

Exploring Interreal Translation

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Abstract

In this paper, I document my efforts to define “interreal translations”, a diverse series of semiotic operations that involve the translation of objects, spaces, and subjects across media-generated virtual spaces, including virtual and augmented realities. This exploration is grounded in the discussions about different types of translation and interpretation, and especially on intersemiotic translation within translation studies and semiotics. In this paper I advance a possible definition of interreal translations, as well as a mapping of their configurations, which I describe as vertical (between the primary reality and alternative realities) and horizontal (between different alternative realities). These translations play a significant role in our diverse mediascape and require a multidisciplinary approach grounded on Semiotics and Translation Studies. This exploration of interreal translations offers a promising avenue for future research, reflecting the dynamic evolution of the discipline and the growing importance of digital and virtual contexts.

Keywords: transmutation, metaverse, virtual reality, extended reality, spatial computing

1 Introduction

This research originated to follow up on an intuition. I was looking into the semiotic properties of media related to the so-called “Extended Realities” or XR, generally referring to immersive Virtual Reality (or VR, digital environments that are experienced through headset and other interfaces that create the illusion to be physically inside them), Augmented Reality (or AR, digital overlays to the real world visioned through the screen of a phone or a headset) and hybrids of the two (such as Mixed Reality). The relations that these mediatic spaces entertain with real spaces and objects is often based on some form of imitation. There are numerous projects, for example, that recreate heritage locations in VR to allow people to visit them without being there physically and to help in their preservation, although in digital forms. Ideas such as that of the “digital twins”, i.e. recreations of objects (often industrial machinery) in a virtual form that allows to test their capabilities and their limits without risking damaging them, go even further in highlighting the relation between real objects and their virtual counterparts. Looking at these and other examples, I started to think of these relations as forms of *translation* that

sees objects, spaces, and sometimes subjects, being translated into different digital media. This was my initial intuition.

Things became more complicated when I started to wonder what kind of translation this would be. We can indeed easily position these efforts under the umbrella of intersemiotic translation. This is, however, a very large umbrella, that encompasses all sort of semiotic operations of recreation, imitation, and adaptation, potentially ranging from subtitling to the movie adaptation of a novel. Simply labelling these phenomena as “intersemiotic translations” did not satisfy me: while fairly diverse they also seemed to have something in common. Whether this was just a family resemblance, or if they have some common characteristics required further investigation.

This paper, hence, reports my efforts of defining what I soon started to refer to as “interreal translations”, to understand if there is some commonality that can make them into a specific form of intersemiotic translation – and what that might be. My reflections also include the possible role of translation studies, supplemented by semiotics, as a key epistemology to research these phenomena. This research effort, in fact, can be positioned productively within the current developments of translation studies.

2. Background

Translation Studies are in an intense period of mutation and expansion. The discipline has long moved past considering the written text as sole concern for translation, rejecting the *linguistic bias* and focusing more and more on rethinking translation as a process rather than a final product. This realisation has allowed translation scholars to move beyond traditional binaries, such as source-target, original-translation, and domestication-foreignization (Marais 2021). Calls to more intense interdisciplinary dialogue are rooted in the recent fortune of the concept of “translation” (Zwischenberger 2019) as well as the importance to value the unique features of translation studies (Gambier 2023).

The transformation of the discipline has taken several different avenues. On one side, translation scholars have increasingly expanded their reach focusing on intersemiotic translations in various areas of application, such as between legal contract and comics (Pitkäsalo and Kallioma-Puha 2019), education (Marais 2019), photography (Mersmann 2020), book cover (Sonzogni 2011), packaging (Eker-Roditakis 2018), music (Gorlée 1997), illustration (Echauri Galván 2019), cities (Simon 2006), and different kinds of artifacts (Otsuji et al. 2021).

Another direction focuses on the increasingly complex relations between translation and technology, ranging from the well-established field of machine translation (MT) – including both technical (Stahlberg 2020) and societal (Nunes Viera et al. 2021) angles – to the impact on labour of translation platforms (Firat 2021). Critical approaches to the role of technology in translation have focused both on its possible impacts (Olohan 2017) and on the changes that it can bring on translation as a practice that can be now framed as a form of Human-Computer Interaction (O’Brien 2020) and applied to computer code (St André 2023).

