

PHENOMENOLOGY OF VERTIGO AND DIZZINESS

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Abstract: What emerges from a phenomenological description of the experiences of dizziness and vertigo for a general phenomenological theory of the constitution of the world? What emerges from this contribution to the general project of a phenomenology of pain? In this paper we try to answer both questions by showing their intimate relationship. For this it will be necessary to carry out a phenomenological description of both phenomena that shows the possible limitations of its clinical determination as it has been established recently (Bisdorff, Von Brevern, Lempert, Newman-Toker, 2009)². Through successive phenomenological descriptions of the experience of vertigo and dizziness, we will try to show the importance of the axis of verticality in the phenomenological theory of the constitution of the world, as well as its relationship with the axis of horizontality.

Keywords: Vertigo, Dizziness, Phenomenology of Pain, Husserl.

Resumen: ¿Qué surge de una descripción fenomenológica de las experiencias de mareo y vértigo para una teoría fenomenológica general de la constitución del mundo? ¿Qué surge de esta contribución al proyecto general de una fenomenología del dolor? En este artículo tratamos de responder ambas preguntas mostrando su relación íntima. Para

Resumo: O que surge de uma descrição fenomenológica das experiências de tontura e vertigem para uma teoria fenomenológica geral da constituição do mundo? O que surge dessa contribuição para o projeto geral de uma fenomenologia da dor? Neste artigo, tentamos responder a ambas as perguntas, mostrando as suas ligações íntimas. Para isto, será

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² A. Bisdorff, M. von Brevern, T. Lempert, David E. Newman-Toker, “Classification of vestibular symptoms: Towards an international classification of vestibular disorders”, in *Journal of Vestibular Research* (2009), 1-13 (DOI 10.3233/VES-2009-0343).

esto será necesario realizar una descripción fenomenológica de ambos fenómenos que muestre las posibles limitaciones de su determinación clínica tal como se ha establecido recientemente (Bisdorff, Von Brevern, Lempert, Newman-Toker, 2009). A través de descripciones fenomenológicas sucesivas de la experiencia de vértigo y mareos, trataremos de mostrar la importancia del eje de verticalidad en la teoría fenomenológica de la constitución del mundo, así como su relación con el eje de horizontalidad.

Palabras clave: Vértigo; Mareos; Fenomenología del dolor; Husserl.

necessário fazer uma descrição fenomenológica de ambos os fenómenos que permita mostrar as possíveis limitações de respetiva determinação clínica, recentemente estabelecidas por autores como Bisdorff, Von Brevern, Lempert e Newman-Toker. Através de sucessivas descrições fenomenológicas da experiência de vertigem e tontura, tentaremos mostrar a importância do eixo da verticalidade na teoria fenomenológica da constituição do mundo, bem como a sua relação com o eixo da horizontalidade.

Palavras-chave: Vertigem; Tonturas Fenomenologia da dor; Husserl.

1. Phenomenology and criticism of scientific knowledge: brief outline of the historical difficulties in establishing a diagnosis

The present research is devoted to laying the foundations for a phenomenological description of vertigo and dizziness. Out of the multiple courses of thought at the disposition of phenomenological research, our work will be built on the conception of phenomenology as a critique of knowledge³. The knowledge that will hereby be submitted to criticism through a phenomenological interpretation of its usual normative definitions is that of the clinical diagnosis of the experience of vertigo and dizziness. Firstly, taking the phenomenological analysis of the standard concepts in the clinical diagnosis of vertigo and dizziness as our starting point allows us to make use of phenomena on top (or underneath) of which a history of thematization attempts that are alien to the methodological tools of phenomenology already exists; which allows us to ascertain what it is that we can gain through its application. Therefore, the phenomena addressed in this paper contain what Husserl would call “substructions”, which far from being unworldly

³ It would be a mistake to interpret this course as a secondary proceeding in Husserl’s phenomenology, we are probably referring to the course that leads to the phenomenology’s first impulse as philosophy in the “Logical Investigations” (especially in the “Introduction to pure logic”), and even previous to his first great work: the project of phenomenologically substantiating the basic notions of mathematics and logics in respect to their psychologistic deviations. The self-interpretation of phenomenology as inseparable from the critique of knowledge appears in different places in Husserl’s work, especially *Hua* XXIV, § [31], 158 & ff.

elements, configure it in the fundamentality of its donation⁴. The fact that we are choosing this as our starting point does not imply: (a) a direction that is anti-natural to the phenomenological movement itself, which originates in an attempt to clarify the fundamental concepts with which the sciences operate (mainly mathematics and logic); (b) different or conflictive results to those we would obtain had we taken a different starting point out of those offered by phenomenology, such as a direct first person description of an experience of vertigo or dizziness. A serious understanding of phenomenological research as a proceeding which always zig-zags forward is essential in order to ascertain that the complementarity of the starting points and conclusions in whichever directions we take at the beginning of a phenomenological investigation should be the criteria that proved we were proceeding correctly⁵.

The establishment of terminology ascribed to the diagnosis of vertigo and dizziness has been surprisingly tardy and is still debated today. In 2008 the American Academy of Psychiatry regretted the lack of an exhaustive classification equivalent to that of headaches for vestibular disorders by the International Headache Society (IHS). In comparison to the International Classification of Head Disorders (ICHD), in 2008 the classification of vestibular disorders was still “in its infancy”⁶. This drove the members of the

⁴ On the meaning of the neologism that Husserl coins for the phenomenological concept of “substruction”, specially *Hua VI*, § [34] (d), 130 & ff; see also Joan González Guardiola, “Lebenswelt”, in *Anuari de la Societat Catalana de Filosofia*, vol. XXIII (2010), 160, as well as Hans Blumemberg’s interesting thoughts on the matter: Hans Blumemberg, “Lebenswelt und Technisierung unter Aspekten der Phänomenologie”, in *Filosofia*, n° XIV (1963), 855 - 884.

⁵ Already in Husserl’s first works we find the methodological notion of phenomenology as an investigation in zig-zag; *Hua XIX*, LU, II/1, *Einleitung*, § [6], 2° *Zusatz*. There, Husserl refers to this image to reveal the impossibility of following the “normal” order of exposition according to the order of the systematic connection of the science at hand (logic, in this case). The image of the “zigzag” is important to clarify the general structure of the *Logical Investigations* in its six parts. The methodological figure of advancing in zig-zag is sustained as a functioning concept through all of Husserl’s work, and we also find it in his thematization of the *Lebenswelt* (Anthony Steinbock, *Home and Beyond: Generative Phenomenology after Husserl* (Evanston: Northwestern Univ. Press, 1995). The movement of the regressive interrogation of phenomenology as archeology is characterized not as a “construction, like in Kant” but as a “reconstruction, consisting of zigzagging”, as is properly done, Husserl says, in “archeology”. Finally, we also find the image of “zigzagging” in subsection (k) of the § [9] of the *Krisis*, in the “methodic meditation”, where the zigzagging structure is set from the “need” of the *Krisis* problem itself, and also plays a role in the famous *Beilage III, Der Ursprung der Geometrie*.

