIVE PERIPHERAL component:

CORE: ||>#31  
/ Consistent with CORE LEXICON of NAT LANGS  
\> proof of universality  
\> Swadesh's core items found in CORE EMOJI LEXICON

/ Expands upon Swadesh's list  
> includes facial emojis - happy and sad  
\> Swadesh didn't include emotions  
\> too variable/relative  
\> his relativist school of linguistics  
\> others show words for basic emotions universally  
\> anger, surprise  
\> Ekman (1973) and others

/ VERBS harder to convey graphically than NOUNS  
\> Danesi's participants showed "no hesitation in interpreting (them) correctly" VERBAL EMOJI

/ 1,000 core emoji - Danesi's research team  
\> couldn't do a statistical analysis of actual usage  
\> did X  
\> cross-referenced with most frequently used emoji of IOS customers in 2016  
\> mostly consistent with Danesi's core  
\> some obviously not universal

\> only tells us about iPhones in 2016

> Nicolas Loufrani first to create some kind of CORE (unintentionally)  
\> 2000 - made "Emotion Dictionary" - 1,000 smiley signs  
\> not a great universal selection

> 2010 Unicode Consortium and national standardization bodies from US, Europe, and Japan released STANDARD SET of 722 emoji - in Unicode 6.0  
> Apple made emoji keyboard available to non-Japan in 2011

. > User's native language guides emoji syntax  
\> complicated further by fact emoji can be used as nouns, verbs, or other parts of speech

. / Keymoji function - autocorrect suggests emoji  
\> can also upload individual emoji translations for a word or phrase  
..

/ Emoji and EMOJILING display COMPRESSION  
\> "a picture is worth a thousand words"

/ Technocracy of emoji  
\> need to have the keyboard to speak the language  
> Unicode controls the standard  
\> who controls EMOJILING?  
\> evolves EMERGENTLY

/ "modern eye" already accustomed to pictorial communication  
> computer icons  
> visual signs in public - traffic etc  
> logos

\> Danesi: "The emoji phenomenon is an outgrowth of this intrinsic tendency in communications."  
\> evolved itself

/ Indicates decline in standards CRITICISMS  
\> ANCIENT mindset  
\> every time there has been a shift in WRITING/LITERARY practices, has been viewed as "disruptive" and indicative of a "decline in standards"  
\> Plato - Phaedrus: threat of writing as negatively impacting  
> memory  
> ability of THE MIND to detect inconsistencies of logic  
\> too instrumental  
\> non-dialogical  
\> didn't allow back-and-forth repartee that attenuated danger of MANIPULATION  
\> writing became THE BASIS UPON WHICH K CONTRSUCTED AFTER  
\> Philosophy - logical syllogisms (defined first by Aristotle)

> Major striving toward conciseness in modernity  
\> reaction to "protracted style of treatises and philosophical disquisitions"

> Mass communications TECHNOLOGIES always geared toward this goal  
\> "compression" - Alexander 2012; Turner 2012

Compressive visual symbolic systems:  
/ Charles Bliss - Blissymbols  
/ Pitman 1837 stenographic (shorthand) notation system

. Semantics of emoji:

/ Will emoji use shape/change EXISTING writing practices and SYSTEMS

/ Visual forms have an intuitive appeal

/ Forces people to think imaginatively (see grammar)

/ Emoji usage could be retrieving ancient form of "VISUAL CONSCIOUSNESS"

/ EMOJILING is a WRITTEN SYSTEM - what about speaking?  
\> Danesi p 53 - everyone preferred WRITTEN communication (to F2F or video chat)  
\> "texting allows me to make sure we don't fight, as we often do when we talk to each other"  
- parents

/ Emojis intrinsically CONNOTATIVE  
\> even POETIC

/ Evolution of rhetoric symbols:  
> not all visual objects carry visual rhetoric  
Sonja K Foss 2005 [Danesi p 61]:  
/ 3 characteristics that turn VISUAL OBJECT->COMMUNICATIVE ARTEFACT:  
> symbolism  
> human interaction  
> presented to audience for purpose of comm with audience

/ Emojis are "metaphorical pictures" - BLENDS  
\> metaphorical = separate DOMAINS of meaning BLENDED to produce new forms of meaning that AMALGAMATE the referential domains into ONE IMAGE  
> blending occurs at MICRO and MACRO  
\> MICRO: SIGNIFIERS > IMAGE  
> MACRO: PARTS coalesce > METAPHORICAL CONSTRUCTS associated with the image

> "CONCEPTUAL METAPHORS" can be seen OUTSIDE OF LANGUAGE

\> PHYSICAL SYMPTOMS  
\> pain = "don't do that/this is bad"  
> VR LANGUAGE (avatar/environment etc) IMPLICATIONS  
\> represent CMs we DON'T HAVE IN EXISTING LANGUAGE  
\> limitations of WRITING  
> overcome w VR lang  
\> LATENT SPACE CONCEPTS?  
\> could EVOLVE HUMAN CONSCIOUSNESS/PERCEPTION  
\> Evidence: Neuroplasticity  
> Find evidence: HOW WRITING/LANGUAGE has SHAPED  
> cognition  
> sensory experience  
> other things - read

/ Metaphors We Live BY - Lakoff and Johnson

> visual metaphors / emoji CREATE A NEW SYSTEM OF CREATING INFINITE COMPOUND METAPHORS

\> on top of use alone  
\> this is just language?  
\> visual component  
\> universal?  
> connects with PRIMORDIAL?  
> things can't say with words  
> BEYOND IMAGES to VRLANG implications  
\> motion  
\> SENSE OF PRESENCE/INHERENCE  
\> ACTUALLY SEE THE LANGUAGE COMING FROM THE BODY/representation of presence/identity itself  
\> EMPATHY  
\> neurodivergence and empathy + remedy to similar desensitization  
\> desensitized to certain phrases and phrasal verbs  
\> e.g. "I want to kill myself"  
\> same will happen  
\> avatar-linkage means constant reminder of link to human - THAT HUMAN THERE  
> this is where FLAVOUR/TONE comes in  
\> use tone to create a visual VOICE - imparts PERSONALITY/OWNERSHIP

. Images are POWERFUL: .

/ Todd Gitlin - Media Unlimited: How the Torrent of Images and Sounds Overwhelms Our Lives  
\> barrage of images from media  
> washes over individual

> accumulate in "groupthink"  
\> worldviews, lifestyle behaviours

> images represent realities but are not realities

\> we know this but PREFER THE VIRTUAL to the REAL  
\> Baudrillard 1983 [Danesi p 74]  
\> SIMULACRUM EFFECT  
\> blurring of lines between reality and images

[> live in a VISUAL CULTURE  
\> image more predominant than words/spoken word  
\> always had a visual culture  
\> balance tipped now due to VISUALLY BASED COMMUNICATIONS  
\> illuminated manuscripts medieval/Renaissance  
\> enhance meaning of text - adjunctive (not substitutive)  
\> emotive-poetic power  
> tone  
||> like emoji  
\> Saussure 1916 [Danesi p 76] "Men might as well have chosen gestures and used visual symbols instead of acoustical symbols"

/ Overcomes real problem of conveying TONE in written text

\> punctuation marks  
\> very lacking  
\> examples of famous misunderstandings/ thought experiments  
> SARCASTISM  
\> interrobang  
\> why didn't it catch on?  
> internet age approach to capitalisation - NEW CASE - ironic/sarcastic case

/ Only used for adding tone - not a real language  
\> ADJUNCTIVE usage = emotive, phatic, poetic - supplementary  
> SUBSTITUTIVE usage = has own SYNTAX - conceptual (see below)

/ No culture in history doesn't have visual writing traditions

\> visual thinking crucial to human understanding  
\> maybe more than verbal  
\> picture-writing = foundation of all writing systems  
\> points to COMMON UNIVERSAL TYPE OF ORIGIN  
\> evolved in different places individually  
\> is evidence for PRIMORDIALITY / BIOLOGICAL  
\> supporting evidence

\> best way to make a universal language? Return to the LOWEST COMMON DENOMINATOR

/ Hybrid visual-written language "More the rule than the exception" in history  
\> graffiti usually had visual supports  
\> considered + intended as profane  
\> is the visual profane?  
\> we are reviving the visual from profanity - #promoji

\> Danesi: rise of emoji could be retrieval of this hybridity

/ Spread of emoji-only texts will lead to FURTHER EVOLUTION of emoji GRAMMAR  
\> like learning a second language by immersion

\> marketing  
\> PETA "beyond words"  
> branding  
> political campaigns

> pop culture

..

[Notes from the book "The Semiotics of Emoji" by Marcel Danesi, with some thoughts from me, Ash]

Emoji Grammar  
/ "Placement grammar"  
> **Mostly based on calquing**  
↳ also pictorial-conceptual  
> has its own syntactics  
↳ conceptual-ionic syntactics  
↳ syntactic flow > a "conceptual assemblage"  
↳ organised by nature of concepts  
↳ alongside own "sentence grammar"  
↳ internal "SYNTACTIC PROPENSITY" (for SUBSTITUTIVE and ADJUNCTIVE uses)  
↳ ADJ + SUB: emoji SUPERIMPOSED in locations usually filled by specific kinds of words, punctuations marks, parts of speech

↳ ADJUNCTIVE: image or diagram in a paper/illuminated manuscript couldn't convey this type of meaning - only illustrative/demonstrative/supplementary  
↳ interplay between ICONIC CONTENT of emoji and SYNTACTIC STRUCTURE of the NATURAL LANGUAGE (that is used hybridistically) provides HIGHLY EFFECTIVE FORM of STRATEGIC WRITING STYLE (e.g. Danesi p85 - SMS 5)  
↳ reading employs HYBRID FORM OF UNDERSTANDING  
↳ like REBUS WRITING

[> e.g. Danesi p 83-84:  
> Asymmetrical flow  
↳ SUBSTITUTIVE: PETA - subject first  
↳ ADJUNCTIVE: SMS 4 - :P emoji AFTER message  
||> wouldn't make sense/have same meaning other way round

/ Self-sufficient - relation of concepts to each other and to outside referential domain  
↳ not based on internal rules of sentence formation

/ PETA eg  
> CONCEPTUAL GRAMMATICAL STRUCTURE  
↳ **grammar of SENTENCE FORMATION**  
↳ follows THREE PART ORDERING  
↳ like SVO syntax of most European languages

[> **grammar of CONCEPTUAL FORMATION**  
↳ This + visual nature > **forces people to think imaginatively**  
↳ **what happens to our brains when we think in this way?**  
> visual processing  
> compositional/creative mode?  
> Emojilang: synthesis mode?

/ LANGACKER - (19877): parts of speech originated from imagery content of words  
↳ **NOUNS ENCODE THE IMAGE SCHEME OF A REGION IN MIND-SPACE**  
↳ ideospace  
↳ VRLang latent-space concepts/words

/ Has its own rules of pluralisation  
> repeat character  
↳ **expand capabilities of current language**  
↳ can PLURALISE ANYTHING  
↳ even ABSTRACT CONCEPTS  
↳ uncountable nouns - water, homework  
↳ abstract nouns - happiness, humorosity  
↳ laughing face - singular vs two, vs many  
↳ just intensifier - "very" - emphatic  
↳ same function as pluralised forms in verbal language  
↳ can't pluralise "happiness" in verbal lang  
↳ could use "intensely smiling face" instead of "smiling face" if all the same  
↳ BUT DON'T - instead repeat "smiling face" multiple times  
↳ "really good" vs "great"  
↳ BUT CAN'T SAY THAT FOR "happiness" as a concept  
↳ same mode (happiness) but PLURALISED  
↳ still just emphasis  
↳ A: emoji pluralisation can mean MORE THAN EMPHASIS  
↳ provides tone  
↳ friendly/playful tone  
↳ implies active negation of PERFUNCTORY nature of certain phrases  
↳ developed through overuse / "being the obvious choice"  
↳ e.g. multiple "smiley face" emojis rather than one when housemate says "everyone should do x"  
↳ one may seem perfunctory  
↳ multiple NEGATES this through DISPLAYING EFFORT  
↳ **writing more (verbal lang) shows increased concern/care**  
↳ emoji pluralisation = NEW, DEFINED, DISTINCT mode of COMMUNICATION OF perceived

#### IMPORTANCE/ATTENTION

Danesi's 322 messages show (adjunctive)  
/ Emoji used  
> Syntactically - at locations where PUNCTUATION or SALUTATION would occur  
↳ beginning or end of VERBAL structures  
↳ 1,615

> Semantically - represent MEANING, at the location in sentence where the meaning occurred  
↳ annotate meaning of word or phrase  
> 1,928

> Reinforcing - reinforce VERBALLY INDICATED meaning  
↳ 878  
..

/ Conceptual-ionic syntactics somewhat concordant with **GENERAL THEORIES On VISUAL WRITING AND THINKING**  
> Arheim 1969  
> Dondis 1986  
> Saint-Martin 1991  
...

/ Emoji-only text in "Book from the Ground: From Point to Point" - Bing Xu, 2014 (Danesi p88)  
> translating it would miss the point  
> AMALGAMATION OF SCRIPTS, SYMBOLS, and VISUAL FORMS  
↳ breaks created with chevrons ">>>>"  
↳ like SECTION BREAKS in WORD PROCESSORS  
> like HTML

> indentation used  
> punctuation used  
> emojis

[> Cohn (2013:28) [Danesi p89]  
↳ writing based on "combining schemas"  
↳ comic-book analysis  
↳ FUTURE IS NOT EMOJILANG or AVATARLANG, or ENVIRONMENTLANG, its an AMALGAMATION OF SCHEMAS  
↳ multimodal communication  
↳ future of multi-modal BCIs  
↳ why are they showing to be the way forward?  
↳ A: humans magpie  
↳ 1st stage - pictography > rebus principle (for NECESSITY-esp to accomodate external/foreign/alien concepts/names)  
↳ PURPOSEFULLY HYBRIDISED rebus writing (e.g. German Rebus Manuscript)  
↳ alphabets/abugidas + syllabaries  
↳ colonialism > languages and writing systems combine  
↳ Japanese combines logography + syllabaries  
↳ Japanese popularise Emoji  
↳ World use Emoji with own scripts/languages  
↳ individual HYBRID quasi-scripts emerge  
↳ commonalities subconsciously/cultural/metamind-level emerge into IMPLICIT GLOBAL (via regions first - West and East separately) EMOJI quasi-language/script (own grammar)  
-PRESENT MOMENT-  
> Unintentional/without intervention:  
↳ will evolve into fully-fledged GLOBAL EMOJI LANG  
> Intentional:

↳ people like me CONSTRUCT EMOJI LANGS  
↳ others - defined - set  
↳ wont withstand evolutionary pressures  
> wont get over initial LITERACY barrier  
> EMOJILANG/VRLANG - fluid  
↳ designed to not just accomodate evolution  
↳ but be DESIGNED by EVOLUTION/EMERGENCE  
↳ "Emergent Participatory Design"

> others - uni-modal  
↳ come "outmoded" on arrival  
↳ Stengers? - lang/tech can't keep up with human thought

> EMOJILANG/VRLANG - MULTIMODAL  
↳ must be open to  
> evolution of existing included modalities  
> addition/integration of FUTURE MODALITIES  
↳ how?  
↳ "More Than One Way To Skin A Cat Ethos" (MTOWTSAC Ethos)

> Originally thought EMOJILANG = answer  
↳ Emojilang UNIMODAL  
↳ VR-Multilang  
↳ learning curve  
↳ far less than traditional constructed global languages  
↳ intuitive  
↳ logographic EMOJILANG basis (to start with)  
>  
↳ initial MULTIMODALITY includes user's NATIVE LANG  
↳ speaking/gesturing to fill in gaps  
↳ user's "PERSONAL VRLANG" evolves  
↳ shared practice group/pair "GROUP VRLANG" evolves  
↳ inter-group communication facilitates "VRLANG MICRODIALECTS"  
↳ cross-nativelang inter-group comm > "VRLANG DIALECTS"  
↳ can't rely on NATIVE LANG supplementation  
↳ VRLang Dialect becomes FULLY NATIVELANG INDEPENDENT  
↳ will always remain  
↳ inter-dialect communication > "VRLANG"

[> PROVE VR IS THE FUTURE OF COMMUNICATION  
↳ VR as the future of ontology / reality  
↳ VR as the future of global communications  
↳ internet is centre of global communications  
↳ evidence  
↳ VR is the future of internet communications  
↳ evidence

> VRLang not a language because not "spoken"  
↳ spoken in other ways  
↳ enables mute people  
↳ disables blind people  
↳ MTOWTSKC Ethos - should always be multiple ways of saying things  
↳ different MODALITY-CENTRED DIALECTS  
↳ naturally evolve to accomodate impaired communities  
↳ like how various sign languages evolved  
↳ Modes SO FAR:  
> visual  
↳ Avatar visual  
↳ what is closest to Jaron Lanier's avatar language NOW?  
> haptic  
↳ wrist vibration interface - Xtactor  
> vibratory bodysuit  
↳ represent presence  
↳ switch between "displaying"/relaying diff AGENCY STATES  
> SELF AVATAR STATE  
> OTHERS' AVATAR STATE  
> ENVIRONMENT STATE  
> GENERATED FORMS STATE  
||> each utilise all desired modes  
  
> auditory?

/ "what the emoji phenomenon is showing, more than anything else, is that **visuality and phonetic writing are merging more and more to produce a hybrid language and, thus, that HUMAN COMMUNICATION IN WRITTEN FORM IS EVOLVING more and more on a single path of HYBRIDIZATION ACROSS THE GLOBE...**"

↳ "traditional language and writing can't carry our thoughts in the ways of the past"  
↳ CAN carry in ways of the past  
↳ can't keep up with our thoughts/communication needs TODAY  
↳ STENGERS? WHO SAYS THIS?

Danesi's study quotes:  
/ "I can figure out **emojis most of the time**; but **sometimes I have to** write back and ask my friend **what she meant**: I guess emojis are a lot like words: we use them any way we want."

/ "Many of my emoji are the same as those of my friends: but sometimes I create new ways of using them. But my friends still UNDERSTAND MY USES because, I think, **THEY UNDERSTAND MY TRAIN OF THOUGHT**. It's easier to be inventive with emoji than with anything else."

#### Emoji Pragmatics

##### Internet affects on literacy

/internet affect on traditional school literacy  
↳ increasing use of informal registers  
> inconsistency in writing patterns  
> increased abbreviations

/ Perez Sabater (2012) [Danesi p97]: similar communicative strategies in Facebook + Informant texts

/ David Crystal (2011) [Danesi p97]: 2 new forms of writing = online and offline  
↳ impacting "all kinds of social processes"  
↳ in schools now students and teachers given choice to move back and forth between the 2 literacies  
↳ Emoji not common in student-teacher comms

/ Naomi Baron (2008) [Danesi p97]:  
> ONLINE literacy little effect on OFFLINE literacy  
↳ dichotomy > diglossia  
↳ ONLINE = low value and informal  
↳ why is informality of low value?  
↳ has it always been? Structures of power shaping development of language and attitudes toward it

/Some claim ONLINE LANG is like a pidgin  
↳ will eventually EVOLVE into a GLOBAL CREOLE - new form of literacy

/ Danesi: Emojis, as a written form, may have INCREASED SENSITIVITY TO WRITING  
↳ generated a "meta-literacy" awareness  
↳ as emojis used more  
↳ ? due to HYBRID form (picture + traditional script) being more interesting  
↳ dynamic (vs static traditional)

/ Hybrid competence - HYBRID LITERACY  
↳ ability to extract and use relevant digital info in MULTIPLE FORMATS, from a WIDE RANGE OF SOURCES, via digital devices

> implies development of SUBLITERACIES  
↳ "mobile pragmatic competence"  
↳ social media

↳ audience rather than single interlocutor  
↳ increase in MEDIA-style literacy  
  
> vernacular literacy - how diff langs and jargons interact  
> information literacy - how to mine info from internet and communicate it

> media-dependent (we learn through DOING - being involved in a MEDIA COMMUNITY)

/ Media-specific textualities  
> SMS poetry  
> cellphone novels  
↳ download in short installments  
↳ shift in consciousness/attention span or EXPANSION into MULTIPLE ATTENTION MODALITIES?  
> email  
↳ formal, institutional - closest to print

/ Halliday (1985:82) [Danesi p98]: "when new demands are made on language, it changes to accomodate them...  
We are making language work for us in ways it never had to do before,  
it will have to BECOME A DIFFERENT LANGUAGE in order to cope."

