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### IS SENSORY EXPERIENCE DETERMINED BY CULTURAL HISTORY? HUSSERL, SENSORY STUDIES AND PSYCHOLOGY

**Abstract:** In this paper, Husserl's phenomenology is confronted with the idea that our collective history and the culture we inherit and grow in (including language, habits, cultural values), influence our experience of the world. Drawing from "sensory studies" (namely, sensory history and anthropology), a first version of this idea is formulated, where history and culture are thought to affect the quality, intensity, spatiality, and other attributes of the sensory contents that underlie our perception. This first version is confronted with Husserl's conception of hyletic data in the 1910s and 1920s, which, in contrast, assumes that our sensory experience is immune to such an influence. In a second section, evidence from contemporary experimental psychology is put forward to support Husserl's position. Our early, basic, sensory processes, appear to be safe from any historical, cultural determination, and as such, to be universal. In a third and last section, the question of the influence of history and culture on our perceptual experience is reframed according to that evidence, in the context of genetic phenomenology. Some conceptual tools from genetic phenomenology are subsequently introduced to account for the historicity of our sensory experience in that new framework.

**Keywords:** Husserl, phenomenology, senses, history, culture, psychology, sensory studies, genetic phenomenology

### INTRODUCTION

This paper is dedicated to the influence of our collective and cultural history on the content of our experience. I raise the following

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questions: is our sensory experience determined by our collective, cultural history? Do people belonging to different times or different cultures "see" or "taste" or "smell" or "feel" or "hear" the world in a different manner than we do? The tradition of "sensory studies", mostly of sensory history and sensory anthropology, first imagined in the 1930s-1940s by Lucien Febvre and developed in the 1980s onwards, seems – at least at first glance – to take this quite literally, and to assume that the influence of history and culture determines our sensory experience at the earliest and deepest levels. Is that so?

If phenomenology is understood in the sense that Husserl gave to that term, that of a transcendental science dedicated to elucidating the correlative structures of the world and of our experience of it, what does phenomenology have to say about the historicity of our senses? Is the idea that our senses are historically and culturally determined compatible with the basic tenets of phenomenology?

In a first section, I investigate the most radical version of the idea of the "historicity of the senses", and I suggest some challenges it might pose, in that original form, to a Husserlian phenomenology. In a second section, I show that recent findings in psychology lead us to abandon the initial proposal and to formulate a more modest claim. I conclude that this new formulation is compatible with Husserlian phenomenology, and briefly indicate the conceptual tools provided by Husserl's genetic phenomenology to account for the historicity of our senses, reframed within the above-mentioned limitations.

## 1. A FIRST VERSION OF THE CLAIM OF THE "HISTORICITY OF SENSES"

The main claims of sensory historians and scholars at large can be summarized by some quotes, such as this often-quoted sentence, written by Karl Marx in the 1844 *Manuscripts*: "The *forming* of the five senses is a labour of the entire history of the world down to the present"<sup>3</sup>. According to this sentence, our sensory experience is influenced

<sup>2</sup> Howes, D., *The Sensory Studies Manifesto: Tracking the Sensorial Revolution in the Arts and Human Sciences*, University of Toronto Press, Toronto, Buffalo, London 2022.

<sup>3</sup> Marx, K., Economic and Philosophic Manuscripts of 1844 and the Communist Manifesto, trans. Martin Milligan, Prometheus Books, Amherst 1988, p. 109.

