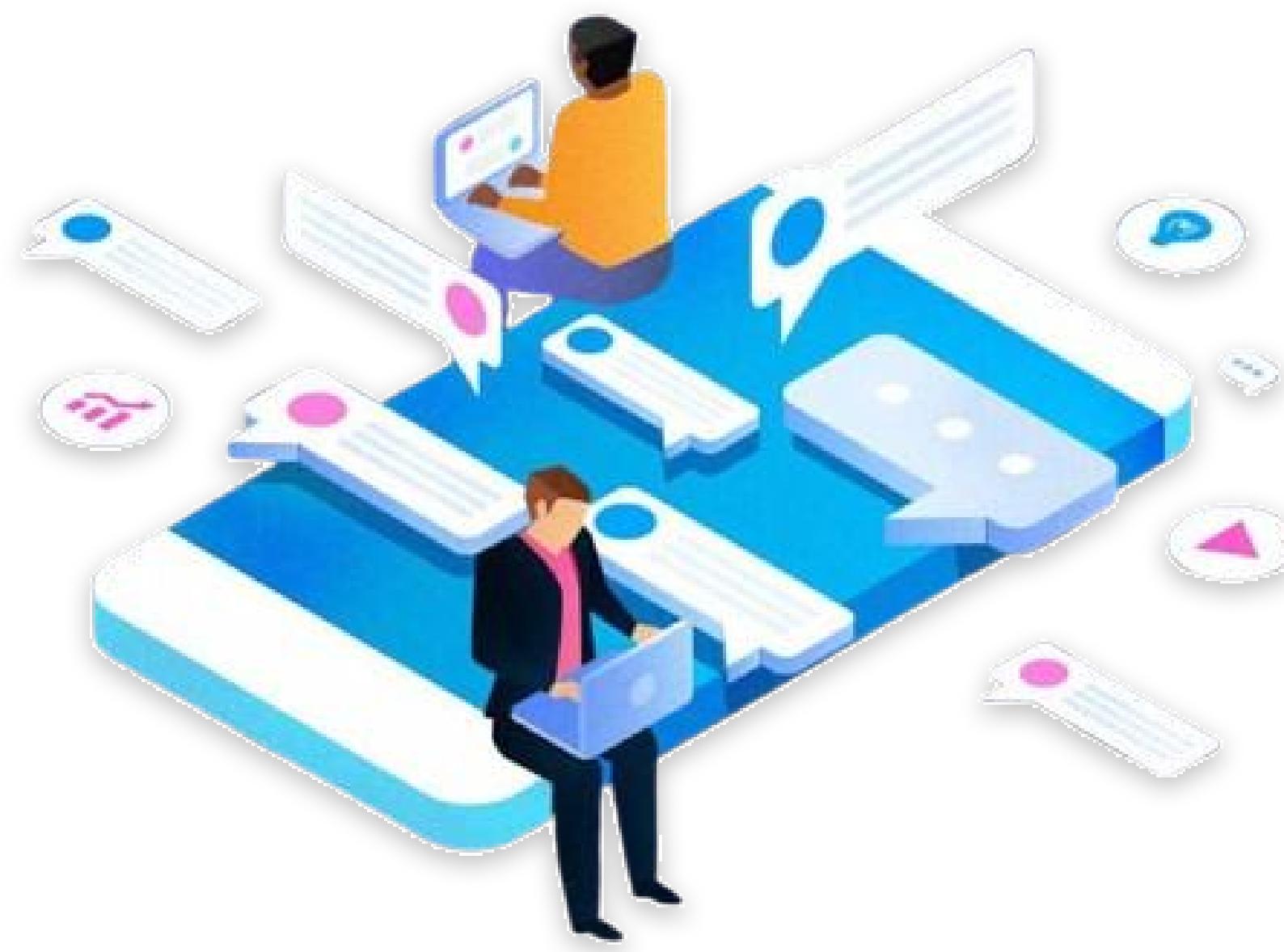


Instant Messaging

Namrata & Maanya



Gamified Interaction - Why?

What better way to give the overview of Instant Messaging than to show it through a PPT at an instant. We all know a basic idea of all the major landmark inventions in the history of text communication. Since it is an Interaction Design class, we wanted our PPT to be interactive and engaging.