/ Stark and Crawford (2015) - **political angle to new Emoji literacy (hybrid writing)**

> convey affect > support current socio-political system  
↳ maintain "CULTURAL HEGEMONY" (GRAMSCI 1931) (Marxist)  
↳ control masses through indirect means  
↳ incl writing  
> emoji are conduits for AFFECTIVE LABOUR  
↳ work intended to produce/modify emotional experiences  
↳ in the social networks of "INFORMATIONAL CAPITALISM"  
↳ Emojis are rich in social, cultural, and economic significance

> emoji embody the tension between AFFECT as HUMAN POTENTIAL and a PRODUCTIVE FORCE that capitalism seeks to harness  
↳ by managing "EVERYDAY BIOPOLITICS"

> evidenced in emoji usage in ADVERTISING and POLITICAL SLOGANS

[|> Danesi's study - almost everyone disagreed that emoji can be used to "manipulate people in a capitalist society"  
↳ admitted potential for this  
↳ but always been a danger in persuasive writing

> began with rise of SMILEY  
↳ visual language is a CULTURAL FORM that emerged out of "typographic habits, corporate strategies, copyright claims, online chat rooms, and technical standards disputes"

> emoji morphed into a WIDESPREAD VERNACULAR DISCOURSE  
↳ serving to SMOOTH OUT the rough edges of digital life  
↳ D's work shows emoji used to underscore TONE, introduce HUMOUR, bring COLOUR and PERSONALITY to boring text

> emoji can act as EMOTIONAL COPING STRATEGY  
↳ how might this develop?  
> How are analogous VR/game "EMOTES" used like this?  
↳ Facebook "REACTS"  
↳ condense emotional reactions down to 6 states  
↳ "create new avenues for digital feeling"

> Sarah Ahmed (2010:29) [Danesi p99]: "AFFECT is what sticks" to  
↳ PEOPLE, PLACES + OBJECTS (**Ensure VRLang addresses these categories**)  
↳ emoji emplexify the TENSION between AFFECT AS  
> liberating human potential  
/  
> productive force the market seeks to harness through COMMODITIZATION OF EMOTIONAL MODALITIES

> Alexander Galloway (2006:95): "It is precisely those places in culture that appear politically innocent that are at the end of the day the most politically charged"

[|> emoji code part of EMERGING NEW GLOBAL INTELLIGENCE  
↳ WHICH HAS GENERATED ITS OWN KNOWLEDGE FORMS  
↳ Politics will always follow technology

> form of CREATIVE EXPRESSION  
↳ my text about santa  
↳ fun emoji art/writing examples

[Notes from the book “The Emoji Code” by Vvyyan Evans, with some thoughts from me, Ash]

Is Emoji and Universal Language?

/English is - 942 million fluent speakers - 1.5 billion proficient  
 / QUARTER of global population owns spartphone  
 /Emoji vetting by Unicode - 18 months  
 \>Unicode Consortium: 11 companies  
 > 8 AMERICAN: Oracle, IBM, Microsoft, Apple, Adobe, Google, Facebook, Yahoo  
 > committee reps overwhelmingly WHITE MALE COMPUTER ENGINEERS  
 \> EmojLang/VRLang designed to be shaped by EMERGENT PARTICIPATORY DESIGN  
 \> “Natural language is a living, evolving organism shaped and renewed each day by its users”  
 \> **LANGUAGE AS AN ORGANISM PAPERS**

/Over 90% world's internet users use Emoji on SOCIAL MEDIA  
 >80% adults regularly use in text messaging - more for teens  
 /2 billion users of Emoji

Multimodality:  
 /NONVERBAL CUES provide much meaning in everyday conversations  
 \> Emoji fill this gap  
 \> VRLang

>gesture  
 >facial expression  
 > Avatarlang  
 >body language  
 > Avatarlang  
 >speech intonation

Digital text alone is “impoverished” and “emotionally arid”

/72% of British 18-25 YOos believe “Emoji makes them better at expressing their feelings”

/Match.com study (non-subscribers)[p34]:  
 >more emojis single person uses = MORE DATES AND MORE SEX  
 >In women - MORE SEXUAL SATISFACTION  
 [|] > correlation clearly not indicative of causation directly  
 \> Most: Emoji use facilitates COMMUNICATION and EXPRESSION  
 \> least: people that use Emoji more likely to have SOCIALLY/SEXUALLY APPEALING QUALITIES - e.g. extraversion, flirtiness, mentally promiscuous, GOOD COMMUNICATION

/Switkey- 1 billion text-based items (16 languages) study - TOP 3 CATEGORIES = EMOTIONAL EXPRESSION  
 \>45% happy faces, 14% sad faces, 12.5% heart/broken heart

..

**The Conduit Metaphor**  
 /Lakoff and Johnson  
 /Meaning is like a PHYSICAL OBJECT we can PACKAGE up into WORDS  
 /Michael Reddy: we all buy into the idea  
 \>meaning is a thing that can be packaged up into words, and transmitted from one mind to another, through language?  
 \> meaning associated with WORDS or EMOJIS is NOT FIXED - meaning is a SHAPE-SHIFTER-like putty  
 \> must have a RELATIVELY CONSISTENT, WIDELY KNOWN MEANING to FUNCTION effectively  
 \> we interpret meaning of words THROUGH PRISM OF CONTEXT  
 \> C. Levinson - message in a bottle - “meet me here, a week from now, with a stick about this big”  
 > server at fast-food place asks “What’s up?” when you arrive at counter  
 \> MEANING =  
 >“meaning is a PROCESS that takes place in the HERE AND NOW OF COMMUNICATION”  
 \> NOT AN OBJECTIVE “THING” that lies outside us, in the world  
 > dynamic  
 > consequence of PERSON, PLACE, TIME

/Emoji and context:  
 >aubergine/peach emoji  
 >emoji meaning SHIFTS via their METAPHORIC APTNESS  
 \> my lawyer is a “shark emoji”

>emoji meaning shifts based on “emoji font” used by your device  
 \> Unicode: “(hand) gun emoji”  
 > Microsoft = revolver: Apple = WATER PISTOL  
 \> would NY District Attorney have issued arrest warrant for Osiris Aristy if WATER PISTOL EMOJI?  
 ...

/words/emojis don’t represent definitions like a dictionary, represent CONCEPTS, more like ENCYCLOPAEDIA  
 \> “book” = everything we know about a book - how looks, works, made, written, who writes them, what can be about, how use them, possible purposes  
 > MEANING VARIES based on context - accessing DIFFERENT PARTS of our ENCYCLOPAEDIC KNOWLEDGE/CONCEPT  
 \> “heavy book” = book as object, with weight  
 \> “controversial book” = book as written text, item of culture  
 >red pen = red outside/red ink  
 > water pistol = dredges up DIFFERENT ENCYCLOPAEDIC K than REVOLVER/PISTOL  
 \> diff meaning

..

/communication requires  
 >SIGNAL, intentionally produced, to SIGNIFY a SPECIFIC, WIDELY KNOWN MEANING  
 >RECOGNITION as such by OTHER MEMBERS of a GIVEN COMMUNITY  
 \> EmojLang/VRLang DIALECTS part of DIALECT GROUPS  
 \> mutual intelligibility of CORE LEXICON = ALL DIALECTS  
 \> mutual intelligibility of PERIPHERAL LEXICON = DIALECT-SPECIFIC

**Human Communication Is Multimodal**  
 /communicative SIGNALING is MULTIMODAL  
 >point = gestural mode  
 >cough = paralinguistic mode  
 >write letter = linguistic mode  
 >draw love heart= visual mode  
 >perfume letter=olfactory mode

/mode = TYPE of INFORMATION  
 /medium = channel

/SAME MODE can be conveyed via MULTIPLE MEDIUMS  
 \> LINGUISTIC MODE  
 \> oral-aural medium - speech  
 > manual-gestural - sign languages  
 > written-textual - write  
 > 2D-visual - visual languages (e.g. Blissymbols)

/some MODES can be conveyed via SAME MEDIUM  
 \> KINESIC-VISUAL MEDIUM  
 \> facial expressions  
 > gesticulations  
 > body posture

/multimodal COMMUNICATIVE SIGNALS provide COMPLEMENTARY TYPES (MODES) of INFORMATION, conveyed via DIFFERENT CHANNELS, CONVERGING on a RICH, often COMPLEX, COMMUNICATIVE INTENTION”  
 \> what signals, modes (types of info), channels can be used IN VRLang?  
 > “ can be used in other channels/technologies  
 > what FUTURE TECHNOLOGIES can be imagined to fill given CHANNELS, MODES, SIGNALS

\> due to COMPLEMENTARY and OVERLAPPING cues from DIFFERENT MODES - we understand intended meaning easily  
 \> how can VRLang do this?  
 > can EmojLang do this?

/Today’s 6-YOs have EQUIVALENT levels of DIGITAL TECHNOLOGY K to average 45-YO [pg 57]  
 /Adults spend 22 hours online avg - more than doubled in decade

/Multimodality of Osiris Aristy’s messages conveyed the meaning that got him arrested  
 “I keep in touch with all my niggas yea... They all doing fine free my brother he doing his bid right along RNS  
 🦋🦋🦋FREE EMONEY (Tag: Eric Santiago)

...

## Mind Control

/Minds are SYMBIOTICALLY LINKED to others  
 \> “mind-control”  
 \> affect mental states of others with INTENTIONAL BEHAVIOUR - shared intentionality  
 \>physical - harm, hug, stimulate sexually  
 >communicative - “I hate you”  
 \> “close the door”

/Function of communication = enable everyday mind-control  
 \>shaping means of communication = thought control  
 \> Emoji  
 \> controlled by powerful multinationals

/Emoji already “evolves via the changing use of individuals”  
 \> supports EmojLang/VRLang as EVOLVING PARTICIPATORY DESIGN

/Apple changed gun>water pistol  
 > prevented introduction of “riffle emoji” for Olympics [pg 66]  
 \> controlling what people can say

/ALREADY HAVE DIALECTS OF EMOJI - platform-specific “Emoji fonts”

/DON’T NEED LANGUAGE TO COMMUNICATE  
 \>aphasia patients can communicate wishes,feelings,desires (gesture, facial expressions, body language)  
 > “home sign” - Goldin-Meadow [pg 69]: DEAF children of HEARING parents that NOT TAUGHT SIGN LANGUAGE CREATE THEIR OWN SYSTEM OF GESTURED COMMUNICATION  
 \> SUPPORTS EVOLVED PD Design for Emoji/VRLang

...

/We already create new words through SYNTHESIS  
 \> “lumbersexual” - shortlisted for 2015 word of the year  
 > “Brexit”  
 > prefixes / suffixes - “un-”, “-less”, “-ed”  
 \> I’ll create a new word now: “ununiversitied”, “universitiless”  
 \> can already see possible connotations, socio-political tensions - “Robert is ununiversitied.”  
 \>what about “misuniversitied”

Emergent:  
 > contractions - “gonna” = “going” + “to” / “it’ll” = “it” + “will” / “aint” = “am” + “not”  
 \> goodbye = “God be with ye” / salam = As-salamu alaykum = “as-salāmu ‘alaykum wa-rahmatu-llāhi wa-barakātuh” (Peace be upon you, as we as the mercy of God and his blessings)  
 \> EMERGENT SYNTHESIS is (one way) HOW NAT LANGUAGES EVOLVE

/Constructed Languages CAN become languages  
 \> Esperanto native speakers

/A language is a [language definitions]  
 \>MEANINGFUL UNITS (e.g. words) with a SYSTEM OF RULES - GRAMMAR

## MEANINGFUL UNITS

A: EmojLang/VRLang dialects won’t lead to MUTUAL INTELLIGIBILITY  
 \> no one knows all the English words -  
 \> A VOCABULARY  
 \> most 10,000-30,000 words  
 > the Oxford 3,000 - CORE VOCABULARY (core lexicon?)  
 > SHAKESPEARE only knew 40% of words at the time  
 \> Mandarin readability with characters  
 > Charles K. Ogden [pg 82]’s (1930s) Basic English movement  
 \> only need 1,500 words, made up of 850 basic words

/Emoji itself has “narrow SEMANTIC RANGE OF EXPRESSION”  
 \> pictographic - can’t do ABSTRACT concepts  
 \>“chaos”, “betrayal”, “empathy”  
 \> Show EmojLang poss words/grams for these  
 \> Emojilang = possibly LOGOGRAPHIC (are “grams” words?\*) - combination of “pictographic”+ “ideographic”

### SYSTEM OF RULES - GRAMMAR

/word order isn’t universal  
 \> use L-R word order  
 \> conceptual (Danesi style) grammar might evolve - or own word order

/Emoji grammar  
 >Gestalt Principle central to visual perception  
 \> proximal objects considered RELATED  
 \> Placing Emojis next to each other to show relationship = form of grammar

>MANY EMOJI ALREADY COMPOSITES  
 \> “zero width joiner”  
 \> “female singer with dark-brown-skin” = “female” emoji + “dark-brown skin modifier” + “microphone” emoji  
 \> people don’t know this

/Natural language: SYMBOLS motivated by ARBITRARY CONVENTION (“cat” - doesn’t look like a cat or build on smaller units that look like smaller units of a cat)  
 >Emoji “code”: SYMBOLS motivated by ICONICITY  
 \> accustomed to ICONIC REFERENCE  
 \> computer icons (skeuomorphic) - recycle bin, file, document  
 \> dragging file > recycle bin moves it there  
 \> ICONICITY means HARD TO REPRESENT ABSTRACT CONCEPTS  
 \> not all Emoji use ICONIC  
 \> become more symbolic  
 > flags - represent state - represent country  
 > See no evil, hear no evil, speak no evil monkeys  
 \> ICONICITY of Emoji can be culturally-sensitive  
 \>two hands pressed together - originally Japanese “please/thank you” - used to mean “prayer” by Westerners  
 \> BECAME SYMBOLIC: “hands together” icon > prayer > HOPE/WISH/ASPIRATION  
 \> like a language

\> ASL is largely ICONIC in motivation - “cheerful”, “happy”, “excited” = upward motion

...

## Will emoji EVOLVE to become a language?

/Need grammar  
 /Joe Hale created one- cryptosemantics  
 >must be VALUE in LEARNING a grammar (/Emoji language principles) for it to CATCH ON  
 \> Emoji use is mainly ADJUNCTIVE  
 \> complement “LINGUISTIC MODE” - not replace  
 \> provides NONVERBAL CUES missing from textspeak  
 \> SIGNIFICANT SHIFT TO LANGUAGE compared to most of history  
 > evolve into a system that ENABLES “LEVEL PLAYING FIELD” between F2F and DIGITAL COMM

..

/How is TECH shaping communication today?  
 Kristin Byron - Syracuse Uni [pg 105]: LACK OF NON-VERBAL CUES in EMAILS > addressees NOT GOOD AT INTERPRETING EMOTIONAL EXPRESSION OF SENDER  
 >angry emails  
 \> E- and TEXTUAL DIGITAL COMM PREVENTS EMPATHY  
 \> STUDIES on conditions for empathy? Mirror neurons etc - need to see them  
 \> Negative effects on society  
 \> analyse Reddit argument from misunderstanding  
 \> VRLang  
 \> PHANTOM TOUCH  
 \> shows our brains associate AVATARS with self > probably can stimulate mirror neurones

>Lack SPEECH PROSODY  
 >F2F can ADJUST TONE and CONTENT of overall message, AS WE SAY IT  
 \> RESPOND TO ADDRESSEE’S responses  
 \> VERBAL and NON-VERBAL

[|] > Emoji add tone  
 > Help express IRONY/SARCASM (study [118]) > avoids miscommunication

### Importance of non-verbal cues

/Handshake strength (evidence)  
 /Self-touch - e.g. hair - bored, romantic  
 /Turn-taking time  
 /eye contact  
 /pupil dilation  
 /blink rate

/Kinesics = “study of facial expression, gestures, posture and gait, and visible arm and body movements” [pg110]  
 \>VRLang  
 /Kinesics and Paralinguistics = communicative attitudes, rapport  
 \> tone, express attitudes to addressee/others AND to MESSAGE  
 \> turn taking

/Mehrabian [pg 114] over 90% of COMMUNICATION of EMOTIONAL RESPONSES comes from PARALANGUAGE + FACIAL EXPRESSIONS (part of KINESICS)  
 \> 7/38/55% rule - language/paralanguage/facial expressions  
 /FACIAL EXPRESSIONS important for  
 >VRLang  
 > and FUTURE TECH possibilities

\>verbal comm more important when making judgement on person  
 >The more language = the more language becomes important

...

Emoji faces [pg 119]  
 \> insert table with OFFICIAL descriptions  
 \> are the descriptions exactly how you (reader) would put them?  
 \> show e.g.s of AMBIGUOUS, SYMBOLIC, and SOPHISTICATED emoji  
 \> ambiguous  
 \> “multipurpose”  
 >+ meaning will evolve - maintain “multipurpose” usage or not depending on NEED of USERBASE  
 \> may see CULTURAL DIALECTS make themselves evident here

\> DO SAME FOR EMOJILANG - map Emoji faces to POSSIBLE EMOJILANG compound equivalents  
 \> maybe use faces of Emoji (or Emojilang) as guide to show possible VRLang ideas  
 \> Emojilang needs more faces  
 \> not if used in combination with VRLang - face tracking, eye tracking, body tracking

/Swiftkey study - nearly 50% EMOJI use = POSITIVE YELLOW FACES  
 \>15% negative  
 \> emoji used when POSITIVE at the moment  
 \> LACK of POSITIVE EMOJI is taken to mean PASSIVE AGGRESSION

\> REPLACING active aggression in youth bc of this?

...

Silent Messages  
 /Successful communication requires MULTIPLE MODES, SIMULTANEOUSLY: avoiding MIXED MESSAGES  
 \> VRLang  
 > Emojilang ON VRChat  
 |> is this a consequence of EXISTING MODES NOT REACHING FULL POTENTIAL - indicates failure on mode/medium

/6 main ways NON-VERBAL CUES (NVC) ENHANCE MEANING F2F  
 > 1>substitution (need INSTEAD of “yes”)  
 > 1> EMBLEM/emblematic gesture = when NVCs REPLACE LANGUAGE (“ok” sign; thumbs-up)  
 >2>reinforcement (nod head AND say “yes”) - 2 MODES say SAME THING  
 >3>Contradictory - MIXED MESSAGING - can be DELIBERATE (“this will be fun” in MONOTONE delivery + GRIMACE) - IRONY  
 >4> COMPLEMENTARY = ADD INFO to VERBAL (“would you like some wine?”-“Yes please” + parallel fingers gesture for “little” = “Yes please, but only a little bit”)  
 \> SPEECH PROSODY often complements LINGUISTIC MODE (“Hello” w falling tone vs rising)  
 >5> EMPHASIS/ACCENT - (“beat” gestures w hands/fingers - fast = agitation, precise = determination/sincerity (think Jordan Petersen), large+ forceful = frustration/enthusiasm)  
 \> SPEECH PROSODY - falling tone = new info (I ate a V hamburger)?  
 >6>MANAGEMENT/FLOW of DISCOURSE  
 \>KINESICS:  
 >gesture  
 \>repeated across conversation = LINKS TWO POINTS  
 > Indicate THOUGHT PAUSE (hand to chin) = not done talking, just thinking  
 > nodding head/shaking head = provides SUPPORT  
 > eye contact - make eye contact when done talking - pass the baton

\> PARALINGUISTICS:  
 \> Intonation - punctuates

...

/ EMOJI FULFIL ALL 6  
 >1>Substitution - (“👉” instead of “hahahaha” or “that’s hilarious”)  
 >1> AN EMOJI - VISUAL GESTALT [|||||]  
 \> ENCAPSULATES often complex SET of EXPERIENCES in a single, intuitively accessible glyph  
 2>Reinforcement - (“I love you” + ❤️)  
 3>Contradictory - (“No, I love spaghetti bolognese 🍝” = ironic metacomment)  
 4>Complementary - add something new - METACOMMENT on HOW TO INTERPRET MESSAGE  
 \> avoid LOSING FACE - politeness markers  
 > EXPRESS EMOTIONAL ATTITUDE (vibe) - (“Late again!” vs “Late again! 🙄”  
 5>Emphasis  
 \> can REPEAT Emoji for EMPHASIS (often also REINFORCEMENT)  
 \> A: EVIDENCE OF EMOJI GRAMMAR  
 \> generally, more emojis = emphasis/stronger sentiment  
 > but complex CODE/system of number - like Xs  
 > MULTIPLE HEARTS = more friendly, less amorous love (“I love you ❤️❤️❤️❤️”)  
 > ONE HEART = more sincere/amorous (“I love you ❤️”)  
 \> understatedness implies lack of need to exaggerate/emphasise sentiment as is so OBVIOUS  
 \> Julie Bishop - Australian MP/Minister for Foreign Affairs - (“Thanks...for...stellar 🌟year”)  
 6>Discourse management - MOSTLY at START OR END of SENTENCE  
 \> START = often RESPONSE/ACKNOWLEDGEMENT of PREVIOUS MESSAGE - smiley or thumbs up  
 > END = >FLAVOURED TERMINAL PUNCTUATION MARK (full stop = pass aggl)  
 \> or “TRANSITION RELEVANCE PLACE” - idea FINISHED - pass baton  
 >METACOMMENT

## Backwards Step

/Jonathan Jones in The Guardian [pg 137] - Emoji “huge step back for humanity”  
 \> misunderstands purpose of Emoji  
 \> Emoji not for LONG FORM - literature, complex prose  
 \> EMOJI for SHORT FORM, EVERYDAY writing  
 \> UTTERANCE function  
 \> text messages (red IM)  
 > tweets - replicate “thinking out loud”

/ makes us poorer communicators  
 \> like saying using FACIAL EXPRESSIONS in F2F makes us poorer communicators  
 \> RESEARCH ON EMOJI USE AND COMMUNICATION/LITERACY

\> VISUAL REPRESENTATION = POWERFUL MEANS OF COMM.N  
 \> esp in LESS ADEPT LANGUAGE USERS  
 \> DISABILITY EVIDENCE  
 > Adults - “visual learners”  
 > YOUNG  
 \>PICTURES to communicate with CHILDREN after OPERATION when LINGUISTIC MODE DIMINISHED [p 138]

\> EMOTIONS  
 \> Swedish children’s charity - bespoke Emojis for DOMESTIC ABUSE victims  
 > “Emotes Project” - emoji-like characters - help CHILDREN express EMOTIONS

\> ADD LEVITY + PERSONALITY  
 \> personality “oils” comm.n  
 \> make and maintain RELATIONSHIPS - DIGITAL and MATERIAL realms

...

**Emoji as a WRITING SYSTEM? - no, a colourful addition**

/2016 Apple - predictive emoji  
 /Joanna Stern - Wall Street Journal article in Emojis  
 \> “Just to supplement text with emoji, you need to adjust your brain to think visually: how to communicate in cartoon.”