by the history of our culture, and cannot entirely be explained by, or reduced to, the nature of our physiological apparatus. A second quote, by American anthropologist Edward T. Hall in 1966 adds to the former: "people from different cultures not only speak different languages but, what is possibly more important, inhabit different sensory worlds"4. In other words: since our senses are shaped by the history of the culture to which we belong, members of different cultures have a different sensory experience of the world, or even different sensory worlds so to speak. Walter Ong, a colleague of Marshall McLuhan, of whom Edward T. Hall was a student, radicalized this idea in 1967, when he suggested that: "(...) The differences in cultures (...) can be thought of as differences in the sensorium [the sensorium being the interplay and relative weight of our senses], the organization of which is in part determined by culture while at the same time it makes culture"5. The notion put forward by Ong goes beyond that of Hall: not only are cultures different when it comes to the sensuous aspects of experience, but the very dimension of experience is what defines a culture as such (not language, religion, or other symbolic structures). Finally, Ong provides an interpretation for the fact he set forth: "Man's sensory perceptions are abundant and overwhelming. He cannot attend to them all at once. In great part a given culture teaches him one or another way of productive specialization. It brings him to organize his sensorium by attending to some types of perception more than others (...)"6. Cultures would then operate by subtraction. The difference between cultures would be construed, following Ong, as a differential filtering out of sensations, leaving but a few to be actually processed.

These quotes, summarizing the main claims of anthropologists and historians of the senses, might still contain some ambiguities about what is meant by the influence of culture on sensory experience and perception. One radical interpretation would be that different cultures, through language but not necessarily exclusively through language, affect the very fabric of our sensory experience, by making that surface,

<sup>4</sup> Hall, E.T., *The Hidden Dimension*, Anchor Books, New York 1990, p. 2.

<sup>5</sup> Ong, W. J., 'The Shifting Sensorium (1967)', in *The Varieties of sensory experience: a sourcebook in the anthropology of the senses*, ed. D. Howes, University of Toronto Press, Toronto, Buffalo 1991, p. 28.

<sup>6</sup> Ibid.

shape or heat *appear* differently to members of different cultures. In that regard, the leading figure of contemporary sensory studies, David Howes, himself a former student of McLuhan and Ong, has criticized phenomenology for having overlooked the cultural aspect of the senses, and writes: "(...) by universalising the subjective sensations of the individual, phenomenology ignores the extent to which perception is a cultural construct".

Having presented this first interpretation of the historicity of the senses, making sensory contents relative to historical times or historically developed cultures, I will show three ways in which such a claim could be problematic from the standpoint of a transcendental phenomenology in the Husserlian sense. For that purpose, I will first need to briefly sketch Husserl's understanding of our experience of the world.

According to the hylomorphic paradigm presented in *Ideas* I, our experience consists firstly of raw data of sensation, so-called hyletic data: color patches, sounds, smells, textures, tastes, sensations of heat or cold, and others<sup>8</sup>. By virtue of the animation (*Beseelung*) operated by an act of consciousness, sensory contents are joined together and become "appearings of" (*Erscheinungen von*), appearings of an object, upon which a sense is bestowed<sup>9</sup>. The experience is then construed by Husserl as a layering of different strata, corresponding to different types of objects, founded upon each other. The first fundamental layer is that of nature (*Natur*), and the second one is that of spirit (*Geist*). Within the fundamental layer of nature, there are subdivisions, the *res* 

<sup>7</sup> Pink, S. & Howes, D., 'The future of sensory anthropology/the anthropology of the senses', *Social Anthropology* 18, no. 3, 2010, p. 335, doi:10.1111/j.1469-8676.20 10.00119 1.x.

<sup>8</sup> Husserl, E., Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie. Erstes Buch: Allgemeine Einführung in die Reine Phänomenologie. Husserliana, Bd. III/1, ed. S. Ijsseling, K. Schuhmann, and R. Boehm, Neuausg, Husserliana: Gesammelte Werke, Bd. 3-1, Martinus Nijhoff, Haag, 1976, § 85, p. 193; E. Husserl, Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy. General Introduction to a Pure Phenomenology, trans. K. F., Kluwer Academic Publishers, The Hague, Boston, Hingham, MA, USA, 1982, p. 205.

<sup>9</sup> Husserl, E. Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie. Erstes Buch, § 41, p. 86; Husserl, E., Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy. General Introduction to a Pure Phenomenology, p. 88.

temporalis, res extensa and res materialis<sup>10</sup>. These three substrata form the layer of nature. On top of this fundamental layer, is founded the level of spirit (*Geist*), itself made of two subdivisions, that of the person and that of *Gemeingeist*, the "communal spirit". Individuals form groups, clubs, associations, institutions of all sorts, including States and nations, but also the largest social groups in existence, *cultures*, and even groups of cultures, such as the one that Husserl will later name the super-nation (*Übernation*) of Europe, as opposed to Indian, Chinese, or Papuan cultures.