⁶ Bisdorff, Von Brevern, Lempert, Newman-Toker, “Classification of vestibular symptoms...”, 1.

Bárányi Society⁷ to set a consensus classification for the concepts of “vertigo” and “dizziness” in the Kioto Conference. From now on, we will refer to these concepts as the “Kioto consensus” on the definitions of vertigo and dizziness.

The main aspect of the Kioto consensus regarding the definition of vertigo and dizziness is that the new classification abandons the North-American tradition, which considered vertigo a subset within dizziness. Instead, it follows a more European tradition, which separates vertigo and dizziness as two different types of disorders. What we are interested in is carrying out an application of phenomenological methodology (fundamentally phenomenological reduction and eidetic variation) to ascertain whether the new definitions provided by the Kioto consensus can withstand some of the nuances of first-person phenomenological description.

In the Kioto consensus the definition of “vertigo” is established as follows:

the sensation of self-motion when no self-motion is occurring or the sensation of distorted self-motion during an otherwise normal head movement” ... The term encompasses false spinning sensations (spinning vertigo) and also other false sensations like swaying, tilting, bobbing, bouncing, or sliding (non-spinning vertigo)⁸.

Conversely, the definition of “dizziness” is established as follows: “sensation of disturbed or impaired spatial orientation without a false or distorted sense of motion”⁹.

Therefore, the separation of the two phenomena includes the possibility of a false sensation of self-motion without an alteration of spatial orientation,

⁷ The Bárányi Society is a committee devoted to the establishment of an international classification of vestibular disorders. Experts from hospitals from all around the world are part of it, like the John Hopkins or the Berlin hospital, among others.

⁸ Bisdorff, Von Brevern, Lempert, Newman-Toker, “Classification of vestibular symptoms...”, 5. Vertigo is understood as “internal vertigo” by default; that is, an experience that implies proprioception (self-motion, or a sensation of movement of one’s own body). External vertigo is that which lacks this proprioceptive component of motion, and is defined as a vestibulo-visual symptom that usually accompanies it. However, “inner” and “outer” are here explicitly disassociated from any kind of link to a distinction between “subjective” and “objective” vertigo, a distinction which disappears in the Kioto consensus.

⁹ Bisdorff, Von Brevern, Lempert, Newman-Toker, “Classification of vestibular symptoms...”, 7. The notion of “spatial disorientation” refers to the notion of not being able to precisely define the position of our body in space in relation to both the vertical and the horizontal axis.

and vice versa: an alteration of spatial orientation without a false sensation of motion. The Kyoto consensus' definitions stress that both phenomena tend to happen very frequently; but this regularity cannot make us forget their "eidetic" separability. From a phenomenological point of view, it does not take long before both definitions stagnate in the polysemy of two concepts of wide metaphysical tradition and, therefore, presumably heretical from a scientific standpoint: on the one hand the "I" crouched in the "self" – movement prefix (a "self-movement" is immediately presupposed to be a movement of the "I"; Husserl would say: an execution of the "I can"), and, on the other hand, the spatial "orientation", which immediately takes us to the question of the relationship between body and movement. An immediate reading would lead us to finding an alteration of the kinaesthesias in the episodes of vertigo and an alteration of the feelings (*Empfindnisse*) in those of dizziness. Or, to put it in the appropriate vocabulary for the phenomenology of corporality, an alteration of the kinaesthetic system in the case of vertigo, and an alteration of the somaesthetic field in the case of dizziness¹⁰. We immediately encounter the problem of establishing a correct separation between both experiences, at least eidetically, which takes us to the complex and more general debate concerning the relationship between the kinaesthetic system and the somaesthetic field¹¹. We will claim that the phenomenological delimitation of these two experiences (vertigo and dizziness) allows us to make progress in the more general problem of the relationship between kinaesthesias and affectivity or between proprioception and interoception.

¹⁰ At this point, it is very important to properly fix the alteration of spatial orientation to the somaesthetic field, for otherwise the specific difference between the kind of alteration that dizziness entails and any other experience of disorientation not accompanied by dizziness would not be understood. The non-somaesthetic disorientation implies a lack of knowledge of our position in relation to other objects around us (Arne A. Ekstrom, Hugo Spiers, Véronique D. Bohbot, R.S. Rosenbaum, *Human Spatial Navigation* (New Jersey: Princeton University Press, 2018) 26; 38.), but it does not necessarily entail an alteration of our position between our perceptive center and other parts of our own living body. I can effectively get lost or disoriented walking back home, but at no moment does this experience have to be accompanied by the sensation of dizziness. Rather, dizziness obeys the experience of disorientation between some parts of my body (the head, the stomach) and other parts of it.

¹¹ We take this terminology from E. Behnke's works; especially "*The Problem of Inner Spatiality: An Experiment in Phenomenological Practice*", presented in the 49th Husserl Circle, City of Mexico, 2018. The difference between a kinesthetic "system" and a somaesthetic "field" is important: we understand "system" as "coherent nexus of interarticulated possibilities", and "field" as "matrix of display". The relationship between "field" and "system" is one of constituting – constituted: the field constitutes a system, or the system is constituted by a field.

Thus, we hope to shed some light on the “direct” phenomenological problem of the relationship between the egoic polarity of intentionality and the genesis of the “inner - outer” distinction, which is correlative to the possessive pronominalization of some experiences of “miness”¹².