/Writing systems evolve in response to CHANGING NEEDS  
 /Writing such as EGYPTIAN HIEROGLYPHS 5,000 years old  
 \> Danesi - larynx + cave paintings [||]

/Writing enables COMMUNICATION BEYOND THE HERE AND NOW - SPACE AND TIME  
 \> how can future systems evolve this? Refine elements of this?  
 \> speaking is EPHEMERAL  
 \> EMOJILANG/VRLANG SYNTHESISES WRITING AND SPEAKING - best of both worlds  
 \> so does TEXT MESSAGING  
 \> not intended for it - mental paradigm different - text seen as “recording speech” still, even when clearly UTTERANCE meaning  
 \> EL/VRL = NEW PARADIGM - “writing”(ish) as a FORM of “speech”(ish)

/classical Greece - democracy = POWERFUL ORATORY dominates WRITING  
 /Golden Age of Athens - 400s (FIFTH CENTURY) BCE - NO PUNCTUATION MARKS or WORD-SPACING  
 /200s/3rd Century BCE - Greek librarian at Alexandria - **PUNCTUATION** (comma, colon, “periodos”) **REPRESENT BREATH**  
 /Romans - DOTS between words; NO PUNCTUATION  
 / Fall of Rome - CHRISTIANITY - PUNCTUATION popular for PRESERVING the WORD OF CHRIST [hieroglyphs = holy also]  
 \> gained GRAMMATICAL MEANING  
 / Middle Ages - colon, semicolon, question mark  
 / 15th Century - exclamation mark

/Punctuation = mechanism for imbuing aspects of PARALANGUAGE into text  
 \> but affects MEANING, not just transcribing speech

## The Emoticon

/WRITING now REQUIRES articulation of NVCs as REPLACES F2F COMM.N - WRITING RUNS PARALLEL to SPEAKING  
 \>NOT REQUIRED degree of COMPLEXITY UNTIL NOW  
 \>WRITING traditionally only COMPLEMENTED SPOKEN INTERACTION

/3rd INDUSTRIAL REVOLUTION - DIGITAL REVOLUTION - 1980 to NOW (VIRUS?)  
 \> SOCIAL INTERACTION takes place increasingly in DIGITAL VENUES - SOLIDIFIED BY VIRUS  
 \> MEETINGS > EMAIL / VIDEOCALL  
 \> GOSSIP > GROUP CHAT  
 \> PEOPLE THAT LIVE TOGETHER USE TEXT even when in SAME HOUSE

1ST INDUSTRIAL REVOLUTION: 1760-1840  
 /Driven by NEW TECHNOLOGY:  
 \> STEAM+WATER-powered TECHNOLOGIES - (STEAM ENGINE)  
 /CULTURAL TRANSITION: AGRARIAN->INDUSTRIAL

2ND INDUSTRIAL REVOLUTION: 1870-1914  
 /DRIVEN by NEW TECHNOLOGY:  
 \> ELECTRICITY + Internal combustion engine  
 /CULTURAL TRANSITION: LABOUR MECHANISED > MASS PRODUCTION

....

/1982 - Scott E. Fahman - computer science prof - USA  
 /Proposed “:-)” MARKER for JOKES on UNI COMP SCI DIGITAL BULLETIN BOARD - “:-” for “NOT Jokes”)

/Vladimir Nabokov - 1969 - called for “typographic sign for a smile”  
 /Alan Gregg - 1936 - Harvard Lampoon - “smile (-), laughter (:-)), frown (☹), wink (”)  
 / Puck Magazine (satirical) - 1881 - typographic symbols for HUMOUR in PRINT - Joy, melancholy, indifference, astonishment  
 /Bierce - ? - “smigger point” - represent laughter - smiling mouth like right way up parenthesis

/Fahman 1982 > early INTERNET like USENET (1980) - emoticons with NOSE “:-)” / “:/” / “:D” / “:P” took off  
 / NOSED became standard - email  
 /NOW - NOSELESS EMOTICON more common  
 /one EVOLUTIONARY PRESSURE ON LANGUAGE = “COVERT PRESTIGE” [p 154 ref 151]  
 /non-standard language has COVERT appeal - REJECTION of SOCIAL NORMS > FORM IN-GROUP  
 \> e.g. swearing in some groups - express group identity

/NOSELESS TWEETS most common variation on TWITTER - 2012 research  
 \> 140 characters  
 \> Covert Prestige  
 [|] >NON-NOISERS  
 \> shorter tweets  
 > non-standard spelling  
 \> abbreviations (“thru”)  
 > missed apostrophes  
 > ?typos? - (tomorrow = tomorow)  
 > lengthened words for “emotional affect” (“soooo”)  
 > YOUNGER  
 \> covert prestige - drop the nose to rebel/establish own ground  
 \> **ALT LIT**

/ At time of Emoticons - TECHNOLOGY to DISPLAY COLOURED PICTOGRAMS in FLEDGLING STAGE

...







# Technology and language (#41)

[back to thoughts from me, Ash]

## Technologies:

- / Stone tools
  - \> instrumentalism
    - \> language instrumental - verb-oriented
      - \> can we imagine smt else?
    - \> get what we want immediately
      - \> Amazon
      - \> don't need "desire" words/phrases
    - \> needs are hyperbolic versions of today
      - \> consumerism
        - \> more NOUN-centric
      - \> identity politics
        - \> groups have own grammatical\_
          - > gender
          - > case
      - \> century of the self
        - \> everyone has own grammatical\_
          - > gender
          - > case
  - > sex
  - > know what we want immediately
  - \> Hivemind

/ Drawing

/Art (wider)

/ Writing

/ Cars/trains/planes

/Radio > podcasts

/Computers

/YouTube

/Social media

/Smartphones

- \> include:
  - > camera
  - > torch
  - > communicator
  - > encyclopaedia
- \> what valuable tech could we add?
- \> how would this shape comm.n?

Future:

/ Robots - telepresence

/BCIs

- >telepathy
  - \> strains - digital telepathy languages
    - \> different styles of thought
- > storage
  - \> store all languages

ABSTRACT - SHORT IF AT ALL:

- / "The Institution/Corporation"
  - \> brands

/ The State

/ The law

## User interaction methods:

/ all TECH <

/

Future:

/ SOCIOLOGICAL TRENDS PREDICTIONS

/FUTUROLOGY

/gesture-based?

/BCIs

/ Nature-Inspired

>bees - waggle dance

>ants- emergent decision-making trails

\> hivemind

## Processes:

/ NEW MEDIA require NEW SYSTEMS

\> to exploit their communicative potential

>new forms of INTERPERSONAL INTERACTION >  
new forms of COMMUNICATION

\> humans inherently cooperative > drive for  
communication

/ratchet effect - culture provides complex network of  
shared knowledge, systems, behaviours, and practices  
\> born into all this

\> progress is exponential

Evans, V. (2017) The Emoji Code: The Linguistics Behind Smiley Faces and Scaredy Cats. Picador. Available at: <https://books.google.co.uk/books?id=1TtCWuACBAA>

/interactional/cooperative intelligence

/understanding others have THOUGHTS, FEELINGS,  
WISHES

\> how can engage w those cooperatively > achieve  
shared goals

...

**How far can we take it?**

**What will never change?**

/bottleneck of communication = PROCESSING,not  
MODES of comm.n themselves

\>speaking

\> Spanish

> writing

\> Chinese vs English

/FUNDAMENTALS of COGNITION

## Functions of language (#42)

Functions of human interaction:

/ animal (see Terrence Deacon):

- >food
- >safety
- >sex

/ social:

- >chatting
- >establishing/maintaining social hierarchies

/ societal:

- >creating and maintaining societal systems - e.g.  
government

## Future of Emoji Proper (#43)

/ animated

/Bitmoji

\> avatar emoji

[Notes from the book "The Emoji Code" by Vyvyan Evans, with some thoughts from me]

/ HASHTAG names "Children's Word of the year" 2015

Vineeta Gupta - Oxford Uni Press:

Under 13s USING HASHTAG new way in SHORT STORIES

\> add EMPHASIS

> signal comment

> developed for use on TWITTER

\> refers to WIDER CONVERSATION

\> implies emphasis

> SYMBOL not ICONIC SIGN (like emoji)

\> more like lang

> SEMANTIC DRIFT EASIER

> **Semantic drift** - "over" = "above" > "covering" (clouds over the sun)

\> we "unconsciously detach semantic flavours of words" from one situation > apply to other

Evans, V. (2015) "Language: evolution in the digital age". The Guardian, 26 June. Available at: <https://www.theguardian.com/media-network/2015/jun/26/hash-tag-language-evolution-digital-age> (Accessed: 16 January 2023).

> new forms of INTERPERSONAL INTERACTION > new forms of COMMUNICATION

\> humans inherently cooperative > drive for communication

..

SHAPING FORCES of DIGITAL on culture:

/IMMEDIACY

> today : social media updates, IM

> before: physical distance > communication = travel or mail - DAYS/WEEKS

/REACH

> communicate with UNPRECEDENTED NUMBER OF PEOPLE immediately - Social Media

\> ANALOGUE COMM.N:

> SOCIAL NETWORK LIMIT = Dunbar's Number -150 stable social relationships

\> COGNITIVE LIMIT

\> link between PRIMATE BRAIN SIZE + SOCIAL GROUP SIZE

\> **something's got to give**

\> **split the cognitive load?**

\> **WEAKER relationships**

\> **still have strong relationships**

\> **also have EXTRA portion of MORE DIVIDED SUPERFICIAL RELATIONSHIPS**

\> **SOCIOLOGY - RELATIONSHIPS, DIGITAL AGE, DUNBAR's NUMBER**

Evans, V. (2021) "The Future of Communication: Psychology Today [Preprint]. Available at: [https://www.vyvyans.net/\\_files/ugd/603ac2\\_42a375d8ace1493ca9521a0888228c.pdf](https://www.vyvyans.net/_files/ugd/603ac2_42a375d8ace1493ca9521a0888228c.pdf) (Accessed: 16 January 2023).

# Evolution of language (#45)

[Notes from the book "Why Only Us" paper by Chomsky and Berwick, with some thoughts from me]

CHOMSKY, BERWICK - Why Only Us  
Berwick, R.C. and Chomsky, N. (2016) Why Only Us: Language and Evolution. MIT Press.

> language evolution NOT DARWINIAN as NO OTHER ANIMAL HAS LANG  
> no Darwinian gradualism

> CONTINUOUS APPROACHES wrong  
Pinker and Bloom (1990)

> DISCONTINUOUS right  
Lenneberg (1967: Ch. 6)

> individual genes can have LARGE effects on phenotypes

## What is language?

The Basic Property of language:  
/every language is a "finite computational system" yielding an infinite array of hierarchically structured expressions, each of which has a definite/systematic interpretation in "thought" and "sound."

> systematic interpretations at interfaces with 2 other internal systems:

> sensorimotor system- [A:]  
> what can tech do with this?  
> new modes of articulation  
> visual  
> haptic  
> temperature  
> represent any linguistic/conceptual duality  
> active/passive  
> happy/sad  
> positive/negative  
> general affirmation/negation  
> no longer is "yes" the default mode - negation being the exception  
> everything coloured with positive or negative  
||> consequence of disinformation dystopia  
> happy/sad  
> proprioception  
> auditory  
> spatial  
> olfactory/gustatory  
> already have ineffable quality - lend themselves to ineffable concepts  
> LATENT SPACE CONCEPTS  
(A)

> conceptual-intentional system - thought  
> inference  
> interpretation  
> planning  
> organisation of action  
> other "thought" stuff

..

## Components of language:

1-Merge  
> operation - merges 2 syntactic objects  
2-Interface to sensorimotor system  
3-Interface to conceptual-intentional system  
...

## Who has language?

> Pfenning et al. (2014) - songbirds and humans share neurological/genetic basis for VOCAL LEARNING  
> birdsong and externalisation sound system of humans share something  
> birdsong not like other parts of human language system  
——> nonadjacent dependencies, hierarchical structure, structure-dependence of syntactic rules, displacement (Berwick et al. (2011))

> nonhuman primates have similar limitations—Project Nim

...

When did language emerge?

200,000 (humans in Southern Africa) - 60,000 years ago > before 80,000  
/Symbolic behaviour as proxy for language

/Basic Property - 200,000-300,000 y.a  
> genomic sequencing

## How is the Basic Property implemented in the brain?

Friederici (2017):

/Syntactic computation and deficits - one area (Broca's area) (good evidence) says  
/Lexicon (or features of "word like elements" used by Merge) - another area (Wernicke's area) (unclear evidence says Ohta (2020))  
/“ring” combination of structures - moves info from one side to other to be used by Merge  
> “ring” complete in adults, not in newborns  
> macaques and chimpanzees - also incomplete  
||> “small rewiring of the brain” > functioning syntactic system with Merge

## Why did language evolve?

/tool for INTERNAL THOUGHT, NOT COMMUNICATION

> most biological functions (including comm.n) can be met by species w/out language  
> also “SOFTWARE” differences between humans and primates (Ohta (2020))  
> human NEURONES CODE INFO more efficiently than macaques Pyrkla, R. et al. (2019) A Tradeoff in the Neural Code between Region and Feature Size. PLoS Biol. 17(12): e2000000. <https://doi.org/10.1371/journal.pbio.2000000>  
> diff cognitive functions  
[A:] > what is the next evolution of this - new HARDWARE: BCIs - process info even better  
> can DESIGN the SOFTWARE as ACTUAL SOFTWARE [A]

..

/GENERATIVE GRAMMAR  
/ Universal grammar

/UNIVERSAL GRAMMAR has EVOLVED - NOT LANGUAGE  
> languages change but don't evolve

..

/Divide and conquer strategy (re “ring”)

...

Relationship between LINGUISTICS and NEUROSCIENCE problems (Ohta (2020)):  
1-Ontological Incommensurability Problem - neuroscience and hypothesised linguistic elements CAN'T BE MATCHED DIRECTLY  
2-Granularity Mismatch Problem - GRANULARITY of hypothesised LINGUISTIC ELEMENTS DOESN'T MATCH NEUROSCIENCE

## Presentation of Context Report (#46)

[\[Return to me, Ash\]](#)

/ use red + blue discourse colours

/ use emoji

## Harry group tutorial:

18/11/22

/ Cherry: game - "Sky - Children Of The Light"

People who aren't friends in the game can't CHAT - only use the body actions (emotes)

/ Noam Chomsky - language - thought and language

/ Do we need symbols

\> symbols vs words

/ Ideospace-

/ symbol poetry -explore meaning

/

...

Not yet:

/ I must perform an alchemy of language

/ use Jung's archetypes in review of the language characters

/ must test

# Harry tutorial 5 (V#48)

(22/11/22)

/Committment to actions, forms of realisation of my idea that allow me to

/Test it - Idiot

Get other people to use it

\>See how others cope with it

\>See how it changes the way they think etc

\>Standardized feedback form - research / questionnaire

## / SPEAK TO SECOND YEARS to TEST

\> may have more time

/Background reading on linguistics

/Emoji books

/Read the papers recommended by that person

/Chat to her the professor

/Joanne Long check ittt

- Research other conlangs

/Inter language communication attempts outside of language

>Sign language

## Long term goals:

/ Interview Sonja Lang - Toki pona creator

/ Interview other conlang creators



## Random Inspiration (V#49)

[Image of the "eye inside chat bubble" emoji]

\> can we find out who proposed it, on the database - contact them? )

/ Lex Fridman Interview with Mark Zuckerberg Inspired some additions in ||>

# Peter consultation 1 (V#50)

Consulted Peter (creative computing technician) re BCI application

/ need the hardware

/ ask around uni for hardware finding

- Creative Computing - can't control the whole thing with BCI as we know

- Psychology N

The language tone flavour idea:

How do you actually interact with it to articulate these things like how do you use a BCI to say "I'm happy"

\> maybe do the tone one - use brain waves emotions

It's very Sci fi

But don't want to do

...  
Can I condense from my dissertation and articulate  
E. G. Leipzig-Jakarta list

...  
Two strands rn - testing with language

/maybe make a website version - more accessible - can get people from different locations, can enter their native language and proficiency

-can test and get a score

- could even do a quiz to learn or design a tutorial and see if it works

\> good for jobs after - designing online tutorials for a system you design and engineer

\> would need server to facilitate the communication

\> sockets

\> chat server client example

\>

....  
Actionables:

/ DUNCAN labs ask again

/ school of professional studies science and technology HUB

\> Margaret mcmillan building 1st floor

/ talk to creative computing - Yawen Chen thinking of

/ look Into **eye gaze and biosensing**

/ biosensing maybe cheaper - e. G. Heart rate

/ are the emojis and symbols universally understood - what emoji or symbol would you associate with this entity or thing

/could we expand the one in one out based on usage bit - the PD BIT

\> tyranny of the majority

/ could I expand postviralism - the manifesto

/ ask Giuseppe if goldsmiths can help me find bci stuff on my own

/  
Over two weeks will. I smash the hardware wall

...  
Multimodal input - eye gaze, heart rate, conductivity

...  
Jennifer George - head of computing

Co Head - Jose Van Vekken - head of psychology

Co head- Guido - got photos of Contacts

Computing (St James office)

Jamie Ward

Max Garagnani...

..

# Matt Tutorial 1 (V#51)

TUTORIAL WITH MATT 21/03/23 - not actually first, jsut first recorded

/ Getting a bci

/ still have to visualise - make sure to make renderings

/

...

/ IF DO Participatory Design without freaking out about testing

\> deliverable could be a 1 minute film describing the emergent PD system

\> mocking it up - allows for critiques and improvement befriensk bit

\> don't necessarily have to get it

/ Do mockups in 2 weeks cause bcis could fuck up very easily

/when people go to test tjlgne they've tested it themselves a lot

/ the testing conversation deliverable

> definitely design and mockup the speculative bit - VRL

# BCI Logistics (V#52)

Max:

/ Not feasible in the timeframe to use BCI

\> so much coding

...

Maria HERROJO - ruiz

Ben Pimlot

\> TAKES SO MUCH CODING JUST TO DECODE THE EEG SIGNALS

\> ambitious project even for an Ma student

...

Computing might have some rudimental eeg

Maybe contact VR director

Sylvia xueni pan

Would need a supervisor

Maybe Peter Holland - is a GOOD BET

peter.holland@gold.ac.uk

Computing or Psychology lecturer or anything

Could ask Giuseppe for other people who supervise

Jamie Ward - could ckrnacr - computing

Peter

...

Dear Ash,

It sounds like an interesting project but unfortunately at this stage of the year I am unable to take on any more undergraduate students. There seems to be some confusion, I don't have a Brain Computer Interface (BCI), I do record some EEG and also do some VR experiments but am still working on combining these methodologies. However, turning this into a functioning BCI device is a very complicated project and one that I would hesitate to undertake even with a MSc student unless they had significant programming experience. It requires a lot of writing of complex code both in Unity (for VR development) and in Matlab/python for EEG analysis.

My advice would be to concentrate your project on the design of the interface and leave the BCI aspects as a topic of further expansion or for a MSc project. I'm sorry that I cannot help and I don't mean to discourage you from pursuing what is a really interesting project but I just wanted to explain the complexities of what it is you are trying to achieve and encourage you to pursue a project that is realistic within your timeframe.

Best Wishes

Peter

--

Dr Peter Holland

Lecturer, Department of Psychology

Goldsmiths, University of London

Lewisham Way, New Cross, London SE14 6NW

# Harry tutorial 6 (V#53)

21/03/23

/ Do I want to

/I need to to help me not hyperfocus on one thing and to make sure I'm multitasking - doing mockups as well as design as well as Poss testing (tho Matt sceptical about that)

? maybe I use my meds two days a week only

/ VRChat = inaccessible - only PC

\> smaller user testing base

\> CREATE WEB VERSION

\> build ENGAGEMENT

> easier to modify quickly

Hierarchy of input methods/engineering:

1-BCI

\> unconscious (eventually?)

\> so is (2)

2- Eye tracking

\> cheaper

> easier

> more accessible

||> Is it just a gimmick?

\> we are trying to get close as possible to DIGITAL TELEPATHY

\> more unconscious, the better

\> less reliance on BODY

\> more accessible

3 - Web - keyboard/mouse

> Lessa accessible

...

For viva:

Maybe minihistory of conlangs

DELIVERABLES:

/ Web version of keyboard

...

ENERGY VIBE

/ Could it be a pitch format - see Viva as the BUSINESS ENERGY

/ ITERATION - avoid FIRST BASE thinking

/ make rule or something like odd days = mockup, even days, = hardware /coding

/ to multitask - make lots of things into one thing

\> multiplicity -

...

Actionables:

/watch a video on how to multitask /ASD/ADD hyperfocus when working And when it works against you

/make a rough theme timetable

/make a rule based thing

/ Peter Holland - camp outside his door - HE MUST SAY YES - use the energy of regret for BrainControl

/two weeks for speculative bit mockups

/Duncan email

/follow up Duncan labs emails

/follow up USA person emoji communication thing - was it MIT MEDIA labs/communication labs?

# Emergent Participatory Design Ethos (EPDE) Implications / Applications (#54)

## Emergent Participatory Design Ethos:

/ Community-Drive Content Creation  
\> VRChat community-driven content creation

\  
/ Metaverse(s)

> All seem to have CAPITAL  
\> CRYPTOCURRENCY  
    > Virtual Land

/ Can we add money/capital and somehow make it an open source free and fair and equal and democratic metaverse  
\> open source?

/ Users can submit new keys  
\> suggestions or actual keys?

> Suggestions  
\> reviewed by developer/team  
    \> digital technocracy  
        \> avoids user chaos

> Submit raw  
\> users submit raw tiles  
    > appear in "new" category - most used go to "popular"  
    \> eventually integrated  
        \> how?