To properly understand the divide between *Natur* and *Geist*, we can use Husserl's example of a member of the Bantu people from Cameroon arriving in our Western world: "The Bantu would 'see' our 'park', our houses, our churches, and there would be spatial things for him, and things that, perhaps, would have, for him as well, the character of constructions, of gardens. But there is a difference here. Regarding the spatiotemporal determinations, the pure nature, a common ground must exist, but regarding what the architect aimed at with this building, and regarding what holds a 'sense', an aesthetic and practical one, correlatively to this building as such, that, the Bantu cannot understand"11. This example shows a clear divide between nature and culture; nature is universal, shared by the Bantu and the Westerner, while culture is local and hermetically closed. Belonging to a different culture, the Bantu "cannot understand" the values and goals that animated the architect in the making of the building, nor the values and goals that animate the passer-by or the user when confronted to the building.

<sup>10</sup> Husserl, E., Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie. Erstes Buch, § 149, p. 347-348; Husserl, Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy. General Introduction to a Pure Phenomenology, p. 359; see also E. Husserl, Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie. Zweites Buch: Phänomenologische Untersuchungen zur Konstitution, ed. Biemel, M., Husserliana: Gesammelte Werke, Bd. 4, Kluwer, Dordrecht, Boston, London 1991, § 10, p. 22; Husserl, E., Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy: Studies in the Phenomenology of Constitution, trans. R. Rojcewicz and A. Schuwer, Kluwer Academic Publishers, Dordrecht, Boston, 1989, p. 24.

<sup>11</sup> Husserl, E., *Phänomenologische Psychologie. Vorlesungen Sommersemester* 1925, ed. D. Lohmar, Husserliana: Gesammelte Werke, Bd. 9, Meiner, Hamburg, 2003, Beilage XXVII, 498 my translation.

The clear divide of culture and nature as well as the relation of order that exists between founding layers and founded layers within our experience make us understand why a strong claim on the radical historicity, or historical relativity, of our senses can be threatening for phenomenology as a whole:

1/ If sensory experiences are the level on which every experience is founded, included our social and cultural experience, how could it be that the latest founded level influences the founding level? How could it be that our culture shapes our sensory experience, since it is in fact the latter that shapes the former? Acknowledging the historicity of the senses would be putting the layering of types of objects upside down, and would render unintelligible any enterprise of construing our experience as multilayered.

2/ The idea of a culture-bound and historical sensorium poses a second challenge to transcendental phenomenology. If each culture promotes a different sensorium, would there still be a common ground for intercultural communication? Would we still have nature as a shared experience on which to build empathetic relation? Husserl faces a similar challenge when admitting conflicting orthologies. By that notion, he understands an inter-individual variety of aesthetic experience in the case of "anomalies": color blindness, individuals having ingested santonin and having their visual field colored in yellow, people with missing limbs, etc. He thus asks: "But how could men reach an understanding, and thus form a humanity, if they don't constitute one and the same world, and how could they, if they have different orthological systems?"12. Husserl nuances this remark by observing that divergent inter-individual orthologies are often slight variations in the experience, additionally that many of them can be framed in quantitative terms, as differences between a better and a worse (Unterschiede des Besseren und Minderen), which offers a clear ground for a decision in favor of one of the orthologies being compared. The differences between cultures, if we follow the claim of a historicity of the senses, seem incomparably wider than the inter-individual one: people from different cultures are said to inhabit no less than different sensory worlds, which indicates massive, unbridgeable qualitative differences.

<sup>12</sup> Husserl, E., *Zur Phänomenologie der Intersubjektivität. Texte aus dem Nachlass. Erster Teil. 1905-1920*, ed. I. Kern, Husserliana: Gesammelte Werke, Bd. 13, Martinus Nijhoff - Springer Netherlands, The Hague, 1973, p. 378–79, my translation.