Major Inventions

1. Hieroglyphics

- Smoke Signals: Used by ancient cultures, including Native Americans and Chinese soldiers, smoke signals were one of the earliest forms of long-distance communication, **conveying messages through visual signals**.
- Hieroglyphic writing has two main characteristics: **objects** are portrayed as **ideograms or pictures**, and the picture signs have the **phonetic**, or sound, value of the words represented by the objects. Thus hieroglyphs are not pictures only: they can be spoken, as are words written in an alphabet such as that of English.
- Transition from Hieroglyphics to Language



3200BCE -15TH
CENTURY BCE

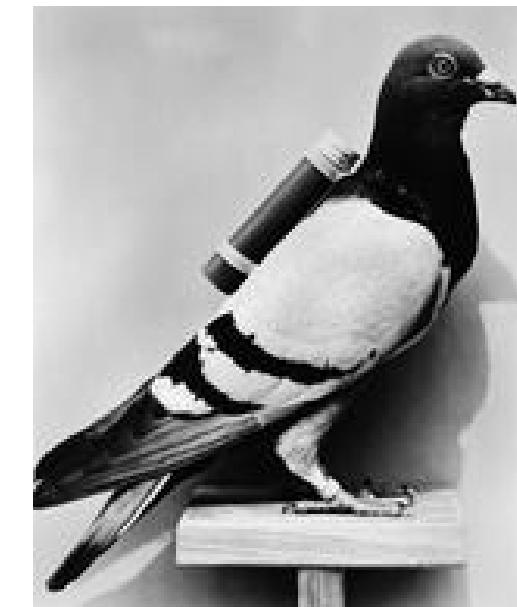
Transition from hieroglyphics to Language

- Hieroglyphics were complex and limited to a few. Their complexity made it **cumbersome for everyday use**, as it required extensive training to read and write, limiting literacy to a small elite class of scribes and priests
- Scribes resisted change to maintain their power. The scribal profession was **highly selective**, creating a **monopoly on literacy**. This exclusivity discouraged the development of a simpler writing system that could be used by a broader audience
- Languages evolved, making hieroglyphics **less suitable**.
- New scripts emerged, but the transition was challenging.
- Other cultures influenced the shift to alphabetic systems.
- **Reference** - Transition from Hieroglyphics to Language



2. Carrier Pigeons

- Carrier Pigeons: These birds were trained to **carry messages over long distances**. This method was notably used in military contexts, especially during World War I and II, where they played a crucial role in relaying important information.



3200BCE -15TH
CENTURY BCE

3. Written Communication

- **Letters and Chits:** The use of written messages dates back to the earliest civilizations, with the first known letters appearing around 255 B.C. as part of organised postal systems. This laid the groundwork for more formalised communication methods.
- The Invention of the **Printing Press:** The printing press revolutionized communication and knowledge dissemination. It **increased access to information**, fueled the Renaissance, and shaped social and cultural developments.



19th CENTURY

4. Technological Innovations

- **Telegraph:** Invented in the 1830s, the telegraph revolutionized communication by allowing messages to be sent electrically over long distances using Morse code. This marked a significant shift from physical message delivery to electronic transmission.
- **Radio and Television:** The rise of broadcast media and its influence on public communication.
- **Telephone:** Patented by Alexander Graham Bell in 1876, the telephone further transformed communication by enabling real-time voice conversations over distances.
- **Text Messaging:** The first text message was sent in 1992, marking the beginning of mobile text communication. Texting has since become a dominant form of communication, especially among younger generations.



Radio

TV

5. Email - A Game Changer

1. Email revolutionized communication: making it more **faster, cheaper, and more versatile**. Email enabled near-instantaneous communication, allowing messages to be sent and received almost immediately, regardless of geographical distance. This speed contrasted sharply with traditional mail, which could take days or weeks to deliver. As a result, email became the preferred method for both **personal and professional communication**, significantly enhancing productivity and responsiveness in various contexts[
2. Key benefits:
 - Speed & Efficiency
 - Cost-Effectiveness
 - Multimedia capabilities & Organization
 - Sending an **email is free** and can **reach multiple recipients simultaneously**, making it a cost-effective solution for **businesses globally** and **individuals** alike.
 - Unlike traditional letters, which were limited to text, email allowed users to easily include attachments such as images, documents, and videos.
3. Challenges: information overload & Email etiquette. The volume of emails people receive daily can be overwhelming, leading to issues with managing inboxes and maintaining effective communication practices. This necessitated the development of guidelines for **professional email etiquette** to ensure **clarity and respect** in digital correspondence
4. Evolution of Email: Text-based to Multimedia rich (Images, Videos, Documents)
5. Reference - Email - Game Changer