A third key direction that is gaining traction looks at the possible futures of translation. Robinson (2023) imagines an experimental *Cyborg Translator*, while O’Thomas (2017) engages with the possibility and shape that translation might acquire with the embedding of technologies in transhuman bodies. Additionally, Cronin (2020) proposes a *posthuman* gaze on translation, focusing on post-Anthropocene perspectives in a time of ecological crisis.

This research is positioned at the intersection of these three research directions: it focuses on a particular manifestation of intersemiotic translation, which is deeply connected to mediatic developments made possible by increases of computational power and connectivity of digital devices, and engages with a series of phenomena that, I believe, are in their infancy, and are likely to gain importance in the near future.

The theoretical background of my effort to define interreal translations is firmly rooted in translation studies and semiotics, and more specifically on the research and theorisations around the concept of intersemiotic translation.

3. Intersemiotic translations and intersystemic interpretations

The concept of “intersemiotic translation”, first defined (while not thoroughly) in a seminal work by Roman Jakobson (1959), is a foundational one both in translation studies and semiotics. Jakobson famously outlined three main forms of translation: intralingual, interlingual and intersemiotic. Intralingual translation, that he also refers to as “rewording”, is described as an interpretation of verbal signs by means of other signs of the same language. Interlingual translation, or translation proper, is instead an interpretation of verbal signs by means of some other natural language. Finally, intersemiotic translation, also “transmutation”, is an interpretation of verbal signs by means of signs of nonverbal sign systems. It is important to notice that, in this early definition, the semiotic systems have always to involve at least one natural language.

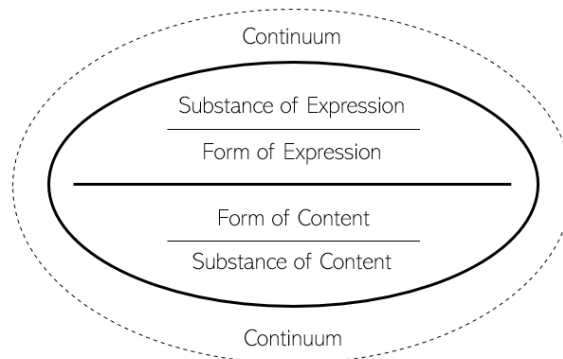
Translations studies have embraced the concept early on and made it part of its theoretic foundations. At the same time, possibly due to their practical orientation, translation scholars have also been cautious in handling it, highlighting how many of the concepts and methods for the study of traditional forms of translation are not necessarily applicable to the many phenomena that can be described as intersemiotic translations. In time, two main understandings of the concept have evolved, as argued by Luis Pérez-González (2014). On the one hand, scholars have seen it as a shift between two different *variants of the same sign system*, such as changing from spoken to written language in film subtitling. This interpretation restricts the possible range of the concept, and thus makes it more applicable within the traditional research interests of translation studies. On the other hand, another interpretation sees intersemiotic translation as the transfer of meaning *across different media* – and therefore across the different semiotic systems that are shaped by, and shape, these media. This second perspective has also moved *beyond* Jakobson formulation, refusing to be constricted by the idea that it only happens when verbal signs are translated in signs of nonverbal sign systems. Instead, the concept has expanded to include translations across non-linguistic semiotic resources and does not

necessarily require a verbal semiotic system to be involved (O’Halloran, Tan & Wignell 2016). To diversify between this wide range of translations, new terms have also been proposed, such as multimodal (focusing on the copresence of different semiotic systems, Boria et al. 2020), intermedial (across different media, Kaindl 2013), and plurisemiotic translation (situated accessible practices, Neelsen 2021).