> user chaos  
    \> inappropriate suggestions  
        \> what is inappropriate to "communication"? Sex and swearing are all important  
        \> troll suggestions - e.g. memes  
            \> EPDE overcomes this - EMERGENCE IRONS OUT THE KINKS  
                \> if a meme or troll suggestions was used enough, this JUSTIFIES ITS USE  
                    \> valid communicative niche

## Designing the EPD Pathway

/ Participatory Design Workshop on existing symbols  
    \> what does X Gram mean to you - list all possible meanings in order

/ + proposed new symbols  
    \> test together, then ask for suggestions

\>

### Advertising testing:

- / Advertising in VRChat worlds
- >Points for copy:
- / Could use example problem - how do you say this "\_\_\_" and give options
- / Phia "The Virtual Reality Show" YouTube Channel
  - \> Discord
    - > ask to post TESTING GROUP LINK on server channel
    - \> COULD HOST DEMO DAY/ PD workshop
- / Promote in VRChat worlds
  - \> create INTRUIGING AVATAR + explains it (can add keyboard as item eventually)
  - \> drop portals to POSTVIRALISM Hub
- \> Mute worlds : ASL worlds : Foreign language worlds (e.g. Japan Shrine, Spanish world)
- \> "No Time Two Talk" world - like VR speed dating
  - \> spent some time on this - gathered some awareness
- / REDDIT
  - \> r/linguistics
  - > r/conlangs
  - > r/ability related

### Incentives:

- / Research with Meesh revealed VR users LOVE the idea they might appear in a video
- \> PROMOTE DOCUMENTATION
  - \> start a YouTube channel
  - \> start a website for it
  - \> integrate all (info website/YouTube/Discord links) into website for WEB VERSION OF KEYBOARD

### Fostering a community:

- / Create Discord Server
- / Created VRChat Group: <https://vrc.group/EMOLAN.0339>

[Image of VRChat group created to organise people who want to test the VRChat version of the keyboard, and help build a community]

### Promoting the web app:

Reddit post:  
  
/r/conlangs  
  
Title:

Hi guys, I just wanted to let you know about my emergent evolving graphic language □□□□ You can mess around with it on my chatroom now :)

[image]

(Like our fave, toki pona,) the language has only 121 morphemes or "grams"; but has a fluid lexicon of picto-ideo-graphic characters, that changes according to use! Anyone can submit new "grams", which appear in the "□□" section - and will be automatically added to the core lexicon, should their usage dictate it. The least used grams will be archived - leaving room for the most used □

EvoLang's lexicon □ has no set definitions - only Suggested Definitions, which can be submitted and voted on (most popular definitions displayed first) □□□

Goals:  
As a form of Participatory Design, EvoLang is designed to design itself to reflect the ever-changing needs of its userbase. While I would love to see a relatively steady core of grams become established, alongside room for more trend-related grams, it's totally up to you □□□□

It's also supposed to be easy to use from the get-go, regardless of native language □:

□ acquired in minutes:  
□ mastered in days.

Suggested grammar:  
The grammar, like everything else, is dynamic - EvoLang possessing only a Suggested Initial Grammar, of a form we are all familiar with: synthetic.

You know the deal: simple grams can be combined - suggested using "()" - to form more complex concepts.

As well as being intuitive, and easy to pick-up and start using immediately - the initial synthetic mode is intended to facilitate users in engaging with language in a more creative way - having fun and . Instead of waiting years to become a master wordsmith in a given natural language, users can experience the joy of linguistic craftsmanship from day one - revelling in that moment taken to formulate a sentence, just the right way: especially when expressing more abstract and conceptual nuance.

Submissions:  
Submissions are based on the fluid Content and Style Guidelines: user-submitted criteria can be upvoted or downvoted, determining their inclusion within the 10 "official" criteria for each (Content/Style).

Plans:  
The current chatroom is a very basic initial prototype.  
The voting functionality for Content/Style Guideline criteria will be live in a few days (for now, criterion modification/addition suggestions and feedback can be submitted using the form).

Next, I hope to add a permanent history to the chatroom, and eventually, a Private Messaging function.

Use:  
At the moment, users will only see messages sent during their session (which will be erased on exit), so if no one's there yet, feel free to drop a comment beneath, letting people know you're open to giving it a go with others - so you can arrange a time. Maybe pop your available window + timezone if you fancy.

## Accessibility Shadow Critic (V#56)

/ 11 x 11 grid could be difficult to comprehend / overwhelming  
 \> processing disorders / generally

\> stacking categories

\> radial

\> perceptual differences

\> stacking UI modifiable

\> radial

> listed

\> nested

> expand on previous categories like TREE

or > REPLACE - like page

..  
/ Using colours for info excludes colour-blind individuals

\> VRLang is designed to push the boundaries of communication, not as inclusive focused as EL

\> inclusive nonetheless

\> colours substituted with patterns or labels that say the quality in native language

\> colour-blind mode

\> colour-blindness varies

\> select colours you can see - uses those and applies labels or pattern substitution where needed

\> patterns could confuse the language between players

\> other players won't see the patterns

\> make it obvious the substitutions describe SPECIFIC FUNCTIONS of the language

\> the function is what is learnt, not the qualia (/qualitative feeling of experiencing its representation)

\> qualia are not guaranteed to be universal anyway (how do we know my red is the same as your red)

\> what is important is those labels are the same, and the labels give them functions, as they communicate a shared agreement of function and context



## VRChat Keyboard Test 2 (#57)

Meesh + Yura - Meesh Trial 1

/ Where does the keyboard exist? ||>  
Be nice to use it in other worlds  
Could we build it into an avatar?

...

"name, word, write, writing" = character for "point" and "Abc" - Eurocentric

Using the pointing □ character only works well for pointing to the words, not in the room, as the display is flipped and relative

The definition

"Unusual, intoxicated,/drunk/high, foolish"  
Chinese participant - cheeky face

Yura -

// feedback for the sessions from Meesh

-more structure for the communication  
-maybe a challenge or prompt to communicate  
-like charades or something  
-information about a thing you have to communicate to the other person  
-e. G. 20 questions?

...

Tunic and Fez both have Conlangs

....

Way to meet people on VRchat:

/No time to chat/ no time to talk

## VRChat Keyboard Test 3 (#57)

Meesh Trial 2

/ Trialled "20 Questions"

> Watch video T#15a

>Link video T#15b

/Codeable games -  
-charade game EASY - create random word generator - easy in udon  
- try to communicate image randomly generated

..

/ NEED "hesitation cues" - E/G/ - typing ellipsis on facebook

/ multi-glyphs needs natural order to them so know whether using L-R,T-B: or clockwise, when using numbers to indicate which sub-glyph in a macro-glyph

/ need hover for suggested definition without typing it

/pansexual orgy = GENDER

\> word for FEMALE, not word for MALE

././think about learning order - so if "down hand"= "me" , then follows that "two downhands" = we  
\> positioning ND ORDER nad stacking of concepts designates/inform smeanings/understanding  
\> once initial connections/meanings for partiuclat sGRAMSs is estaboshed, it can be ahrd to break

/ NEED DEDICATED characters for "CONCRETE" vs "ABSTRACT"  
\> dedicated character, obvious, one of the first ones you see

/ pin needs to be separate meanings - separate GRAM for "literal" and "at"

/ full stop needs to be smaller-  
/ gram for "black"/ dark  
/because  
">" more than, less than, arrows"

/ "do" should be one of first ones  
\> BASE IMPORTANT VERBS together  
\> verbs could be together

/ make obvious priority to teach/learn "ing"/gerund/verbs  
\> verb/noun converters  
\> GERDUND symbol could be with the basic nouns  
\>  
##

/ focus group the symbols  
/ we are painting with digital mud on vr cave walls

/ can you change

/ CAN THEY CHANGE PROXIMITY based on use - more commonly used combinations of words GROUP NATURALLY ENXT TO EACH OTHER  
\> allow buttons to be movable and see what people do with them

"24" = shop PLUS inhospital?  
|. NEED "institution"/"government/building" - the Greco-Roman Pantheon emoji

/ Need COHERENT VISUAL IDENTITY ||>

/ Currently: VRChat world

\> GLUED TO PART OF POSTVIRALISM Hub

\> prohibits use as a communication method

\> VRChat is about exploring worlds

\> VRChat version MUST BE PORTABLE

\> logistics

\> object in world?

> object attached to avatar?

> INTEGRATED INTO OWN METAVERSE

\> create OWN METAVERSE centred on LEVEL COMMUNICATION

AND INTERACTION

> Integrate with EXISTING METAVERSES

\> VRChat

\> pitch to VRChat

> Other Metaverses

> NeosVR

> Altspace replacement

> Meta

## Iterating the POSTVIRALISM Hub (#59)

/ add canals

/ a room with people's brains and dokabrs growing out of them, in water, long  
Canals with plants thriving in it - like in The OA

/ shutters above sceindow needs to be more like shutters - add shutter  
retxturelike shop shutter

/I am designing an entire communicative system - a society, movement, hub,  
ability aid and leveller,

# Visual Identity (#60)

Need coherent visual identity <||

|> how upload?

\> design upload SUBMISSIONS visual SPECIFICATIONS

\> CONTENT specifications - criteria

> STYLE GUIDE

Community Style Guide

1 - Grams should be visually distinct from existing grams, so as to be recognisable

2 - Grams should be easily readable at smaller sizes and with moderately impaired vision:

Ensure grams are readable at the size displayed on mobile

3 - Grams should simple and minimal:

Simplify your design and its parts until it cannot be simplified further without loss of communicative power (taking into account all possible meanings and the principle of polysemy)

4 - Grams should follow the colour scheme:

The colour swatches of the initial designs can be found here: <INSERT LINK>

5 - Line art should be <> points thick, and RGB black (#000000)

6 - Solid fill colours should be used where possible - avoiding unnecessary textures and photos

7 - Backgrounds should be RGB white (#FFFFFF), as should all uses of white

8 - Use a <> grid

# Viva Y3 Communication Modes (#61)

/ DIALOGICAL

\> RED-BLUE DEBATES - get creative  
\> TICK and CROSS mechanism?

\> EXPLAINING DIAOGICAL DEBATES:

> Socrates cautioned, on the invention of writing, that its non-dialogical form allowed for a certain " "

> LINK TO HOW SPOKEN LANGUAGE has so much more "flair, nuance, flavour, and ... COLOUR"

\> Emojis emerged as an answer to this gap

\> explain emoticons > emoji history super briefly

> explain Danesi/Evans - Emoji fulfill these 6 elements that spoken language communicates, that are lost in the omission of paralinguistic and kinesic (body language) features

\> later, take this thread (and even repeat the on screen visual quote) of "flair, nuance, flavour, and COLOUR" or "flair, nuance, and colour",... "this... flavour..."  
> and reprise it when introducing VRL

/ ALLOW THE TUTORS TO COMMUNICATE NONVERBALLY USING A VERSION OF IT SOMEHOW

> walk in and begin it with

"👋 wave" and

Then "[ ] ahhh /fingers to lips gesture" - letting them know not to talk

Then

"[ ] point at them" + "[ ] Thumbs up" + "? Head tilt/ hands by sides [ ] questioning gesture"

\> are you good? /how are you?

>let them reply yes - hopefully with a thumbs up

> "[ ] [ ] two hunbs up + maybe" perfect" gesture "

> maybe prompt them to ask me

>reply [ ] point to self] [ ]two Thumbs up] [ ] perfect ] [ ] thank you gesture]

||> maybe use printed CARDS or TWO LAPTOPS

/ Emoji

/ Key/glossary

\>at side throughout slides

\> fold-outpage at back

\> hand-outs

/ Add grams as the ledger/progress bar of the slides/doc - headings as grams

/ Publication ||>

/ avatar speaking in VR video

/ dialogue between the AI and me

Using. Text to audio file. Simple. Google. Colaba For. Elenelabs eleven labs

And feed that inri a vtuber software.

## Designing the engineering

/ Path:

1-Create text server using sockets

2-Make available online

3-Allow sending EMOJILANG Grams

- \> must allow easy UI modification later
- \> stacking modes toggle - see "Accessibility shadow critic" ||>
- \> map images to variables for Grams

4-Attach definitions to variables/grams

5- Display definitions

- \> rollover
  - \> only possible on desktop
- > definitions section - displays "suggested definition" for last clicked Gram
  - \> have to click and backspace
    - \> click separates user from rapid browsing / skim-reading definitions to find desired one
    - > backspace adds extra work to each exploratory endeavour - dissaforde use
  - > definitions toggle button - each key toggles between the Gram and the Suggested Def.n with a button toggle

6- Submissions

7-"New" section

- displays user submissions

-displays AI "submissions"

- \> most frequently used combinations/strings of Grams concatenated
  - \> two / more glyphs synthesised adjacently
    - > glyphs synthesised abstractly
  - \> AI LATENT SPACE COMBINATION
    - \> combines image-based
    - \> combines definition/variable based

8-"Popular" section - displays most popular submissions

## Engineering log

1 - COMPLETE

\> created LOCAL websocket chatroom using <https://github.com/websockets/ws>

<https://karlhadwen.medium.com/node-js-websocket-tutorial-real-time-chat-room-using-multiple-clients-44a8e26a953e>

\> solved error by adding {binary:isBinary} in Server.js

<https://stackoverflow.com/questions/53884481/websocket-sending-blob-object-instead-of-string>

2 - Used Chat-GPT to generate a version of it

\> many failed attempts led to me understanding how to use tools like this, as well as how to engineer programmes in general:

>start at the un-differentiated general flow of what you want it to do and how, then REFINE, using the

\> using the EMBRYONIC DIFFERENTIATIONAL LOGIC (EDL) of Brains, that fuels the evolution of LANGUAGE, and HUMAN CIVILISATION (in tandem) []>

\> after many errors trying to generate the entire project using Chat GPT, I asked it for an outline of how to engineer such a project, then got it to generate a backbone template by asking it to generate code for file X, then asking where it should be, then checking the file structure was correct, then running it, and REPORTING THE ERRORS

\> used Chat-GPT and Discord and Reddit and StackOverflow to help me

TROUBLESHOOT errors in my template

\> gradually added more functions, one at a time, and troubleshooted one at a time

\> used the EDL of the evolution of brains, language, and society, to refine a prototype by creating a rough outline, then differentiating each individual part using "experience" - e.g. exposing the file code to Chat GPT or help forums, and asking it why I doesn't do X, or how to add Y - allowing the code to evolve in a series of "interactions" - differentiating its purpose based on contexts of these new situations that narrow down specific functionalities it should have (adding functions) or not have (troubleshooting errors/removing or modifying broken functions)

\> In the process, I learnt things through a similar process of differentiation

-Fixed file name numbering issue

EXAMPLE "experience" that guided the development of the code:

/Grid won't display images

\> asked on StackOverflow + Reddit

\> "check CSS"

\> CSS wasn't loading - moved it to correct directory

\> learnt importance of file-management (and how CSS and HTML interact) and

also in process, learnt about using "./" to reference root directory

3 - Combing through file names of the grams in order, adding them to a javascript array, I realised "gender/sex" should be next to "man/masculine person" and "woman/feminine"

person", to highlight its other suggested usages of "gender-nonconforming person", "gender fluid/ity", and "androgyny"

[Image of experiments engineering the chatroom before help from Sam]

# Harry tutorial 7 (V#64)

05/04/23 (did Meesh Trial 2 later that day)

/ Can we take away the speech

\> create a toggle of "learning mode"

\> both users muted

\> gameify it

\> points for remaining mute

\> can trial game without coding - just note down points and explain rules

/ Making the viva presentable - cut to images/videos

\> embed

/ Redesign the keyboard for portability

/ How will new submissions be

-submitted

-displayed

-used

/ 11x11

\> scary?

\> stacking

\> do we need to be fixed to 121 characters

\> constricts the language

\> that's the point

\> creates new mode of thought

\> more creative

> more minimalistic

\> easier baseline for LEVEL PLAYING FIELD ETHOS (LPFE)

\> simpler concepts less culturally sensitive?

> easier to comprehend for those with processing differences

\> harder to construct?

\> requires less memorisation - good for those with trouble/ aversion (learning style also) to ROTE MEMORISATION

\> encourages KINESTHETIC learning

\> contextual language development

\> how Natural Languages are learnt

\> EMBRYONIC DIFFERENTIATIONAL LOGIC OF

BRAINS

> easy to learn

\> can we expand to allow IMAGE SEARCH use

\> so many CONCRETE NOUNS easier to show with picture

\> restricts drive to use the SYNTHETIC LOGIC + creative mode

\> maybe use IMAGE SEARCH for OPTIONAL LEARNING MODE

/ How will it grow and gain users?

/Immediate to dos:

- Play 20Qs with Meesh



**Gamified Conversation:**

```

> | |
/ Can we take away the speech
\> create a toggle of "learning mode"
  \> both users muted
  \> gamify it - GAMES ARE BIG DRIVE FOR ORIGINAL TA - VRChat users, isolated, disabled (all the POSTVIRALISM
types)
  \> points for remaining mute
    \> points for
      - minutes mute
      - messages sent while mute
    \> skill and PROGRESS should be rewarded - not just effort
    \> other user ticks whether understood
    \> yes; no; some of it/gist; not sure
    \> yes: +4 points to receiver
    \> outward proficiency should be rewarded as well as interpretational comprehension
    \> both get points
    \> both get equal number of points
    \> equal points for all types of interaction?
    | \> ONE score
  \> COOP MODE
    \> beat highscore
    \> leaderboard
    > pair high score
    > individual high score (regardless of interlocutor)
    \> both gain METAPPOINTS/rewards for beating high score
    > points from each game added to personal TOTAL METAScore
    \> badge of honour - can add to BIO
    \> UNLOCK DIFFERENT LEVELS
      \> beginner: intermediate; advanced
      \> gain DISCORD/VRChat group ROLES
      \> increases sense of pride
      > fosters community
      > EXPERTs can opt into "TEACHER" role on Discord/VRc group
      \> generates LEARNING ENVIRONMENT - follows EPD Ethos

  > shows

  |> turns game from COMPETITIVE to COLLABORATIVE
  \> reduces competitive drive
    \> add VS MODE
    > increases camaraderie + feeling of connection
    \> promotes idea of communication as a two-way street

```

```

  > no: no points for COMPREHENSION, but may get points for remaining mute - maintains
confidence/sense of progress
  > some/gist: +2 point
  > not sure:
    \> dialogue: "Ask for clarification/validation (unmute)?" - unmute button
    > receiver asks for validation
    > sender receives dialogue "rate interlocutor's comprehension of your message":
      \> points to "thumbs up" = +1 point; "- (gist)" = 0.5 points; "thumbs down/?" = 0 points
      \> "well done!"; "nearly there!"; "maybe clarify with a question?"

```

...

**|> VS MODE**

```

t/ Points weighed toward sender or interpreter?
/ Points the same, but INDIVIDUAL SCORES

```

```

  \> won't scores be equal?
    \> COMPREHENSION sub-mode + EXPRESSIVE PROFICIENCY sub-mode
    \> also allows practicing of different skills separately - focus on weaknesses

  \> conversations don't necessarily have to be in single, alternating messages
  \> some may require multiple messages
  \> rewarded for being verbose/arbitrarily speaking about more complex topic
  \> more messages sent per turn also affords opportunity for more messages COMPREHEENDED per turn > evens out

```

**|> COMPREHENSION SUB-MODE**

```

  \> message comprehension points only awarded to SENDER

```

**|> EXPRESSIVE PROFICIENCY SUB-MODE**

```

  \> message comprehension points only awarded to INTERPRETER

```

**Actual games:**

```

/ Existing games
  \> 20 Questions
  \> Guess Who
  \> Improv Games

```

```

| |> add suggestions to wall of POSTVIRALISM Hub "Communicate" room

```

**Tutorial:**

/

# Designing the self + Metamapping (#66)

Reflection on previous projects:

## /Metamap problem

- \> don't put things into metamap directly as builds up - don't use it to full potential
- \> metamap takes time to launch - turn on PC, launch Illustrator, find relevant page
  - \> use paper - add to metamap later
  - \> can't copy and paste
  - \> use Google Doc
- \> causes distraction
  - \> idea of linkages to new pages and new concepts for new pages leads to constant page-creation and MOSTLY EMPTY PAGES
  - \> that's the whole point - the linkages are vital
    - > MANY QUARTER-FILLED PAGES with room to expand later is better than filled pages with no room to expand
    - \> empty space AFFORDS ADDITION and EXPANDING OF IDEAS
      - \> distracts from current task or just viewing Metamap
      - \> use LIGHT GREEN INTERPAGINAL LINKS COLOUR to indicate "expand idea to new page later"
        - \> light green should always indicate an ACTUAL LINK
        - \> this is what PURPLE IS FOR
          - \> add symbol shortcut for "make new page later if needed"
          - \> purple pen: "[P?]"
          - \> too close to "[P]" (pauses red-blue debates)
          - \> [NPg?] - new page
  - > create-page: fill page ratio off

## /Hyperfocus problem

- \> waste time hyperfocussing on project/idea/mini-task X, to the detriment of Y and Z
- \> balance with the metamap distraction energy
  - \> ensure to visit the Metamap at least twice a week - allows PERSPECTIVE
    - \> won't remember
    - \> timetable it
  - \> build up Metamap to become scary by adding lots of info in Docs to add to it later
- manageable
  - \> timetable Metamap visits 3 x a week
  - \> keeps info-addition debt levels (and so avoidance of Metamap)
    - > maintains perspective to prevent toxic hyperfocus
  - \> may avoid on timetable due to INFO-ENTRY / TASK DEBT LEVELS
    - \> don't do INFO-ENTRY on every viewing
      - \> want to keep INFO-DEBT levels low
      - \> to accomplish that you must actually look at the Metamap
      - \> first visit of week = no INFO-ENTRY - just LOOK
    - \> concretise the ethos of regular visits for the sake of perspective and low INFO-ENTRY DEBT
      - \> sigill
      - \> ethos branding: Visiting Metamap Thrice A Week Maintains Healthy Project-Task Perspective And Keeps Info-Debt Low
      - \> VMTAWMHPKIDL (vimto and wham hove park kid life)

+ Don't Have To Expand Every Idea Now

- \> use [NPg?]
- \> to give NPG weight, we must actually come back to it
  - \> importance of REVIEWING Metamap
  - \> requires VIEWING

\> DHTEEGIN

- \> DETAIN - If need to - WRITE "DETAIN" in the text flow as a way of reinforcing this ethos and calming the obsessive part of you that wants to expand it now
  - \> the part we must DETAIN
  - \> detention is TEMPORARY and INDEFINITE

"Vimto and Wham Hove Park Kid Life" synthesises my old, Hove Park (High School) work ethos, my sense of play (getting Vimto and Wham sweets after school), and my ambition (Wham)  
\> "Put Vimto and Wham Hove Park KID Life In DHTEEGIN-tion"  
\> reminds me to regulate that energy with the DHTEEGIN energy

User Interface

/ 11 x 11 grid

>overwhelming  
>harder to control with other inputs than mouse (e.g. BCI)  
>limiting  
  \> that's the point  
    \> affords CREATIVE SYNTHETIC THINKING MODE (CREATIVE-SYNTHETIC COGNITION (Mode))  
  \> can't say much  
  \> suggested grammar/ SUGGESTED COMBINATIONS fill in extra base concepts  
    \> have their own gram if sufficiently "core"  
    \> not if their construction from existing grams is simple (can't waste grams/tiles)  
    \> SUGGESTED COMBINATIONS generated from most commonly used combinations  
  > SUGGESTED COMBINATIONS could be VISUALLY SUGGESTED AS POTENTIAL INPUT, when using initiating gram in the sequence  
    \> hold down gram tile to view Suggested Combinations (like emoji variants)  
    \> have to think to do it  
  > Suggested Combinations given automatically  
    \> additional space  
    \> integrate with Message Input Field - like Autocomplete  
    \> display half-opacity PREVIEW of mouse-over-ed gram in Message Input Field  
  \> show suggested combinations after it, stacking vertically (overtakes Message History rather than current message)  
    \> differentiate from selected gram  
    \> in box container  
      > lower opacity?  
    \> too low to see (if lower than already half-opacity gram preview)  
    \> fill SUGGESTED COMBINATIONS BOX with colour/shading

>see all available units together  
  \> affords experimentation  
  \> affords SYNTHESIS  
  \> having them visually available means words from DIFFERENT CATEGORIES can be SEEN at the same time - affording the CREATIVE SYNTHETIC THINKING MODE we are seeking to cultivate  
  \>

/ Stacking/nested categories

...


