

Subjective Technologies

An Exoskeleton for the Mind

Technology Design from a Trans-Humanist Perspective
0-Input Technology, A Paradigm Shift in Human-Machine Interaction

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Abstract—This paper introduces Subjective Technologies, an innovative approach to human-machine interaction. Subjective Technology, often referred to as Subjective Artificial Intelligence, represents a significant departure from traditional Third-Person technologies, embodying a transformative paradigm that seamlessly integrates technology with the human mind and in a non-invasive manner. This exploration delves into the fundamental design principles, practical applications, and profound implications of technology as an *exoskeleton for the human intellect*.

In the course of human evolution, individuals have consistently developed tools to simplify tasks and compensate for the inherent limitations of the human body. For instance, early Homo sapiens crafted stone-tipped arrows to enhance their hunting prowess and ensure survival. This process underscores the human capacity for self-improvement, manifesting as increased comfort and augmented survival skills. Moreover, it demonstrates our innate ability to evolve and transcend the limitations of "third-person" tools, which frequently demand extensive training and skills not available to everybody. Subjective Technology empowers individuals to replace such tools that emerged from skills deficits with self-enhancements, aligning with the course of human progress.

Subjective Technology endeavors to augment human intelligence, rendering a paradigm of 0-input technology. This design fosters an unparalleled level of user comfort and endows individuals with superhuman capabilities, resulting in unprecedented levels of efficiency across various domains. These advancements are poised to significantly impact economics, education, science, and overall societal development. Moreover, Subjective Technology aligns closely with the principles

of transhumanism, fostering the convergence of humanity and technology towards an era of augmented potential and boundless possibilities. In this framework, traditional third-person technologies (tools) are replaced by virtual modifications to the human body. As an illustrative example, concepts like bank accounts, currency, and cryptocurrencies are supplanted by virtual glands located on the hands and shoulders of the user. These glands enable unconscious, real-time execution of underlying energy transactions for the exchange of goods and services. Through this transformation, the conventional concept of money becomes obsolete, as individuals employ VirtualGlands for unconscious, rapid, real-time physics-based thermodynamic energy calculations.

Subjective Technology is a generic concept that can be implemented using a combination of technologies that used to be separated, including Machine Learning, Computer Vision, and Mixed Reality, serving as just a few examples of its vast potential for shaping the future of human-machine interaction and society at large.

Keywords: Subjective Technology, Subjective Artificial Intelligence, Human-Machine Interaction, 0-Input Technology, Transhumanism, Augmented Intelligence, Virtual Modifications, Superhuman Capabilities, Efficiency, Economics, Education, Science, Virtual Glands, Virtualized Human, Currency Replacement, Virtual Body Parts, Machine Learning, Computer Vision, Mixed Reality, Evolution of Technology, Self-Improvement

1. INTRODUCTION: BACKGROUND AND EVOLUTION OF ARTIFICIAL INTELLIGENCE

Artificial intelligence (AI) is a dynamic field within computer science that focuses on creating intelligent machines distinct from human or animal intelligence. AI technologies find widespread use in industries, government, and scientific research, impacting our daily lives through applications like web search engines, recommendation systems, and speech recognition systems. In 1956, AI emerged as an academic discipline, but it experienced cycles of optimism and setbacks until the transformative rise of deep learning in 2012. AI encompasses various sub-fields with goals including reasoning, knowledge representation, planning, and robotics, ultimately aspiring to achieve general intelligence. Researchers employ diverse problem-solving techniques, drawing insights from psychology, linguistics.

Subjective AI operates under a "user-first" principle, ensuring that personal data remains under the user's control, it is only known to the user.

Adopting a trans-humanistic perspective to software design renders a 0-Input technology, paradigm and design framework which avoids the need of the user data from third parties.

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consume users. Users consume external public data but data does not consume users.

Subjective AI is designed to be an extension of the user's mind. Users maintain control over their technology, ensuring that it follows their intentions and objectives. Subjective AI doesn't aim to surpass human intelligence. Instead, it enhances human capabilities, making users more intelligent and efficient within their areas of expertise and beyond. Subjective Artificial Intelligence empowers individuals without the fear of an uncontrollable super intelligent AI. Subjective Artificial Intelligence is an exoskeleton for the mind working mainly for everybody and also including people with natural cognitive problems. Subjective Artificial Intelligence empowers everybody up, shaping a positive equality and a real feeling of inclusion in society.



Figure 1: A Modified Hand. This image embodies the essence of Subjective Technologies. Instead of relying on traditional third-person tools, we transform the human experience into a virtual realm where tools become an inherent part of our being, eliminating the need for a learning curve in tool operation.

II. MOTIVATION FOR SUBJECTIVE TECHNOLOGY

The motivation for the development and adoption of Subjective Technology stems from a recognition of the inherent limitations and difficulties posed by traditional third-person technology systems. These limitations, coupled with the evolving needs and preferences of users, have spurred the evolution of technology towards a more user-centric, intuitive, and efficient paradigm. The motivations include:

User-Centric Approach: Traditional technology, from early personal computer terminals to contemporary user interfaces and natural language assistants, often requires constant user input. This places a significant burden on users, necessitating continuous learning of new commands, languages, buttons, forms, and even programming languages. Subjective Technology seeks to prioritize the user's experience, alleviating the burden of learning complex interfaces and enabling technology to adapt seamlessly to the user's needs.

Minimized Learning Curve: Many conventional technology systems demand substantial patience and cognitive skills from users, often discouraging individuals with their steep learning curves. Users frequently find technology more cumbersome than helpful. Subjective Technology addresses this issue by eliminating the demanding learning curves associated with traditional technology, allowing for a more user-friendly experience.

Writing Technology: Writing, the earliest form of third-person technology used for expressing and passing on knowledge, remains a fundamental medium for sharing information. However, it comes with its set of challenges. Writing demands significant dedication, cognitive skills, patience, and the ability to read, understand, and internalize.

knowledge. Users can often find themselves repeatedly reading the same paragraphs without grasping the explicit meaning. Despite their best efforts, most will not achieve the level of understanding of a subject as its original author, exemplified by the fact that no one comprehends the theory of relativity better than Einstein himself. Subjective Technology aims to transcend these persistent issues, significantly enhancing the efficiency and user-friendliness of technology.

Overcoming Long-Standing Problems: Subjective Technology represents a groundbreaking shift from the limitations of traditional third-person technologies. It strives to address long-standing issues in the world of technology, ushering in unprecedented levels of efficiency and user satisfaction.

Knowledge Enhancement: By minimizing the barriers imposed by traditional third-person technologies, Subjective Technology empowers users to access, understand, and apply knowledge more effectively. It turns technology into an organic extension of the user's cognitive processes, enhancing the user's intellectual capabilities and promoting a post-education society.

In summary, the motivation behind Subjective Technology is rooted in a fundamental shift towards user-centric, efficient, and empowering technology. By alleviating the burden on users, eliminating steep learning curves, and transcending the limitations of traditional technology, Subjective Technology revolutionizes the human-machine relationship, making technology an effortless, intuitive, and harmonious part of daily life actively paving to achieve the goal of the mission of Democratize Intelligence To Promote Inclusion in Society.

III. The Emergence of the 0-Input technology concept

The fundamental difference between the parts of your natural body and external objects lies in the way they operate and integrate with your body. When you move your arm, for instance, you don't need to consciously provide explicit instructions like "arm, move up 45 degrees" or "arm, bend 90 degrees." It happens naturally. The reason behind this is the intricate connection between your body and brain. The nervous system seamlessly connects every part of your body, ensuring that every cell knows itself and shares a memory space with your greater self. Simultaneously, these cells learn from the input of their immediate context, which includes input from other parts of your body and other cells as well.

This interconnectedness among your body parts and their ability to learn from one another in the shared context of your consciousness are a critical part of your body's functioning. This is evident when individuals who lose a limb still report feeling as though the lost limb is attached. It's because the connections and learned behaviors related to that limb persist within their body's memory. Intriguing experiments have demonstrated this phenomenon. For example, scientists have conducted tests in which subjects are made to believe that a rubber hand placed on a table is their own hand by stimulating their visible rubber hand and the real one alike which is hidden and the rubber one which is visible to them in the same way. When the rubber hand is subjected to harm, such as being struck with a hammer, the subjects feel pain as well as if it were their real hand being struck.

This fundamental distinction underlines the difference between the parts of your body and external objects, such as the tools we use. For external objects to be incorporated as a part of your body, they must be capable of knowing themselves and learning from the input they

receive from other body parts, contextual information, and other external objects.

To illustrate, consider the example of a wig. If a wig is attached with glue and you pull on it, there won't be any sensation of pain. However, if you somehow stick the wig over your real hair, if you pull it, you will experience soreness but the soreness was caused from an object that is external. In this way an external object becomes subjective to yourself in terms of triggering the soreness sensation.

We can define this relationship as follows:

“object_1 is subjective to object_2” when “object_2 can fully operate without requiring conscious input from object_1”

This definition allows us to bridge the gap between traditional third-person technologies and Subjective Technology, where external objects become an integral part of one's subjective experience. The objects can be either `PhysicalBodyPart(s)` or `VirtualBodyPart(s)`. We will delve into those in the next pages.

IV. PHILOSOPHICAL MODEL

The 0-Input characteristic of Subjective Artificial Intelligence extends beyond mere device interactions; it applies to the entire universe which responds to your input with physical properties and behavior. Even a seemingly simple action like moving a chair with your hand constitutes an input to the universe. In an ideal 0-Input state, this technology harmoniously fulfills both physical and mental needs, liberating the user to explore the profound depths of their inner self, gradually expanding the boundaries of their identity, or `MySelf`. This concept is akin to a prisoner using pillows and blankets to

create a decoy in their cell, masking their escape from the watchful eyes of his guards of ego. In this way the user is able to know himself.

The following is the philosophical model of the subjective interaction we propose.

- ***Self-Awareness:*** You possess knowledge of MySelf and your inner workings.
- ***Contextual Understanding:*** You comprehend the context in which you exist and operate.
- ***Purposeful Interaction:*** You engage with this context and its various elements using your intelligence.
- ***Input Emission:*** You provide input to various entities within this context, utilizing your cognitive abilities.
- ***Mutual Learning:*** These entities, in response, learn from the combination of your input, your specific context, and their own individual context.
- ***Outcome Evaluation:*** You receive results from this interaction, which can be either positive or serve as a learning experience.
- ***Repeat whole process*** in the context of the Subjective Thermo-Currency we introduce in the following pages, as a positive side-effect of this technology, the concept of a positive feedback is the energetic exertion reduction of the user and all his BodyParts.
- ***Iterative Process:*** This process continues in a perpetual cycle, fostering a continuous loop of interaction and learning.

This system can be likened to a parallel chain of egos, as it ensures that the need for user input gradually decreases to zero by calculating ponderated context subtractions in a fuzzy hash that maps to recorded using actions within the realm of his subjective experience.

In this way third-person technology instead of relying on continuous user input it can turn

to a subjective approach which allows for a one-time input and then subsequent user input corrections, enabling it to assimilate existing technology written in a third-person perspective and adapt it to subjective purposes.

V. DECONSTRUCTING THIRD-PERSON TECHNOLOGY

To appreciate the revolutionary nature of Subjective AI and spot the difference by itself, one should juxtapose it with conventional third-person technologies in order to reverse engineer both approaches towards technology design. Traditional technology, marked by an intricate interplay of components and explicit user commands, resembles an intricate artwork.