Furthermore, if Husserl proceeds to resolve the inter-individual conflict by having recourse to a majority-based conception of "normality" (normality is what most people experience), such an endeavor seems hard to transpose to the scale of conflicting culture. Husserl writes: "[the subject's orthology] is anomal in the sense indicated above. But it would be normal if the majority of subjects sensed in that manner (so empfänden)"<sup>13</sup>. We hardly imagine an argument supporting the superiority of the, say, American sensory experience over the Bantu's based on the ground of a demographic analysis. Conflicting cultural orthologies would make it difficult to identify what normal means.

3/ Finally, the thesis of the historicity of the senses seems to reawaken an old problem. Early in his intellectual career, Husserl had faced the many-headed hydra of *relativism*. Relativism consists in the notion that truths are relative to the structure of the subject. This conception comes under various forms. Depending on whether truths are thought to be relative to the biological apparatus of the species, to the human psyche, to historical periods, to symbolic forms of cultures, we encounter biologism, psychologism, historicism or anthropologism. If sensory contents are the building bricks of our experience of nature, and if sensory contents are historical in nature, it seems to make "nature" the mere correlate of a historical, culture-bound worldview. Aren't we then facing the old problem of historicism, already tackled in *Philosophie als strenge Wissenschaft*? And if we bind sensory experience to a certain culture, aren't we additionally confronted to a form of anthropologism?

The notion that our senses are historically determined raises legitimate concerns from a phenomenological standpoint. However, it is still to be determined whether the claim of the historicity of the senses is justified in the form under which it has been framed so far. As I will show by using insights from contemporary psychology, not quite.

# 2. HISTORICITY OF THE SENSES FROM THE PERSPECTIVE OF PSYCHOLOGY

It might be tempting to think that perception is culture-bound or history-bound, but facts seem to tell otherwise. In 1898-99, despite great expectations, the Cambridge expedition to New Guinea had al-

<sup>13</sup> *Ibid.*, p. 379, my translation.

ready showed that locals didn't differ much from their British counterparts when confronted to standardized testing, for example when tested for visual acuity: "the races which have so far been examined do not exhibit that degree of superiority over the European in visual acuity proper which the accounts of travelers might have led one to expect" More recent research seems to confirm that our sensory experience is indeed universal at its lowest level.

The best-known case is that of colors. Anthropologists have long noticed that different cultures in the world divide differently the color space and use different numbers of labels for colors. Following Berlin & Kay's seminal study in 1969<sup>15</sup>, it has been shown that some cultures use as little as two basic color terms, such as the Dani in Papua-New Guinea, equivalent of light and dark (as studied by Eleanor Rosch-Heider), while others use up to 12 basic color terms (as defined by Berlin & Kay), such as Russian or Greek speakers, who happen to differentiate light blue and dark blue, English having 11 terms at its disposal. Additionally, many languages around the world don't differentiate blue and green, and have only one label for both. One language, the Berinmo language, uses two words for different shades of yellow<sup>16</sup>, etc.

Influenced by the Sapir-Whorf hypothesis, anthropologists first imagined that, based on the differences in their vocabulary, members from different cultures actually saw different colors in the world, had a different sensory experience, shaped by their language and culture. Some observations seemed at first to support such relativist claims. Indeed, in some languages, two non-contiguous colors (such as blue and yellow) appear conflated under the same term (the word *hu* was thought to mean both red and green in the Ainu from Japan). This seems to indicate connections between colors that a Western mind is unable to make. But linguistic research shows that these cases are often superficial variations in language. As Roberson summarizes it: "Mc-

<sup>14</sup> Haddon, A.C., et al., Reports of the Cambridge Anthropological Expedition to Torres Straits. Volume 2, Physiology and Psychology (1901), Cambridge University Press, Cambridge, 2010, p. 42.

<sup>15</sup> Berlin, B.& Kay, P., Basic Color Terms: Their Universality and Evolution, University of California Press, Berkeley, 1969.

<sup>16</sup> Roberson, D., Davies, I. & Davidoff, J., 'Color categories are not universal: Replications and new evidence from a stone-age culture.', *Journal of Experimental Psychology: General* 129, no. 3, 2000, p. 369–98, doi:10.1037/0096-3445.129.3.369.