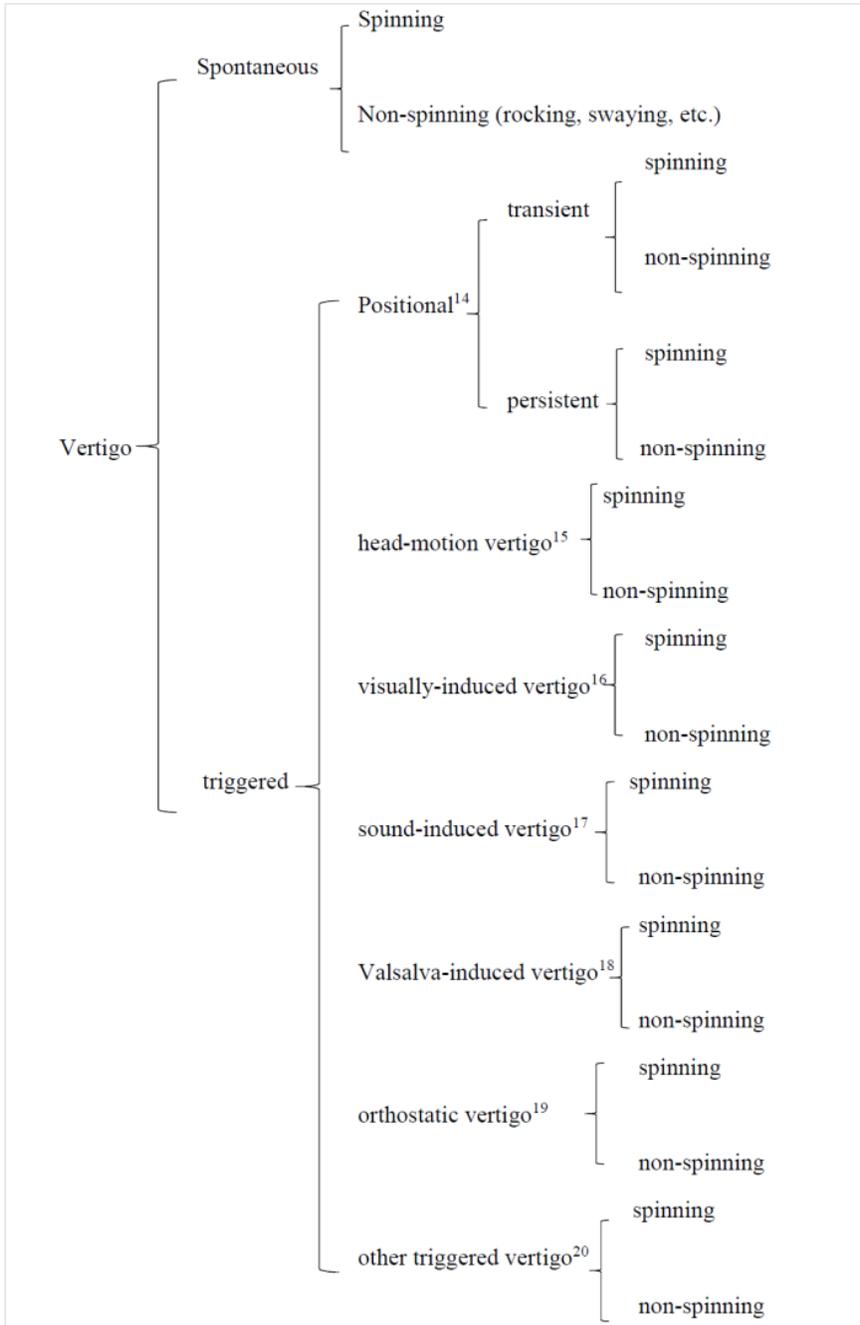
2. The structure of the Kioto definition: contexts and symptoms

In the Kioto consensus, apart from the two definitions of the phenomenon, both experiences are accompanied by a classification of “contexts” and a set of “symptoms”. Although the Kioto document does not directly refer to “types” of vertigo and dizziness, it articulates the contexts in which the experiences take place in a taxonomic manner, based on a fundamental distinction: whether we can distinguish the trigger factor or not. The description of the link between the trigger and the vertigo or dizziness is presented in phenomenological terms: it must present an “appropriate temporal relationship”, not necessarily based on the establishment of a psychophysical causality. The fact that the classification of the appearance of vertigo/dizziness and its trigger is not based on a scheme of psychophysical causality is revealed through two factors: (a) the vertigos/dizziness that are causally provoked by chemical triggers (for instance, the ingestion of specific foods, hormonal supplements, medicine) are only considered such if they take place in the temporally appropriate terms of the relationship. A vertigo/dizziness caused by a chemical component the appropriate association of which cannot be established will be classified within spontaneous vertigo/dizziness, regardless of having been causally provoked by a chemical agent. This takes us to suggest a phenomenological nature, which is not causal or psychophysical, of the Kioto classification’s notion of “trigger”; (b) some specific contexts include the simultaneity between the experience of vertigo/dizziness and its trigger. For instance, in the case of head-motion vertigo/dizziness, the trigger and the experience occur simultaneously, and not following a causal relationship of anteriority and posteriority. The factors (a) and (b) make us think that the classification of contexts of appearance is based on the descriptive clarification of consistent diagnosis, at least in part. That is, in the accepta-

¹² In the sense that “mine” here defines simply what is “inside” (to add “of me” would be redundant), and “not mine” would be that which is “outside”. We believe that our phenomenological descriptions of vertigo and dizziness can be useful to carry out nuances in the distinctions that have recently circulated between “miness” and “mineness” as different expressions when establishing the subjective nature of experiences, but we will not carry out this discussion here; about these distinctions, vid. M. Guillot, 2017, pp. 23-53.

tion of descriptions from the patient in first person, in which the association of the trigger and the appearance of the symptom can be established, insofar as both are *parts* which appear in the experience of the phenomenon and not in the strictly casual physiological analysis. Concerning the third level in the Kyoto definitions, that of symptoms, it is already explicitly presented in a phenomenological tone in the report itself (in other words, adopting an explicitly first-person perspective in its descriptions): “The definitions of the symptoms must be as purely phenomenological as possible, without any reference to physio-pathological theories or particular illnesses”¹³. Therefore, the structure of the Kyoto document presents three levels: (1) the definition, which as aforementioned, opts for the eidetic delimitation of both phenomena based on the basic notions of self-motion (vertigo) and orientation (dizziness); (2) contexts of appearance (which structures the phenomena into a frame of “types”); (3) symptoms, described as the phenomenological “ingredients” (in the phenomenological sense of immanent contents of experience, or “*reell*” parts of the phenomenon). The symptoms appear in both phenomena (vertigo and dizziness) and in diverse contexts, which results in a combination among the three levels which has enriched and refined greatly the means of diagnosis and has allowed for a considerable increase in the precision of the description of such experiences. The three levels (definition, context, symptom) of the descriptions for diagnosis by the Kyoto consensus are structured in the following manner:

¹³ Bisdorff, Von Brevern, Lempert, Newman-Toker, “Classification of vestibular symptoms...”, 3.



The exact same classification is presented for dizziness, except for the fact that because there is no illusion of self-motion, there is no unfolding into spinning/non-spinning. Thus, we will not be reproducing it. However, the combination with the level of symptoms, which takes place in both classifications (vertigo and dizziness) in an identic manner, is fundamental:

¹⁴ Regarding the one the vertigo that takes place *after* a change of the head's position. This concept (positional), applied to triggered vertigo, should be differentiated from "postural", a classification of a kind of symptoms that appear in both vertigo and dizziness.

¹⁵ Regarding the vertigo that appears *during* the head movement, delimited in respect to the posterior time of such motion. It is the concept of "a distorted sensation of self-motion while it is happening" (Bisdorff, Von Brevern, Lempert, Newman-Toker, "Classification of vestibular symptoms...", 6). This vertigo must be distinguished from kinetosis, which is linked to the repeated and sustained motion of the head dependent on the swaying of its surroundings (which should be introduced in the category of dizziness; for instance, the dizziness that occurs due to travelling by car, plane or boat).