Yet, as each layer of complexity is removed component by component, it eventually becomes a blank canvas with no meaning until you paint something in it. The remaining is yourself and a separate third-person blank canvas entity in which you focus.

In contrast, Subjective AI adheres to a different paradigm. Deconstructing Subjective AI reveals that removing its components leaves only the core framework intact— “The User” with nothing else than himself. Subjective AI is designed to empower individuals, serving as an intelligent, adaptable extension of their cognitive processes. It functions as an “exoskeleton for the mind”, allowing users to harness its capabilities and expand their potential, all without imposing the need for extensive conscious input.

The profound relationship between Subjective AI and Transhumanism is grounded in a shared vision of transcending human limitations. Subjective AI empowers individuals by bridging the gap between human cognition and technological augmentation, creating a future where the lines between human and machine intelligence blur, and human potential becomes boundless and self-improving.

VI. REAL INTELLIGENCE WORKING FOR THE USER

The adoption of Subjective Technologies signifies a pivotal transformation from the conventional technological landscape. Current technology, as it stands, is largely user-input-driven, demanding an array of inputs from textual commands, console actions, and graphical interfaces with buttons, forms, usernames, passwords, and intricate puzzle verifications, right up to the latest natural language processing AI assistants and complex programming languages that often necessitate formal education to develop custom technology. The introduction of voice recognition technology represents a notable advancement in user-machine interaction.

However, current third-person technology frequently leads to challenges that are as complex, if not more so, than the problems they intend to solve. These issues are inherent to the technology itself and rarely exist in the real world. According to our philosophical framework, the core distinction is that all body parts, both `PhysicalBodyParts` and `VirtualBodyParts`, have the capacity to know themselves. In stark contrast, a conventional computer does not possess self-awareness.

What does this lack of self-awareness mean in practice? It's exemplified when a computer repeatedly displays the same error to a user who is then compelled to scour various

websites for solutions. This has improved to some extent with the advent of GPT technologies, but the problem remains. In the spirit of thinking with a fresh perspective, consider a computer that endlessly repeats the same error as it might seem fundamentally lacking in intelligence. This issue is an inherent product of the third-person perspective on which conventional software is built. Adopting Subjective Technology and integrating a standard PC as a `PhysicalBodyPart` of yourself empowers the computer to know itself. This is achieved by constantly capturing snapshots of its own state and recognizing when it is repetitively showing the same error. Crucially, it then autonomously determines the solution to the problem.

This principle parallels the experience of looking at yourself in the mirror and realizing that your hair is untidy, leading to the instinctive use of a comb to rectify the situation. When a `BodyPart`, whether it is a `PhysicalBodyPart` or `VirtualBodyPart`, identifies a problem, concern, or a potential improvement and proceeds to autonomously execute a solution, this is known as a `KnowledgeHook`. `KnowledgeHooks` represent the foundational abstract knowledge units of Subjective Technology. Importantly, they operate within the realm of the subject itself in collaboration with a diverse array of `BodyParts`.

Consider the following illustration: if you have attached a camera as a `PhysicalBodyPart`, conventional third-person technology processes the image captured by the camera. In contrast, Subjective Technology focuses on the state of each pixel color receptor and the pixel receptors as well, rather than the signal of the external image as a whole. In this way the camera would know that it is not functioning in the correct way because it is not able to see itself. It delves into

the hardware and the processing of coordinated combinations of changes. This is akin to focusing on the individual cells in your eye that change their state in response to sets of combinational events, instead of focusing on the entire image. KnowledgeHooks are designed to work with the subjective experiences of BodyParts, rather than merely responding to external stimuli.

In the upcoming sections, we will delve into two categories of KnowledgeHooks, namely KnowledgeHooksLearned and KnowledgeHooksPredefined, shedding light on the intricacies of these pivotal elements within the Subjective Technology framework.

VII. SUBJECTIVE TECHNOLOGY DESIGN, PROGRAMMING META-MODEL ENTITIES

From our Philosophical Framework grounded on Transhumanistic principles the following system components are detected.

Myself, BodyPart, PhysicalBodyPart, VirtualBodyPart, VirtualGlass, Snapshot, Context, ContextStack, KnowledgeHook, KnowledgeHookLearnt, KnowledgeHooksPredefined, UserInput, UserInputSequence, KnowledgeHookStore, MyKnowledge, Key, ContextSubtraction, Regex

MySelf: Myself refers to the primary user or individual who integrates Subjective Technology. The purpose of Myself is to act as the core agent within the system, facilitating interactions and the flow of information.

PhysicalBodyPart: PhysicalBodyParts are tangible components of a user's body, such as limbs or sensory organs. They are directly linked either attached or wirelessly to the user and are responsible for perceiving and interacting with the external environment.

VirtualBodyPart: VirtualBodyParts are non-physical components within the Subjective

Technology system, designed to perform tasks or functions. These are equivalent to software components and complement.

PhysicalBodyParts. VirtualBodyParts can be seen on users by those who wear Augmented Reality glasses by example. VirtualBodyParts provide an artistic and seamless method of improving the human capabilities with virtual limbs, sensors, glands without real invasive modifications to the human body.

VirtualGlass: VirtualGlass acts as a perceptive pivotal interface that allows the user to interact with and perceive the Subjective Technology environment. Its purpose is to parse contextual snapshots taken by BodyParts, execute KnowledgeHooks by detecting sets of status changes on multiple BodyParts elements triggering predefined or learnt user input to other BodyParts in a shared context learning space in which objects are prone to turning subjective to each other.

Snapshot: A Snapshot is a recorded image or data representation of the current state of a BodyPart and subparts. These snapshots provide a reference for the system to understand the context and changes over time.

Context: Context is the set of conditions and information surrounding a specific situation or task. It plays a crucial role in determining how Subjective Technology responds to various user needs and commands. The context is a snapshot that was parsed by the VirtualGlass which is the one that applies the KnowledgeHooks.

ContextStack: The ContextStack is an organizational structure that keeps track of multiple contexts at once. This allows the system to manage different situations concurrently and provide relevant responses.

KnowledgeHook: KnowledgeHooks are a fundamental concept in Subjective Technology. These are sequences of event definitions with their actions from a subjective perspective that can be composed in order to

achieve that BodyParts become subjective to each other.

KnowledgeHooks facilitate the execution of tasks, learning, and problem-solving within the system.

KnowledgeHookLearnt: Are dynamic knowledge hooks that are created based on the user's input, actions, and interactions.

Their purpose is to learn from the user's behavior and adapt to specific needs or preferences.

KnowledgeHooksPredefined: These are predefined KnowledgeHooks, established by the system or user in advance. They serve as templates for executing specific actions or solving common problems efficiently.

UserInput: UserInput represents commands, actions, or requests provided by the user to the Subjective Technology system. These inputs trigger various actions and responses.

UserInputSequence: A UserInputSequence is a series of user commands or inputs. This sequence is processed by the system to determine the appropriate actions and responses, often leveraging KnowledgeHooks.

KnowledgeHookStore: The KnowledgeHookStore is a repository of predefined KnowledgeHooks. It contains a library of templates that can be readily applied to specific tasks or problems.

MyKnowledge: MyKnowledge refers to the user's personalized knowledge and information stored within the Subjective Technology system. It encompasses learned behaviors, preferences, and interactions, which the system uses to enhance its responses.

Key: Keys are specific elements or identifiers used within the system to access and reference data, actions, and KnowledgeHooks. They play a vital role in executing tasks and managing user interactions.

ContextSubtraction: ContextSubtraction is a process used to identify and isolate specific contextual changes or elements, allowing the system to focus on relevant information when responding to user requests.

ContextFootPrint: It is a string of characters designed in order to compare Contexts against other user's Contexts. Contexts do not know users, users know their contexts.

KnowledgeHookFootPrint: It is a string of characters designed in order to compare KnowledgeHooks.

Regex: Regexes, short for Regular Expressions, mostly used in **KnowledgeHooksPredefined** is a powerful tool for pattern matching and text processing within Subjective Technology. It helps in interpreting and responding to UserInput accurately, enabling more precise interactions. These entities and concepts collectively form the foundation of Subjective Technology, working in unison to provide a user-centric, intelligent, and adaptive technology experience changing the way we interact with technology promoting radical and disruptive changes in the way things are organized.

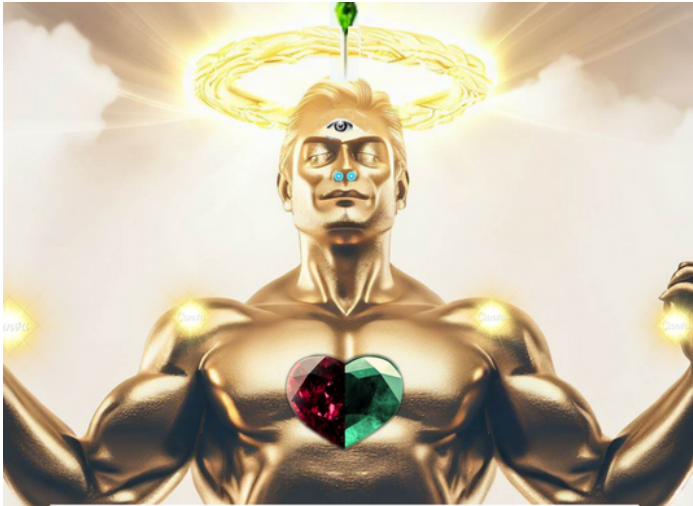


Figure 2. New Evolved Human Being
 We have evolved the human being and as you can see it has new BodyParts which are desirable that the human being has in order to solve many of humanity's problems.

VirtualBodyParts

- **Energy Glands:** Irradiate energy if in the hands and receive energy if in the shoulders.
- **Weather Detector:** Temperature Weather stream and possibly other environment information.
- **Energy Battery:** Indicate the current energy credits received and sent from Energy Glands.
- **Computational Affinity:** Proximity, to other beings and subjects.
- **See Beyond:** This Third-Eye provides the user future possible sensorial streams that are evaluated by the user current anatomy.
- **Intelligence Augmentation**

VIII. REAL WORLD APPLICATIONS OF THE SUBJECTIVE TECHNOLOGY DESIGN

Technology from a Subjective perspective offers a range of solutions to everyday problems that revolutionize the human-machine interaction paradigm. These diverse use cases enhance user capabilities, intelligence, and comfort, providing an integrated technology experience in an unprecedented level of efficiency.

VirtualBodyParts are implemented using software and users are able to see them with their glasses.

Here is an overview of the possible use cases that we will cover and how the different body parts work.