Semiotics has also taken on the concept quite eagerly, using it to explore the entails of different relations between texts (see, as examples among many, the works of Peeter Torop [2003] and Nicola Dusi [2015]). Semiotic research has also developed several variations in its understanding and use. Dusi (2015) highlights three classic alternatives: the first one is Louis Hjelmslev’s (1969) concept of Transduction, which indicates a translation between semiotic systems with different *continuum*, *substance*, and *forms* of expression – making a precise use of his glossematics terminology. The second one is Algirdas Greimas’ (1966) concept of Transposition: that describes intertextual transformations oriented by the natural language towards other sensorial orders – therefore espousing Jakobson’s idea on a movement away from verbal sign systems. The final one is Gerard Genette’s (1997) concept of Hypertextuality, which describes the operation of creating a “second-degree text” (that is, a text deriving from another, pre-existing one) which includes, among others, traditional translation and what is generally described as an intersemiotic translation.

Hjelmslev’s idea of Transduction and the theoretical framework on which it is based, can be a good starting point to look at the different semiotic components involved. Hjelmslev, building on Ferdinand de Saussure’s theorisation of signs articulated as *signifiant* and *signifié*, imagines two planes necessary to create signs: the plane of expression (roughly corresponding to the *signifiant*) and the plane of content (roughly corresponding to the *signifié*). Signs establish a correspondence between two elements of such planes, which, at the same time, emerge from the indefinite materiality of the *continuum*¹, that is, the material qualities on which a sign system is grounded. Both planes can also be articulated according to the form and substance of their units and systems. Figure 1 represents these relations, inspired by Zingale visualisation (2016).

Figure 1. A schema of expression and content according to Hjelmslev.



¹ Translations of this term oscillate between “purport” and “continuum”. In the works cited, for example, Zingale (2016) uses “purport”, while Eco (2018) uses “continuum”. In this paper I chose to use the second term in all instances for clarity.

The components of Hjelmslev's model, hence, include five main levels. First, the Continuum represents the amorphous element: the non-linguistically formed matter or sense that is later susceptible to formation. It is the unformed matter preceding, and enabling, both planes of expression and content. In practical terms, it indicates the material qualities of the signs produced by different semiotic systems. It can indicate, for example, all the phonological possibilities of humans, the possible traces left by a pen on paper, the typographical possibilities of a printer and so on. In other words, it indicates all the array of possible instruments for sign creation in a specific semiotic system (with all the biological or technical limitations that pertain to them). The Substance of Expression indicates the material selection of the Continuum operated by a semiotic system. For example, a natural language will select only a few of the many sounds that humans can produce or, in written form, a very limited selection of written signs – like an alphabet. Given that the plane of expression can take on a multitude of forms and exists in diverse substances, encompassing speech, writing, gestures, and an array of media, the substance of expression will vary according to the semiotic system involved. The Form of Expression, on the other hand, indicates the shape that the signs of a specific sign system can acquire, and their relationship to each other. Phonemes and morphemes can be an example in regard of natural languages. Finally, the Form of Content indicates the way in which a certain meaningful object is localised within a culture, the articulated form in which meaning is conveyed, while the Substance of Content indicates the underlying, abstract structure of language that exists beneath the surface level of linguistic expressions. As we have mentioned, for Hjelmslev, transduction indicates a form of translation in which the source and target texts belong to semiotic systems with different *continuum*, *substance*, and *forms* of expression.

Hjelmslev's model, together with Peircean semiotics, is at the basis of one of the most sophisticated understandings of the different types of translations, which is the one proposed by Umberto Eco (2018), and which I will adopt in my attempt to define interreal translations.

Eco starts his discussion with a critical reading of Jakobson definitions, and in particular bringing attention to the terminological alternation between the concepts of “translation” and “interpretation” that the author uses to indicate the phenomena he describes. Eco argues that this ambiguity could indicate Jakobson's understanding that the term “translation” when used to indicate intersemiotic translation, is used in a metaphorical way (2018, 227). Eco then elaborates on the role of translation in Peirce's ideas on interpretation – and in particular on the key concept of interpretant, a sign that is used to understand another sign by offering a sort of translation of it – and on their influence on Jakobson thought (*ibid.*). Eco concludes that every form of translation also requires a prior interpretation from the side of the translator. The operations necessary to create a second order text, based on that interpretation, then vary according to the semiotic systems involved and the differences between them (2018, 227–229).