1940s - 1980s

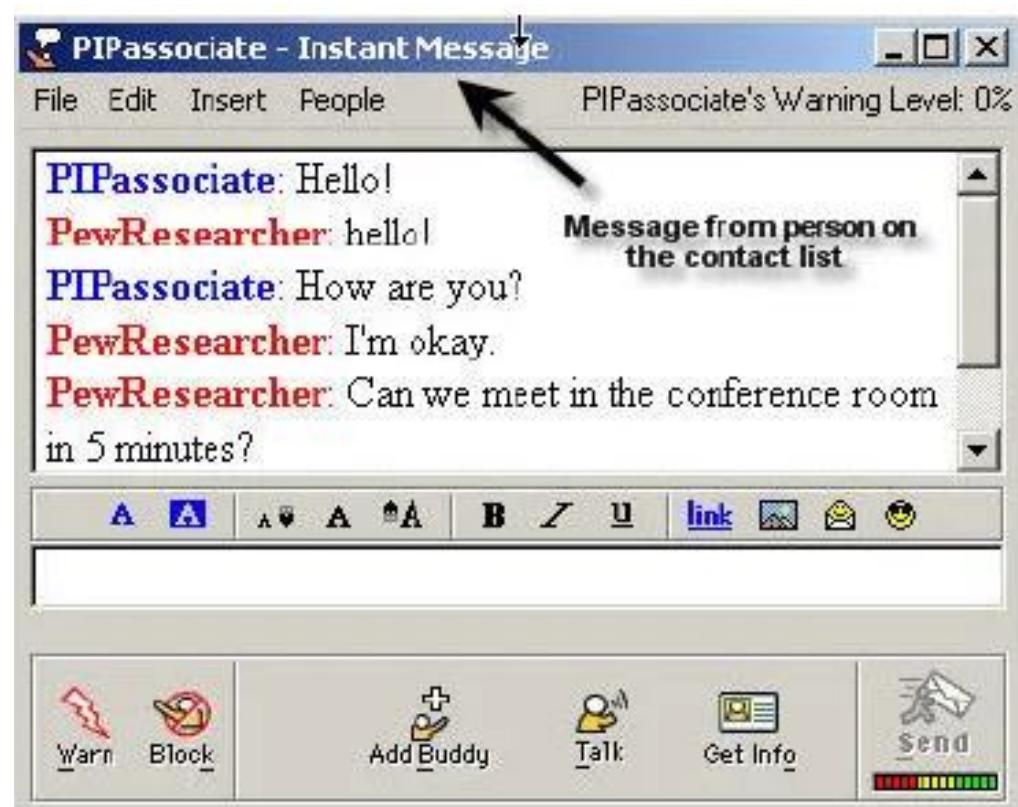
6. Instant Messaging

Instant Messaging: The rise of the internet led to the development of instant messaging platforms. ICQ was the first standalone instant messenger, and services like AIM (AOL Instant Messenger - Software) popularised the concept in the late 1990s. The transition to digital communications has been driven by the need for faster, **more efficient**, and **cost-effective** ways to connect with others. As technology continues to evolve, the reliance on digital communication is expected to grow, making it an indispensable part of modern life and business.