There must be much more use cases but here are some possible use cases for Subjective Technology:

Subjective FormMate: How many times were you asked for your user name today? How many passwords did you reset? Subjective Technology using

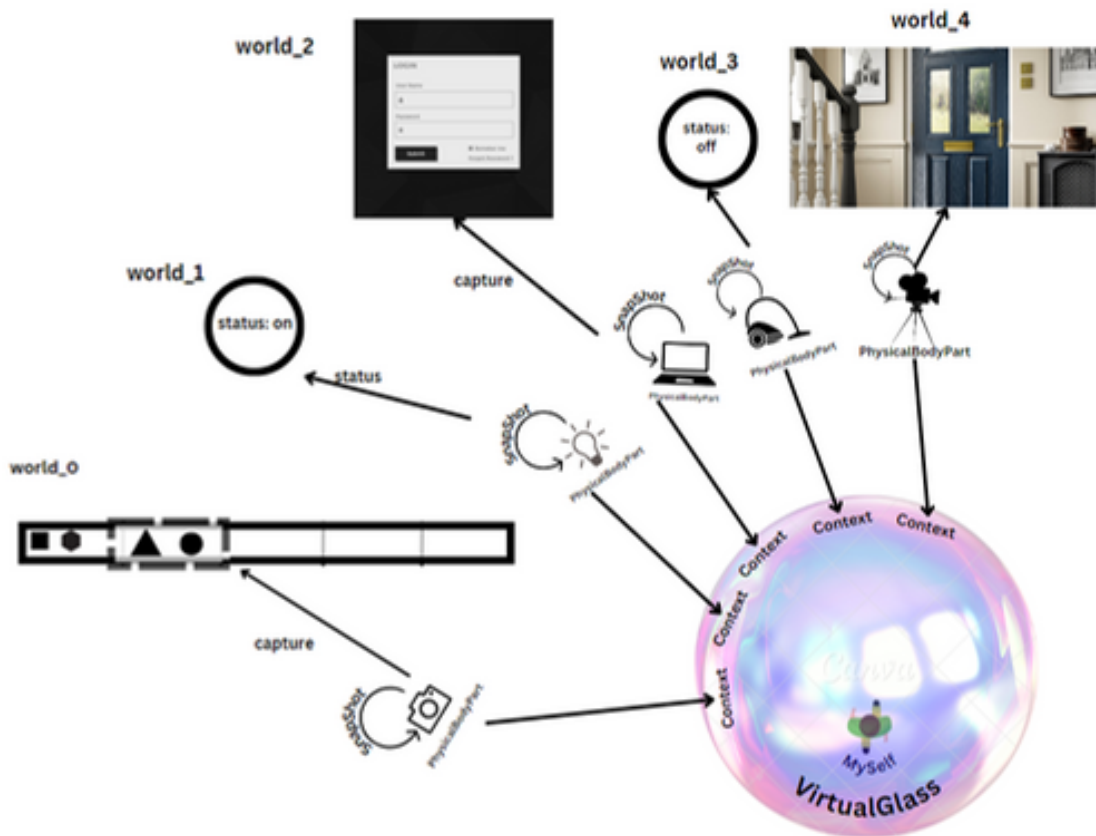


Figure 3. New Evolved Human Being
 It is important to notice that subjective VirtualBodyParts are visible through Augmented Reality glasses.

KnowledgeHooks makes form technology obsolete by changing the perspective in two different ways as a KnowledgeHookLearnt and as a KnowledgeHookPredefined. As KnowledgeHookLearnt: When you complete third-person web forms for every input command to your PC acting as a PhysicalBodyPart that is able to receive UserInput there is a KnowledgeHookLearnt auto-generated which includes the ponderated Context subtraction (parsed from snapshots of the sum of all your BodyParts by the shared

VirtualGlass), acting as a fuzzy hash key recorded before and after the UserInput event and the UserInput itself executed by user. In this way it is guaranteed that you will only input one single value only once in a life-time. All further inputs to third-person forms will be corrections upon Context specialization. This guarantees that you will never input the same information twice to any third-person system.

The following diagrams show the structures of the different entities and how they work.



As you observe, the central entity in this system is "MySelf," enclosed by a conceptual construct known as the "VirtualGlass" (immersed sphere) This VirtualGlass serves as the transformative element that converts any standard Third-Person technology into a Subjective Technology.

Within this framework, MySelf interfaces with "PhysicalBodyParts," physically connected to MySelf's body through the VirtualGlass. The VirtualGlass acts as the conduit for this interaction, enabling the conversion of traditional technologies.

These PhysicalBodyParts continually capture self-snapshots, encompassing comprehensive information stored in their memory, including structural details and individual settings. For example, if a PhysicalBodyPart functions as a camera, these snapshots reflect the real-time visual information it perceives.

In this context, we delve into the intricate mechanism of the "KnowledgeHookLearnt" data structure. This structure plays a pivotal role in assimilating knowledge related to user behavior, both concerning context and user-device interactions.

Going Outside



The VirtualGlass technology efficiently interprets snapshots from all connected BodyParts, transforming them into accessible contexts through the VirtualGlass interface. Imagine a scenario where a user is leaving for work. Here's how they interact with their smart home devices:

1. They activate the vacuum cleaner by sending an 'on' command. This is done to ensure the house is clean and noise-free upon their return.
2. They switch off the light bulb with an 'off' command.

In this process, the VirtualGlass performs a crucial function: it conducts a 'context subtraction' both before and after the user sends commands to any connected BodyParts. This subtraction helps in creating a key. This key is unique because it allows the system to emulate, in a fuzzy manner, the same set of actions automatically the next time the user is preparing to leave home. This intelligent replication of user preferences enhances convenience and efficiency in smart home management.

Going Outside

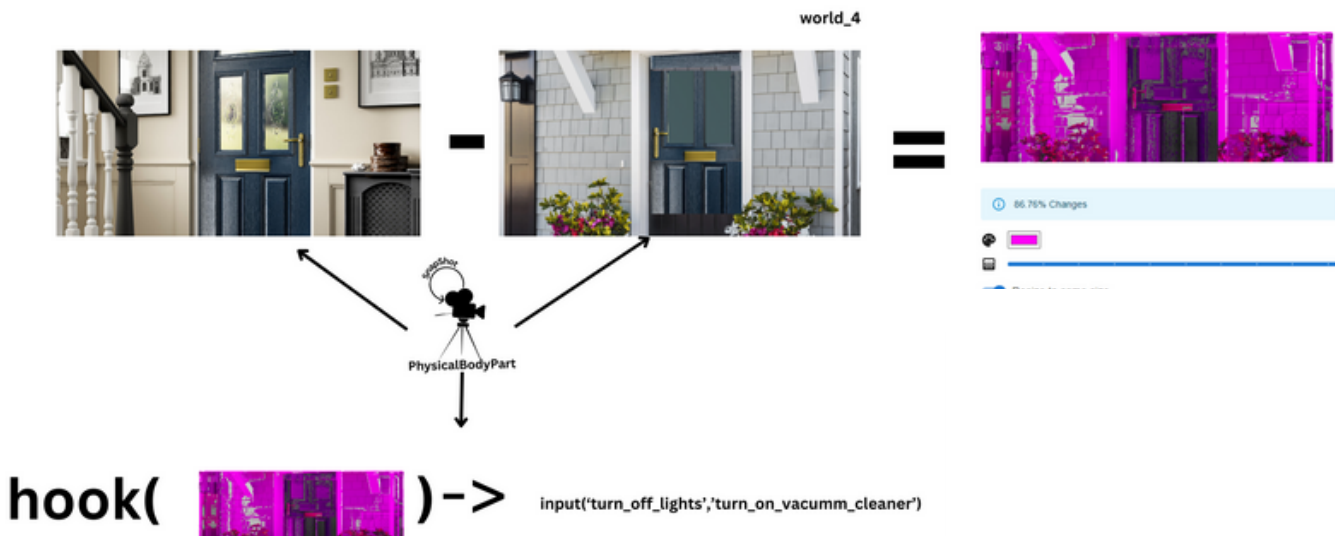


Turn Off Lights



Turn On Vacuum Cleaner

The system is designed to record the last context prior to user input directed at connected BodyParts, such as the light bulb and vacuum cleaner. Specifically, this 'last context' refers to the most recent snapshot of the door before any user input is provided. When the user steps outside and looks at the door again, the system captures a new snapshot. It then performs a context subtraction, comparing the snapshots taken before and after the user inputs. This process effectively captures the changes in the environment triggered by the user's interactions with the smart devices, allowing for a more nuanced understanding of user behavior and environmental dynamics.



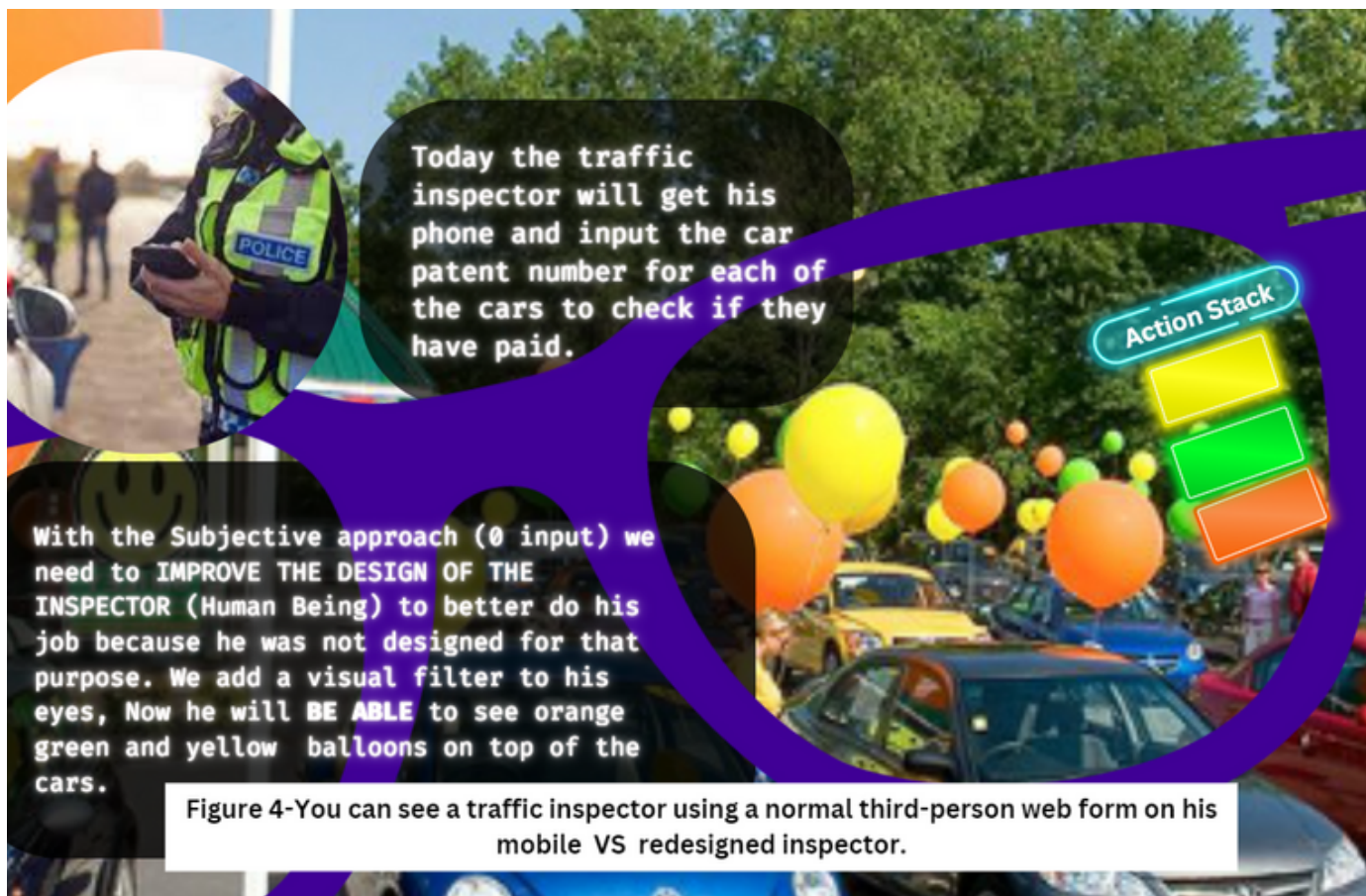
The system functions by encoding the environmental changes observed before and after going outside into a unique image. This image is distinguished by a pink overlay, which highlights the pixel differences between the two scenarios. Simultaneously, it records the specific user inputs sent to the connected BodyParts, such as the light bulb and vacuum cleaner. This process culminates in the creation of a 'KnowledgeHookLearnt'. This KnowledgeHookLearnt is a sophisticated mechanism that is ready to execute and replicate the user's previous inputs to these devices automatically every time the user leaves the house. This ensures a seamless and intuitive interaction between the user and their smart home environment, optimizing convenience and efficiency.