Based on these reflections, Eco proposes a systematisation of different types of *interpretation* (and not translation), which is not a typology, but represents a series of categories within a continuum of different semiotic operations. The categories are the following (Eco 2018, 236, my translation):

1. Interpretation by transcription
2. Intrasystemic interpretation
 - 2.1. Intralinguistic, within the same natural language
 - 2.2. Intrasemiotic, within other semiotic systems
 - 2.3. Performance
3. Intersystemic interpretation
 - 3.1. With marked variation in the substance
 - 3.1.1. Interlinguistic, or translation between natural languages
 - 3.1.2. Rewriting
 - 3.1.3. Translation between other semiotic systems
 - 3.2. With mutation of continuum
 - 3.2.1. Parasynonymy
 - 3.2.2. Adaptation or transmutation

The categories range from transcription (e.g. in another alphabet) to adaptations and cover a wide range of different activities. While we do not have space to go through all of them, it is important to notice how Hjelmslev's concepts are at the base of Eco's idea of intersystemic interpretation, in particular as a base to distinguish between interpretation across semiotic systems in which the variation is on the level of the substance – including translation between natural languages – and those that feature a variation in the continuum itself – including adaptation and transmutations, i.e. what is generally described as intersemiotic translations.

These categories, and the key concepts behind them, will guide my attempt to position the phenomena of interreal translation within the continuum of different forms of interpretation. Nevertheless, as the term is the most widely used, I will keep referring to “intersemiotic translations” to indicate intersystemic interpretations with mutation of continuum. It is also important to note that, based on Eco's definition, I am using the term “translation” in a metaphorical way – in the same way as in Eco's understandings of Jakobson's transmutation.

Before situating interreal translations, however, it may be useful to describe the phenomena that we are discussing and the metaphors that are used to define them.

4. From virtual worlds to alternative realities

4.1 Metaphors and media

Extended Realities (XR) is a term used to describe a wide range of digital media that allow different levels of immersion, interaction and/or mixing of digital and analogue elements. XR as a concept – and a metaphor – follows what has been one of the most philosophically relevant technological, social, and cultural innovations brought by the development of computing: the formulation of the idea of a “virtual reality” (which initially designated every form of digital space, not today's immersive VR). Humans often use temporal or spatial metaphors to describe different media (Volli 2005), and computers are not an exception: the new, virtual space simulated by computers was soon perceived

as a second, separate “reality”. The launch of the World Wide Web only increased this perception, by populating this reality of numberless virtual spaces. However, for a long time, the Web was perceived as a socially separate – and somewhat dangerous – place to navigate anonymously or pseudonymously, where deception was the norm, and no personal information should be shared. The advent of the so-called Web 2.0 brought along new social media and a different media ideology: a continuity between online and offline identities that promoted an intense connection between personal life and online presence (Thibault 2016). This led to new techniques that would allow forms of translation between these realities: devices such as social media “profiles” (containing pictures, preferences, and personal information) would allow users to cast themselves in an online simulacrum, with the help of shared geolocative data and of the production of a large quantity of images representing one own’s life (selfies, food pictures and so on) (Leone 2018). One egregious example was *Second Life*, a platform launched in 2003 (and still active) that promised a 3D virtual world that was parallel to the real one, not imitating it, but allowing social relations that would translate across reality. Users could go to class or visit their bank within the separate reality of *Second Life*. In time, the development of immersive VR has given another dimension to the idea of virtual reality.

Nowadays the term is mostly used to describe 3D virtual environments that afford an illusion of physical presence thanks to the use of headsets and controllers that give the impression to be inside it and to be able to interact with it. VR applications include a variety of texts, ranging from games to virtual tourism platforms, and including virtual training grounds, educational environments, apps for heritage preservation and VR social media.

Simultaneously, opposite strategies have been devised, where the rich digital-born content could be translated back. *Pokémon Go* is still the most salient example of Mobile Augmented Reality application allowing to visualise digital characters in real environments, but it is not the only one. Dating simulators, such as in *Konami’s Love Plus*, allow users to take selfies with their virtual girlfriends, while applications like Snapchat or Zoom allow to digitally alter one’s own appearance or take a new one altogether.