Neill (1972) documents a number of instances of languages in which a term comes, over time, to be used for either one of opposing colours (red / green or blue / yellow) in different derivative languages. In the case of Slavonic languages, the same term, *plav*, at different times has meant 'pale yellow / blonde' in some East Slavonic languages, but 'pale blue' in some South and West Slavonic languages. Fasske, Jentsch and Michalk (1972) suggest that the original meaning of the term in Proto-Indo-European was 'pale' or 'grey' and that the 'yellow / blonde' meaning came from the 'pale' sense, while the 'pale blue' meaning came from the 'grey' sense'". A more recent study has demonstrated that color terms encompassing noncontiguous colors did not exist<sup>18</sup>.

Similarly, experiments on the ability to discriminate between colors first seemed to show that speakers who had more labels at their disposal were better at categorizing, especially cross-categories. For instance, Russian speakers (two words for blue) perform better than Americans (one word for blue) in a match-to-the-sample task, when the sample is dark blue and the options offered respectively light and dark blue, in the sense that they complete the task faster<sup>19</sup>. Similar results have been found for differences in Serbian language between dark blue (*teget*) and regular blue (*plavo*) and dark red (*bordo*) and regular red (*crveno*)<sup>20</sup>. But does this result really mean that the sensory experience is any different? More recent interpretation suggests that this apparent result is due to language working as a memorizing tool or as a decision-making

<sup>17</sup> Roberson, D., et al., 'Colour categories and category acquisition in Himba and English', in *Progress in Colour Studies*, ed. Pitchford, N., and Biggam, C. P., John Benjamins Publishing Company, Amsterdam, 2006, p. 3, doi:10.1075/z.pics2.14rob.

<sup>18</sup> Bailey, A. C., 'On the non-existence of blue-yellow and red-green color terms', *Studies in Language* 25, no. 2, 2001, p. 185–215, doi:10.1075/sl.25.2.02bai.

<sup>19</sup> Winawer, J., et al., 'Russian blues reveal effects of language on color discrimination', *Proceedings of the National Academy of Sciences* 104, no. 19, 2007, pp. 7780–85, doi:10.1073/pnas.0701644104.

<sup>20</sup> Jakovljev, I., & Zdravkovic, S., 'The colour lexicon of the Serbian language - a study of dark blue and dark red colour categories Part 1: Colour-term elicitation task', *Psihologija* 51, no. 2, 2018, p. 197–213, doi:10.2298/PSI160521002J; Jakovljev, I.,& Zdravkovic, S., 'The colour lexicon of the Serbian language - a study of dark blue and dark red colour categories Part 2: Categorical facilitation with Serbian colour terms', *Psihologija* 51, no. 3, 2018, p. 289–308, doi:10.2298/PSI171115018J.

tool<sup>21</sup>. Interesting results arise when "verbal interference" is used. Subjects are asked to perform the match-to-sample task while blabbering or reciting series of words or numbers. This disruption is meant to prevent subjects from using the tool of language to perform the task; they have to rely exclusively on their sensory experience. The results are striking: "a simple task manipulation, asking subjects to remember digit series, eliminated the language-specific distortions in discrimination"<sup>22</sup>; "Once more, the advantage for cross-category pairs has been completely removed by verbal interference"<sup>23</sup>. A recent attempt to replicate Winawer's study on Russian language failed to detect any speed advantage compared to English speakers in the absence of verbal interference<sup>24</sup>, implying that the influence of linguistic categories (and culture overall) on perception is even more limited than previously thought.

Another well-known example is that of the acquisition of phonemes in early language development. There are approximately 600 consonants and 200 vowels (phonemes) in all the languages of the world combined; yet each language uses only about 40 phonemes, and children quickly learn to differentiate these 40 phonemes. Studies by Patricia Kuhl and colleagues have shown that in early infancy, children from different cultures diverge by picking up particular phonemes in their environment, which correspond to the ones that are distinct in their mother tongue. For instance, "Japanese infants' discrimination of English *r-l* declines between 8 and 10 months of age, while at the same time in development, American infants' discrimination of the same sounds shows an increase" This decline in the perception of a dis-

<sup>21</sup> Dehaene, S., 'L'influence du langage et des symboles sur la perception et la cognition. Cours au collège de France du 1er septembre au 13 octobre 2020', https://www.college-de-france.fr/fr/agenda/cours/influence-du-langage-et-des-symboles-sur-la-perception-et-la-cognition, 2020.