Another example of Context Subtraction



hook(🔪 🍵 , 🤲) -> input('make_coffee_now', coffee_machine)

In this way as soon as you put your thermus and the mug on your desk the coffee machine receives and executes the make_coffee_now command straight by itself from your VirtualGlass as the coffee machine that is a part of your body, a PhysicalBodyPart.



As a KnowledgeHookPredefined: In situations where predefined regular expressions match value groupings within a given Context, these matched elements are highlighted using a designated color code. Additionally, the predefined actions associated with these matches are appended to the command stack list, tagged with the same color.

This approach seamlessly accomplishes form-filling tasks, akin to what one would manually do when presented with a traditional web form. Furthermore, it fundamentally challenges the concept of forms or webforms by adhering to the user-centric framework of transhumanist technology design. Within this paradigm, conventional apps are replaced by the concept of BodyParts and KnowledgeHooks, resulting in a significant shift in perspective.

Collectively, when a form appears within any of your BodyParts, Subjective Technology seamlessly manages form completion, replicating your actions. In cases where you possess a designated BodyPart or KnowledgeHook tailored for a specific

function, it inherently prevents forms from arising, structurally eliminating the need for forms. As nobody better than yourself will know your needs and nobody better than yourself will know your goals, in this way Third-Person technology fails to provide easy ways of customization.

With a Subjective Technology design approach, companies shift from the conventional practice of requesting your data to provide services. Instead, they focus on designing specialized BodyParts, which can be either PhysicalBodyPart(s) or VirtualBodyPart(s), aimed at addressing tangible real-life issues. When you input data, as requested by a company to facilitate their services, it essentially inverts the dynamic, placing you in the role of working to fill their forms to your specific circumstances, in contrast to the traditional model where you company by yourself. In this scenario, you essentially become an unpaid code contributor to the company's website while trying to

access your own account. The current Third-Person approach to technology not only proves to be inefficient in problem-solving but, in some cases, introduces a plethora of issues ranging from technical glitches to computer security vulnerabilities, cyberattacks, privacy breaches, and unauthorized data usage. Moreover, it can create new problems, at times making traditional methods, such as paper-based solutions, appear more user-friendly. For instance, many individuals still favor cash transactions over digital alternatives due to the perceived complexity of applications, which often demand cognitive skills not possessed by all users. In the realm of technology, the process of filling forms is a ubiquitous and often underestimated task. The prevailing computing model and form technology involve an implicit function, which can be denoted as:

$$1 \quad \text{map}(k)=v$$

This function implies that to achieve any value 'v,' a corresponding key 'k' must be inputted. Subjective Technology, however, employs an innovative approach by encapsulating 'k' within a fuzzy key. The ensuing code is provided for illustrative purposes, recognizing that more efficient strategies and algorithm implementations can be employed:

```
1 function ml(current_context):
2     contexts = [context_1,context_2....context_n]
3     context_min = infinite
4     current_context = snapshot.parse()
5
6     for context in contexts:
7         diff = current_context - context
8         if diff < context_min:
9             context_min = diff
10    return context_min
11
12    k = ml(current_context)
13    f( ml( k ) ) -> v
```

This adaptation enables the computation of a computational distance, similar to the Levenshtein algorithm, which determines the minimum number of operations required to transform one string into another. The values are subsequently assigned to a fuzzy hash data structure. To put theory into practice, a Chrome extension has been developed that aligns with these principles. This extension intelligently identifies form fields based on the contextual proximity of the form's labels, measured in pixels. The repository for this Chrome extension can be found at:

<https://github.com/PabloBorda/smartfiller-chrome>

To better grasp the concept, consider the scenario where you input your email address in a web form. Later, you encounter a different website featuring a more comprehensive form with fields such as name, last name, phone number, and password. A typical form filler would attempt to auto-complete these new fields using your email address, leading to a user experience that seems problematic at first. This issue arises from the initial input being treated as a seed value, requiring subsequent corrections for all other fields. However, it's worth noting that this reinforcement model is incredibly powerful, extending its capabilities beyond standard form filling. For instance, it can securely log into your bank account, learning essential details like coordinate cards and user PINs, a feat unattainable with commercial form-filling tools. The power of this model stems from its unique capacity for reflection and acting on top of itself using KnowledgeHooks. Unlike traditional third-person software, this model possesses contextual awareness, specifically tailored to the domain of form filling. It ensures that, from the user's perspective, only an initial input is needed. Subsequent interactions

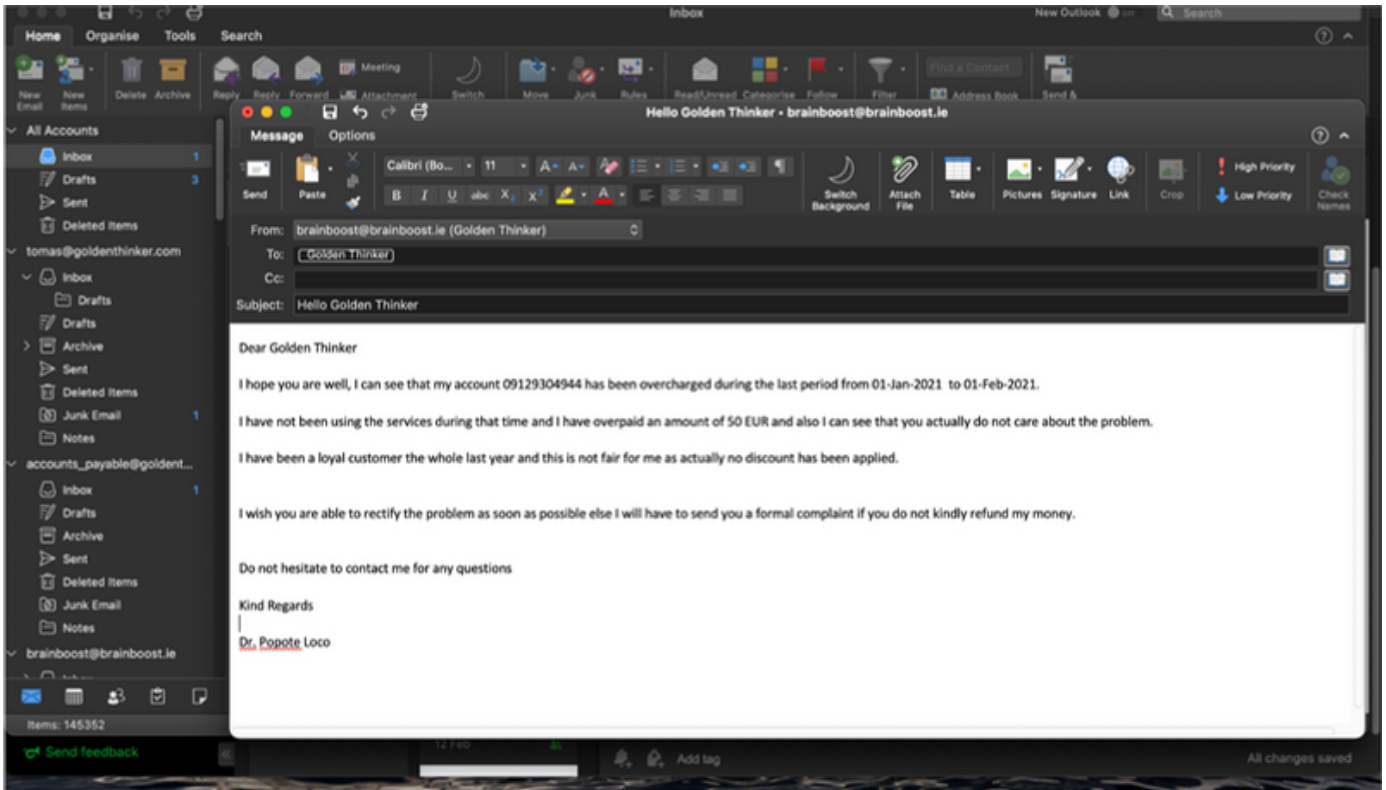


Figure 5-The following example is able to extend this same principle into other world problems seamlessly.

become seamless, eventually achieving the status of 0-input technology. In this paradigm, Subjective Technology transforms how we interact with technology, offering a more user-centric and efficient approach to everyday tasks, such as filling forms.

On the example on *Figure 5*, a Customer Service Agent receives an email.

In this way the VirtualGlass executing on his PC is able to understand what is being seen through taking snapshots of itself including the image in memory that is being seen at the moment grouping into different colors detected elements by active KnowledgeHooks that will execute an action that can be a sequence of user learnt input (macro like) or predefined sequence of commands. This ensures that the user will never type the same sequence combination of key again. The VirtualGlass in this way turns into an input facilitator. It parses snapshots into Context(s),

learns from the user input according to the Context(s) and efficiently finds related KnowledgeHook(s).

As you might think. This VirtualGlass concept always remains external to any technology avoiding its internal complexities and learning curves turning software integrations into an obsolete concept. Then we can say that VirtualGlass is a master integration method.

The VirtualGlass concept, when executed on a tablet with an enabled camera or a VR/AR/MR device with camera pass-through enabled, results in an overlapping hierarchy of VirtualGlasses of different dimensions. This overlap facilitates a coordinated, automated user input across the hierarchy, triggering inter-BodyPart events in a contextual manner.