In the continuous work to define new metaphors that help us understand our media landscape, one of the most recent has been that of the *metaverse*. It is an idea strongly promoted by corporate interest, which envisions the creation of a single all-encompassing VR infrastructure that would allow users to meet, work, play and practically live their lives online within the system. Besides the clearly ideological implications of such metaphor, this vision seems to contrast strongly with where our current mediascape seems to be heading.

Our mediascape (intended here as the system of media and communication as a whole) is instead increasingly fragmented and structured around different “alternative realities” (digital, virtual, augmented, hybrid...). This plurality and variety can be, in fact, of great interest for translation research. The complexity and diversity of the mediascape make translations a key operation in the circulation of meaning.

4.2 Media-generated alternative realities

Until now, we have been using terms such as “reality” and “real” rather naïvely, while dealing with metaphors. The term “reality”, however, is a philosophically complex one. Scientific realist perspectives, for example, posit the existence of a stable reality outside of human experience (Hunt 2011), while constructionist and postmodern approaches choose to focus on how (social) reality is mostly constructed through individual experiences and socio-cultural institutions (Berger & Luckmann 1967). This is not the place to engage in such issues deeply, but we need to find a way to deal with the term that is appropriate to the media environment we are describing.

Without taking any hard position on the nature of reality, here I will be using the concept of “primary reality” to indicate the mediation between an external physical reality and the psychological, socio-cultural, and socio-technical constructions that make it intelligible for humans. I look at this primary reality as an interpretative fact, that is, as the result of culturally shaped individual and collective attempts to make sense of the physical reality.

Our simple definition of “primary reality”, in its name, suggests the existence of “secondary realities” – a concept that also needs a less naïve approach. Terms such as “virtual reality”, “augmented reality” or “extended reality” cannot be taken literally, as they clearly do not indicate ontological alternatives to the primary reality. As mentioned above, we are dealing with metaphors – but this does not mean that they do not shape profoundly our understanding or interpretation of them. These “realities” have been described with many different terms (Laato et al. 2024) but are effectively mediatic spaces that can be perceived and interpreted as alternative to the primary reality. These spaces, however, are not seamlessly connected with the primary reality and require an interface (ranging from mouse cursors to haptic gloves) to be accessed. For this reason, they appear to us as separate realities, alternative to the primary one. This is not an ontological fact, but an effect of meaning that they generate – effect that guides us to interpret and conceptualize them in such a way. I propose to call them “media-generated alternative realities”.

These alternative realities, as discussed above, include several different mediatic spaces. Augmented Reality (AR), for example, indicates a digital layer that is superimposed to primary reality spaces and visualized through a phone or headset. Immersive Virtual Reality (VR) is a 3D virtual environment navigable with an interface (e.g. headset) to allow users to experience embodiment. The virtual worlds common to many digital games, finally, offer a similar digital spatiality, accessible through a screen rather than a headset.

I call this ensemble of media-generated alternative realities that surround, interact, and augment the primary reality “interreality”. It is entrenched in both a dense intertextual network (Genette 1997), where different media and products continuously refer to each other’s content (forming transmedia *cinematic universes* or causing the emergence of continuous parodies and retellings) and a sophisticated hypertextual network (Nelson 1965), the infrastructure of links and digital connections that binds it together. The reach and complexity of these networks is ever increasing, and it is likely to become even

thicker because of the competitive corporate attempts to standardize and interconnect different realities and of the increasing success and continuous development of XR technologies.

Because of this complexity and interconnection, at the very core of the techno-social and semiotic working of the interreality there are mechanisms of translation.