<sup>22</sup> Winawer, J., et al., 'Russian Blues Reveal Effects of Language on Color Discrimination', p. 7784.

<sup>23</sup> Roberson, D.,& Davidoff, J., 'The categorical perception of colors and facial expressions: The effect of verbal interference', *Memory & Cognition* 28, no. 6, 2000, p. 984, doi:10.3758/BF03209345.

Martinovic, J., Paramei, G. V., & MacInnes, W. J., 'Russian blues reveal the limits of language influencing colour discrimination', *Cognition* 201, 2020, 2, p. 25, doi:10.1016/j.cognition.2020.104281.

<sup>25</sup> Kuhl, P. K., 'Brain Mechanisms in Early Language Acquisition', *Neuron* 67, no. 5, 2010, p. 717, doi:10.1016/j.neuron.2010.08.038.

tinction should not be understood as affecting early sensory processes, as if children had become "deaf" to sounds that their language does not recognize as independent phonemes. As Kuhl notes, language development "grows out of infants' heightened attention to items and events in the natural world" The processes affected by exposition to different languages seem to be that of attention and categorization, with no modulation of the sensory impression itself. Thus, Japanese children "hear" the sound r and the sound l, but they don't treat them differently, and as such don't interpret them as two different phonemes; English-speaking children, on the other hand, hear both sounds and interpret them as two different phonemes.

Both examples addressed the universality of the perception of sense qualities, namely color in visual phenomena and timbre in acoustic phenomena. But the question can be raised about other attributes of sensory phenomena, such as intensity. Is intensity perceived in a consistent manner across time and cultures? Studies in olfaction tend to show that perception of intensity varies cross-culturally, and not necessarily along with familiarity with the scent: "The Germans judged three of the Japanese odors – dried fish, Japanese tea and soybeans – as significantly more intense than did the Japanese themselves whereas the Japanese judged one of the European odors – church incense – as significantly more intense than did the Germans, but three other odors - pinewood, cheese and almond - as significantly less intense. Of the international odors, beer and ointment were judged more intense by the Germans"<sup>27</sup>. This finding is striking, but should it be taken at face value? Are subjects rating the objective attribute of the phenomenon, or their own reaction to it? Another study has shown that intensity was perceived as lower by subjects in Singapore than subjects in Geneva and Liverpool, but Singaporean subjects' rating of pleasantness and familiarity was also lower<sup>28</sup>, indicating a possible connection (not explored by the authors).

<sup>26</sup> Ibid., p. 716.

<sup>27</sup> Ayabe-Kanamura, S., et al., 'Differences in Perception of Everyday Odors: a Japanese-German Cross-cultural Study', *Chemical Senses* 23, no. 1, 1998, p. 34, doi:10.1093/chemse/23.1.31.

<sup>28</sup> Ferdenzi, C., et al., 'Variability of Affective Responses to Odors: Culture, Gender, and Olfactory Knowledge', *Chemical Senses* 38, no. 2, 2013, p. 179, doi:10.1093/chemse/bjs083.

The domain of taste offers here a last example. In 1975, a cross-cultural study compared tastes preferences of Europeans (and Indian medical students) and of illiterate Indian laborers from the Karnataka region, whose diet contains many sour products. This study found no difference in perceived intensity of salty and sweet dishes, but clear distinctions in preferences, with Indian laborers rating sour and bitter food as more pleasant than Europeans or Indian students did<sup>29</sup>. In other words, the underlying sensory experience is unaffected by culture, but preferences and values are cultural through and through.