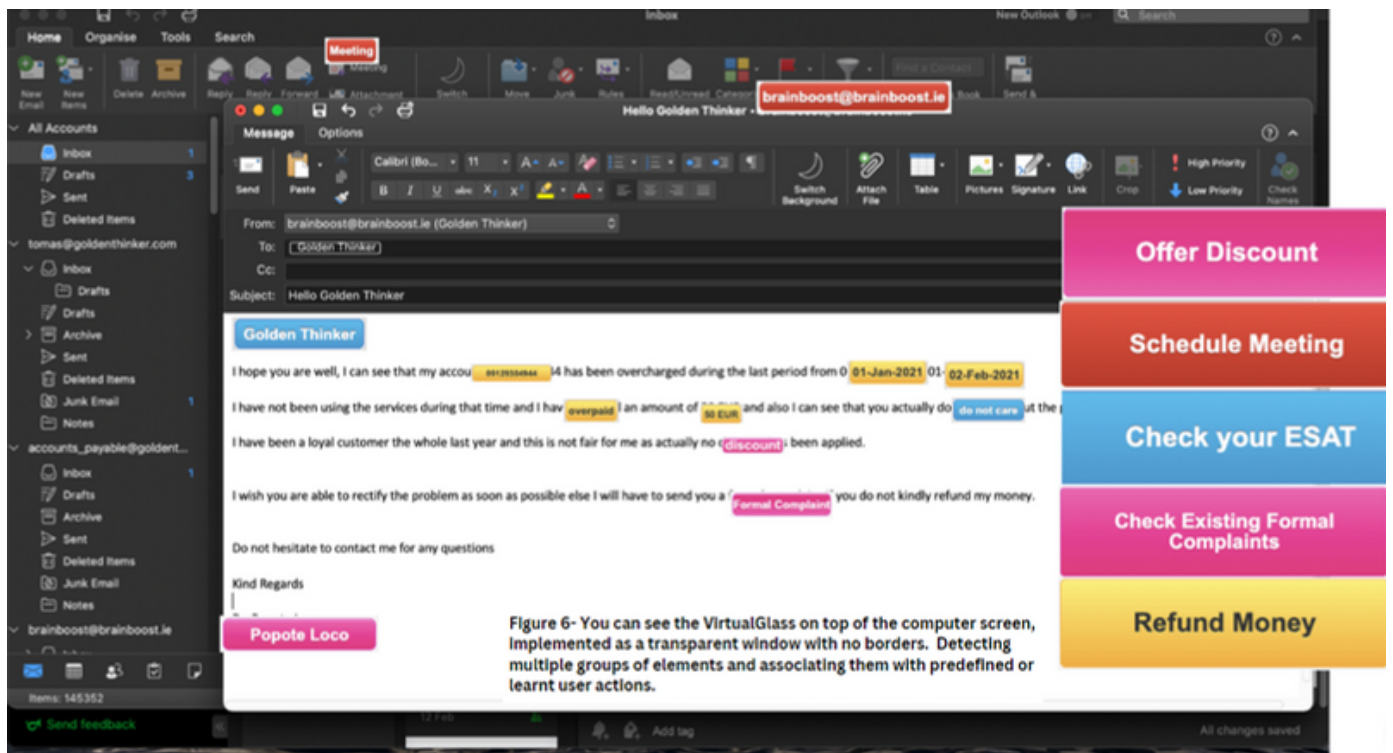


Figure 6- You can see the VirtualGlass on top of the computer screen, implemented as a transparent window with no borders. Detecting multiple groups of elements and associating them with predefined or learnt user actions.

In Figure 6. you can appreciate the VirtualGlass executing on the PC and you can see the detected elements that could possibly fulfill the detected scenarios.

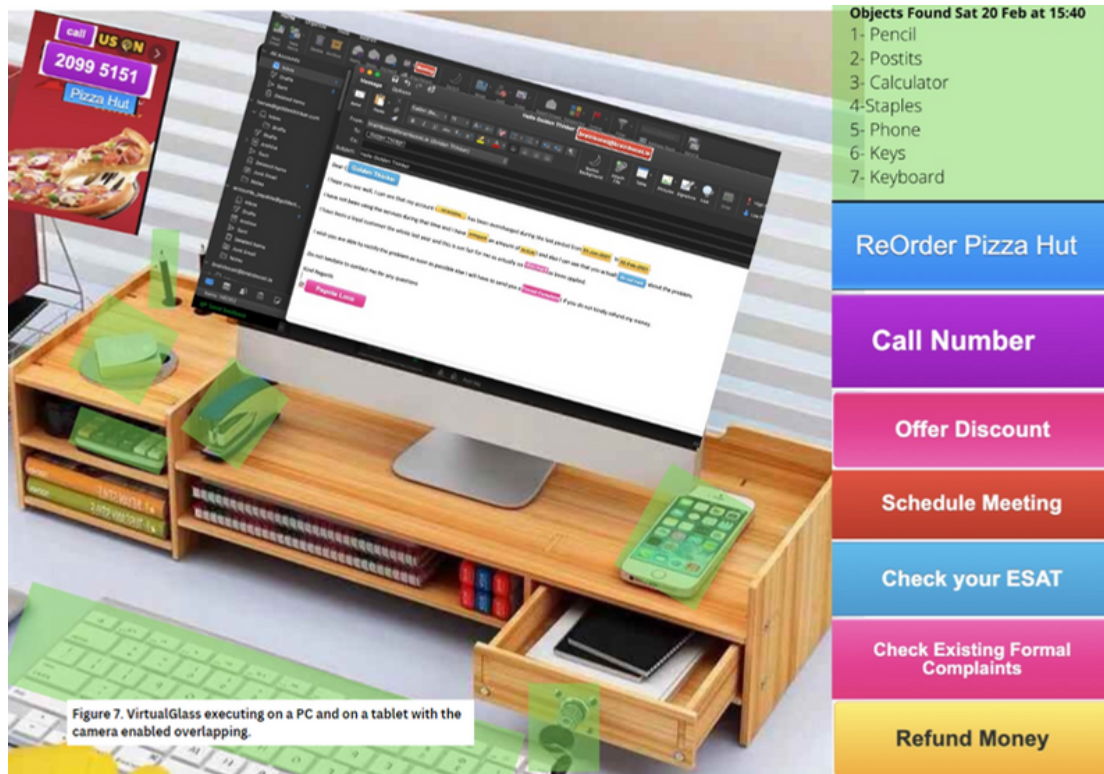
In a scenario where VirtualGlass is executed on a PC and a tablet, the overlapping VirtualGlasses form a single, composite VirtualGlass. This composite VirtualGlass is made up of the VirtualGlasses of all BodyParts that accept input actions in a shared VirtualGlass composite structure. This overlapping mechanism enables seamless execution of actions on KnowledgeHooks, triggering combinations of multiple commands across various BodyParts.

VirtualGlass serves as an external input facilitator, parsing snapshots into Contexts, learning from user input based on the Contexts, and efficiently finding related KnowledgeHooks. It avoids internal complexities and learning curves of any technology, rendering software integrations obsolete.

In essence, VirtualGlass acts as a master integration method, transforming legacy third-

person technology into a subjective experience or mediating between specifically designed subjective BodyParts. Within our system, there exists an intricate network of VirtualGlasses, each operating in different dimensions and contexts, forming a hierarchical stack of InputReady VirtualGlasses. These virtual lenses facilitate an orchestrated, holistic, and contextual mechanism for triggering KnowledgeHooks across various BodyParts. This system allows for the seamless coordination of automated UserInput across the VirtualGlasses hierarchy.

In Figure 7, you can observe the execution of the VirtualGlass on your PC, where multiple elements are displayed in various colors on your computer screen. However, the experience extends further when you execute the VirtualGlass on your tablet, with the camera activated. The VirtualGlass captures constant snapshots of itself, revealing that the



VirtualGlasses from both your PC and tablet overlap. Consequently, our model consolidates these VirtualGlasses into a unified entity, composed of the VirtualGlasses associated with all BodyParts capable of receiving input actions, housed within a shared VirtualGlass. This discovery of VirtualGlasses overlap enables you to seamlessly initiate actions through KnowledgeHooks, triggering a multitude of commands across multiple BodyParts. This transformation turns the VirtualGlass into a facilitator for input. It parses snapshots into distinct Contexts, adapts to user input within these Contexts, and efficiently identifies relevant KnowledgeHooks. Consequently, the VirtualGlass concept remains external to any specific technology, sidestepping internal complexities and learning curves. It effectively renders traditional software integrations obsolete. Now, imagine executing the same VirtualGlass on a tablet equipped with an active camera or

within a VR/AR/MR device with camera pass-through capabilities. The possibilities for dynamic interaction and synergy across BodyParts expand significantly. This refined VirtualGlass concept serves as a master integration method, offering a bridge to transform legacy third-person technology into a subjective user experience. It also mediates between BodyParts specifically designed to function within the subjective framework, irrespective of the device's hardware features.

In the example context of the Figure 7, this capability allows you to effortlessly order a pizza, whether you're using your phone, computer, or tablet. The system seamlessly integrates the tablet's context and your PC's VirtualGlass context, just as you ordered pizza the previous day, either via phone or an app. It's akin to the scenario where, based on multiple cues, you could order a Pizza Hut pizza, much like you did the day before by simply calling the shop whose number you found on a leaflet hanging on your wall.

Here's another example that illustrates this phenomenon: Picture yourself wearing AR/VR/MR glasses while at home, where you have a red couch and a sunflower. When you sit down in front of your computer, your home credentials are automatically input by the VirtualGlass, reflecting your prior actions.

Now, let's say you go to your office and sit at your computer. In your office, there's a blue curtain and a goldfish. Based on the detection of these elements, the subjective system intuitively inputs your work credentials.

But consider a different scenario: You visit a shopping mall and sit at a public computer. The question arises, should the system input your home or work credentials? Given the presence of the blue curtain in the shopping mall, the system decides to use your work credentials for the public computer. However, when you, the user, correct this input and enter the appropriate credentials for the public system, those mall-specific credentials are recorded.

Now, here's where it gets fascinating. When you return to your work office, you might wonder whether it will input your work or public credentials. The system, being aware that there was no goldfish in the shopping mall, correctly infers that you're in your work environment and inputs your work credentials. This fluid interaction between systems, both virtually and physically, showcases the seamless integration made possible by Subjective Technologies successfully integrating into your subjective experience while at the same time expanding your mind assisting your intent.

IX. SUBJECTIVE SEMANTIZER

Subjective Technologies by using the KnowledgeHooks mechanism is able to turn third-person technology into your subjective experience changing your perspective. Writing and Reading is not the exception as they are

the first third-person technology to exist in order to transfer valuable knowledge generation to generation representing a huge advantage as before writing the way to transfer knowledge was person to person and included memorizing and repeating words. Writing has shaped the world we have today that it is indeed a much better place than it used to, because knowledge does not die.

However, write still encounters issues in the process of the transfer of Knowledge as it requires a lot of effort, dedication and skills that not everybody possesses due to many different reasons, becoming this disadvantage the seed of social exclusion.

Often people could be reading the same paragraph many times and still not be able to remembering or understanding the subject. Despite all effort of students, there will not be a scientist that understands the Theory of Relativity better than Einstein himself.

The process of learning is typically divided into Theory and Practice. The theory is memorizing and understanding a subject and the practice is used to interiorize the knowledge and build a mind map in your mind to associate the actions to the relevant theory.

Subjective Technologies has the potential to bring humanity one leap ahead of evolution and gradually decrease the use of write. By using Subjective Technologies as a "Semantizer" we are able to translate written knowledge or even GPT third-person perspective into KnowledgeHooks comprehending the replace of alphabetic symbols by real time meaningful subjective experiences expressed in KnowledgeHooks that map alphabet symbols/words into sets of nested computer visions that map to actions. In this way we can affirm that "*Knowledge is Alive*". Knowledge does not need to be transferred anymore and the concept of a Subject Mater Expert, the Division of Labor, could vanish as knowledge can be applied and executed in real time by the user.