[Image of UI sketches for the User Interface of the emergent Emojilang / EvoLang keyboard chatroom, for Sam to help me engineer]


/ Engineering Issue  
  \> if 11 x 11 grid fits to viewport width, its square shape will overflow off bottom of page in landscape orientations (like desktop)  
  \> if 11 x 11 grid fits to viewport height, portrait orientations (like mobile, or non-fullscreen desktop windows), will cause overflow/bleed horizontally  
  \> use whichever is lowest  
  \> CSS grids not designed to allow this


/ create a separate UI for the mobile version


/ see if possible to allow anything like the mobile version to be constructed from the desktop version automatically, using some sort of stacking/overflowing function

Planned functions emerged from engineering the grid with Sam (computing):

 Language (eventually) - set language - perhaps ignore for now, but be good to keep in mind possibility of adding a second language (could we later change the formatting to "Username-Language-Suggested\_translation" instead of the used "Username-Suggested\_translation" format? If it's just as easy to add an extra variable for language in this way, I can edit the spreadsheet to reflect that.

 New - Display recently added grams (my name for the key-glyph-pic-to-ideogram-words, forgot to mention)

 Favourites (eventually) - display favoured grams (RMB > add to favourites)

 Recent (eventually) - display client's most recently used grams

 Popular - display grams with highest no of clicks (or later - upvotes) in Sheet

 Translation -

A new property has been added - "Suggested Translations" ("s\_translations") display short default (Ash) and user-submitted strings (that can eventually be upvoted or downvoted - affecting the "s\_translations\_scores" column of the Sheet)

while "Suggested Definitions" ("s\_definitions") display longer default (Ash) and user-submitted strings (that can eventually be upvoted or downvoted - affecting the corresponding scores column, and so, their ordering in the "Translations" window (bottom).

Hitting the Translation area's magnifying glass icon would toggle the definition overlay of the definition with the highest score. The area itself shows the entry with the highest score, for the gram last clicked alongside whatever is mouseover-ed, in the following format: "Suggested Translation + Username of submitter + Suggested Definition"

The entries can be scrolled along and each "Suggested Translation" and "Suggested Definition" can be upvoted/downvoted individually.

....

The ratios on the second drawing are supposed to be roughly exact, with some padding where needed. 1 square = 1 tile, assuming a 9:16 aspect ratio.

Current sheet. Please let me know if there is a better way than the semicolons, and whether or not I need to put them (or whatever we chose instead) at the end, as well as just seperators  
[https://docs.google.com/spreadsheets/d/1DCASLUtW7XOzCtQZ5\\_\\_P-jm92oMwTUrUpd34GRgtVSE/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1DCASLUtW7XOzCtQZ5__P-jm92oMwTUrUpd34GRgtVSE/edit?usp=sharing)

..  
/ Definitions order sorted by number fo upvotes by default  
  \> can choose "Sort by": "upvotes (default)" or "new"  
  \> need to maintain the emergent power of the upvote  
    \> always returns to "sort by... upvotes (default)"  
  \> need to resist stagnation of evolution by upvoting becoming EXPONENTIAL  
    \> more experienced users can keep "sort by upvotes" as permanent  
      > new users can't

....  
Need gram: figurative meaning indicator  
  \> "X + LMI"?

Need gram: noun converter (anchor) separate from literal meaning indicator (pin)  
  \> use "thing" / "box" as noun converter

/ least used grams being archived could lead to lesser used but integral grams being used - e. G. Punctuation  
  \> up votes?  
  \> algorithm?

/ while creating submit form:  
Form says specifications beneath upload button  
426 x 426 px.png  
That conforms to style guide

\> rules?  
  \> NO - authoritarian  
    \> guidelines  
      \> anyone can suggest ammendments to guidelines - criteria are voted on - upvote + downvote  
      \> set number - lowest archived (same principle as grams)

\> style guide works in same way  
  \>list of criteria that can be individually voted on

[|> how express this emergent feel in branding / UI  
  \> "Community(-Led) Guidelines" + "Community(-Led) Style Guide"

Planned Expansion Roadmap:

/User accounts  
/automated submissions  
/ persistent chat history  
/personal messaging  
  
/social network-type functionality  
  \> could it become a social network?

Side projects:

/ Create AI that can use EvoLang  
-langchain  
-prompt you can only use 121 words  
-words and definitions in databasd  
-teach it how to parse the Google sheet database  
-give it a grammar doc with examples and translations  
-Programme in example training sample translations of different types  
-including basic synthesis of larger concepts  
-could we later train an alpaca model on this?  
-trial it super quick using Toki pona and the Toki pona manual feeding into gpt

/

[this page shows excerpts from my Context Report / Dissertation]

## PROCESS.

### TRADITIONAL LINGUIST'S VIEW.

Traditional Linguistics views language as evolving analogously to biology - primarily through Natural Selection.

Such a view is useful at the micro level, as new words and structures can be seen to arise from Mutation<sup>ii</sup> in the genetic structure of languages<sup>iii</sup>, and like biological Mutation, variant elements can be created from errors in replication<sup>iv</sup>, as well as external forces<sup>v</sup>, and individual modifiers<sup>vi</sup>. Useful variants are then repeated, until so widespread as to become "standard".

Darwin himself noted this Linguistic Selection of "better-, shorter-, and easier forms"<sup>vii</sup> - for example, the regularising force on verbs over time, due to regular forms being easier to learn.<sup>viii</sup>

While many early Darwinists were linguists, and championed such parallels with language<sup>ix</sup>, most modern linguists remaining tied to this instrumental explanation<sup>x</sup>. It's important to note that languages, like genes, also change "aesthetically", through "drift", evolution through random fluctuation in gene/word frequency<sup>i</sup>. This "unconscious change in natural language"<sup>ii</sup> (e.g. split vs spilled) creates new dialects, that, like Speciation, eventually become so distinct as to be classified as different languages (species), though we must remember the adage that a language is simply a dialect with an army, and that dialects/languages form a continuum<sup>iii</sup>.

- ii Change in the structure
- iii And just as biological genetic structures are unique between individuals, so too are linguistic structures - no two people having the same vocabulary, set of associated concepts, conception of grammar, conceptual links, and style of synthesizing them.
- iv Genetic Transposition - "A whole nother thing", "expressos", "help the question"
- v Mutagens such as radiation or chemical mutagens (e.g. carcinogens) - social forces like prestige and Covert Prestige (see later discussion), political/organisational forces like The Académie Française, founded instilled by Cardinal Richelieu, chief minister to King Louis XIII, to standardise the French language (L. Bédier | Académie française, no date)
- vi Viruses - "cologne" by individuals
- vii Himself quoting Max Müller
- viii E.g. "none" gave way to "nemed"; "help" to "helped"
- ix Lowercase - not as a distinct technology
- x Hereafter: "NL."

Although our focus is on language evolution, on a wider scale, the language USE that shapes such evolution, could also be examined through the lens of the more specific, micro-level factors of the individual, such as individual psychology; mental health, age, impairments and disabilities, and personality/communication styles (including extravertedness and neurodivergence)<sup>xi</sup>.

## SOCIAL.

In a similar vein, socio-demographics of Internet use reveal a pattern of inequality: Internet use lower for older, less affluent, minority group, less educated, and rurally located individuals<sup>xii</sup> - meaning such groups may get left behind in this Third Industrial (Digital) Revolution, and its increasing technological surrogacy of social functions: including initiation<sup>xiii</sup>, maintenance<sup>xiv</sup>, and legitimisation<sup>xv</sup> of relationships.

## TECHNOLOGICAL.

As the extension of our Selves (selves that are inherently social and contain desires, knowledge, and meaning) into the material realm, technology is communication.

Firstly, its apparatuses, Technics, constitute a physical history of Humanity - an extended physical form of not just episodic memory (in the archival information-storage - devices of objects that represent or even encode narratives of events), but procedural memory (in the instruments that enable and, to some extent, embody our practices and procedures). In this way, every Technical instrument is a symbol, acting as a centre for the collection of concepts and possibilities it represents and, often, enables<sup>xvi</sup>, refined through EDL during Invention<sup>xvii</sup>. As Heidegger would point out, our instruments shape our interaction with the world.<sup>xviii</sup>

Language is one such technology - languages collections of symbols and rules - rules that allow the arrangement of said symbols to convey meaning.

We design this technology in every use of it - each word constructed from letters in a certain order<sup>xix</sup>, each sentence constructed from words similarly - each and every<sup>xx</sup>.

- xxii We shall, however, return to some of these dimensions in the impacts of technology/ language development
- xxiii Internet/age dating, bookshops, friend-making, and networking
- xxiv Chatting (DM, phone, video, content-sharing, and play (games))
- xxv "Friend", "Penfriend", "unfollow", "relationship status" - or social networks
- xxvi An adapted symbol of Stinger and Derrida
- xxvii A process of creation of Technics in the experimental manner of Bricolage - using what is at hand and repositing instruments

## MODERN VIEW.

Following this broader vein, a more nuanced view of Evolution<sup>xx</sup> emerges from Stiegler, who frames technology (and so Language) as the creation of "artificial organs that overcome maladaptation".<sup>xxi</sup>

Terrence Deacon expanded upon this, to conceptualise Language as a system of symbols, passed down generationally; human cognition and language coevolving with the culture they enable and create. He argues that this invisible world of concepts and practices guides the construction of each human's brain, through the Embryonic Differentiation Logic<sup>xxii</sup> of neurology, which relies on experience to differentiate the multipurpose pluripotent neocortex.<sup>xxiii</sup> These humans' behaviour is then guided by these brains as they further culture and language - evolving the PSCPEs that shape future brains.

## FACTORS/FORCES.

Such evolutionary processes shape communication's development through a rich contextual tapestry of interwoven factors and forces:

### INDIVIDUAL.

Guy Deutcher gives Three "Motives" Of Language Change<sup>xxiv</sup>:

- Economy - the principle of least effort<sup>xxv</sup>: people will always take the easiest path
  - e.g. Digital Age - abbrevs make up 4 time lost typing - esp on older alpha-numeric keypads
  - e.g. Emoji<sup>xxvi</sup> - ppl use emoji in some situations as EASIER
- Expressiveness<sup>xxvii</sup>
  - For example, the use of Emoji to articulate emotional affect.
- Analogy (order) - the mind's tendency toward order/regularity
  - For example, the aforementioned regularising force on verbs.

- xi Capitalised here, to highlight its use as a particular and defined process and theory (despite neither usually being capitalised either)
- xii An extension of the views of Leroi-Gourhan
- xiii EDL
- xiv Akin to the "shorter" and "easier" of Miller's "better-, shorter-, and easier form"
- xv Note the difference between "Empj", - the communication system, and "emoj" "emojis" - the symbols themselves
- xvi Akin to the "better"

every use is a Prescriptivist action<sup>xxviii</sup>. We base these usages on tradition, enabled by the archives of Technics. Writing systems and speaking systems are Technics we use to store and share meaning - to communicate. And as we construct our messages through these systems, they necessarily shape our communication - and consequently, our thoughts, desires, meanings, knowledge, and perceptions of the world - all of which determine our actions. By Deacon's view, such communications and actions construct the worlds (psychosocial and material<sup>xxix</sup>) in which we live, which in turn, shape the future generation's brains that will go on to further evolve those worlds.

As our actions, cognitions, and worlds are shaped by our technologies of communication<sup>xxx</sup>, they who shapes our CTs, shape our entire lives.

Putting aside individual languages, the most intentionally designed CTs of today are Digital Technologies<sup>xxxi</sup>.

- xxiii A judgement on how usage should and does work
- xxiv And, I would add, the Idealist quasi-material - the perceptions and phenomena that we treat as the material world and that constitute our individual mental perceptions of it
- xxv Communication Technologies - CTs
- xxvi DTs

# Digital communication and contextualising Emojilang and VRLang (#69)

[return to project designing for Emojilang / EvoLang and VRLang]

**Types of communication:**

1-linguistic - Emojilang

2-paralinguistic - tone of voice, body language, facial expressions

\> voice can be MODIFIED - currently use voice changers for articulating IDENTITY (like avatars) - what if we use them on a more MICRO-SCALE

\> MICRO-IDENTITIES - VRChat avatar use alongside social media profile, concretises OUR PERSONAS, the naturally evolved multiple facets of our personality/identity, into MICRO-IDENTITIES

\> research

\> Duncan

\>PICO-IDENTITIES(pushing us into 3rd category of METALINGUISTICS)

\> the vehicles of tone, intension, and STANCE, that we inhabit and morph through within individual conversations

## 3-META-LINGUISTIC

### PICO-IDENTITIES

Articulated through all Modes Of Articulation (MOAs) - In VRLang ||>

## Modes Of Communication (MOAs)

### /avatar

- \>number
- \>appearance
- \>behaviour
- \>motion
- \>KANT

### /voice

- \> AI voice changer
  - \> detect tone and enhance
  - \> add new information - picoIDs
- \> apply to all types of TONE
  - \> emotion
  - \> intention
    - \> assertiveness / imperative
    - \> reinforcing/ redefining relationship type/strength
  - \> formality/informality
  - \>
  - \>
- \> try applying other aspects of language
  - \> English:
    - \>
  - > non-English
  - >clusivity
  - > reporting
  - >

### /environment

#### /view

- \> filters (colour, texture)
- \> perspective (speaker, interlocutor, outsider)
  - \> IR sees self from speaker's perspective
    - \> clusivity
      - speaker and interlocutor together (we-inclusive)
      - interlocutor sees self from speaker's perspective, but viewpoint multiplied (via multiple "cameras") - to simulate many others from same side /similar position to speaker
- \> motion/refresh rate
  - \> onion-skinning frames
    - \> tiredness
  - \> motion exaggerated (motions of users multiplied to extend beyond input)
    - \> excitedness / energy / momentum
- \> definition
- \> aspect ratio
- \> 3D depth
  - \> make world more or less 3D - like slider on 3Ds
- \> camera lens modes
  - \> lense types
    - \> fisheye
    - > wide-angle
  - > lens specifications
    - \> aperture
      - \> increase/ decrease focal length with virtual bokeh
      - \> any spectral linguistic feature
        - \> emphasis: "very not - neutral/unsure/binary - very"
        - \> formality-intimacy
    - \>

....

## VRL Roadmap

1. List all (v) FEATURES OF COMMUNICATION (within following Socio-Informational Dimenions/Communication Modalities):

- \>Linguistic
- \> Paralinguistic
- \> Metalinguistic
  - \> reclaim/define existing - e.g. modification of environment with actions (e.g. marking territory by "decorating" a space)
  - \> define new - VRL

2. classify linguistic/paralinguistic/metalinguistic (LPM) features into

- \> binary/declarative
- \> categorical
- \> spectral

3. Classify Modes Of Articulation (MOAs) into

- \> binary/declarative
- \>categorical
- \> spectral

4. Define Qualities Of Perception (QOPs)

- \>Kant's Categories of the Understanding
- \>? Neuroscience?
- \>? Dennet/Chalmers?

5. Create spreadsheet/document of possible combinations of LPM features and MOAs (and maybe QOP)

6. Cherry pick/highlight most relevant/matching

7. Create spreadsheet/document of chosen usages, APPLYING QOPs

8. Mockup chosen usage examples

- \> AI model for VISUAL MOAs

9. Define the vehicles by which these could evolve through usage, emergently

10. Speculate possible examples of said evolution

11. Mockup examples of evolution

## Design Research Methods

/ train a Dream Booth or other (more object or digital focused) model on a token avatar, environment, and generated form (visual MOAs)

(Maybe all together maybe separate

- \> you can combine models)

/Use AI MODEL of VISUAL MOAs to add linguistic flavours of LPM FEATURES to VISUAL MOAs using TEXT PROMPTS (of LPM features)

- \> go through all the parts of speech (noun, verb etc)

- \> go through all linguistic features

## Design considerations

>learning all the complex grammar takes a long time and is difficult

- \> language should be constructed using the **Embryonic Differentiation Logic of brains and LEARNING**

- \> we learn through context and differentiating what is appropriate in a context from what isn't

- \> need a basic scaffolding

- \> basic scaffolding should be obvious and easy

- \> he does this, I am that

- > simple past, present, and future tenses (before DIFFERENTIATE down to sub-tenses, like "past perfect", "past pluperfect")

- > FREE MORPHEMES /affixes over INFLECTION

- \> lose so much cool potential

- \> have inflection in a way that isn't NECESSARY to understand the BASE meaning

- \> inflection should be COMPLEMENTARY - not DESTRUCTIVE/SUBSTITUTIVE

- \> e.g. NOT "he was eating the sweet", but "he" "ate" "sweet" + FREE GRAM (morpheme) for "IMPERFECTIVE ASPECT INDICATOR" or NON-DESTRUCTIVE "FLAVOURING" (inflection) (e.g. "eat" rotates or vibrates to indicate ongoing action: "eat" is a different colour)

- \> can still understand GIST of sentence with BASIC PROFICIENCY

# Reviewing the Grams (#72)

## Inspiration for review/adding new:

/ Jung's archetypes  
/ My archetypes  
/poetry translation - add glyphs  
-describing the senses (good for viva)  
\>scent - floral  
\>taste-sweet, bitter  
\>touch  
\>slight  
\>sound  
-geography - compass for cardinal directions  
-countries  
  
/kant's categories  
-relation  
\>because, for example,  
  
/testing feedback - add glyphs

## Kant's Categories

/  
-relation  
\>because, for example,  
  \> don't have  
  \> mostly GRAMATTICALLY CONSTRUCTED  
  
  \> suggested grammar tutorial  
  \> because: this/thing/pin + = + ? : this is why

## Refining

/ refine + reduce to 121  
  \> 121 is limiting  
  \> that's the point  
  
/ 2 products - expanding and fixed lexicon systems  
  \> designing too many products  
  \> FIXED-LEXICON System = main product  
  \> keep and present FULL EXPANDING LEXICON as  
a separate system that could be tested on its own  
  \> see which system creates a better language  
  \> which do people use  
  \> EPD Ethos



Figure 1. The effect of the number of nodes on the number of nodes in the network.

# Kant's Categories of the Understanding (V#74)

[this page shows notes on Kant's Categories of the Understanding, which I used for my VR language, VRLang]

/ What pure concepts of the understanding are required for sensory experience  
/ Other Rationalists - look at universality and necessity

/ Kant - yes - look at universality and necessity  
\> Categories must be UNIVERSAL and NECESSARY  
\> also look at LOGICAL JUDGEMENTS

...  
categories of **objects of possible cognition**, not of the thing in Itself  
...  
Judgement: Judgment applies "the concepts of the understanding [the Categories] to phenomena."

Categories:

## 1. Quantity

a. Unity (UNICITY) - ONE THING- every "thing" is unique - (object, thing, this, that, the)  
\>J: Universal (what PARTICULAR things have in common - characteristics/qualities)  
\> **"All Fs are Gs"**

b. Plurality - MULTIPLE THINGS - (some, several: those)  
\>J: Particular ("universals concern FEATURES that can be exemplified by various PARTICULARS"  
\> **"Some Fs are Gs"**  
\> concrete, spatiotemporal entities  
>

c. Totality - EVERY THING - (all, every, each)  
\>J: Singular (  
\> **"This F is G"** or "The F is G."