To summarize, psychologists tend to agree that cultural upbringing is ineffective on early or low-level perceptual processes, that is on sensory experience itself. Despite their practices, linguistic categories, symbolic forms, people from different cultures see the same colors, feel the same texture, sense the same taste. Certainly, as Angela Gutchess and Robert Sekuler put it their summarizing chapter on the issue, published in 2019: "(...) we are far from a unified understanding of the influences of culture on cognition or the underlying mechanisms" Nonetheless, it appears that it is within a limited scope that we can discuss the influence of culture on our sensory experience. We can now go back to our original question, that of the historicity of the senses understood as a direct influence of culture and collective history on sensory contents themselves. This initial claim would have to be reframed, and, as a consequence of this reframing, Husserlian phenomenology would not have to fear the idea of historically determined or culture-bound senses.

As it shows that the level of sensory contents is unaffected by culture, psychology can also determine how culture influences late or upper-level perception. Examples of these influences are to be found in the domains of 1/ attention, and 2/ perceptual learning or fine-tuning of the senses through exercise and practice. Examples of how culture influences attentional processes can be found in the cultural difference regarding attention paid to the surroundings. According to established research, Japanese people tend to pay attention to the surroundings,

<sup>29</sup> Moskowitz, H., et al., 'Cross-cultural differences in simple taste preferences', *Science* 190, no. 4220, 1975, p. 1217–18, doi:10.1126/science.1198109.

<sup>30</sup> Gutchess, A., & Sekuler, R., 'Perceptual and mnemonic differences across cultures', in *Psychology of Learning and Motivation*, vol. 71, Elsevier, 2019, p. 166, doi:10.1016/bs.plm.2019.06.001.

while Westerners, and even more so, Himba people living a nomadic life in the desert in Namibia (empty landscape), tend to focus on a specific object and to disregard the background. This difference between focal attention and background attention makes Americans and Himba less prone than Japanese people to illusions like the Ebbinghaus illusion, where the perception of the size of a disc is influenced by the size of surrounding discs<sup>31</sup>. An example of perceptual learning can be found with the ability of Moken children from Thailand and their ability to see clearly underwater, an "expertise" that can be acquired by Westerners after weeks of training<sup>32</sup>. The fine-tuning of underwater sight among Moken children is an interesting case because it actually makes them see differently. Yet, this difference can be framed as a quantitative difference, rather than a qualitative one.

A closer look at "sensory studies", which would exceed the scope of this paper, would confirm the impression. Sensory studies insist on the way history and culture affect levels of attention, tolerance, emotions connected to sensory contents, and do not pretend that sensory impressions are themselves being modified by their context of appearance.

## 3. BASIC PROCESSING OF SENSORY DATA ACCORDING TO PHENOMENOLOGY

We finally turn to phenomenology, to enquire about Husserl's doctrine of sensory contents and the way they can be affected by history and culture. Simply put, Husserl opposed *relativism*. A relativistic account of sensory contents admits that there is no absolute determination of content, such as an absolute quality or an absolute intensity of said contents; that all contents are determined by their relation to other contents. The relativistic account of sensory contents has been often opposed by Stumpf, in the first volume of his *Tonpsychologie*<sup>33</sup>, in « *Erscheinungen* 

<sup>31</sup> Caparos, S., et al., 'Exposure to an urban environment alters the local bias of a remote culture', *Cognition* 122, no. 1, 2012, p. 80–85, doi:10.1016/j.cognition.2011.08.013.

<sup>32</sup> Gislén, A., et al., 'Visual training improves underwater vision in children', *Vision Research* 46, no. 20, 2006, p. 3443–50, doi:10.1016/j.visres.2006.05.004.