5. Translating across realities

5.1 In search of a definition

As mentioned in the introduction, this research followed an intuition I had while analysing the semiotic dynamics occurring between these different “realities”, and in particular different forms of XR. Some operations – not all! – seemed to be understandable as forms of translation, intended as an attempt to recreate a certain object, space, or subject in a different reality, preserving its key characteristics and workings. An example is the recreation of a heritage site in Immersive Virtual Reality (VR). The space is scanned, and the data are used to reproduce it in VR in a way that is faithful to its key characteristics. The desire to preserve the characteristics of the original guides the choices of its translators in terms of technical solutions and design choices oriented towards an effect of “equivalence”. However, a similar process with a different propose – such as the recreation of Paris’ Notre Dame cathedral in the game *Assassin’s Creed* – is shaped by different translatorial choices: even if it has been suggested to use the in-game model as a blueprint for the reconstruction of the roof of the cathedral after a fire, its faithfulness to the original met a series of constraints related to game design needs and copyright laws (Rochefort 2021). Like other forms of translations, the media involved, the purposes of the operation, and the stylistic choices of translators all participate in the realization of the final product.

If we look at these operations as translations, we can position them quite easily within what Eco calls intersystemic interpretations. The semiotic systems across which information is exchanged, different realities, feature important differences including the “nature” of the reality (primary vs secondary) as well as the dimensions that the objects and interaction can have within them (being visible, touchable, interactive, augmented etc.). They are complex and sophisticated operations – widely different and variegated – that take place between different forms of media-generated alternative realities.

They are also clearly intersystemic interpretations *with mutation of continuum*. It is, in fact, one of their key characteristics. We can imagine, for example, the recreation of a book in VR. The semiotic systems would be the same: the medium is, in both cases, a codex, the sign system would be the same natural language, using even the same font – what changes is the continuum. In VR the continuum is a digital one, profoundly different from the material features and affordances of a book made of paper.

In a first moment, I thought this could be the key to define interreal translations, the answer to my feeling that there is something in common between these different operations. The involvement of a *virtual continuum* would cover all sort of interreal

translations: the recreations in a digital world of VR, the visualisation of digital content in AR, and even the possibility of translating something across two different virtual worlds, like from a digital game to a Social VR application.

This definition, however, has a series of issues, starting with the definition of “virtual continuum”. The term “virtual” can be defined in various ways. The most appropriate in this context is Berthier’s (2004), which define as “virtual” something that while not “real”, displays the full qualities of the real. In this sense, as in Deleuze (1991), “virtual” is not the opposite of “real” but rather the ability of evoking some characteristics of the “real” – although with several limitations, e.g., when it comes to our ability to sense it (Massumi 2021). Depending on which characteristics of the “real” we take into consideration, this definition would indeed cover our alternative realities. However, the same could be said for many other media, including photography, cinematography and 360° videos. Even an ad hoc interpretation of the term would still allow to include things like the digital imitation of a sheet of paper in a text editor to be considered as an interreal translation. If we were to restrict the characteristics imitated by the virtual, we could exclude other media, but we would limit our definition to VR, and exclude other forms of XR or Virtual Worlds which don’t have constitutive differences in the way they are experienced – that is, they are images on a screen. The idea of a virtual continuum as a discriminant is not tenable for my purpose.

After exploring different approaches, I had to give up the idea of a structural difference between interreal translations and other forms of intersystemic interpretations with mutation of continuum – or intersemiotic translations. Nevertheless, I could not avoid perceiving a deep similarity between these processes, and a difference from other forms of intersemiotic translation.

In my efforts to uncover what could be behind this sensation, I kept going back to the ideas of metaphor and of family resemblance (as theorized by Wittgenstein – see Wittgenstein 1953). The media involved in the phenomena I am interested in are not, as we mentioned, ontologically different realities, but they are metaphorically described as such. And they are because, despite their differences, they share a family resemblance regarding their media affordances and semiotic features. Could this be the basis upon which to build a definition?

Eco’s (2018) discussion of the nature of translation and interpretation could offer a justification for such a choice. The translations and interpretations he describes are always secondary, in practice, from a first interpretation operated by the translator. In other words, before translating any kind of text, a translator “reads” it and interprets it – and, according to Peirce’s semiotics, they do so by using another sign, or series of signs, as interpretants. Only after this first moment of interpretation, which filters the original text from the perspective of the translator, the latter can create a new text, which also works as an interpretant for the first one, in a second moment of interpretation.