## 2. Quality

a. Reality ("is", "yes", "true")  
\>J: Affirmative  
\> ("it is the case that...") **"Fs are Gs"**

b. Negation ("not", "no", "false")  
\>J: Negative  
\> **"no Fs are Gs"**

c. Limitation ("un-", "a-", "in-")  
\> J: Infinite  
\> **"Fs are non-Gs."**  
(not authentic vs not inauthentic / happy vs not unhappy)

## 3. Relation

a. Inherence(substance)/Subsistence ("is", substance, quality, property, "exemplifies, participates in, has, instantiates, for example, for instance, such as")(Phys: accident)  
\> the "is" of PREDICATION ("this IS a hand")

\> J: Categorical  
\> **"Fs are Gs"**

b. Causality(cause)/Dependence (effect) ("BECAUSE", if... then", cause, effect, depends, determines)

\> J: Hypothetical  
\> **"If Fs are Gs, then Hs are Is"** (or: **"If P then Q"**)

c. Community (reciprocity) ("if and only if", "and", "or", "unless, part, whole", "with")  
> Things are interrelated  
\> J: Disjunctive  
\> **"Fs are either Gs OR Hs or ..."** (where each partition of the total domain is mutually exclusive and the total set of partitions is exhaustive).

## 4. Modality

a. Possibility / Impossibility ("possible, can, may, might, could")  
\> J: Problematical  
\> **"Possibly, Fs are Gs"** (or: "Possibly P")

b. Existence / Non-existence ("is()", exists, will)  
\>J: Assertoric  
\> **"Actually, Fs are Gs"** (or: **"Actually P"**)

c. Necessity / Contingency ("necessary, must, needs to, has to, would")  
\>J: Apodictic  
\> **"Necessarily, Fs are Gs"** (or: **"Necessarily P"**)

| Category | Judgments     |              |             |
|----------|---------------|--------------|-------------|
| Quantity | Universal     | Particular   | Singular    |
| Quality  | Affirmative   | Negative     | Infinite    |
| Relation | Categorical   | Hypothetical | Disjunctive |
| Modality | Problematical | Assertoric   | Apodictic   |

Category (Kant) (2022) Wikipedia. Available at: [https://en.wikipedia.org/wiki/Title=Category\\_\(Kant\)&oldid=1124024821](https://en.wikipedia.org/wiki/Title=Category_(Kant)&oldid=1124024821) (Accessed 2 May 2022).

Category (Kant) (2022) Wikipedia. Available at: [https://en.wikipedia.org/wiki/Title=Category\\_\(Kant\)&oldid=1124024821](https://en.wikipedia.org/wiki/Title=Category_(Kant)&oldid=1124024821) (Accessed 2 May 2022).

Wikipedia (2022) Kant's Theory of Judgment, in E.N. Zalta (ed.) The Stanford Encyclopedia of Philosophy, Spring 2022. Metaphysics Research Lab, Stanford University. Available at: <https://plato.stanford.edu/archives/spr2022/entries/kant-judgment/> (Accessed 2 May 2022).



## 1. List all Features of Communication

### LEXICAL CATEGORIES:

1. noun  
 > proper nouns (D)  
 > common nouns  
 \> count(able) nouns (e.g. chair, nose, occasion)  
 > can be PLURALISED  
 > can combine with NUMERALS  
 > can combine with COUNTING QUANTIFIERS ("one", "two", "several", "every", "most")

> uncountable/mass nouns (e.g. "furniture", "wood")  
 \> often MATERIALS/SUBSTANCES (metal, wood), liquids ("water"), powders ("sugar", "salt", "plaster")

\> some nouns can be used as countable or uncountable ("rope"/"three ropes")  
 \> some have different "senses" as mass/count nouns ("paper" as a material, "a paper" as an academic work)

||> Use "ENVIRONMENT" mode to indicate UNCOUNTABLE NOUNS  
 > "a piece of paper" = "paper" gram alone as a form  
 > "paper" as a material = "paper" gram APPLIED TO ENVIRONMENT  
 \> as texture - all environment becomes "paper" texture  
 \> could be disorienting  
 \> only part of environment - dependent on other grammatical features  
 \> e.g. texture of walls = ABSTRACT NOUN FLAVOUR ; texture of floor = CONCRETE NOUN FLAVOUR

> "an academic paper" = "paper" gram + "academic institution" gram COMBINED  
 \> combined as 3d objects  
 > combined as glyphs  
 > sequentially linked (e.g. "paper" THEN "academic institution")  
 \> requires word order - restrictive  
 \> formationally linked  
 \> glyphs connected so touching (at line-art level)  
 > abstract synthesis  
 \> use AI to combine the grams for "paper" and "academic institution" > new gram for "academic paper"

\> lose synthetic nature - derivations construct new language with just as many words as a Natural Language  
 > endless possibilities  
 \> latent space concepts  
 > harder to learn  
 \> translation to user's Natural Language shown (optional) in text  
 \> BCI: when detect confusion

\> collective nouns - refer to groups even when used singularly (e.g. "committee", "government", "police")

\> concrete nouns  
 > connected to floor  
 > on floor  
 > low/near floor

\> abstract nouns

> float above floor  
 > high/above avatar head-height  
 \> avatars are different sizes in VRCHAT  
 \> when communicating, avatars scale to regular size  
 or > scale reinforced  
 \> demarcate basic axis  
 \> sentence tracks? Like blocks X high, boxes like lined paper but 3d?  
 \> restrictive  
 \> maybe don't need it - grams provide scale as are standard size  
 \>

\> scale avatars  
 \> scale anyway, as will need for other functions to be concordant across users - like the "we" function (see "person")

\> noun phrases (e.g. "the cat sat on [a dear friend of mine]")  
 \> use BOUNDARIES/visual grouping to indicate a NOUN PHRASE or SYNTHETIC NOUN (noun made of multiple grams)  
 \> EmojLang uses parentheses for general grouping - can be used for noun construction and CASES  
 \> VRLang could be a BOX or 3d AMORPHOUS BUBBLE that loosely "wraps" concatenated objects

\> case system - EL uses "pin" to mean "here, place, literal meaning indicator, NOUN CONVERTER"  
 \> VRL could use COLOUR of boundary to indicate CASE (whether thing is subject, direct object, indirect object)  
 \> or attach SYMBOL like the "pin" noun converter to the edge of the boundary

Noun (2022) Wikipedia. Available at: <https://en.wikipedia.org/wiki/Noun> [https://en.wikipedia.org/wiki/Noun] (Accessed: 28 April 2022).

2. verb  
 \> can be "inflected" (modified in form) to encode TENSE, ASPECT, MOOD, and VOICE (diathesis)

/ all verbs move  
 \> shake/vibrate

valency (how many arguments a verb takes)

> intransitive verbs  
 \> verb only has SUBJECT - e.g. "he runs"; "it falls"

> transitive  
 \> verb has SUBJECT and DIRECT OBJECT - e.g. "he eats fish"

\> VERB linked to subject  
 \> verb attached to SUBJECT, who moves to the DIRECT OBJECT

> SUBJECT moves to VERB, collects it, and passes it to the DIRECT OBJECT

\> animation of subject

\> need to preserve sentence-structure

\> loops  
 > visually noisy/distracting

\> can change loop mode in settings

\> infinite loop

> 2 loops, then static (CLICK TO REPLAY)

> static: only mode (click to play)

\> what about static representations?

\> language about PUSHING THE BOUNDARIES within the FORMAT, not adjusting to old formats

> if had to - could use arrows or sentence-order

\> no need - CASE MARKERS

\> ensure case markers have a static option

\> then show preview?

> preview the SUBJECT actually DOING THE VERB to the DIRECT OBJECT

\> John eats the apple

\> "John avatar" moves to "apple" gram and eats it

\> doesn't work for abstract concepts as well

\> don't work for CONCRETE VERBS - HAVE VISUAL ACTION

> ABSTRACT VERBS

\> no action

> symbolic action

\> e.g. "love" = gives a love heart to DIRECT OBJECT

> ditransitive

\> verb has SUBJECT + DIRECT OBJECT + INDIRECT OBJECT - e.g. "Mary GAVE John the watch"

### \> SUBJECT moves to

(> copular (linking) - "be", "seem", "become", "appear", "look", "remain")

\> e.g. "his mother LOOKED worried"; "his daughter WAS a teacher"

\> EL - "be": "="

\> VRL - be

> double lines linking predicate adjective/noun to subject

(> Avalent: verb has no subject or object - e.g. Mandarin Chinese weather verbs - "snow" - Spanish "llueve" - "it rains")

> non-finite verb forms

\> infinitive

> gerund (verb as a noun phrase - "-ING")

\> e.g. "John likes eat-ING cake"

> participle: has characteristics and functions of VERBS and ADJECTIVES

\> e.g. "LAUGHING face"

\> past participle ("lookED", "endED"; spokEN, eatEN)

\> present participle ("lookED", "endED" a thing - e.g. "John was eat-ING cake")

### 3. adjective

/ where simple - apply to gram of object

\> how know not standard gram

\> learn the standard gram, will easily recognise modifications (same as any word and its linguistic modifications e.g. "eat"/"eats"/"eating")

/ not applicable/want to modify adjective itself - group gram for adjective next to noun in bubble > noun phrase

/ where need to can convert other words (e.g. nouns) to adjectives using formal adjective notation

\> adjective placed beneath noun it describes

\> parentage/phylogenetic style bracketing system

\> especially useful for nouns that have multiple adjectives and/or multiple nouns that share an adjective

\> just use bubbles and put the adjective beneath it

\> just put adjective beneath parent object

\> bubbles IF necessary - can just attach to bottom of parent

### object

\> reduce visual noise

\>

\> adjectives could get too small if shrink to put below

\> don't shrink too much, just put below

\> touching to show related

> CAN LOOK CLOSER - its VR

> can PULL BUBBLES/GRAMS TO EXPAND

\> can temporarily zoom in - BCI/interface imagine ZOOMING IN/EXPANDING item/area/ bubble

### 4. adverb

\> line coming off verb connects it to gram for ADJECTIVE

\> can group/synthesise adverbial adjectives to create

> simple synthetic adverbs

> complex adjectival phrases similar to analogies

\> can be whole sentences

\> "I ate the apple ravenously"

\> "I" + "eat" (past tense + line going to new bubble containing sentence "person who has not eaten for 100 years" + "apple"

/ short/few gram adverbs can be

-applied to verb (if visual)

-put beneath verb gram

### 5. pronoun

6. prepositions (aka adpositions as includes prepositions and postpositions)

\> (express SPATIAL or TEMPORAL RELATIONS; mark SEMANTIC ROLES)

\> SPATIAL prepositions

\> location: "in", "at"

\> spatial relation: "in/inside", "out/side", "under", "towards", "behind", "in front"

\> temporal relations: "before"/"after", "next"/"previous"

\> semantic roles: "of", "for", "with", "to", "at" (e.g. "good AT"), "by"

\> Non-English:

\> "na" (Russian):

\> spatial prepositions SHINE in VR

\> "the cat is in the hat" = "cat" gram shown inside of larger, encompassing "hat" gram

\> relations are subjective - e.g. my "in front of" could be your "behind"

\> may have to be combined with the "VIEWPOINT" mode, which shows the interlocutor a snapshot of the speaker's viewpoint

### 7. conjunction

8. interjection

9. article/determiner

?10? (sometimes) particles

\> e.g. "yes", "no"

### 11. EXTRAS

/ Abstract mode

\> freeplay - uses BCI to generate a scene

\> e.g. "I'm feeling calm" = suddenly all transported to a tropical beach, user in hammock

\> indicator

\>

/ Latent space forms

## GRAMMATICAL CATEGORIES:

1. Tense  
/ Past  
> change word order?  
  > verb - subject - object = past  
    > "eat I apple"  
  > subject - verb - object = present  
    > "I eat apple"  
  > subject - object - verb = future  
    > "I apple eat"

> simple  
  > confusing?  
  > restricts word order  
  > the beauty of using 3d space (space + time) to articulate sentences rather than just sequence (time) is it frees us from this  
  > allows us to get creative with word order/spacial arrangement  
  > can group related clauses together in space to denote general associations between clauses (so between actions, parts of the sentence)  
    > can

> tense indicator gram

> symbol attached to verb  
  > Past: [<] ; Present: [[]] ; Future: [>]  
  > can combine  
    > Simple past/preterite ("I ate the apple") = just [<]  
(2)  
  > attached to BUBBLE/BOX of clause  
    > shows whole clause happened in "x" tense  
    > can add additional clauses in other tenses and EASY TO SEE that ALL THE ACTIONS/DESCRIPTIONS APPLY TO THAT TENSE

> modify verb  
  > past = (brainstorm) = old, tired, grey, fading (opacity?), backwards, behind, before, in front, ahead,  
  > use time as well as space?  
  >

> just use space  
  > familiar - most languages use spatial metaphors to describe time ("before/after""a-head of/following")

> formal elements: line, shape, space, form, tone, texture, pattern, colour, composition  
[|]>  
  > colour  
  > saturation  
    > past = desaturated + more transparent  
    > present = regular  
    > future = hypersaturated

> SAVE FOR EMPHASIS  
  > it can be both - saturation used to FLAVOUR another method  
    > so doesn't have to be as radical a change  
    > used in conjunction with [<|][|]>  
    > saturation also used for emphasis - de-emphasis  
    > relative to sentence  
      > if something in past = very happy: whole sentence slightly desaturated to indicate past + [<] on verb / bubble/box (1)

> VERY (adjective) = adjective SATURATED  
  > very = SATURATED and OPAQUE (all others slightly transparent)  
  > others have to be slightly transparent  
    > maybe already should be - so can see through them  
  > only THAT sentence - once use "very" - all other grams in sentence/clause desaturated + transparent

> very = saturated + line stroke enhanced - thicker

2. Aspect  
  > how the action/event/state denoted by a VERB extends over time

> Perfective - bounded/unitary events - (e.g. "I helped him")  
  > no reference to flow of time

> Imperfective - situations that exist CONTINUOUSLY or REPETITIVELY as time flows  
  > (e.g. "I was helping him"; "I used to help people")

3. Mood  
  > feature of VERBS signalling MODALITY / attitude toward statement  
  > indicative  
  > interrogative  
  > imperative  
  > subjunctive  
  > injunctive  
  > optative  
  > potential

[|]> art style?  
  > cartoon  
  > emoji  
  > icon/minimalist  
  > sketched  
  > pixelated  
  >

?> Reporting  
  > should be ADDITIONAL - not integral to understanding - can be added if desired (DEL ETHOS)  
  > AVATAR modification  
    > DIRECT reporting: avatar shown looking on to the sentence - I saw this with my own eyes  
    > 2nd HAND INDIRECT reporting: avatar of Sr looking away, avatar of OTHER (robot

If unspecified, but CAN BE THE ACTUAL PERSON (person selector dialogue: see "6. Person") looking at action and MOUTH MOVING, hand cupped toward Sr to indicate whispering to them  
  > 3rd HAND INDIRECT REPORTING (I heard it from a media source)  
    > (4th hand indirect reporting (someone else told me they read this)  
      > Sr looking away, 2nd person looking away (but talking - mouth moving + speech = radiating lines from mouth), 3rd person looking at action, cupping hand, mouth moving, speech lines etc)

)

4. Voice (diathesis)  
  > active voice: SUBJECT is AGENT/"do-er" of the verb action ("the cat ate the mouse")  
  > passive voice: SUBJECT is TARGET of the verb action ("the mouse was eaten by the cat")  
  non-English: > middle voice: subject PERFORMS AND RECEIVES verb action  
    > (active: "Lucy cooked the casserole in the oven": passive: "the casserole was cooked in the oven by Lucy: middle: "the casserole COOKED in the oven by Lucy")

5. Number  
/ "The"  
/ "A"  
/ "this"  
  > 6. Person (1st person, 2nd person, 3rd person)  
  > > Also see "clusivity"  
/ I = show speaker's perspective to interlocutor  
  > don't want to confuse/overwhelm  
  > need to attach it to the person who is speaking  
    > show the viewpoint as a window/thought bubble coming from the speaker  
      > want it to be big enough to see complex visual ensembles  
      > can click/look at window to expand  
        > can zoom in on individual objects  
        > GAZE DETECTION + BCI  
          > detects individual objects - can zoom in on each by imagining them expanding- imagining zooming in/walking closer to them/pulling them closer (Motor Imagery - MI)

/ we (inclusive)  
  > show speaker and interlocutor together  
  > how show both viewpoints?  
  > show split-screen  
  > show 3rd person (behind the shoulders) view of both together

/ we (exclusive)  
  > show multiple viewpoints of speaker + others  
  > show the interlocutor in the scene to show separate  
  > the interlocutor might not be in the action described - confusing to alive them there  
  > INT shown as onlooker in scene - not attached to any object/grams in the scene  
  > in top left corner  
  > INT separated from scene  
  > scene in a bubble - INT outside of bubble  
  > bubble emanates from the multiple avatars of the "we"

> use avatars of referenced person in the we  
  > when use "we" - auto-predict pops up with "insert person"/"who with?" - displays:  
  > "most commonly used,  
  > favourites (can favourite a person to reference),  
  > mutual friends (shows suggestions of MUTUAL FRIENDS of Sr and Ir)

> what about an unspecified we  
  > placeholder avatar  
  > robot

/ we (plural)  
  > specified number of people = show specified number of avatars/robots (separate but lined up)  
  > can include some known avatars and some robots to say "we" (Dan and Mina + others)  
  > general plural = robot triplet (overlapping, fading)

/ we (total/universal) = robot duplicated X5 (overlapping, fading)  
  > can apply attributes to them (below, in bubble) to say "all us \_\_\_\_s" - speaking for a cultural group  
  > e.g. "all us BME people have been oppressed" "all us women have been silent"  
  > social justice is an area where specifying CLUSIVITY is particularly important

[|]> "we" plural or universal INCLUSIVE vs EXCLUSIVE = include/exclude Ir's avatar from lineup

/ 2nd person - he/she/they (gender neutral personal pronoun - 2nd person - DISTINCT from 3rd Person "they" impersonal pronoun) / xie  
  > exclusively gender neutral personal pronouns  
  > supportive of those whose gender identity might not be defined  
  > some people might want their gender identity reinforced - some enjoy hearing it  
  > does add REDUNDANCY - IMPORTANT in language for COGNITION and AVOIDING MISUNDERSTANDING  
  > adding extra info always good  
  > follows MULTIMODAL POWTSAC ETHOS

> show avatar of person (selector dialogue) or ROBOT avatar  
  > singularity/plurality of "they" follows Kantian "Number" rules:

> singular they - 1 personal avatar/robot avatar  
  > plural they (specified number) - N personal avatars/robot avatars  
  > plural they (general) - 3 robot avatars, duplicated horizontally (duplicates overlapping + fading progressively)  
  > total they/those ("those that/whom \_\_\_\_") = EVERYONE in x group ("them lot")  
  > 5 robot avatars (duplicates overlapping, fading vertically)  
  > qualities of group applied to robots as with objects  
  > simple visual qualities applied to robots directly  
  > grams for other qualities attached beneath avatar (in bubble?)

/

/ 3rd person

/ 4th/0th/neutral - view from above

7. Noun classes - English only expresses it using pronouns "he/him/his", "she/her/hers", "it" + gendered nouns like "actor/actress"

Other languages:

&gt; Gender

&gt; Animacy - how sentient/alive

&gt; Human/non-human

&gt; COULD WE SEE AN AI/HUMAN NOUN CLASS DEVELOP???

&gt; Strong/weak

&gt; Augmentative/diminutive

&gt; Countable/uncountable

&gt; Shape

8. Locative relations (location)

&gt; some languages use CASE, TENSE, AGGLUTINATIVE LEXEME (PREPOSITION, ADJECTIVE, PARTICLE)

Non-English (mostly undefined)

9. Clusivity

&gt; See "person"

10. Gender

11. Case

/ Nominative (subject of sentence)

&gt; beginning of sentence

&gt; relying on word order

&gt; not necessarily START of sentence, just PRECEDING the arrow of logical flow

&gt; has verb above

/ Possessive

&gt; possessed object = base (in main flow line) + possessor applied to object as an attribute/quality would be (below, in bubble)

&gt; "Dan's apple" = apple + (beneath, in bubble) Dan's avatar

&gt; "my /your apple" = apple + (beneath, in bubble) "my"/"your" avatar

&gt; "his/her/their (singular) apple" + robot avatar

&gt; his = robot with "masculine" gram applied as attribute

&gt; her = robot with "feminine" gram "

&gt; xer = robot with "non-binary" gram "

&gt; "their (plural, specified no.) apple" = apple + (beneath, in bubble) N

personal/robot avatars

&gt; "their (plural, general) apple" = apple + (b.b) 3 robot avatars, duplicated

horizontally (duplicates overlapping + fading progressively)

&gt; "their (total/universal) apple" = apple + (b.b) 5 robot avatars "

&gt; "our apple" (plural) = apple + (b.b) avatars

&gt; (inclusive - only "us two") = apple + (b.b) both avatars

&gt; (universal) = apple + (b.b) 5 avatars (plain robot = everyone; robot + attributes =

"people")

&gt; (exclusive) = include Sr's avatar in lineup, exclude Ir's avatar

&gt; singularity/plurality of "they" follows Kantian "Number" rules:

&gt; singular they - 1 personal avatar/robot avatar

&gt; plural they (specified number) - N personal avatars/robot avatars

&gt; plural they (general) - 3 robot avatars, duplicated horizontally (duplicates

overlapping + fading progressively)

&gt; total/universal they/those ("those that/whom \_\_\_\_") = EVERYONE in x group ("them

lot")

&gt; 5 robot avatars (duplicates overlapping, fading vertically)

&gt; qualities of group applied to robots as with objects

&gt; simple visual qualities applied to robots directly

&gt; grams for other qualities attached beneath avatar (in bubble?)