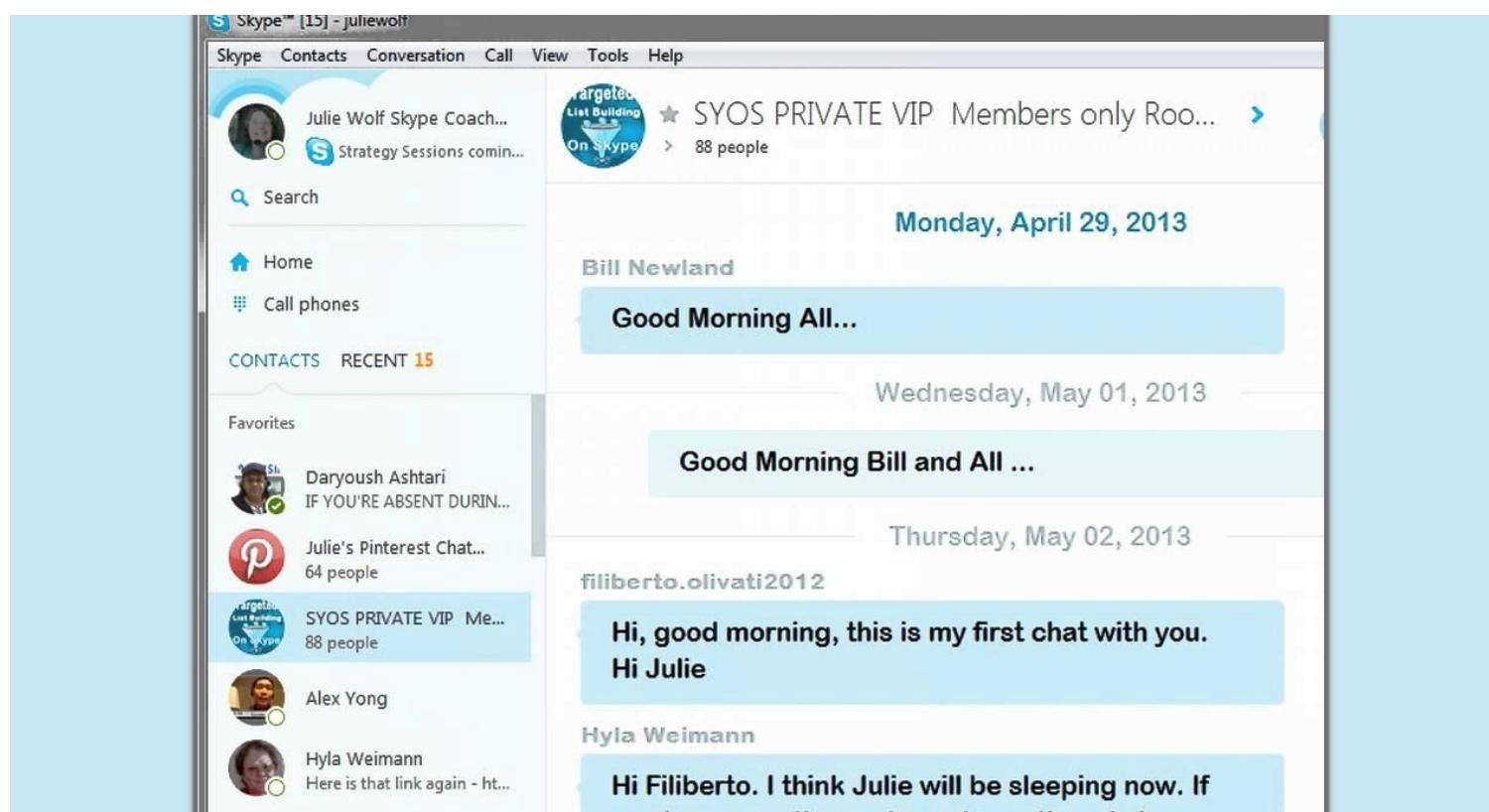
Reference - [Need for Digital Communication](#)



1990s - PRESENT



Oldest text Messenger



Skype



WhatsApp, i message, & Facebook Messenger

Comparisons we drew from Hieroglyphics and Modern day Emojis

Beyond basic emotions, hieroglyphs convey more nuanced feelings through combinations of symbols and context. For example, a person with a heart-shaped symbol over their head might express joy and love, while a person with a heart-shaped symbol over their mouth might represent a secret or hidden affection.

The use of hieroglyphs to express emotions was not always consistent or standardized. Different periods and regions of ancient Egypt might have had variations in the symbols used to convey specific emotions. However, the underlying principles of using visual representations to express feelings remained consistent.