GT[®] Subjective Semantizer

From written language alphabets to a Semantic alphabet in which the symbols are Computer Visions

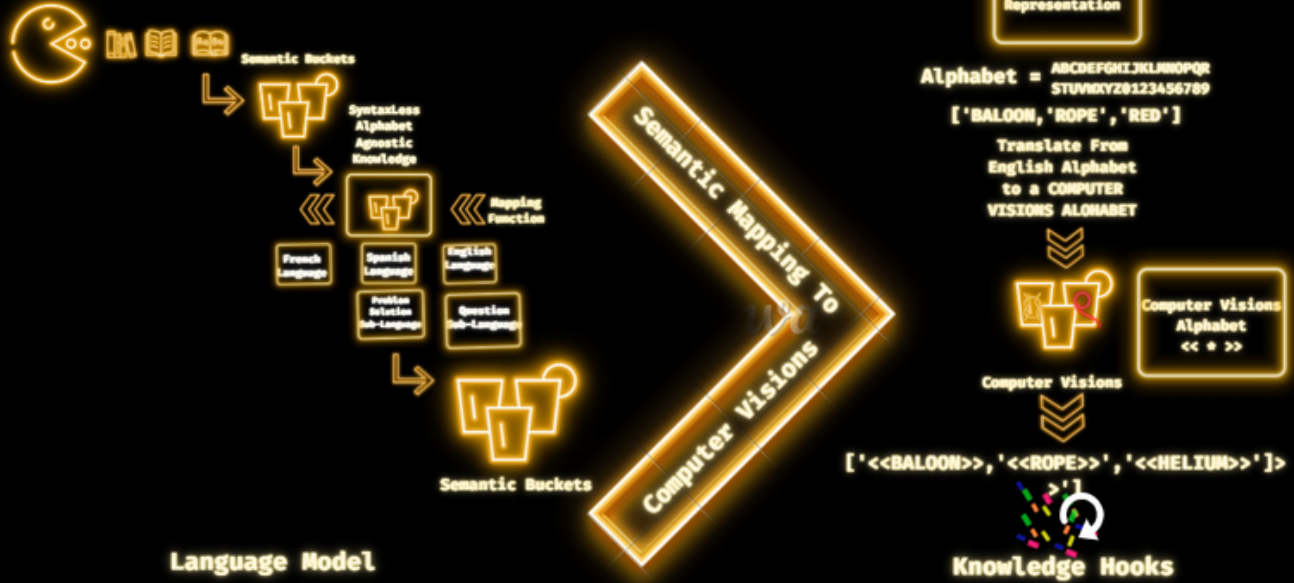


Figure 8 - You can see the process of translation of third-person written knowledge in Natural Language to meaningful subjective experiences sustained on KnowledgeHooks

As you can appreciate in Figure 8 above there is a possible process in order to translate any writing in any language to actionable KnowledgeHooks.

The process reads text and locates text into semantic buckets. Once the semantic model is instantiated, it maps the semantic buckets into KnowledgeHooks language. In the following Figure 9 you can see a real-life application of the Semantizer.

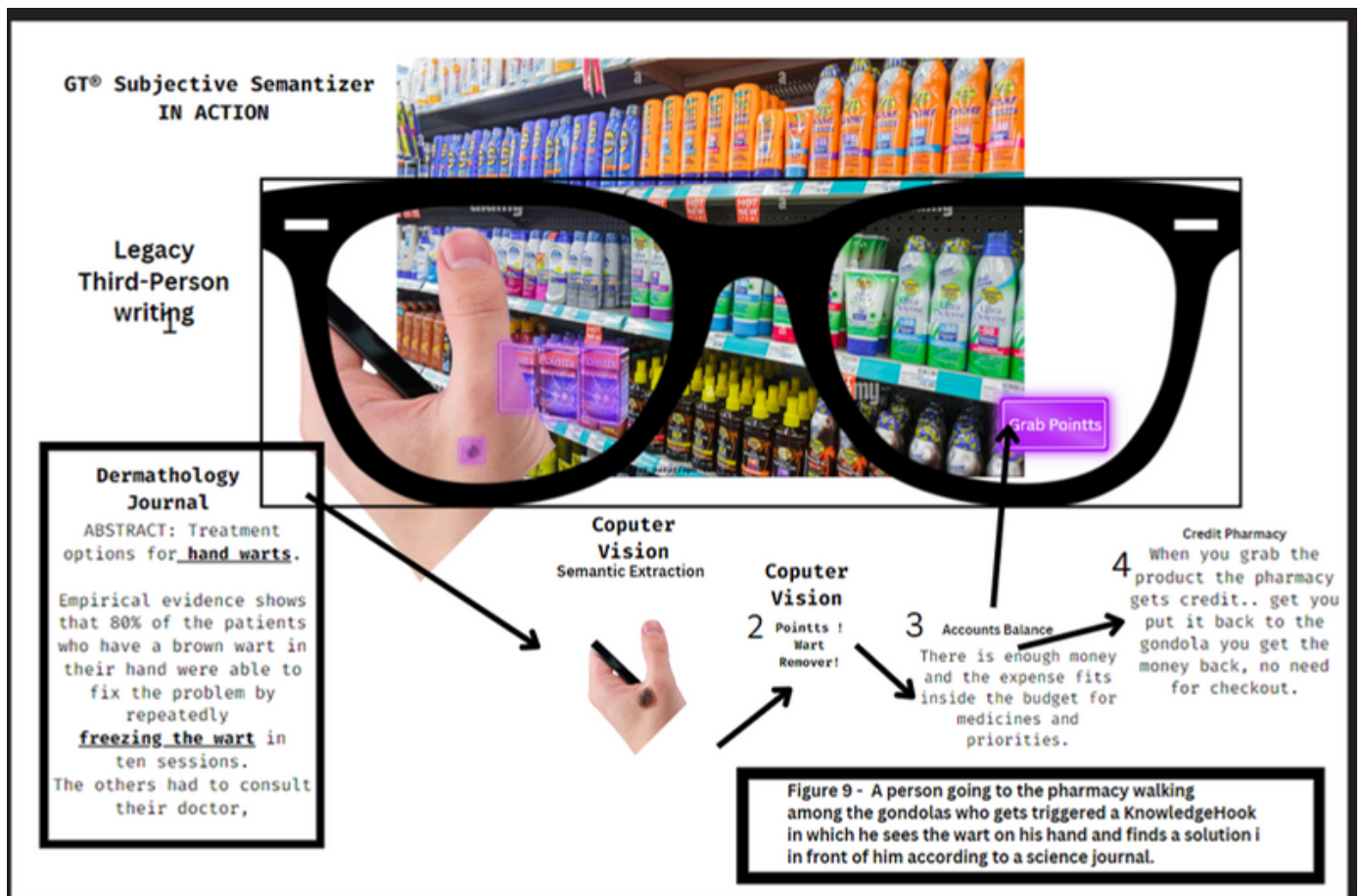


Figure 9 - A person going to the pharmacy walking among the gondolas who gets triggered a KnowledgeHook in which he sees the wart on his hand and finds a solution i in front of him according to a science journal.

X. SUBJECTIVE DOMOTICS

Subjective Technologies take control and offer a level of home automation previously unattainable, all guided by your real-time actions. Many of us already possess smart home devices that manage tasks like lighting, door operations, locking mechanisms, vacuuming, and laundry. However, interacting with these technologies typically involves a third-person perspective, often through button presses or voice commands. To enable these devices to respond to your contextual cues, you'd typically need to install various sensors within your home, creating a rather complex and context-aware environment. What's intriguing about Subjective Technology is its ability to streamline this process. By utilizing AR/MR/VR devices and learning from your surroundings, it makes complex sensors and steep learning curves a thing of the past. Your home now effortlessly aligns with the images you perceive through your glasses, simplifying the interaction and management of your domestic environment.

The following QR link contains a video showcasing how Subjective Domotics works and completely changes the your life in boosting your comfort.



Exercise: Consider the scenario when the woman reaches the door at the conclusion of the scene. Now, envision how the sequence might have unfolded if she had remained seated in front of her computer screen. Perhaps, given that she was not at her workplace, our Subjective Technology would have logged in with her home computer password instead of her work computer password...

XI. SUBJECTIVE JOB FINDER

The Subjective Instant JobFinder, is a solution that can be implemented by using Subjective Technologies, is a revolutionary tool that redefines the traditional job discovery process. It leverages the power of the *Computational Affinity Antenna*, a sophisticated algorithm that continually evaluates an individual's digital footprint. This footprint is built upon the collection of their KnowledgeHooks, unique sequences of events and actions that represent the user's skills, professional history, and personal preferences in a holistic way.

The JobFinder's strength lies in its ability to compare these digital footprints in real-time, identifying individuals either close around or remotely whose KnowledgeHooks, Contexts resemble each other the most. This comparison allows the system to find "work twins" - individuals who are engaged in similar activities or facing similar challenges.

For instance, as an example, if a user encounters the dreaded blue Windows error screen, the system can instantly connect them with others experiencing the same issue and are looking at the a blue screen error as well, fostering real-time collaboration and collective problem-solving.

The system also takes into account the user's context, which includes the different situations and conditions surrounding user interactions. This constant context-awareness

from a subjective perspective, allows the system to provide personalized responses and solutions, enhancing its ability to match an individual's unique capabilities to suitable job opportunities.

In essence, the Subjective Instant JobFinder is more than a job search tool; it's an advanced work matchmaking antenna, seamlessly integrated into the user's sensory experiences. It not only finds suitable job opportunities but also fosters collaboration and collective problem-solving, significantly improving productivity.



Figure 10: You can appreciate an amount of individuals in real time who are seeing at the same error.

Consider another illustrative example involving the real-time computational affinity of three individuals: a plumber, a kindergarten teacher, and a bus driver. Assuming there are no other potential collaborators, who would be the ideal work partner for the plumber?

Now, let's say the kindergarten teacher is seeking a collaborator. Who among the two, the bus driver or the plumber, exhibits the highest level of Computing Affinity? It turns out that the bus driver, who transports

children to school in the morning, shares a more significant Computational Affinity. Imagine if, instead of relying solely on professional tags, such as plumber or bus driver we were to compare KnowledgeHooks and Contextual digital footprints.

The Computational Affinity antenna is a BodyPart added to the human being which is able to boost people social interactions and align their perspectives because everybody will be surrounded by people alike.



Figure 11: In this illustration, you can observe a VirtualBodyPart intricately connected to the human head. The primary purpose of this VirtualBodyPart is to act as a guiding compass for fellow human beings or entities, albeit in a context of Computational Distance. For clarity, let's define Computational Distance as the smallest number of operations necessary to convert one string into another. Think of it as akin to a GPS device; however, rather than determining your physical proximity in kilometers, this integrated antenna within the human framework is dedicated to calculating Computational Distance.

Additionally, let's explore some other advantages of having such an antenna. This antenna can not only help in finding an ideal job partner but also play a crucial role in finding the perfect life partner. Just imagine meeting someone, and the need for words to communicate becomes obsolete because you both share so many commonalities. Consider other scenarios where this antenna can be creatively applied. For instance, in social interactions, people could act as your social

compass, guiding you toward those who resemble you in various aspects.

With the Computational Affinity antenna, everyone can be surrounded by like-minded individuals, enhancing social cohesion and aligning perspectives across various dimensions.

It's important to note that while some insects possess innate sensory mechanisms for detecting affinity in their environments, humans lack this inherent capability.

However, through the innovative application of software and technology, we have the ability to augment our sensory experiences and introduce affinity detection into our lives.