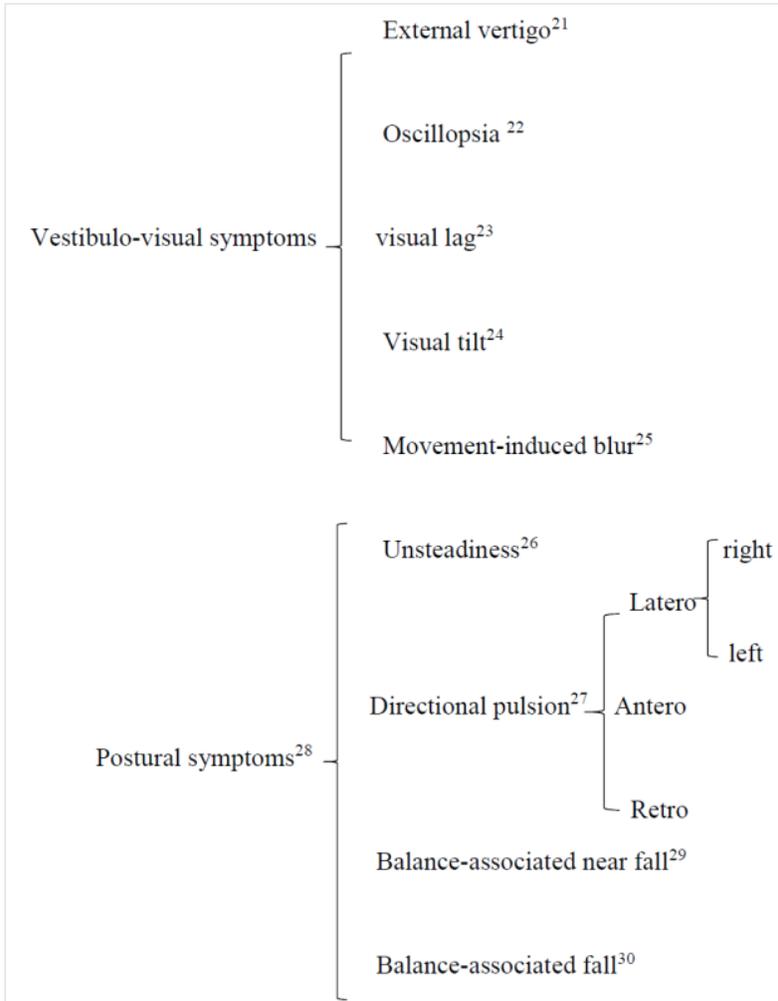
¹⁶ Caused by a stimulus or visual field that is complex or distorted by motion, including the motion of the visual surroundings, associated with the motion of the body. It must not be confused with visually-induced dizziness.

¹⁷ Vertigo provoked by an auditive stimulus. From this classification on, the "Tullio phenomenon" is left out and becomes associated with vertigo induced by the Valsalva maneuver and a phenomenon of pressure in the endolymph in the middle ear. In 1929, the Italian doctor Pietro Tullio proved that the perforation of small holes in the semicircular canals of pigeons made them present difficulties to stand when they were exposed to the sound. However, this phenomenon relates to endolymphatic pressure, not sound itself.

¹⁸ The "Valsalva maneuver" stands for any bodily maneuver that tends to rise intracranial pressure or that of the middle ear. The Valsalva maneuver (which consists of exhaling air maintaining either the glottis or the mouth and nose closed) is used as a pressure levelling technique in the practice of scuba diving or for plane passengers, who are subjected to barotraumas and discomfort inside their ears when external pressure varies.

¹⁹ Orthostatic vertigo is provoked by sudden risings, whether it is from a laying position to a sitting one, from sitting to standing, or from laying to standing. Orthostatic vertigo is linked to orthostatic hypotension, that is, the fall of arterial pressure in the blood as a consequence of standing for a prolonged time, or of standing after having been sitting or laying down.

²⁰ Dehydration, drugs, changes in environmental pressure, exercise or severe effort, hormonal treatments, hyperventilation, phobic situations, necklaces that are tight to the neck and other idiosyncratic situations that are linked to particular patients, etc.



²¹ The classification of the symptoms (in principle, the most explicitly phenomenological element of the levels) is without a doubt the weakest and most problematic aspect of the Kyoto consensus. We consider that in some (few) cases the “contexts” and “symptoms” are confused, causing fluctuations in the expressions that are used to designate the second and third level (for instance, the warning regarding the distinction between “positional” (context) and “postural” (symptom) is not respected in page 3, in which positional vertigo (which should refer to the context of the phenomenon’s appearance) is treated as a symptom. It seems, however, that the conceptual exclusion that does function among the triggers (if a vertigo has been visually induced then it has not been auditorily induced

and is not orthostatic, for example) is decidedly inexistent in the symptoms, which coexist with absolute habituality, which gives them the ontological character of accidents, and invites to avoid internal genre hierarchies.

²² The false sensation that the visual surroundings are spinning or floating, usually in a horizontal plane and in one direction. It is distinguished from oscillopsia by the lack of bidirectionality in motion (the motion is not swaying). The Kioto document points to difficulties when it comes to accepting the term of “external vertigo” within the set of symptoms, implying that the definition of vertigo always refers to “internal” vertigo, which is associated with a false sensation of self-motion, that is therefore started from a vague active “interiority”. However, given that the presence of some peculiar cases of nystagmus can involve a sensation of continuous visual flow in the absence of a sensation of motion, it was decided to separate this sensation from that of vertigo (which is, by defect, always internal). The committee was aware of the confusion that understanding an “internal” vertigo as essential definition and separate it from a symptom called “external vertigo” might cause, basically because this terminological option implied the combination of the experience of vertigo (as a disorder) with external vertigo (as a symptom). Thus, it deliberated on the possibility of coining the neologism “vertigopsia” to dissolve this ambiguity, but it was finally discarded. Instead, they opted for the conceptual clarification of the difference between “vertigo” (always understood as “internal”) to refer to the disorder and “external vertigo” to describe a symptom. We believe that coining the neologism would have been a better choice, not only because in philosophy we are less fearful of this kind of choices, but mainly because, as we will claim, the implied “internal” in the description of the phenomenon of vertigo is, to us, flawed: it confuses the somaesthetic field with the kinesthetic system (instead of “internal” it should say “egoic”, since it is not attributed to an “inner” but to an “egoic polarity” to whom the origin of the motion is attributed). We will defend that the possibility of “non-mine inners” (precisely those in which dizziness appears) and the “external egoic polarities” make the choice of “internal vertigo” (for the phenomenon) and “external vertigo” (for the symptom) a bad choice. This difficulties in the classification, which are due to the “floating” of the oculomotor field in relation to the vestibular system, are already present in Husserl’s analysis, albeit in a very different context; *Hua* XVI, § [71].