- **Purpose and Function:**

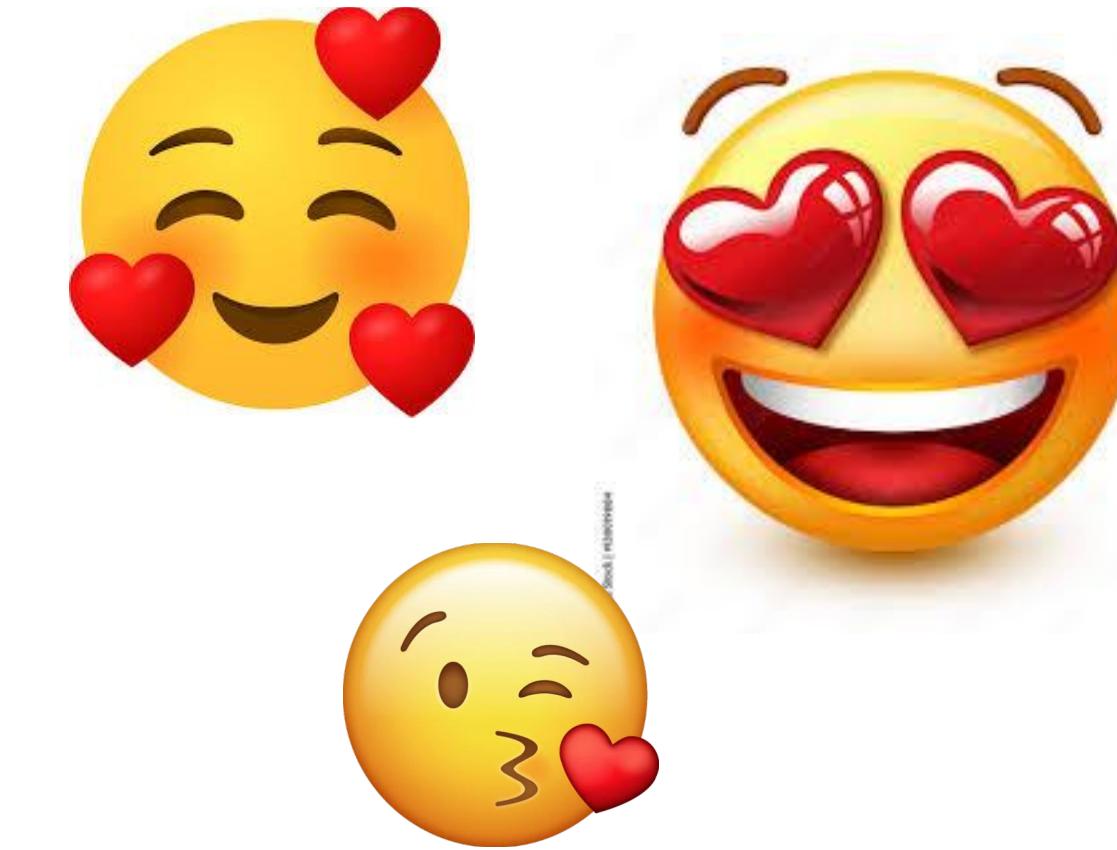
Both hieroglyphics and emojis are designed to convey information visually. Hieroglyphics served both as a means of communication and a form of art, often representing complex ideas and narratives. **Emojis**, on the other hand, are designed primarily for **emotional expression** and **quick communication**, often used to supplement text and convey tone or sentiment.

- **Universality and Accessibility:**

While hieroglyphics were limited to a specific region and culture, **emojis** have a **global presence** and are integrated into digital platforms accessible to almost everyone with a smartphone or internet access.

- **Evolution of Visual Symbols:**

The transition from hieroglyphics to emojis shows a return to the visual in an era dominated by text. Just as hieroglyphics were used to **bridge gaps in literacy**, emojis help bridge gaps in language and culture, creating a universally understood visual shorthand.



Shift from Serif to Sans-Serif

the shift from serif to sans-serif fonts in instant messaging is primarily driven by considerations of **readability**, **aesthetics**, **accessibility**, and **global reach**. As technology continues to evolve, it is likely that new font trends will emerge, but sans-serif fonts will likely remain a popular choice for digital communication.