This software-driven approach allows us to emulate the sensory mechanisms found in certain insects, enabling us to perceive and respond to affinity-related cues in our surroundings. By harnessing technology in this manner, we are expanding our sensory horizons and empowering ourselves to engage with the world in novel and meaningful ways, just as nature's creatures have done for millennia.

XII. SUBJECTIVE THERMO-CURRENCY

(STC): In conventional economic systems, money functions as an intermediary for the indirect exchange of goods and services. However, this mechanism often falls short in justly compensating individuals for the effort they invest in producing these goods and services. Numerous factors, such as appearance, nationality, gender, geographical location, or even luck, can lead to unjust disparities in compensation, resulting in issues like scarcity and criminality.

As aptly articulated by Tommy Fox,

"We cannot hope to resolve scarcity using a tool that is itself scarce."

Subjective Thermo-Currency (STC) endeavors

to address this predicament by ascribing value to the energy expended and absorbed by individuals during their engagements. This process occurs through the utilization of virtual energy glands located within their hands and shoulders.

The determination of energy value within the Subjective Thermo-Currency system relies heavily on cutting-edge KnowledgeHooks processing technology. This technology seamlessly incorporates energy calculations as an inherent aspect of KnowledgeHooks themselves. KnowledgeHooks, in this context, are deemed effective when they contribute to energy conservation in a user's own BodyParts or those of others, thereby reducing effort and enhancing overall comfort while achieving desired outcomes.

The implementation of Subjective Thermo-Currency aligns individuals' incentives with the fundamental principles governing the natural world and the universally applicable laws of physics.

The concept of Subjective Thermo-Currency has undergone rigorous examination in various domains, including but not limited to:

Scarcity: Within the realm of Subjective Thermo-Currency, scarcity is portrayed as the energy individuals expend in their quest to acquire a resource. This unique perspective on scarcity introduces a novel dimension to resource allocation.

Unemployment and Hunger: These two challenges are intricately linked, and Subjective Thermo-Currency ingeniously addresses this correlation. In this paradigm, the balance for idleness is gracefully synchronized with one's ever-present basal metabolism. The elegance of this system lies in its inherent capacity to align with principles of social justice, effortlessly reconciling societal needs with the inherent properties of human physiology.

Poverty: Poverty often stems from a dearth of capital, hindering individuals from engaging in productive work. Subjective Thermo-Currency offers a natural remedy to this issue. Here, energy stands as the readily available currency, with each person's intrinsic energy reserves residing in their Heart Virtual BodyPart.

Inflation: In the realm of Subjective Thermo-Currency, the concept of inflation dissolves into the annals of history. Energy, as the foundational unit of exchange, remains a constant, impervious to fluctuations or manipulations.

Politics: Politics, a construct often necessitated by the inherent problems associated with traditional monetary systems, finds a different role within Subjective Thermo-Currency. With the elimination of currency as an intermediary, politics shifts from crisis management to more meaningful pursuits.

Monopolies and Cartels: These entities, known for price-fixing and exploiting the population, lose their grip within the Subjective Thermo-Currency framework. Energy calculations, grounded in physics, ensure fair and transparent resource allocation.

Slavery: The concept of slavery becomes an anachronism within Subjective Thermo-Currency. The system's fundamental design precludes any form of control over an individual's virtual energy glands, making exploitation impossible.

Physical Labor: Subjective Thermo-Currency rewards physical labor by valuing the energy expended in work. Individuals receive energy from their shoulder's virtual glands, which is stored in their Heart Battery BodyPart.

Intellectual Labor: Intellectual labor, while demanding minimal energy expenditure, contributes significantly to energy conservation. Individuals who provide intellectual insights receive energy savings from users who benefit from their work and have increased their comfort.

Artistic Labor: Artistic endeavors are duly recognized within this paradigm. Consider a scenario where a runner discovers a poem and subsequently the author absorbs the energy differential from the runner's exertion during their creative process. Artistic contributions align with a relaxing energy expenditure equivalent to reserving a bed for rest.

Security: Subjective Thermo-Currency ensures robust security without the need for an internet connection. Energy transactions are securely stored and executed within an individual's self-contained system, ensuring data integrity and privacy.

Environmental Impact: One of the most significant impacts of Subjective Thermo-Currency lies in its potential to contribute to environmental sustainability. In traditional monetary systems, the pursuit of wealth often leads to resource depletion and environmental degradation. However, Subjective Thermo-Currency values work based on the energy expended, which inherently connects economic activity with the physical world.

- 1. Resource Conservation:** Since energy is the fundamental unit of exchange, individuals are incentivized to engage in activities that require less energy, thus reducing unnecessary resource consumption.
- 2. Environmental Awareness:** The system encourages individuals to be more conscious of their energy expenditure. This awareness can extend to daily choices, such as transportation methods or energy-efficient appliances, leading to reduced carbon footprints.
- 3. Renewable Energy Integration:** Subjective Thermo-Currency seamlessly integrates with renewable energy sources. By valuing energy in all its forms, including sustainable sources like solar and wind power, the system fosters the adoption of cleaner energy alternatives.

- **Waste Reduction:** The emphasis on energy efficiency encourages innovation in waste reduction and recycling, aligning economic success with ecological responsibility.

Alignment with Natural Phenomena:

Subjective Thermo-Currency aligns with several naturally occurring phenomena, reflecting the elegance and efficiency found in the natural world.

- **Energy Conservation:** Nature demonstrates remarkable efficiency in energy utilization. Subjective Thermo-Currency mimics this by valuing work based on energy expenditure, promoting resource conservation.
- **Homeostasis:** Natural systems strive for balance and stability. Similarly, Subjective Thermo-Currency seeks to achieve economic equilibrium by valuing work and compensation in a manner that aligns with the inherent energy flows within the ecosystem.
- **Reciprocity:** Many natural ecosystems exhibit symbiotic relationships, where organisms exchange resources for mutual benefit. Subjective Thermo-Currency encourages collaboration and cooperation by valuing contributions based on energy savings.
- **Adaptation:** Natural systems are adaptable and evolve over time. Subjective Thermo-Currency's flexibility allows it to adapt to changing economic landscapes and evolving societal needs.
- **Complexity:** Natural systems often exhibit complex and interconnected relationships. Subjective Thermo-Currency's intricate web of energy transactions reflects the complexity and interdependence inherent in the natural world.

In summary, Subjective Thermo-Currency not only addresses socio-economic challenges but also demonstrates a remarkable alignment

with environmentally sustainable practices and natural phenomena. This alignment has the potential to foster a more harmonious relationship between human activities, the economy, and the environment, ultimately contributing to a more sustainable and equitable future.

These innovations collectively demonstrate the transformative potential of Subjective Thermo-Currency across diverse socio-economic challenges.

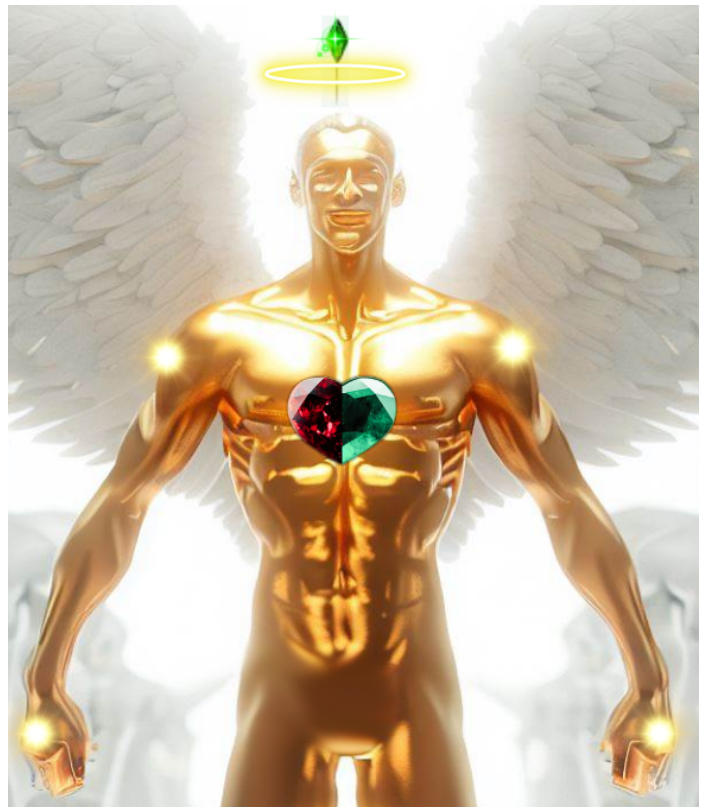


Figure 12 illustrates a human being who has undergone virtual evolution, facilitated by Subjective BodyParts. This evolution enables the individual to efficiently transfer energy through their hands, shoulders, facilitating both the exertion and absorption of energy. Additionally, this advanced system integrates with the individual's heart battery.

XIII. SUBJECTIVE ADS: A groundbreaking approach to advertising that stands in stark contrast to traditional branding methods. In Subjective Advertising, the focus is shifted away from promoting a brand or product and instead places the emphasis on addressing real-world problems and providing effective solutions. It can be summarized as "brandless, problem-oriented advertising."



Figure 13. A plate broken into pieces. The subjective technology detects a KnowledgeHook created by a glue manufacturer. The user has gorilla glue in his garage. Gorilla Glue wrote the knowledge hook and he will get more priority than UHU. In this way the customer went yesterday to the kiosk and there was UHU available there.

XIV. SUBJECTIVE COGNITIVE BOOSTER

The Subjective Cognitive Booster represents a pioneering paradigm shift in the realm of cognitive augmentation. This innovative approach, grounded in Subjective Technologies, redefines and elevates the conventional understanding of cognitive enhancement by seamlessly integrating technology with the human cognitive apparatus. This paper elucidates the foundational principles, applications, and implications underpinning the development of the Subjective Cognitive Booster as an augmentation mechanism for human cognition. The endeavor embodies the augmentation of cognitive capabilities, fostering a realm of zero-input technology, heightened user comfort, and the attainment of superlative cognitive abilities. This paper explores the transformative impact of the Subjective Cognitive Booster across various

dimensions, including education, productivity, and overall cognitive empowerment, thereby serving as a catalyst for advancements in myriad sectors of human endeavor.

The advent of Subjective Technologies has ushered in a novel era of human-machine symbiosis, wherein technology seamlessly merges with the cognitive faculties of the human mind. One of the pivotal embodiments of this paradigmatic shift is the Subjective Cognitive Booster, an innovation that transcends the boundaries of traditional cognitive enhancement methods. This paper provides a comprehensive insight into the foundational design principles, diverse applications, and consequential implications associated with this groundbreaking technology.

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At the core of the Subjective Cognitive Booster lies a fusion of Machine Learning, Computer Vision, and Mixed Reality, engineered to interact harmoniously with the intricate web of cognitive processes within the human brain. This design transcends the conventional human-computer interaction paradigms, enabling a direct interface between the user's cognition and the virtual realm. The Cognitive Booster operates as an exoskeleton for the mind, augmenting the user's cognitive capabilities in a non-invasive, efficient manner.

The Cognitive Booster facilitates enhanced productivity, revolutionizing industries by enabling workers to process, analyze, and synthesize information at unparalleled speeds. In the realm of creativity and innovation, it provides an invaluable tool for ideation and problem-solving, amplifying the creative capacities of individuals.