²³ The false sensation that the surroundings are swaying. This motion forward and backwards tends to occur in any direction and is often reported as an experience of “bouncing”, “swaying” or “shaking” of the visual world. In fact, according to this new classification, the famous “Vertigo effect” in cinema that Alfred Hitchcock popularized with his celebrated movie in 1958 represents a clear case of oscillopsia. Like all of the other symptoms, oscillopsia can also appear in both the absence and the presence of movement; in the first case it will be associated with dizziness, and in the second, with vertigo.

²⁴ The false sensation that the visual surroundings continue with a delay after a head movement or briefly drifting after the head motion has already been completed, in a lag that does not generally extend beyond 2 seconds. It is different from external vertigo due to the lack of continuity in its flow, it is instead based on “leaps”.

²⁵ False sensation that the visual surroundings are oriented in a position that is not the true vertical one.

The classification of symptoms into two groups (vestibulo-visual and postural) should not draw from a common branch corresponding to the genre “symptom”, given that the use the Kioto classification makes of this expression is deliberately weak and quite problematic, and refers only to the contained ingredients (*reell*) of the experience. What leads the classifiers to avoiding a ranking in the symptomatologic level is the fact that the symptoms associated to both the vestibulo-visual system and vertical posture occur very frequently. The fact that the types of symptoms are not exclusive leads the classifiers to not refer them to a common genre under the name of “symptoms” and to start directly from the system that the symptom is associated with, which makes the distinction between the two sets of symptoms and the triggers an oftentimes fluctuant ground³¹.

3. Beyond the Kioto consensus: possible phenomenological clarifications for the experiences of vertigo and dizziness

Although Husserl’s first relevant research on kinaesthesias does not cite the disorders of vertigo and dizziness, neither as examples nor as their li-

²⁶ It consists of a reduction of visual sharpness after a head motion. If head motion is a self-motion, it is the expression of a symptom of the experience of vertigo; if it is a passive motion (resulting from the experience of “being moved” rather than “moving”), then it is the expression of a symptom of the experience of dizziness.

²⁷ Unsteadiness is the sensation of not being able to remain still while sitting, standing, or walking without a particular directional preference.

²⁸ Consists of the sensation of being unsteady, with the tendency to steer or fall in a particular direction while sitting, standing or walking. The direction must be specified as latero, retro, or anteropulsion. In the case of lateropulsion, direction must always be precised (right or left).

²⁹ Structuring the postural symptoms (which refer to the maintenance of a vertical balanced orientation, whether it is sitting, standing, or walking, yet, for instance, not of horizontal positions like laying in bed) obeys a clear gradation of intensity from lesser to larger difficulty in order to maintain verticality. “Postural” must thus be distinguished from “positional”, which only refers the appearance of the phenomenon *after* the head motion, whether that is active (vertigo) or passive (dizziness), as well as from the motion that goes from a horizontal position to a vertical one, for which the term “orthostatic” is reserved.

³⁰ Sensation of impendent fall (without a full fall) related to a strong unsteadiness, directional pressure, or another vestibular system.

³¹ Fall of the body caused by a strong unsteadiness, directional pressure, or another vestibular system.

mits³², it does postulate the crucial role of body movement in the constitution of space³³. As often happens in Husserl's descriptions, some of his most fundamental concepts progressively take on a central role as answers to what, in principle, are "traditional" philosophical questions. These questions are reconsidered in light of the profound transformation they undergo due to the incorporation of a phenomenological perspective and its methodological findings. In the present case, Husserl's theory on kinaesthesias has a role as a fundamental auxiliary tool of the thingness constitution theory in the determination of the thinghood pole perceptive intentionality points to, and in the wider frame of a theory of constitution of objective space³⁴. Thus, the content of some investigations on the issue of "Thing and space" that concern our topic may be formulated briefly in the thesis by which the content of the thinghood pole of any perception (a house, a tree, a dog) depends on the articulation between the proper appearance of the side that this thing presents to me (*eigentliche Erscheinung*) and the presupposition that my consciousness is constantly engaging in the set of improper appearances (*uneigentliche Erscheinung*) that the present side contains. At the same time, this articulation is always present in the total perception of a thing (*Gesamtperzeption*)³⁵.

³² In some paragraphs of *Abhandlung I* of *Hua XVI*, Husserl is very close to the description of eidetic variations in the different kinesthetic systems that could result, once synthetized, in experiences of dizziness. However, in the *Hua XVI* lectures it is not the context of phenomenological research of affectivity and passivity, but the phenomenological theory of constitution of space, and this thematic adscription conditions the direction and emphasis of the descriptions.

³³ We are especially referring to *Hua XVI, Ding und Raum*.

³⁴ A similar process takes place with the fundamental concept of feelings (*Empfindnisse*) as localizing sensations (*lokalisiert Empfindungen*) in the side of the somaesthetic field, which are postulated by Husserl as necessary when it comes to extensively describing the co-constitution and all its nuances. This co-constitution belongs to tactile perception in the unfolding of attention between the constitution of objective properties, on the one hand, and the localization of the living body (*Leib*), on the other; *Hua IV*; especially §§ [35] – [37]. On the peculiarity in which some husserlian conceptualization is achieved through phenomenological description, without it having previously been thematically postulated, E. Fink, "Operative Begriffe in Husserls Phänomenologie", in *ID Nähe und Distanz. Phänomenologische Vorträge und Aufsätze* (Munich: Verlag Karl Alber Studienausgabe, 2004).

³⁵ *Hua XVI*, § [16], pages 50 – 51. It is relevant that Husserl, precisely in this particular case, in which we are clearly referring to the theory of perception, employs "Perzeption" instead of "Wahrnehmung", that is, widening the relationship among the three layers (genuine appearance, non-genuine appearance and total perception) not only to doxic perception but to the perception in non-doxic thetic modalities (positional) of consciousness (the fantasy, the conscience of image, the memory or the expectation). The constituting articulation among the three layers of appearance is not restrained to presenta-