According to this perspective, the defining criterium of intersemiotic translations should be positioned in the first moment of interpretation, rather than in the second one. It is not a structural feature of the process to create a second text – even if many technical dimensions that are proper to these forms of translation are extremely relevant and similar across the different types – but it is an interpretative attitude towards the media and

mediatic spaces that are involved and that will then guide the process of text creation. In other words, what all forms of interreal translation have in common is that some of the semiotic systems involved are interpreted, following cultural habits crystallized in metaphorical thinking, as being alternative realities.

Grounding the definition in interpretative habits and metaphorical thinking does not offer the most solid of definitions. It allows much space for fuzzy borders, differences in interpretation, and changes over time. At the same time, Eco describes his categories as part of a continuum, rather than being separated by strong borders (2018: 236). Interreal translation, then, can be understood as one of the many sub-categories that can be used to discern items in the continuum and that share similar characteristics. The next step, hence, will be to map out the different groups of operations that populate this sub-category.

5.2 Towards a typology of interreal translations

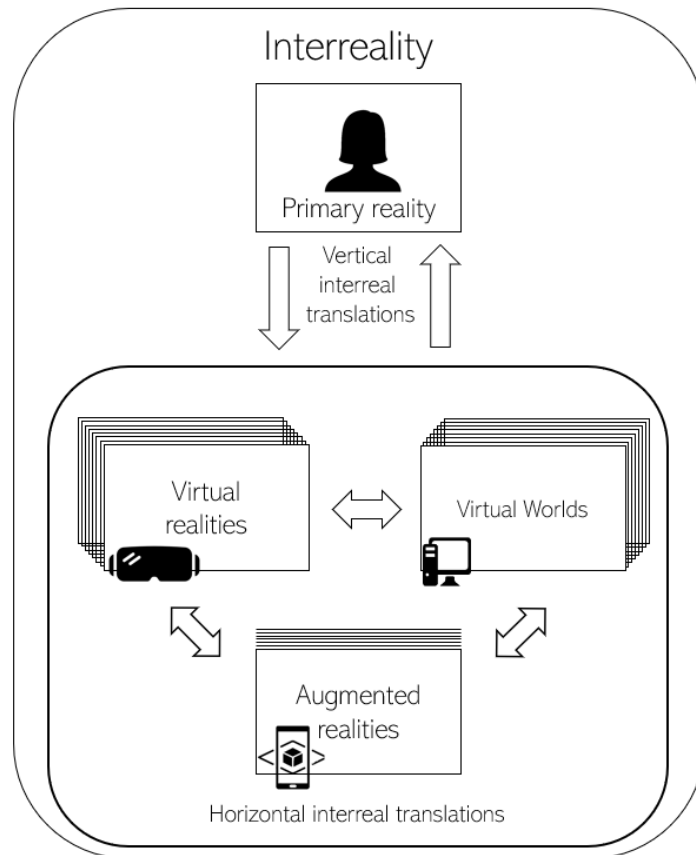
I have grounded my definition of interreal translations in the fact that at least one of the semiotic systems involved is interpreted as an alternative reality. This definition entails different possible configurations. First, we can distinguish between translations that include one semiotic system interpreted as an alternative reality and one that belongs to the primary reality, and others in which the translation happens between two alternative realities. I refer to the first configuration as “vertical” translations and the second one as “horizontal” translations – which highlights the subordinate status of alternative realities to the primary one (Fig. 2). We can therefore imagine a mapping of the translatorial relations in the interreality which includes the different kinds of interreal translations we have described.

As vertical interreal translations take place between the primary reality and one or more alternative realities, this can proceed in both directions. On the one hand, we have translations from the primary reality to alternative ones. This includes different forms of 3D scanning and the creation of digital twins, which recreate objects and spaces from the primary reality in virtual form. The reconstruction in VR or in Virtual Worlds of real spaces (e.g., for touristic purposes or gaming) works in a similar way. Additionally, forms of tracking of human physiology and concepts such as the “quantified self” (indicating the continuous tracking and compilation of data about humans, Ruckenstein & Pantzar 2017) can also be considered as part of this type of translations when they are deployed in the effort to create digital simulacra of human beings. These translations can also be seen as “modelling” efforts. The processes of mapping, measuring, and selecting elements from the primary reality open the way to different modelling strategies (different ways of representing them in the target reality, different styles, choices, solutions). Translating and modelling are deeply intertwined processes. Hermans (1993) claims that translation can be understood as a modelling activity: translations, like models, are representations by approximation that generate a “vicarious object” which, in some capacity, can be a substitute of the original one. If efforts of digitization or virtualization can be understood as creation of models, the processes necessary for such operation can be understood – and studied – as forms of translation: the choices and strategies behind them are analogue to