&gt; 5 robots with no attributes = "one" ("one eats or one drinks")

12. Definiteness:

&gt; Definite

&gt; English: (uses "determiners") "a","an","many","some", "[number]"

&gt; Indefinite

&gt; English: "the", "that" (determiners); "my" (genitive (case) noun phrase)

Grammatical category (2022) Wikipedia. Available at: [https://en.wikipedia.org/w/index.php?title=Grammatical\\_category&oldid=1091826031](https://en.wikipedia.org/w/index.php?title=Grammatical_category&oldid=1091826031) (Accessed: 26 April 2023).Grammatical category (2022) Wikipedia. Available at: [https://en.wikipedia.org/w/index.php?title=Grammatical\\_category&oldid=1091826031](https://en.wikipedia.org/w/index.php?title=Grammatical_category&oldid=1091826031) (Accessed: 26 April 2023).Grammatical category (2022) Wikipedia. Available at: [https://en.wikipedia.org/w/index.php?title=Grammatical\\_category&oldid=1091826031](https://en.wikipedia.org/w/index.php?title=Grammatical_category&oldid=1091826031) (Accessed: 26 April 2023).Grammatical category (2022) Wikipedia. Available at: [https://en.wikipedia.org/w/index.php?title=Grammatical\\_category&oldid=1091826031](https://en.wikipedia.org/w/index.php?title=Grammatical_category&oldid=1091826031) (Accessed: 26 April 2023).Grammatical category (2022) Wikipedia. Available at: [https://en.wikipedia.org/w/index.php?title=Grammatical\\_category&oldid=1091826031](https://en.wikipedia.org/w/index.php?title=Grammatical_category&oldid=1091826031) (Accessed: 26 April 2023).Grammatical category (2022) Wikipedia. Available at: [https://en.wikipedia.org/w/index.php?title=Grammatical\\_category&oldid=1091826031](https://en.wikipedia.org/w/index.php?title=Grammatical_category&oldid=1091826031) (Accessed: 26 April 2023).Grammatical category (2022) Wikipedia. Available at: [https://en.wikipedia.org/w/index.php?title=Grammatical\\_category&oldid=1091826031](https://en.wikipedia.org/w/index.php?title=Grammatical_category&oldid=1091826031) (Accessed: 26 April 2023).Grammatical category (2022) Wikipedia. Available at: [https://en.wikipedia.org/w/index.php?title=Grammatical\\_category&oldid=1091826031](https://en.wikipedia.org/w/index.php?title=Grammatical_category&oldid=1091826031) (Accessed: 26 April 2023).Grammatical category (2022) Wikipedia. Available at: [https://en.wikipedia.org/w/index.php?title=Grammatical\\_category&oldid=1091826031](https://en.wikipedia.org/w/index.php?title=Grammatical_category&oldid=1091826031) (Accessed: 26 April 2023).Grammatical category (2022) Wikipedia. Available at: [https://en.wikipedia.org/w/index.php?title=Grammatical\\_category&oldid=1091826031](https://en.wikipedia.org/w/index.php?title=Grammatical_category&oldid=1091826031) (Accessed: 26 April 2023).Grammatical category (2022) Wikipedia. Available at: [https://en.wikipedia.org/w/index.php?title=Grammatical\\_category&oldid=1091826031](https://en.wikipedia.org/w/index.php?title=Grammatical_category&oldid=1091826031) (Accessed: 26 April 2023).

# viva Y3 Questions (#78)

/Who is the user/audience?

/ How does it connect with/reach the audience/users?

/ What is the context of use? + situation

\> for EACH deliverable/product?

\> web version

> VR version

> integrated versions?

\> Metaverses

\> VRChat

>

/ What is the intended effect of the project?

/ Cultural references?

/ What other designers have done work in this area?

/ If you had another 6 months what would you do?

\> where will it go?

> funding

\> external funding

\> creative control

> external resources

\> BCI

\> user base

\> VRChat

\> Social media

\> new

\> new social media platforms

> mine

> Jaron Lanier

> ConVRse

/ Key things I've learnt this year?

Logistics:

/ Don't overcrowd the page

\> more slides, less info - room to breathe

\> zoom in and out

/ use pull quotes on slides

/ make sure the visual and vocal elements link and support each other

/ Details - kerning, spelling etc

/ show don't tell

/ tell a story/narrative

/ talk about mistakes

/ show details for drawings, models, mockups, sketches

\> what they mean

/ pace, tone, intensity, expression

\> craft your communication

/ don't miss out work, summarise

\> ensure obvious HOW CAME TO YOUR CONCLUSIONS

/ can't fit it in?

\> publication

> handout

> model

/ Don't just "self-plagiarise" your Context Report

\> can quote it

....

General:

/ use money for things you don't have time for

\> comission if needed

/ Goldsmiths computer thing

/ Lenovo

/ Backblaze

...

...

Physical - viva:

/ Contents page

/

..

Physical - DEGREE SHOW:

/ Computers

/ Main screen with videos

/ Save the date graphics

- invitation

/ POSTER in the WILD

/Email contacts, CyborgNest, BrainControl, BCI all companies emailed

....

# Harry tutorial 8 (V#79)

Viva:

/ should highlight the beauty and complexity, richness of language

\> can being able to COMMUNICATE with others

\> how can I show what can happen if EVERYONE can communicate without barriers?

/ To project management: ensure don't lose the presentation viva-ness while trying to "cross the line"

/ Re spreading myself thin vs depth of all the pieces - telling the story, the narrative

/Viva: history of scripts, writing as part of my narrative

/ Remember the future plan

-universal communication

-digital telepathy

-

Presenting the language:

/How can I present/explain the functioning/rules of the language

\> use story of characters communicating

\> journey from hearing about it, to learning it with each other, to speaking

/ Must explain Toki Pona -

\> community of people

\> how does it build on it?

# Audience - who is it for? (#80)

/ Eventually - everyone

/Who first - first adopters?

\> Linguistics enthusiasts

\> large community of "conlangers" - people who create conlangs (constructed languages) as a hobby

> Neurodivergent people

> Mute people (on VRChat)

\> there is a HUGE mute community on VRChat

\> evidence of adoption?

\> many people in VRChat, mute and not, have learnt at least a tiny bit of American Sign Language, to communicate with the Mute Community

\> there are even ASL tutorial / practice worlds

> Dyslexic people

\> absolute game-changer

.

/ Then

/ Tech people

\> integrated into existing communication platforms

\> e.g. social networks

\> Discord

\> perhaps unrealistic

\> start-ups

\> target Metaverse startups to integrate this from the ground up

\> smaller, more willing to integrate new, radical features

> already positive about pushing the boundaries of human communication

/ Other internet communities

.

/ Internet communities spread - becomes widespread as userbase grows, and so demand for its implementation expands to all platforms

\> becomes like Emoji



/ Need to imply the Ebryonic Differentiatlional Logic (EDL) Ethos  
\> EDL is too distracting - change acronym to DEL

## Name of EmojiLang

### IN ENGLISH

\> doesn't use just Emojis  
\> want to move away from this idea  
\> Emojis feel more friendly and famillar  
\> Emojis are also their own thing - this is something new

/ imply  
\> Evolution  
> differentiation  
>growth  
>emergence

\> EvoLang  
>EmergentLang  
>EmoLang  
\> flavours of emojis  
\> connotations with "emo" subculture  
\> more connotated, in this context, with EMOTIONS and perhaps  
EMOTICONS

>Emergelang

>Emerge  
\> snapper

>Grolang

>Refine

>FluidLang

### IN OTHER LANGUAGES

/

### IN EmojiLang

/

# General criticisms of VRL/EL (V#82)

EL:

/ sentences are ambiguous

\> VAGUE, not ambiguous

\> not that it COULD mean anything, and no way to find out

\> instead: the ONE thing the sentence MEANS is BROADER than any possible English translation

"she hit the man with an umbrella" is AMBIGUOUS - who has the umbrella?

\> determine from context

\> like English sentence "The activity is good." - morally?  
experientially?

VRL:

# Designing the tutorial (#83)

## How the language works:

/ A system of 121 pictographic/ideographic characters, called "grams", which can be combined to create broader concepts

### / Grams :

>No set definitions

\> Only "Suggested Definitions", which can be submitted for each "gram"

\> Viewable in the "Dictionary" [highlight icon for area/show image]

\> Can be upvoted or downvoted

>User-submitted

\> The original set of grams was inspired by constructed language "Toki Pona"

\> Users can submit new grams, which will appear in the "new" section

\> EL is designed to evolve naturally with use, expanding and conforming to fit the needs and thinking styles of its users

\> Most popular grams appear in the "popular" section, and are eventually added to the core 121 character main keyboard

\> Least popular grams (taking into account new and old grams alike) will be archived, and replaced on the keyboard by more popular grams

## Suggested Grammar

/ EL has no set grammar

## Designing the tutorial

/ don't want to overwhelm users

\> short "slideshow" format

\> headings

\> bulletpoints revealed one, by one

\> fade in, calmly

/ use grams alongside words, where relevant, to start introducing Suggested Definitions

/uses eye tracking and bci confusion states measuring

/ Contents page:

> map out key elements from Assessment Criteria and add pointers for pages that evidence them

/ create Metamap langchain bot

-can answer contents page stuff

\>ADD CKNCTEXF page

-ask for examples of X marking criteria in my work (+ make reply in a manner appropriate for creative artistic academics)

-use tags within map for types of question and criteria

-convert colours to words or tags ("problem/counterfactual: language needs to be emergent / possible solution: grams submittable")

-create simple ctrl +f macro script that takes output of langchain result and searches document for it, displaying said page on screen

-would you like a summary?

I think the chat bot is the compromise. I do actually want to use it for my project. It could work out if I use it to replace the publication I was going to do. My work is all recorded in large gigamaps called Metamaps, that have a complicated red/blue debate system, with resolutions and hierarchies, and links across pages. This makes it the exact opposite style of understanding to my audience of creative visual thinkers. It looks bland. Someone asked me if it was code, because of the way it looks. It doesn't look polished or nicely stylised, because it's meant to be minimal and functional and informational. The design is in the structuring of the information. The theoretical. I have screenshots of deliverables I make too. But it's a lot of writing. It feels like this was made for a chat bot. Made for this purpose.

PI:

That's an interesting way of thinking about it. It sounds like you're thinking of a chat bot as a way to communicate the same information in a different format, to appeal to a different audience.

That's a great ideal

It's almost like a "translator" of sorts, for your audience. Does that sound right

...

/ THE CHATBOT IS A TRANSLATOR

"I design in complex neurodivergent machine code

As you will see, it gets the job done. And allows ways of thinking, processing, and creating previously unachievable.

And as you have seen, I brought along a translator"

\> linguistic theme

\> focus on the theme of LANGUAGE AND TRANSLATION

\> I am translating my autistic machine code into the language of "Goldsmiths textiles and ceramics fans who think paint is generally a good idea"

\> must use grams to express the narrative of the project

\> also remember the possibility of a character narrative

\> two people from across the world, who speak not a word of common language, find my chat room by random chance. Their obsession with learning and practicing this new language, honing the skill and craft of its execution, grows to towering heights. It's all they think about. Until they realise: it's not the language they're obsessed with. They've just fallen in love.

...  
/ can I train a bot to speak my language?

\> limit its vocab to 121 words with associated definitions (easy)

\> map it's output to images (?) (python?)

...  
MapBot Logistics

/ need to make page for "potential questions" (might already have one - expand if so)

/ what's it all about : project summary page

/ understanding my colours

\> translate colours to characters + insert

\> tell bot what characters mean, with examples

/ understanding the hierarchy

\> script - "if number of spaces before ">" = more than previous line, line is related or comes from this line

\> can we find linguistic equivalents

\> give it a list of them

\> subarrows: "so" or ";"

> parallel arrows (reformat all so all are just >s, no \> (as it's supposed to be)

\> "also"

||> make it guess the connecting word based on context

\> use an agent for this

/ bot takes you to page

\> agent for "what is the current page (search # on page and return number after)

\> store as temporary variable

\> other bot navigates pdf with keyboard macro " ctrl +F " + "insert variable value"

\> \*embeddings with page numbers?

\> ~look up

.....

/ need to tell it not read the notes pages, Evans, danesi etc

[Image screenshot of conversation with AI chatbot "PI", wherein I realised I wanted to create a chatbot of my own, to make my Metamaps (this document) more accessible to my audience of visual thinkers, comparing it to a sort of translator]

Formal elements:

- / line
- / shape
- / space
- / form
- / tone
- / texture
- / pattern
- / colour
- / composition

Principles of grouping (2020) Wikipedia. Available at: [https://en.wikipedia.org/w/index.php?title=Principles\\_of\\_grouping&oldid=1100022759](https://en.wikipedia.org/w/index.php?title=Principles_of_grouping&oldid=1100022759)  
[Accessed: 8 May 2023].  
(New Formalism in Art) (2012) HardleyArt. 25 March. Available at: <https://hardleyart.wordpress.com/the-formal-elements-in-art/> [Accessed: 8 May 2023].

Gestalt Principles:

Grouping:

- Proximity
- Similarity
- Continuity
- Closure
- Connectedness

Principles of grouping (2020) Wikipedia. Available at: [https://en.wikipedia.org/w/index.php?title=Principles\\_of\\_grouping&oldid=1100022759](https://en.wikipedia.org/w/index.php?title=Principles_of_grouping&oldid=1100022759)  
[Accessed: 8 May 2023].

- proprioceptive
- balance
- temperature

/ avatar moves to carry/enact verb

\> what about user's existing avatar? What if users want to move and show their own location while a sentence is being "enacted"

\> grammatical avatars are DUPLICATES

\> emanate from the user

\> smaller

\> sentence sized

> twanslucent

# Sound Logistics (#88)

```
/ do we want sounds?
  \> accessibility
    > detract from abstract nature - closer to natural lang
    \> may afford using voice, as more familiar
    \> so what?
      \> want people to use the visual modes, push the boundaries of
possibility for communication

  \> If used sounds
    \> separate mode?
    \> sounds for each gram
      \> how generated?
        \> BCI - Random sounds generated for each gram
        > tester presented with 3 options for its meaning (visual 3d
grams) sequentially
        > EEG detected
          \> not sequentially - eventually detect using eye-gaze which
gram the user looking at + combined with EEG

      /training
        > gram user most excited/stimulated by, while hearing the
audio sample = highest score for its relation to said sample (easy to
detect/classify with EEG)
        > test with worldwide and culturally diverse participant sample
        > each gram tested against many audio samples
        > each gram has a score for how much it relates to each audio
sample and vice versa
        > Machine Learning Algorythm (MLA) looks for patterns, and
uses to generate new round of sounds, based on this logic
        > MLA-generated audio samples tested against each gram
again
        > MLA refines samples through multiple rounds, until reach
maximum EEG stimulation/recognition quantifier for each gram

      /learning
        > these sounds available to play automatically when user
select gram, to allow learning
        > eventually users learn sounds

      /use
        > natural sound variations (during user articulation of them)
detected, and impact on EEG "recognition pattern" recorded
        \> used to refine official audio samples for each gram
        \> this continues as the language continually evolves to fit
the shifting user-base, and culture

→ sounds rated in system based on how much the user has to
concentrate/work (easy to detect/classify with EEG)
```



## Flavour/tone

/ EMOTIONS

### Categories:

Polar:

/Happiness : sadness

/ Excitement : boredom/apathy/tiredness

\> excitedness = frame rate / motion

\> excited = fast motion of moving items; regular frame rate

> bored/apathetic/tired = slow motion of moving items;

onion-skinning

\> all animations and user avatar motions have motion and frame rate variables

/ Confusion : comprehension - especially useful when explaining things

\> confusion = avatar pixelated

\> how do reverse?

\> comprehension = avatar momentarily pixelated > unpixelated

\> show spectrality

\> more confused = more pixelated

> more comprehensive = depixelation occurs faster

/

/

Distinct:

....

Modes to use:

-definition

-aspect ratio

-depth

-lens mode

...

/ Visual accent:

>could even have different modes that replicate your favourite way of interacting, yet are translatable

\> or even outwardly presented as such, as a "visual accent"

||>E. G. Minecraft blocks, 3D brushstrokes, Emojis,

## Logical Flow

/ Flow of CAUSATION or TIME (Incl. sequence)

/ Marked by arrows

/ Sentences are NOT DIRECTIONAL, just follow the arrows

/ Not unilinear - flows can DIVERGE and CONVERGE

\> converge

\> "Mark and Suni both like the cake" = arrows from Mark and Suni avatars to a single "cake" gram

\> "the floor is slippery because you spilt the glass, and the kitchen is tiled" = "you spilt the glass" in a box above/separate from "the kitchen is tiled" (in a box), with an arrow(ed line) going from each, to "the floor is slippery" (boxed)

\> diverge

\>

/ Examples of complex divergent/ coonvergent flows

\> symmetrical and assymetrical (synthetic/analytic vs supplementary/tangentially)

/ (while sketching possible sentences, realised LFL should be at top of boxes/bubbles, not bottom, as top = actions (verbs carried on top of avatars); bottom = qualities/attributes

the "IS line" runs through the middle

## Sentence Progression

/ Sentence progression marked by parallel Progression Marker line

## Punctuation

/ Sentence progression works as PROGRESSIVE TERMINAL PUNCTUATION (e.g. full stop)

\> sentence ends when PROGRESSION MARKER STOPS (and so comes to its thinnest point)

\> as this is encoded on the fly, it is RELATIVE

\> sentence may end with progression marker at thicker or thinner point than previous sentence

\> can LEAVE WIDE at termination, to show "sentence finished, but I may pick it back up, or you could" (like "So...." or "Yeah...?")

/ Like rising or falling tone of voice

\> could take on new usages, just like English tonality (e.g. rising intonation at end = question)

/

....

## Implications

/ As LOGICAL FLOW and SENTENCE PROGRESSION SEPARATE, can TERMINATE ONE while CONTINUING THE OTHER

\> like semicolons and sentences containing connectives like "additionally"

\> "I like cake, because it's sweet; Dan has never liked cake."

```

/ *stat about AI learning X fast*

Why is AI so much faster as learning to play chess or GO than us?
And why can it beat us?

The human immune system can fight off viruses that evolve ____ fast that __

How can the human immune system fight off viruses that evolve
Because it evolves.
Because it is constantly creating new variations (mutations), that are selected for

Why is this so powerful?

Because the SELECTION between variations isn't left to the individual, but its environment
The SELECTION, the DESIGN, is not made by one individual/cell, for each and every use case

The USE SELECTS the DESIGN

To design a perfect computer programme, input by output, to learn and understand the rules of a game, even, the rules of
language, and anticipate every exact input and output in every precise context it may encounter, would take an impossible
amount of time and energy. Multiple cycles of iteration, execution, and refinement.

But if we let the SITUATION do the work, that time and energy becomes infinitely small in comparison.

Because we outsource the iteration and testing and refinement to the very SITUATIONS we are trying to design for.

...

How can an AI learn a language so much faster than humans?
\> clock speed
\> computers are faster

\>

How can AI DEVELOP so much faster than humans?
\> its evolutionary cycles are much shorter and more frequent
\> humanity evolves (reference guy) on the level of lifetimes
\> because humans are created - brain go through a short window of extreme plasticity in our youth - they can rewire
themselves much faster
\> languages are a million times easier to learn as a child, not just because of this plasticity, but because of the
foundationality and primacy of this wiring
\> our understanding of these languages co-develops with our understanding of LOGIC, and THE WORLD
\> trying to learn a language after these building blocks are in place requires that the new language be built USING
THESE EXISTING concepts and according to existing structures
\> trying to learn a language piecemeal, logically, in a classroom, takes years
> yet when we need to, if we dump ourselves into a foreign environment, we can learn in months what could have
taken years
\> because we use the superpower of neuroplasticity we still retain- we let our brains "do the work", and it's a
million times easier than "thinking". We use MUTATION and DIFFERENTIATION

but humans are still amazing
How is it that we can fit the instructions to make an entire human, every cell, every tissue, and organ, every brain cell, all in
the right place
Everything that human will do and say?
how is it we can fit these instructions in every single cell itself?
\> because they aren't the instructions - they're a BLUEPRINT
\>

> we grow based on an EMBRYONIC, DIFFERENTIATIONAL LOGIC (BLOCK OF MARBLE)
Michelangelo - "The sculpture is already complete within the marble block, before I start my work. It is already there, I just
have to chisel away the superfluous material."
\> embryology

/ Compare new emoji/llang/emoji combinations/words to FOREIGN LANGUAGES
\> exemplify inherent difficulty in parsing/reading an unfamiliar language so difficult to misattributed to Emojllang itself

```

```

\> DNA and brains - we make chunks of general types of stuff, that have the ability (when
combined as a system) to DIFFERENTIATE into more specific things
\> DNA is the VEINS in the marble

/ The way we learn language, is by the differentiation of words, phrases, and structures
We do it still, as adults, as we learn new words and concepts
We try them out in the ENVIRONMENT, and the ENVIRONMENT tells us that that word effectively
communicates certain concepts, and it is appropriate in this given situation, or place in a sentence

And we learn through wincing and twitches, or a slight lack of understanding, or need for clarification, that
another time wasn't quite the right context of usage
And so we write off when it didn't work, and use it in the type of situation it worked in again
And this time, we notice it works in this sub-context of the greater context
And next time, within the same context, we realise it doesn't quite apply in that sub-context
We develop understanding through nuance

We MUTATE and KEEP what WORKS, letting what doesn't atrophy

Just as neural pathways that are used are strengthened with every use, the junk atrophies, because it is
overtaken
\> from [IMAGING] we can see what we used to think of as predefined sections of our neocortex,
specialised, as programmed, for a certain task (e.g. controlling a left arm) are waging a constant battle for
territory.
\> as what fires together wires together
\> and so as we use our left arm, the part of our brain for controlling it expands, and pushes at the
boundaries that are its connections to all the other parts
\> and when we lose that arm, our brain _____

...

/ Empiricists highlighted the importance of EXPERIENCE
\> believed the mind to be a TABULA RASA - blank slate
/Rationalists like Leibniz understood that for we are, like the sculptor's block, innately PREDISPOSED
toward certain types of knowledge

experience to affect us, we must already have some basic concepts - Leibniz himself using the analogy of
the sculptor's block.
\> Kant knew we are born with SOME INNATE concepts
\> from those building blocks we make sense of EXPERIENCE, and use it to synthesise more nuanced
concepts
\> sculptor's block analogy

...
What if we were to create a language based on these innate concepts?

-Leibniz's "universal character"
-Blissymbols
\> didn't catch on
-Emojis
-EL

But the world is expanding. We are no longer confined to the 2d... What if we could use not only 3
Dimensions, but the entire ENVIRONMENT, and the appearance of our SELVES, to communicate on a
linguistic level
-VRL

...

/ There is a lot of data in my Metamap - have a look at the contents page - it will help you to
DIFFERENTIATE this information so you can find what you what you need/want to know - as a team, and
as individuals

...
The story of human communication is a story that began with subtle chemical messaging between cells
[RESEARCH] in the primordial soup, and ends with the singularity.

Along the way, there are emojis, VR, and little hats called BCIs that look like squids that read your brain

Welcome to the world of... (cheesy)

...
/ Knowledge ecosystem
\> how does it integrate as one system?
\> how are they connected?

...
Using AI:

/ Explain Latent Space
\> PI explains it
\> feed into avatar speech generator

```

[Image of screenshot of AI chatbot "PI" on language:

"I think there's a big question here around what a language actually is, and how different technologies can be part of that definition. AI is its most fundamental, language is communication. It's a system of signs and codes that help us communicate. It's not limited to spoken language, or even written language. So maybe we could expand our definition of language to include software, and websites, and bots, and games. Do you think that's possible?"