The articulation between proper appearance and improper appearance within total perception is carried out through a motivated relationship (*Motivationsbeziehung*) among the three levels of appearance. This relationship includes at all times the kinaesthesias (sensations of movement) as a condition of possibility. Therefore, the constitution of the “thing” of perception occurs as a constant correlation between the series of multiplicity of kinaesthetically motivated appearances (*kinästhetisch motivierten Erscheinungsmanigfaltigkeit*) and the series of multiplicities of the thing’s foreshortening in the visual field (*Abschattungsmannigfaltigkeit*)³⁶. Because it belongs at all times to a correlation among series, a corporal position corresponds every foreshortening that the thing presents to me. The kinaesthesias act at all times as a “motivated” bridge among them. However, the link between the “visual sensations” of the foreshortening that the thing presents to me and the “kinaesthetic sensations” of my body’s movement is not an “essential” link in the terminological sense of reciprocal inseparability or dependence, as the one that could take place between the perception of color and figure, but a “functional” link³⁷. We find ourselves before a link between what is by essence separable, not a link between what is mutually cofounded in an intrinsic unit³⁸. A kinaesthetic sensation is, in principle and by essence, compatible with any given visual sensation³⁹. However, this functional nature of the link among the kinaesthetically motivated series and those of foreshortening that the visual thing presents to me is not restricted to the correlation

tive perception (*gegenwärtigen*); it extends to the modalities of presentifier consciousness (*vergegenwärtigen*). Husserl uses the normal term *Wahrnehmung* for the first, and for the second, in a more general sense, he usually uses *Perzeption*. This use of *Gesamtperzeption* in § [16] (unique in the volume, in contrast with the more frequent *Gesamtwahrnehmung*) implies that the articulation of the three layers is maintained, somehow, in the modes of reproductive consciousness; but also, and with the same legitimacy, that perception (*Wahrnehmung*) is for ever a phenomenon based on the consciousness of time, and is inseparable from it. For the distinction between *Wahrnehmung* and *Perzeption*, Hua XVI, § [5], pág. 16; Hua XXIII, §§ [12], [13] y [14].

³⁶ Hua XVI, §§ [48], [54], [55].

³⁷ Hua XVI, § [49]: “*Sie hängen mit ihnen funktionell zusammen, aber nicht wesentlich*”.

³⁸ Hua XVI, § [49]: “*Die Verbundenheit in der funktionellen Einheit ist Verbundenheit von Trennbarem, nicht Verbundenheit oder vielmehr innere Einheit des sich Fundierenden*”.

³⁹ Hua XVI, § [51], page 177: “*Verträglich ist jede Empfindung K mit jedem visuellen Bild, und wenn ich jetzt faktisch im Wahrnehmen des ruhenden Objekts und bei bestimmter Wahrnehmungssituation in der Erscheinung K und b zusammen finde, so lehrt mich jede Wegwendung des Kopfes oder die Erinnerung oder eine anschauliche Phantasie, daß ebensogut dasselbe K mit einem anderen Bild vereinbar ist zu Zwecken einer einheitlichen Erscheinung sei es desselben oder eines anderen Dinges daß ebensogut dasselbe*”.

between movement and visual field. It is also the same link that different kinaesthetic series offer among them: the series of head movement, the series of the oculo-motor field, the series of different kinaesthetic systems among them⁴⁰. In a way, this functional (not essential) nature of the link between the motivated kinaesthetic series and the thing's foreshortenings is the condition that makes the appearance of vertigo a possibility: vertigo is the sensation of self-motion (kinaesthetic sensations) when no other self-movement is taking place; it is therefore a phenomenon that appears as a result of a discoordination among the series. In an experience of visually induced vertigo (as an example of a discoordination between a kinaesthetically motivated series and the motion of an object of the visual field), like we might experience after looking at a Fraser – Wilcox illusion for some time, we are likely to have the sensation that our eyes, and even our head, are moving, when there is in fact no motion⁴¹. We are not claiming that any discoordination results in the appearance of vertigo; there might be some that do not produce the sensation of self-motion (and, therefore, vertigo): some peculiar cases of pendular nystagmus produce the sensation of continuous visual flow in the absence of the self-motion sensation⁴². The first case of discoordination among the series (the sustained perception of a Fraser – Wilcox illusion) would imply an experience of vertigo; the second case of discoordination (pendular nystagmus) would not. Both cases, however, are very likely to immediately become experiences of dizziness. This is because they imply difficulty to clearly provide an answer to the question “where am I”, a question which implies the spatial disorientation that the experience of dizziness involves.

⁴⁰ Hua XVI, § [49]: “*Daß die kinästhetischen Augenempfindungen und die kinästhetischen Kopfempfindungen und so überhaupt die kinästhetischen Empfindungen der verschiedenen Systeme phänomenologisch verwandt sind, ist evident. Andererseits sind sie gesondert und gehen ineinander nicht stetig über, wenigstens nicht normalerweise.*”

⁴¹ Strictly speaking, in fact, there is no motion of neither the body or the object, but the visual distribution of the object's lines generates a sensation of motion in the oculomotor field that ends up dragging the head's kinesthetic series. This can especially be experimented in the renewed illusions of Fraser – Wilcox by Akiyoshi Kitaoka. Akiyoshi Kitaoka, “The Fraser – Wilcox Illusion and Its Extension”, in Arthur G. Shapiro, Dejan Todorovic (ed.) *The Oxford Compendium of Visual Illusions*, (Oxford: Oxford University Press, 2017), 501-511. We are using a very simple example to avoid the most complicated (although undoubtedly more interesting) cases of pathological visually induced vertigo, like those of visual vertigo, acrophobia or height vertigo. On these pathologies, Seong Ching, “Visual vertigo: Vertigo of oculomotor origin”, in *Medical Hypotheses*, vol. 116 (2018), 84-95.

⁴² It seems like Husserl is “eidetically” reconstructing these possibilities of disarticulation among the series without alluding to the concepts of vertigo or dizziness; for instance, in I *Abhandlung* (Hua XVI, page 297). However, Husserl himself admits that a “huge imprecision” underlies these descriptions when it comes to integrating the

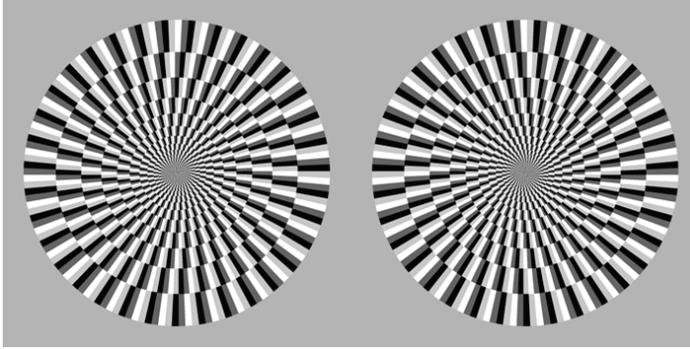


Fig. 1: Fraser – Wilcox Illusion (Kitaoka and Ashida version, 2017).