Cultural Aspect



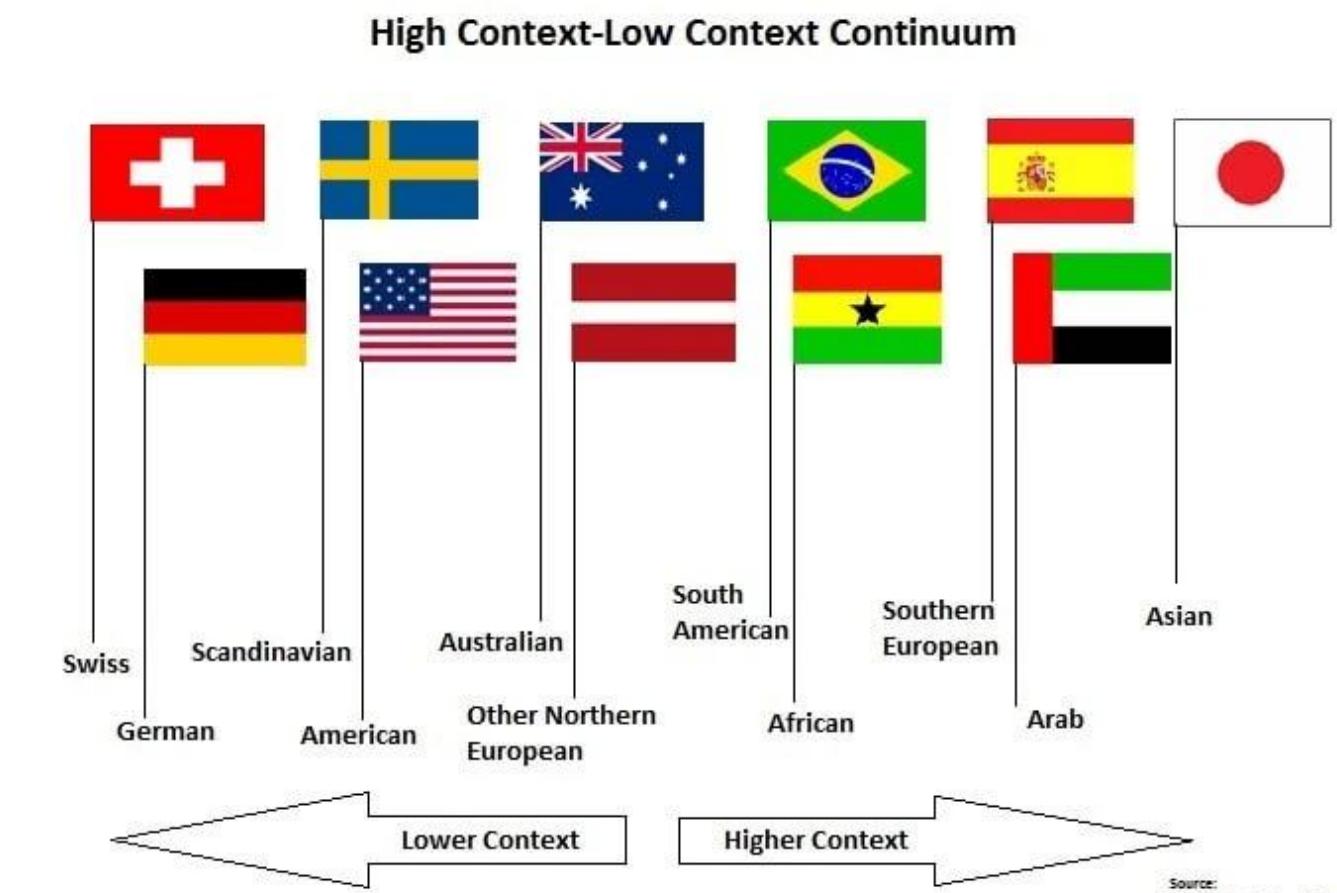
High-context cultures will use communication that **focuses on underlying context, meaning, and tone in the message**, and not just the words themselves.



Low-context cultures expect communications to be **explicitly stated** so that there's no risk of confusion, and if a message isn't clear enough, it will slow down the process of communication.

How people communicate with one another varies wildly from culture to culture. In our fully globalised times, it is more important than ever to understand these differences and where they come from. One way to understanding is through the high and low context culture framework. The difference between high and low context cultures is meant to highlight differences in **verbal and non-verbal communication**.

The population is usually diverse, and focuses on the individual, instead of the group. Since there are so many differences within a low-context culture, communication must be basic enough to allow for as many people to understand it as possible. **Text communication tends to be straightforward**. (also at the same time we need to keep in mind that Cultures can't be organised strictly into either high or low context. Most cultures fall between the extremes on the spectrum and can share characteristics of both high and low context traits to varying degrees.)



Holograms - The Anywhere Door To communication

We thought that since in text communication, many a times, messages are misconveyed because the users can't see the facial expressions of the sender and their tone of voice, what if we can have a text based messaging interface that showcases a hologram of the sender with their facial expressions and mood visible when the message is sent.

Holo-Interface with Adaptive AI

- Description: A holographic communication interface that uses adaptive AI to customize the **display and interaction based on the user's needs**. The AI would learn from user behavior and automatically adjust text sizes, fonts, and colors. For dyslexic users, it could use dyslexia-friendly fonts, **adjust letter spacing**, and provide a distraction-free background.



Features:

- **Voice Activation and Control:** Users can interact using voice commands to write, read, or navigate the interface.
- **Text-to-Speech and Speech-to-Text Conversion:** Real-time conversion of written text to speech and vice versa, with voice modulation options for different accents and languages.
- **Dynamic Text Adjustment:** Text that auto-adjusts in real-time as it is read, with options to increase spacing, change background colors, or modify font types based on individual preference.
- Reference - Futuristic ideas

Use of Gemini AI and ChatGPT to restructure and concise our information.