those pertaining to a traditional translation activity – while specific to the media and technologies involved. On the other hand, we have translations from alternative realities to the primary one. This includes all strategies to position digital objects from alternative realities in the primary one, such as the use of AR, which allows the positioning of virtual objects or characters in the real world, (for example in the form of filters, or when taking a selfie with a character from a dating simulator). Many of these forms can be understood as forms of *eversion* (Nadin 2010): integration of digital elements into our real-world experiences.

Horizontal translations take place between different alternative realities. These include the translation of digital artifacts across different platforms, operated by exporting, importing and recreating 3D models, avatars, environments, and objects. Social VR websites are often hubs of such translations, as they host avatars and environments that users have translated from innumerable digital games. Recreation of certain virtual spaces in others, as the recreation of game maps in *Minecraft* are also common. They are all also forms of transmedia translation (Kaindl 2013).

Figure 2. A map of interreal translations.



6. Conclusions

In these pages I have shared my efforts in moving from an intuition to a proposal for a new subcategory of translation – or interpretation. This work is still at an exploratory stage, but I have tried to establish a possible definition of interreal translation, together with some mapping of the items that compose it. These are, in my mind, some first steps towards an expansion of the traditional reach of translation studies, much in line, as mentioned above, with the current trends within the field.

Interreal translation can expand the objects and processes studied by translation research. The latter, I believe, especially when complemented by semiotics, is particularly indicated to engage with the circulation of texts across different realities. First of all, this expansion builds naturally on the current evolution of the discipline. The attention to multimodal and intersemiotic translation, the increasing engagement and entanglement with digital technologies, the curiosity towards posthuman communicative futures and the place that translation will have in them all seem to support an expansion of translation studies in this direction.

Secondly, interreal translations are very unlikely to happen in isolation, but rather are one of the many forms of translation that happen simultaneously in our multifaced mediascape. Our mediatic ecosystem mirrors also the diversity and complexity of human societies, which are increasingly multicultural and multilingual. Interlingual translation and localisation efforts play an important part on how entire alternative realities are shaped – we can think of the enormous changes the virtual environment of the online digital game *World of Warcraft* had to undergo in order to be allowed in the Chinese market (Zhang 2012). What approach would be better suited to engage with this simultaneous multiplicity of translations?

Finally, the methodology of translation studies can offer structure and perspective to the study of these phenomena. The methodological orientation of the field, focusing on products, process, participants, and context (Saldanha & O'Brien 2014) offer a solid and applicable structure to build on. Methods originated from it (such as shift analysis, reception analysis) as well as methods that have a long history of application in the field (such as introspection and self-reflection, translator interviews, and many more) offer key tools to engage with interreal translations and translators.

Nevertheless, this will necessarily have to be a multidisciplinary effort. In this paper, semiotics has already been a key component in my efforts to define and situate interreal translations, allowing for a systematic look under the surface of the meaning-making characteristics of different forms of translation and interpretation. Additionally, while translation studies and semiotics offer theoretical foundations, methodological orientation, and key methods, in the future, complementary perspectives and methods from Human Computer Interaction, Media and Games Research would be needed to engage with the practical implementations of interreal translation, including their technical and design dimensions.

The practical, authorial, and even professional dimensions of interreal translation remain, of course, unexplored. Future research building on the first steps proposed in this paper will have to confront the definitions and mappings proposed here with results of

analysis of case studies. Only a systematic exploration of the different dimensions of interreality would be able to put the definitions to test, and to investigate the epistemological benefits that such an approach can bring in the study of mediatic phenomena that are increasing in number and complexity within our mediascape.

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