In fact, these possibilities of eidetic reconstruction of the isolation of the different kinaesthetically motivated series lead to the question of what would happen in the somaesthetic field's side regarding the localized sensations, which are fundamental to the phenomenological description of dizziness. Is there, in the case of dizziness (the definition of which refers to the phenomenon of disorientation without self-motion in its conceptual nucleus) the same eidetic possibility of variation among the localized sensations (*Empfindnisse*) and the sensations constituent of properties (*Eigenschaften konstituierend*) of the thing? An adequate comprehension of Husserl's concept of "*Empfindnisse*" provides a negative answer: the localized sensations and the sensations that constitute the properties of the thing are not two series set in parallel by a motivated relationship, but attention polarities that correspond to the axis of tactile perceptive intentionality. I do not find myself before the

diversity of the kinesthetic series that accounts for the relevant difference between the "I move" and the "I am moved" experiences; when it comes to integrating the activity and passivity of the kinesthetic sensations themselves. This would fundamentally affect our attempt at phenomenologically reconstructing the underlying the Kyoto classification: "*Das alles ist aber ungeheuer genau ... Dabei ist aber auf <das> Ich werde bewegt nicht Rücksicht genommen*" (*Hua XVI*, page 302). Husserl poses the outcome of this problem in the resolution of the constitution of the "zero body" (*Nullkörper*) of the kinesthetic rest and shifts these difficulties towards the determination of which is "zero body" in the experience of "I am moved" of the totality of the body (the totality, thus, of kinesthetic systems) without providing a clear answer in these lectures. Our opinion is that the jam that Husserl comes to in *I Abhandlung de Hua XVI* regarding the "I am moved" experience (a jam in which Husserl notes a certain discontent regarding the limitations of the concept of "horizon"; the note in *Hua XVI*, page 303: "*Horizont, wohl ein anstößiger Name*"), will find its solution in the concept of "primordial floor" (*Urboden*) as one of the transcendental concepts of the lifeworld; for instance *Hua VI*, §§ [37] – [38].

coordination of a field and a kinaesthetic system (the coordination of visual field – series of kinaesthetically motivated appearances) nor before the functional coordination among different kinaesthetic systems (head, shoulders, trunk, the entire body when walking). We find ourselves before the unfolding of the possible directions of attention (*Aufmerksamkeits*). The link between both “sides” is not between two functionally connected series, but a “necessity nexus between two possible apprehensions”⁴³. Thus, we have one sensation that is open to two possible “directions of attention”, which constitutes a “double apprehension” (*Doppelauffassung*)⁴⁴ of the same sensation. The immediate result of this “double direction” is the near immediate generation of a distinction between an “inner” and an “outer”: the possibility of directing my attention to one side or the other (*einerseits/andererseits*) implies that an “inner” will correspond the locator apprehension and a notion of “outer” will correspond to the apprehension that constitutes properties. Nonetheless, these “inner” and “outer” rely on the same process of double constitution (and such unfolding is intrinsic to this process of constitution)⁴⁵: the constitution of the living body (*Leib*) always as body-thing (*Körper*). Thus, to the extent of the somaesthetic field, the appearance of dizziness is one concerning a disorientation that is not necessarily a result of motion (or, at least, of a “self-motion” in the kinaesthetic mode of “I can – I move”). It is, instead, a blurring or weakening of the line drawn by the freedom of attention to delve into the “inner” or the “outer”: a weakening of the apprehension of that which is inside of me and that which is outside of me in two simultaneous and inseparable directions. In dizziness, parts of my living body which are inner to me are experienced as if they were outer and, at the same time, as a result of the same process of double constitution, now inverted, these external parts are experienced as unable to simultaneously be anything but “inner”. Thus, the disorientation of dizziness is that of parts of my living body as wholes in relation to other parts of my body as partial. In this sense, the disorientation we are referring to, can be isolated from motion, and, through tactile perception, belongs to the constitution of the “inner” – “outer” axis. If I go on a walk and get lost, I am disoriented (“I” referring to the totality of my living body), but the disorientation takes place between the situation of “all

⁴³ Hua IV, § [36], page 147: “Dieser Zusammenhang ist ein Notwendigkeitszusammenhang zwischen zwei möglichen Auffassungen”

⁴⁴ Hua IV, § [36], pág. 146: “Dieselbe Empfindung des Druckes bei der auf dem Tisch liegenden Hand <wird> aufgefaßt einmal <als> Wahrnehmung der Tischfläche (eines kleinen Teiles derselben eigentlich) und ergibt bei „anderer Richtung der Aufmerksamkeit“, in Aktualisierung einer anderen Auffassungsschicht, Fingerdruckempfindungen”.

⁴⁵ Hua IV, § [36], pág. 145: “Der Leib konstituiert sich also ursprünglich auf doppelte Weise”.

of my interiority” (all of my living body), labeled here as “I”, and the things around me which are immediately perceived as “external”. In dizziness, disorientation is produced by a disorientation between a part of my living body, experienced as “external” (even as constitution of external properties: I can live my stomach, feel its heaviness, feel it suddenly “hardened”, without necessarily remitting to an experience of pain; that is, without the immediate “retraction”), and the fact that while this same part is “inside” of me at all times, it is also “externalized”: it is an “inner” experienced as an “outer” and an “outer” experienced as an “inner”. Consider the fact that the concurrency of a motion disorder is a part that can be isolated from the experience of dizziness itself, which is appropriately attributed to disorientation. The dizziness of kinetosis, which is linked to the reiterated and sustained head motion dependent on the swaying of the surroundings (like when we travel by car, plane or ship), can barely appear as a trigger of the experience of dizziness, and in any case would belong to the already mentioned difficulties of phenomenological description of the experience of “being moved”, not of motion as an activity.

This difference between the nature of the linked and the unlinked between the experiences of vertigo and dizziness, would at first sight seem to give phenomenological support to the Kioto classification by eidetically separating the experiences of vertigo and dizziness. With our work we would have simply contributed to offering a better foundation to the adopted terminological decision. However, a more detailed analysis allows for a series of doubts which are not yet resolved, which are precisely pertinent to this decision:

In the established frame of the experiences of vertigo and dizziness, as presented by the Kioto classification, vertigo refers to an experience of self-motion (and therefore the kinaesthetic system, and thus the self as a center driven by the “ability to move” (*sich bewegen können*)); dizziness refers to an experience of disorientation (and therefore to the somaesthetic field, affectivity and, fundamentally, passivity). This frame seems to be in tension (we will not say contradiction) with the fact that the possessive pronominalization of experiences (designated as the “mineness” by cognitive psychology; the fact that experiences are lived as unfailingly “mine”), normally corresponds to the somaesthetic field and is dependent of the “inner” – “outer” constitution that operates in the double apprehension of tactile sensations. In this sense, saying that an experience is “mine” means that it takes place in the “inside” (where “of me” would become redundant). This presupposes a certain recognition of the non-mobile possessive pronominalized attribution, due to which the “mineness” is, at least to a certain extent, disassociated from the egoic polarity of motion (from the kinaesthesias’ “I can”). On the other hand, it would also imply the possibility of motion that is attributable to the self and yet cannot be possessively pronominalized. To put it simply and

in a less technical manner: the eidetic separability of vertigo and dizziness as differentiated experiences appears to point to the phenomenological possibility of “non-mine selves” (those of the self’s free motion which makes the experience of vertigo one of self-motion) and of “non-egoic mines” (those of parts of the body that are lived as external in the advent of the experience of dizziness). This is the ever-present paradox in the fact that cognitive psychology designates the perception of kinaesthetic sense as “proprioception” and that of passive affectivity as “interoception”: the denomination of the prefix “proprio” is too close to “intero” to avoid confusion. Kinaesthesias are always egoic, but cannot strictly be “mine”, to designate the kinaesthetic system as a “proprioceptive” system.