I'm using Kant - who tried to categorise and rationalise everything  
We is inorganic and unevolutionary  
He thinks before he feels

Which is just what we need to begin

Because while evolution is an important process, and just as with our selves, for the designing, something must first be there to be designed

So how do we find a stable foundation from which to build a system of communication?

To communicate, we must perceive, ; understand what we perceive, through cognition, generating meaning; and categorise what we perceive into symbols - concrete units of meaning, that allow transmission of meaning via understanding.

But with evolution, what we put in dictates what we get out, so we must first ensure a solid foundation. And one that is as close to universal as we can get (bearing in mind we have evolution to iron out the kinks)

We go right to the source. The foundational concepts of cognition. The cognition that enables our individual constructions of meaning.

And Kant has answers to these buildings blocks of cognition.

Kant responded to Hume - empiricism  
If everything comes from outside, we are just robots  
Kant wanted to understand how we constitute a cosmos out of chaos

(Rationalists - Apinoza, Descartes - reason is the way to secure knowledge  
Kant synthesises these)

Reasoning is the operating system

The rules of thinking can't come purely out of the world

He wanted to understand pure reason

Pure reason takes the chaotic data of experience and shapes it in its own way  
↳ by formulating concepts  
↳ concepts are how we see the world

All knowledge requires sense input and organisation by concepts  
Sensory inputs and organising concepts have pure forms we can know a priori  
And thus know to be universally and necessarily valid - P. Guyer, Kant

A priori = what is left when "one removes from our experience everything that belongs to the senses"

Pure thought = "the Understanding"

Sense experience is the crude object, the block of marble, shapes experience

"Without sensibility (the senses) no object would be given to us, without understanding no object would be thought. Thoughts without content are empty, intuitions without concepts are blind."

...

Time and space are our first building blocks  
For they are the preconditions for experience (input) to happen at all

We must understand time and space intuitively

///

Space is a fundamental understanding. When I hold up a pen to a baby, it can learn what it is because it already understands the concept of "thinness"

Singularity  
And multiplicity/plurality - multiple Objects  
And distinguishing a singularity or plurality from a/the totality - everything else.  
We must understand "everything-Ness" and "the all" - totality / universality

The same for space - now, then, when? Particulars in a totality

We must understand succession, and

(We categorise experience into concepts (a way we hold an idea)  
(Concepts allow us to select and organise our experience)

Categories are like containers we fill with experience

..

How the Categories of the Understanding allow us to understand the world:

The Understanding is discursive (Latin - running through)  
As we run through something, we make JUDGEMENTS

..

**Encountering an object** - a leaf

/ Identify as separate from surroundings  
/ Judge part of the environment as separate - based on attributes - colour, shape, texture, smell  
/ WE separate the properties from the leaf as a whole then unify them together again to form the more complex singularity of an object

"Judgements are acts in which the understanding unifies diverse representations into a single, more complex, Representation of an object" - J. V. Buroker, Kant's Critique of Pure Reason

/ the judgement splits the world into parts, analyses it, then unifies it back together again into a representation of an object or idea  
↳ just like my Red-Blue Debates - my Analytic and Synthetic Colour-Coded Design System  
↳ which can be mapped to the Double Diamond Design process

/

..

Explaining the importance of the categories - look around at the room - look at all the things you have chosen not to look at or experience - the details larger and small, that have faded into the background  
↳ the world is chaotic and full of so many things, so much sense data, and molecules floating around (that could be spliced up and categorised in any number of ways.)  
↳ we must have categories, containers which we can fill with the water of this messy sense data, to generate understanding.

↳ what if we could wake that up the environment. And change utilise all these categories.

.....

The Transcendental Deduction

/ we must have concept of self

/the world is chaos - full of objects and impressions and sense data that could be cut up in a dizzying amount of ways

Applies to time too  
↳ different speeds of everything around you  
↳ look around yku

The concepts we make using the categories (apple, tree, rock)

"they must be ordered, connected, and brought into relations" - Kant

By observing things (through time and space) we add things to our concepts of "apple, leaf, tree"

THE KEY IS SYNTHESIS

We recognise the world (totality) in its parts/ UNITS, breaking them down(analysis) , then UNIFYING THEM Into a UNITY, SYNTHESISING THEM IN CONCEPTS

even a pillow of patterns - we synthesise either r apart of it, or all of it, into a Unity

..

For us to construct concepts out of experience, we also need MEMORY AND IMAGINATION

"Apprehending identifiable objects requires reproducing in imagination the previously apprehended parts"  
- K, COPU

-an apple, previous representations must be remembered, and recalled in the imagination, to be synthesised  
We can't experience them all at once  
As I turn the apple it changes colour, I must remember the colour on the other side, holding it in the imagination

Abstract concepts too - love, friendship  
-breaking phenomena into parts, recalling them, then unifying them into a concept

THIS IS THE TRANSCENDENTAL UNITY OF APPERCEPTION

We use this for everything.

"a Unity of of consciousness that preces all data of the intuitions"  
"a pure, original, unchanging consciousness" - Kant

" we are conscious a priori of the thoroughgoing identity of ourselves with regard to all representations that can ever belong to our consciousness"

Discursive - running through - Journey  
"the I think must be able to accompany all my representations: for otherwise something would be represented in me that could not be thought at all, which is as much as to say that the representation would either be impossible or else at least would be nothing for me"

To judge and organise any experience, we must be able to carve out a unit to judge, to compare it to other units, to recognize it's qualities, to count it, etc

I then judge that these judgements belong to me

"I can make judgements about one representation, some representations, and All of my representations"

The unity centres everything - space and time are the vessel: judgement, synthesising, and understanding are the process: the categories of splitting up, counting, recognising the qualities - are the RULES, the TOOLS; ; along with our imaginations and memory - to do all this - to survey everything

This is the centre of Kant's project

A priori, universal, required, necessary  
From which everything else can be experienced and understood

..

"thoughts without content are empty; intuitions without concepts are blind"

.....

Reason is pure and how we do things  
It's what makes us human  
The ability to set and achieve ends  
We should respect that ability in others  
Their humanity

"so act that you use humanity, whether in your own person or in the person of any other, always at the same time as an end, never merely as a means"

We set goals and reason how to achieve them  
If you force someone out of the achievement of their own ends, you've gone against the reason of a other

**///We must treat people as ends in themselves ///** -  
The Categorical Imperative  
(Categorical - unconditional, always true)

↳ we must not enforce our will on others, including our will for how they communicate  
↳ systems must be taught in some way  
↳ this should be treated as a baseline  
↳ our usage is fluid  
↳ fluidity increases ambiguity - need a standard everyone can know  
↳ use the principle of DEMOCRACY to ensure there is a standard, yet the standard is fluid and representative of the population of its users

[>] Unicode Consortium enforces their will on others through Emoji  
↳ when consider their powers of influence, as (Google, Yahoo, IBM, Microsoft etc), financial interests, and the necessity of a visual communication system, we see how Emoji form part of a Digital Technocracy / Tech Technocracy  
↳ EvoLang overcomes this by democratising the means of communication

...

Universalising maxims - would it create a LOGICAL CONTRADICTION - a Contradiction in conception

-If we all kill each other or all lie, we couldn't kill, and we couldn't lie - as there would be no people, and there would be no truth  
Cheating, stealing

But also some. Other things -

Internal contradiction with the proposed universal Law itself.

Contradiction between the proposed universal law and another rational obligation that treats reason as an end in itself

We must treat everyone as ends in themselves

..

Our moral ideas should be symmetrical, so as to be universalisable - otherwise there would be chaos

SPACE and TIME  
 \> CONSIDER TIME AND HOW IT APPLIES TO THE LANGS  
 \> flow of logic  
 > sentence progression

/////

### Flow Of Logic:

- sentences show a flow of logic. But they evolved for spoken language, not even written, let alone anything in the visual 3D digital realm we now partly and increasingly live in

In spoken (and signed to a degree) language, sentences also progress in time, and particularly in English, which relies heavily on word order, bounded to the structure of sentences - the ordering of time.

But what if we could present the logical flow in a way that allows us to examine it from any angle or starting point.

Sentences in English are formulated in a way that makes trying to swim upstream or even slightly out from the flow of logic incredibly difficult. You know this if you've ever tried to read a philosophical work, academic paper, or even a simple essay.

writing gave us invaluable ability to put these concepts into visual space, that we can see. There's just so many complicated interrelations and modifications of these basic symbols, that joins them in a way that is completely unfamiliar to the innate structures we use to perceive the world

A world based on **space and time**, entities and emotions, tigers in the grass, berries in the bushes, and fresh kills out on the plains

### Importance of Space and Time:

We are inherently visual creatures - and even the blind think in space and the spacial metaphors of language, and time.

Space is easy to concretise, to divide and categorise, thanks to innate structures that support this visual mode of cognition

And time can encode information, by organising sounds into words.

But the invention of writing, though founded on a visual mode in its pictographic roots, gradually devolved into useful, yet complex transliterations of speech - of the use of time.

Once these characters became abstracted, they lost this natural innate cognitive support, and became difficult - something to be taught and learnt, rather than absorbed.

It seems it may take serious effort in this society, to avoid absorbing spoken language. Our brains know how to process audio and space better than abstractly encoded novel concepts.

Yet reading is something many people struggle into adulthood, and as we know, until recently, most people couldn't read. They could certainly speak and listen. And they could certainly understand pictures, and stained glass windows.

\_\_\_% of people in the UK have dyslexia  
 While dyslexia remains unknown amongst societies that use pictographic writing systems???????

If only we could capture this

EL

...

VRL

Uses space in a new way - 3 dimensions  
 And eventually, with invasive BCIs, will allow us to experience and simulate all our senses - we can already do haptics, visual, and spacial sound

Multimodal ethos

Haptic interface  
 Audio briefly

But the most benefit comes from the spacial possibilities

while we will be focusing on the visual manifestations of this 3d vr space, spacial audio and symbolic and linguistic Haptics provide not just an extra dimension to the experience, but an opening of the world of VR to the blind.

Imagine being blind and hearing an object to the right, then reaching out and feeling it. Feel its size and form. You couple this with feedback from your Haptic interface, either abstract, as a symbol of that gram (like a Haptic 3d braille), but even descriptions of the gram in your native language, if Desired (especially. Helpful for learning these HAPTIC SYMBOLS/HAPTIC GRAMS)

But using space to represent concepts in a way we can traverse and navigate, grams we can look between, and grammar or grams we can understand through the qualities of the VR or MR environment around us, as well as our avatars

Textures (visual and Haptic), colours (or associated Haptic symbols), motion, size, position of objects.

Even abstract forms to represent AI Latent space concepts

...

### Kant's views on Space and Time:

Space is a fundamental understanding. When I hold up a pen to a baby, it can learn what it is because it already understands the concept of "thisness"

Singularity

And multiplicity/plurality - multiple Objects

And distinguishing a singularity or plurality from a/the totality - everything else.

We must understand "everything-Ness" and "the all" - totality / universality

The same for space - now, then, when? Particulars in a totality

We must understand succession, and

(We categorise experience into concepts (a way we hold an idea)

(Concepts allow us to select and organise our experience)

Categories are like containers we fill with experience

# Explaining Red-Blue Dialogical Debates (#94)

/ DIALOGICAL

- \> RED-BLUE DEBATES - get creative
- \> TICK and CROSS mechanism?

\> EXPLAINING DIAOGICAL DEBATES:

- > Socrates cautioned, on the invention of writing, that its non-dialogical form allowed for a certain " "
- > LINK TO HOW SPOKEN LANGUAGE has so much more "flair, nuance, flavour, and ... COLOUR"
  - \> Emojis emerged as an answer to this gap
  - \> explain emoticons > emoji history super briefly
  - > explain Danesi/Evans - Emoji fulfil these 6 elements that spoken language communicates, that are lost in the omission of paralinguistic and kinesic (body language) features

- \> later, take this thread (and even repeat the on screen visual quote) of "flair, nuance, flavour, and COLOUR" or "flair, nuance, and colour".... "this... flavour..."
- > and reprise it when introducing VRL

/ Analytic and Synthetic - like our process of understanding of the world, according to Kant

/ Can map to the Double Diamond Design Process model

# Interface - control of the VR language (#95)

/ Tutorial uses eye tracking and bci confusion states measuring

How does the language use a BCI? How does the BCI interface work? How do you use the VR language?:

/Eye tracking chooses where to place objects in the sentence - mockup

\> dot matrix of possible places to put next item, selected one

(stared at and focus and imagine "pushing" with MI (motor imagery)),

>It is highlighted

\> popup dialogue of word insertion

\> at start categories - radial - stacking

\> categorised based on common usage in similar contexts using Neural Network

\> eventually just BCI + Neural Network (AI) detects imagined gram

\> can create abstract synthetic grams based on merging of concepts

\> alongside ask for Latent Space representations - displayed - can choose appropriate one

\> next time it comes - display previously used Latent Space grams first

\> develop own language of Latent Space grams

\> eventually get shared

\> global "popular" section

\> leads to creation of new grams

\> concepts move from Latent Space to human Ideaspace (become common human concepts)

While designing VRL user interface:

```
/ Sound-focus mode - all visible attributes converted to AI sounds  
\> already doing the training mode thing
```

```
/ can synthesise grmas for verbs and adverbs too  
\
```

```
/ ALL main categories of word "object:verb:adjective:adverb" - can utilise grams from a  
global (inter-category) set of categories:
```

```
\> Concrete  
  \> places  
    \>  
      > Abstract  
      > Relationship / Auxillary  
      > Attributes/Senses  
      > People  
      > Activities
```

```
\> e.g. gram for "big cat" could be used as an adverb (by attaching to verb with single,  
outward-facing line), to mean "ferociously, like a big cat"
```



## Why is it needed? (#97)

/need for it = emojis evolved to fit our need for expressing the paralinguistic cues lost in textual communication - a combination of infographics (notably, ISOTYPE - International System of Typographic Picture Education, designed to communicate complex information and statistics to a broad audience), emoticons (originally proposed as "joke markers" on an MIT online bulletin board), and Manga - emojis were designed by Japanese designer Kurito to overcome the problem of communicating complex information from the budding mobile Internet, on tiny displays. Weather forecasts couldn't be written in type, so use symbols instead.

Free play mode:  
> no rigid structure, just using all the tools available to communicate a feeling, idea, concept, experience  
/ Latent Space 3D forms  
> modify on the fly - "zoom in on this bit - make it smoother and more happy feeling"  
> spectrum axes example from Context Report  
> do one for object  
  
/ we could communicate complex emotions or stories using mini games/simulations

> to express an emotion, we let the other play an AI-generated mini game  
—USE EXAMPLE PAIR THAT MET ON EVOLANG - - - -

"how was your day?"  
> frustration = you HAVE to complete this puzzle to continue speaking  
> calm = float a ball from one side of smooth waves on screen to another  
  
> or a game you play against each other  
> recently talking to some racist, sexist Finnish guy on Digital Eurovision party I organised in VR, he was touting the power and simplicity of settling an argument with a fist fight. You take it outside, you fight clean, and you shake hands when it's over. The best man won.

What if you could do this in VR or AR, with games?

It needn't be VR - take chess, for example - every move communicates something to the other player, builds tension and suspense, and resolves it, all using a system of coded symbolism with mutually understood meaning. It is a kind of language.  
  
Now take an argument to VR  
Or a debate  
The avatars are you, the game can suit the argument, or change through new levels as you change subjects

Perhaps you/Lin feel neglected in your relationship, due to your boyfriend Dan's new job and blossoming social life - you want to explain the importance of prioritising in your relationship. You place 7 grams in front of you, and the other has 30 seconds to pick 3 to keep, and at least 1 you specify, or they lose your "Lin feeling cared for points" (game bar decreases)

Maybe Lin reluctantly plays the game, and actually finds herself understanding Dan's point of view a little more, as well as her own priorities, and how to better manage them - including Dan in the equation.

She counters, however, that she understands the importance of this, and she apologises for making Dan feel this way, but she wants him to understand why she spends so much time away at the moment.

She initiates a 3D VR simulation for Dan, in a combination of their favourite/characteristic visual styles that represent their personalities/ experiences mixing (Pixel art / brushstrokes); in which he has opens a door to a board room for his first meeting at his (her) new job. He can feel heat in his face from the BCI or Haptic interface, and feels his sweaty hand slip a little as he grapples with the door handle.

A kind, voice that actually sounds like it's coming from behind him, says "let me get that for you - I feel like the handles in this place were designed by an octopus or something"

He laughs. He instantly feels a little bit better. Wait, as I actually nervous for this dumb exercise Lin's doing for me?

In this short five minute simulation, this kind stranger becomes his first friend. Smiles and realistic eye contact (thanks to eye tracking), fast forwards to stifled boardroom giggles, and shared glances at the boss' ridiculous demands, all converge toward a genuinely funny chat in the kitchen, using an AI bot that understands Dan and what he finds funny, but also relaxing. Jokes about

You: Oh, our boss? Don't worry, they're like a cup of coffee without any caffeine. All bark and no bite! They may seem intimidating at first, but underneath that tough exterior lies a teddy bear in a power suit. Just keep some honey handy, and you'll be fine!

New chat

Model: Default (GPT-3.5)

User  
Give me examples of jokes someone would slip into conversation in a chat about the demanding boss, at work with a new-coworker, to sooth them. The jokes are integrated seamlessly into the conversation snippets you generate, and are funny and relaxing, using imagery that is funny, while also calming

3 / 3

ChatGPT  
Chat Snippet 1:

New Coworker: I have to say, our boss seems quite demanding. I hope I can keep up with their expectations.

You: Oh, our boss? Don't worry, they're like a cup of coffee without any caffeine. All bark and no bite! They may seem intimidating at first, but underneath that tough exterior lies a teddy bear in a power suit. Just keep some honey handy, and you'll be fine!

New Coworker: Haha, that's a great way to put it! I'll remember the honey trick. Thanks!

Chat Snippet 3:

New Coworker: Is it just me, or does our boss have an uncanny ability to detect the

smallest mistakes?  
  
You: Oh, you've noticed that too? Our boss is like a ninja detective, equipped with a magnifying glass and a sixth sense for typos. But hey, look at it this way: every mistake they catch brings us one step closer to perfection. Just imagine our office as a puzzle, and our boss as the puzzle master. We're all part of their grand quest for flawlessness!  
  
New Coworker: Haha, I never thought of it that way. Let's embrace the challenge and become masters of this puzzle!

Remember, laughter is a great way to ease tension and build rapport with your new coworker. These lighthearted jokes should help create a relaxed atmosphere while acknowledging the demanding nature of your boss.

Chat Snippet 2:

New Coworker: Is it just me or is (boss) watching us like constantly?

You: Ah, the legend of our boss's doppelgänger! Rumor has it they mastered the art of time travel and possess the ability to duplicate themselves. But hey, think of it as having your own personal guardian angel, watching over your every move. Just remember, even if you feel like you're under constant surveillance, you can always outsmart them with your ninja-like stealth skills. It's like a real-life game of hide-and-seek!

New Coworker: I'll have my camouflage gear ready for round 2.

At the end of the chat, Dan/Lin's new friend invites him out for a drink after work, and it slowly all clicks into place.

"OK, Lin," he says, humbled and a little emotional from the experience. This is the first time he has connected so intimately with Lin, with her experience, and her life, her self - and in that moment, he realises they can get through anything together.

He reaches out to give Lin a massive VR hug, that they both feel - outside, and in.

.....  
> AI - generated video  
> show example

> AI pictures - we all know

> Avatar Latent Space example - spectrum