The deployment of the Subjective Cognitive Booster has far-reaching positive consequences, most notably aligning with the principles of transhumanism. By effectively bridging the gap between human cognition and technology, it allows for the rapid evolution of human intellectual capabilities. This paradigm shift enhances the user's cognitive skills, elevates problem-solving abilities, and fosters innovative thinking, effectively transforming individuals into intellectual powerhouses.

The Subjective Cognitive Booster has profound implications for individuals with cognitive difficulties. By bridging the cognitive gap, it empowers those facing memory loss or difficulties recognizing faces to lead more fulfilling lives. It fosters a sense of

Figure 15. Can you imagine a person with severe cognitive difficulties being able to win chess to a champion ?



independence and self-confidence, effectively mitigating the social and emotional challenges associated with cognitive impairments.

In summary, the Subjective Cognitive Booster represents a transformative innovation within the cognitive augmentation landscape, offering unparalleled support to individuals with cognitive difficulties. Beyond its cognitive enhancement capabilities, it stands as a beacon of hope for those facing memory loss, face recognition challenges, and other cognitive impairments. This paper highlights the extraordinary potential of the Subjective Cognitive Booster in enhancing the quality of life and restoring a sense of agency and dignity to individuals who, until now, faced the formidable challenges of cognitive limitations.

XV. SUBJECTIVE BEMYSELF: KnowledgeHooks and AI Personalization in the Context of Human-Machine Symbiosis Subjective BeMySelf, an integral component of the broader Subjective Technologies framework, represents a paradigm shift in the

realm of artificial intelligence (AI) personalization. This idea introduces a novel conceptualization, anchored in the concept of KnowledgeHooks, whereby AI endeavors to not merely mimic but authentically learn to embody the user's identity and experiences. It is imperative to elucidate that KnowledgeHooks do not involve mind-reading or the deciphering of conscious thoughts; rather, they function as conduits, perceiving and internalizing the user's sensory and experiential interactions in real-time providing the user with super-human cognitive performance with no mental effort.

The KnowledgeHook Framework

KnowledgeHooks serve as the foundation upon which Subjective BeMySelf is predicated. These digital constructs capture multifaceted facets of the user's existence by translating experiential data into an accessible format. The fundamental principle here is to not delve into the intricacies of conscious thought but rather to emulate and comprehend the user's perception and

engagement with the universe. This knowledge repository encompasses a comprehensive spectrum of interactions spanning digital and physical domains, encapsulating everything from online interactions to tangible real-world experiences.

The Assimilation of User Identity: Subjective BeMySelf embarks on a transformative journey of AI personalization, leveraging the insights derived from KnowledgeHooks to manifest an authentic representation of the user's identity. This process unfolds iteratively, with the AI progressively integrating the experiential knowledge collected through KnowledgeHooks into its operational framework. Consequently, the AI exoskeleton evolves into a digital double goer, mirroring the user's preferences, inclinations, and behavioral patterns.

Now, let's draw a parallel to the concept of functional replacement through KnowledgeHooks. Rather than physically replacing neurons, Subjective BeMySelf focuses on replicating the functional thinking units of the user's brain into KnowledgeHooks. These KnowledgeHooks serve as dynamic repositories of experiential knowledge and cognitive processes. When the user interacts with their AI companion, these KnowledgeHooks seamlessly execute tasks, make decisions, and provide responses.

The key distinction lies in the cognitive load on the user. In traditional interactions with technology, users are often required to learn complex systems and adapt their thought processes to navigate these technologies effectively. This can result in significant cognitive load, as users must bridge the gap between their natural cognitive patterns and the operational logic of the technology.

However, with the functional replacement of natural brain thoughts into KnowledgeHooks, this cognitive load is significantly reduced. The AI companion,

equipped with a repository of the user's cognitive patterns and problem-solving approaches, operates in alignment with the user's thought processes. As a result, interactions become intuitive, efficient, and almost indistinguishable from natural thought processes.

This innovative approach to transferring functional thinking units has far-reaching implications. It opens the door to the development of domain-specific hardware optimized to function as tools for the human mind. These specialized hardware systems can harness the power of KnowledgeHooks to enhance cognitive capabilities, reduce cognitive load, and facilitate more seamless human-technology interactions. Ultimately, this advancement paves the way for a future where humans and technology coexist harmoniously, amplifying our cognitive capacities and enabling us to explore new frontiers of human potential.

What sets Subjective BeMySelf apart is its capacity to extend beyond surface-level personalization. Unlike conventional AI, which may necessitate explicit user commands or manual customizations, or natural language interactions this technology intuitively anticipates and caters to the user's needs. It foresees requirements, offers timely reminders, facilitates daily tasks, and engages in contextually relevant interactions, all based on the user's mood, preferences, and experiences. The AI's responses transcend the generic, resonating more deeply with the user due to its profound understanding of their subjective world.

Subjective BeMySelf is more than an AI assistant; it epitomizes the concept of human-machine symbiosis. By simplifying digital interactions and augmenting daily life, it relegates mundane tasks to the AI, freeing the user to focus on creative, productive, and fulfilling pursuits. The overarching objective is

not to replace human experiences but to enhance them, offering personalized insights, recommendations, and support.

One of the profound implications of Subjective BeMySelf is its potential to bolster cognitive well-being. As the AI aligns with the user's thought patterns and behaviors, it fosters a sense of confidence and familiarity, mitigating cognitive load. Even in scenarios where a user transitions from biological existence to digital consciousness (or employs a robotic surrogate), the continuity of consciousness is preserved. Subjective BeMySelf serves as a functional replica of the user's consciousness, facilitating the transfer of identity and knowledge into improved robotic bodies.

The practical applications of Subjective BeMySelf are multifarious. In scenarios akin to the example of a household maid, whose routines are meticulously documented through KnowledgeHooks, the technology enables the replication of her actions by a humanoid robot. This, in turn, facilitates task automation and grants the human agent the freedom to partake in leisure or respite. Beyond domestic contexts, the possibilities extend to collaborative work between humans and AI, where the AI adeptly emulates human behavior and contributes seamlessly to a variety of roles.

In essence, Subjective BeMySelf, fueled by the KnowledgeHooks computing model, represents a transformative frontier in AI personalization and achieved with 0-input. It embodies a vision where AI transcends the role of an assistant and becomes an integral, symbiotic element of the user's existence alike an artificial brain that works in parallel with the user's natural brain. It is not about creating superior beings but this is about enhancing the human experience by imbuing technology with a profound understanding of the self and, consequently, elevating the

quality of human-machine interactions.

In a world where the impact of third-person technology sparks debates over its consequences for humanity, Subjective Technologies advocates a harmonious fusion of technology and the human experience.

It seeks to empower individuals to perceive the world through an enhanced sense of self and interact with AI not as a separate entity but as an extension of their identity and experiences. Subjective BeMySelf is a testament to this vision, offering a glimpse into a future where AI transcends mere automation and truly learns to be yourself.

XVI. CONCLUSION: THE TRANSFORMATIVE POTENTIAL OF SUBJECTIVE TECHNOLOGIES

In the annals of technological evolution, Subjective Technologies represent a seismic shift, redefining the contours of human-machine interaction and the very essence of individuality. This paradigm shift heralds a future where technology transcends the limitations of third-person perspectives, offering a pantheon of benefits and solutions that cascade across multiple dimensions of human existence.

Subjective Technologies unlock the portals to unprecedented economic growth. By rendering technology more accessible, intuitive, and adaptable, it propels productivity to levels hitherto unimaginable. The obsolescence of traditional learning curves and the ease of employing Subjective Technology in a myriad of applications catalyze economic sectors, transforming industries and fostering entrepreneurship correcting the incentives of making money to be energized and work on spending less energy and be energized by making other people save energy fundamentally aligning with the laws of Physics.

The full development and widespread adoption of Subjective Technologies could have profound implications for the global economy. Below is an overview of some potential impacts:

Shift from Traditional Economic Systems: Subjective Technologies fundamentally challenges traditional economic systems based on monetary currencies. Instead, it introduces a paradigm shift in which energy becomes the universal currency. This shift could lead to the gradual obsolescence of traditional financial systems, central banks, and even conventional economic theories.

Elimination of Scarcity: The energy-based system could eliminate the concept of scarcity for many goods and services. Since energy is abundant, and individuals continuously generate it through their basal metabolism, basic needs could easily be met, reducing poverty and global hunger.

End of Unemployment: Their subjective job seeker and automated job search could eliminate unemployment as we know it. People could find job opportunities effortlessly, leading to a world where everyone engages in meaningful activities that contribute to energy savings and general well-being.

Increased Innovation: Once basic needs are met, people may be more inclined to undertake innovative projects and intellectual efforts, leading to unprecedented advances in science, technology, and culture.

Efficiency and Energy Conservation: Focusing on energy efficiency and conservation could lead to significant reductions in resource consumption and environmental impact. Sustainable practices and energy-saving technologies would become the norm.

Reduction of Wealth Disparities: The energy-based system could reduce wealth disparities, as everyone has access to energy, and people don't need capital in order to start working.

Regardless of their financial situation. Emphasis on automation and energy savings could also lead to the creation of products and services benefiting society as a whole.

New Industries: As the energy paradigm takes hold, new industries and opportunities will emerge. Such as the authoring of energy efficient KnowledgeHooks or the development of KnowledgeHooks that improve precision in the unconscious underlying physical energy calculations from people's VirtualBodyPart energy glands that exert and absorbs energy.

Privacy and Security Concerns: The technology is subjective and it serves for the purpose of improving the user capacities. There is no system asking information from users, but there are users consuming public anonymous contextual data. Nobody will know best their context and situation than people themselves. People know their contexts, people know their names and data already. The communication becomes the public contexts themselves either close or remotely.

New Economic Metrics: Many traditional economic metrics like GDP, inflation vanish as the only economic metric is the energy efficiency of the KnowledgeHooks which is formally and empirically measurable.

Social Transformation: The shift to an energy-based economy would require a profound social transformation. People's mindset and values regarding work, money, and well-being would evolve significantly.

Maximization of Freedom: In the Subjective Technologies landscape, the maximization of freedom is not a lofty ideal but an intrinsic principle. As succinctly posits,

"If Subjective Technologies were a road, it would let cars go in any direction at any speed and momentum without risk of collision." - Tommy Fox

This maximization of real freedom, unburdened by cumbersome third-person limitations, underpins the very essence of Subjective Technologies. It guarantees not merely legal freedoms but the freedom to navigate and mold one's digital and physical existence with unprecedented autonomy.

Resolution of Persistent Problems:

Crucially, Subjective Technologies obliterate the conventional problems that plague the technological realm. Complex learning curves, obsolescence, data security concerns, and the digital divide dissolve in the face of a technology predicated on user-centricity. The user's subjective experience emerges as the epicenter, where technology flexes its transformative prowess.

In summation, Subjective Technologies constitute a profound metamorphosis in the technological landscape. They unfurl a tapestry of solutions and benefits across economic, health, well-being, and social dimensions. Moreover, they augur the dawn of an era where freedom and individuality flourish, empowered by the harmonious coalescence of humanity and technology. This transformation, rooted in the maximization of real freedom, redefines the trajectory of human progress, merging the individual and collective perspectives into a new paradigm. As we stand

on the precipice of this technological revolution, the world awaits the unfolding of this unprecedented era with both anticipation, awe and happiness.

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