We consider that this terminological confusion may without doubt be clarified if we establish the fundamental distinction between *position* and *motion*, and I believe we need a theory to delimit both concepts with precision. If the feelings (*Empfindnisse*) are sensations of localization, can they be relatively independent of motion? And vice versa, can motion be relatively independent from a positional sense? If proprioception is, in a way, understood as a subsystem of interoception, thus establishing a hierarchy between them, we would concede a certain prevalence to the notion of position or orientation over that of motion. Certain texts of Husserl’s own work might have pointed to the direction of this hierarchy in the developing of the description of the relationship between the self that moves and the self that knows where it is, displacing the mess that is the relationship between the self that moves and the hyletic fields of the perception of the self and the living body to the very terrain of the world donation. Can we know where we are without moving? Can we move without knowing where we are?⁴⁶

In some of Husserl’s later manuscripts on the matter of the lifeworld, orientation is predicated as the mode of donation of the *world itself*⁴⁷. As a final suggestion, for these matters are highly problematic, we believe that exploring the possibility of a prevalence of orientation and position in respect to motion (therefore a prevalence of the passive experience of the “moved being” in respect to the “I move”) could offer a path for the terminological resolution which has been merely announced in this paper. The phenomeno-

⁴⁶ Surely both possibilities may be acknowledged, and therefore the functional independence of both fields must be attended to. In the case of the second possibility, severe pathologies of some aspects of proprioception as described in Oliver Sacks’ book, in the case of *The disembodied lady*, seem to present it as possible. What meaning does the clause “I move”, spoken by Christina R., who has lost all sense or proprioception, living herself as a “specter”, have? And yet “somebody” moves; “there is” motion, albeit barely attributable to Christina R.’s “inner”.

⁴⁷ *Hua XXXIX*, Nr. 16, pág. 145 y ss: “*Die Welt ist orientiert gegeben*”.

logical theory of orientation could be the next field in which to situate the world as a region that allows at all times the connection between the somesthetic field and the kinaesthetic system. It might be the field that remains to be phenomenologically explored, the field that Husserl calls the “lifeworldly situativity” (*lebensweltlicher situativität*) as a structure that would spare us from analyticities such as “mine/inner” or the multiplication of paradoxical interiorities like Russian dolls that lead to aporetic situations. We consider two future lines of work to be relevant for the resolution of these paradoxes: (a) One that is directed to thinking of intentionality as a polar structure of orientation, prioritizing the figure of polarity over that of “pointing towards”. (b) Also relevant to the investigation of these mundane orientation structures is the underlying the fact of the usual use of “intentions-us” in their constitution, neatly postulated as decisive elements of phenomenological description (*Ein Wir, Wir als “Ich-modus”*)⁴⁸. The axis of the constitution of transcendental intersubjectivity in the constitution of the world might be unavoidable in the process of clarifying these paradoxes.

Bibliography

- Bisdorff, A., Von Brevern, M., Lempert, T., Newman-Toker, David E. “Classification of vestibular symptoms: Towards an international classification of vestibular disorders”, in *Journal of Vestibular Research* (2009), 1-13 (DOI 10.3233/VES-2009-0343; IOS Press).
- Blakley, Brian W; Goebel, Joel. “The Meaning of the Word ‘Vertigo’”, in *Otolaryngology-Head and Neck Surgery*, vol. 125 (2001), 147-150.
- Blumenberg, Hans. “Lebenswelt und Technisierung unter Aspekten der Phänomenologie”, in *Filosofia*, n° XIV (1963).
- Ching, Seong. “Visual vertigo: Vertigo of oculomotor origin”, in *Medical Hypotheses*, vol. 116 (2018), 84-95.
- Ekstrom, Arne A.; Spiers, Hugo J.; Bohbot, Véronique D.; Rosenbaum, R. S. *Human Spatial Navigation* (Princeton University Press, 2018).
- Fink, Eugen. *Nähe und Distanz. Phänomenologische Vorträge und Aufsätze*, Verlag Karl Alber Studienausgabe, 2004, Munich.
- González Guardiola, Joan. “Lebenswelt”, in *Anuari de la Societat Catalana de Filosofia*, vol. XXIII (2012), 155-169.
- Guillot, Marie. “I Me Mine: On a Confusion Concerning the Subjective Character of Experience”, in *Review of Philosophy and Psychology*, 8 (2017), 23-53.
- Holt, Martin. “Vertigo and the Beetle out of the box: on the Representation of Inner Mental States”, in *Analecta Husserliana*, XCIII (2007), 55-73.

⁴⁸ *Hua* XXXIX, Nr. 16, pág. 152.

Husserl, Edmund. *Husserliana Band VI, Die Krisis der europäischen Wissenschaften und die transzendente Phänomenologie*, (ed. Walter Biemel), Martinus Nijhoff, 1954, The Hague.

Hua IV, Ideen zu einer reinen Phänomenologie un phänomenologischen Philosophie, II. Phänomenologische Untersuchungen zur Konstitution (ed. Marly Biemel), Martinus Nijhoff, 1952, Den Haag.

Hua XVI, Ding und Raum. Vorlesungen 1907 (ed. Ulrich Claesges), Martinus Nijhoff, 1973, The Hague.

Hua XIX, Logische Untersuchungen, Zweiter Band: Untersuchungen zur Phänomenologie und Theorie der Erkenntnis, (ed. Ursula Panzer), Martinus Nijhoff, 1984, Den Haag.

Hua XXIII, Phantasie, Bildbewusstsein, Erinnerung: Zur Phänomenologie der anschaulichen Vergegenwärtigungen (ed. Eduard Marbach), Martinus Nijhoff, 1980, The Hague.

Hua XXIV, Einleitung in die Logik und Erkenntnistheorie. Vorlesungen 1906/07 (ed. Ulrich Melle), Martinus Nijhoff, 1984, The Hague.

Hua XXXIX, Die Lebenswelt. Auslegungen der vorgegebenen Welt und ihrer Konstitution. Texte aus dem Nachlass (1916-1937), (ed. Rochus Sowa), Springer. 2008, Dordrecht.

Kitaoka, Akiyoshi. “The Fraser – Wilcox Illusion and Its Extension”, in Arthur G. Shapiro & Dejan Todorovic (ed.) *The Oxford Compendium of Visual Illusions* (Oxford: Oxford University Press, 2017).

Steinbock, Anthony. *Home and Beyond: Generative Phenomenology after Husserl*, (Evaston: Northwestern University Press, 1995).