<sup>33</sup> Stumpf, C., *Tonpsychologie I*, Verlag von S. Hirzel, Leipzig, 1883; Stumpf, C., *Tone Psychology*, trans. Rollinger, R. D., Classic European Studies in the Science of Music 1, Routledge, Abingdon New York (NY), 2020, p. 6–12.

und psychische Funktionen », where he wrote: "The tone which is followed by other sounds won't be subsequently endowed with a height and an intensity by those which follow it; it must already have possessed them during its lifetime and in isolation. The objection according to which the height of a sound consists in general only in its relations to other sounds would get enmeshed in the absurdities of a theory of relativity that I have enough characterized elsewhere"34. Another form of relativism, also opposed by Husserl in various places<sup>35</sup>, is that of the Gestalt psychology as it was practiced in Berlin, which denied the existence of sensory contents possessing absolute properties. According to Gestalt psychologists, sensory contents are construed as abstract or non-independent parts of a certain totality (Ganzheit) that has precedence over them. Gestaltists deny the constancy hypothesis (Konstanzannahme), which consists in admitting that sensations are constant under the change of Gestalten – a "hypothesis" that Husserl was accused of maintaining<sup>36</sup>, just like Stumpf: "(...) the sensations of the senses themselves, although they don't necessarily and exclusively follow the stimuli, nevertheless in all cases possess determined, absolute properties, in which they can also manifest, independently from the current connection (Zusammenhang), in another connection or in no connection at all"37.

As he opposes relativism, Husserl also needs to oppose the other extreme, which consists in considering that each and every content has an in-born affective force, which immediately translates into its capacity to affect the ego. Such a conception would mean that each and every content mechanically affects the ego, and that the actively conscious

<sup>34</sup> C. Stumpf, *Erscheinungen Und Psychische Funktionen*, Verlag der Königlich Preussischen Akademie der Wissenschaften vom Jahre 1906, Berlin, 1907, p. 22.

<sup>35</sup> Husserl, E., *Phänomenologische Psychologie. Vorlesungen Sommersemester* 1925, 'Amsterdamer Vorträge', p. 310; Husserl, E., *Formale Und Transzendentale Logik: Versuch Einer Kritik Der Logischen Vernunft; Mit Ergänzenden Texten*, ed. P. Janssen, Husserliana: Gesammelte Werke, Bd. 17, Martinus Nijhoff, The Hague, 1974, § 107c, p. 291-292; Husserl, E., *Cartesianische Meditationen und Pariser Vorträge*, ed. Strasser, S. Husserliana: Gesammelte Werke, Bd. 1, Kluwer, Dordrecht, 1991, § 16, p. 76-77.

<sup>36</sup> Holenstein, E., *Phänomenologie der Assoziation. Zu Struktur und Funktion eines Grundprinzips der passiven Genesis bei E. Husserl*, Phaenomenologica 44, Martinus Nijhoff - Springer Netherlands, The Hague, 1972, § 56, p. 283-286, § 59, p. 293-296. 37 Stumpf, C., *Erkenntnislehre. Band 1*, Johann Ambrosius Barth, Leipzig, 1939, § 15, p. 250.

world is a mere surfacing of the passively dominating forces in the living present. The extreme consequence of this would be that all consciousness could be explained by the inner properties of sensory contents, leaving no space for any form of (intentional) activity. In order to avoid both extremes, Husserl has to recognize absolute properties of sensory contents, but must also acknowledge their differential capacity to affect the ego. How does he do this? Husserl does it by distinguishing a first level, that of the passive, non-egoic, formation of sensory units, where contrast provides units with an absolute affectivity, and a second level, where the relativism of affections makes some contents ineffective in their attempt to affect the ego, and some others successful. This is what Husserl develops in his so-called "genetic phenomenology" under the title "relativism of affective tendencies". Genetic phenomenology shows how sensory contents are pre-given, then given in the form of objects and finally enter in the process of production of higher-level objects such as states of affairs or essences.

We must distinguish accordingly between low-level passive registration of sensory data on the one hand, and higher-level passive processing of such data on the other hand. High-level processing includes temporalization, affection, association, attention and cognitive processes *per se* (sense-bestowing perception, concepts, evaluation, judgments, abstraction...). Culture and history do not affect the first level, but potentially affect the second one, in ways that are still in need to be investigated. Are sensory contents temporalized in different ways in clock-time cultures than they are in event-time cultures? Do some sensory contents affect more or less depending on the value attached to them by different cultures? How do smells or sounds remain in the background in places or cultures where these contents are common and not particularly significant, and, conversely, jump out at people from cultures which put a greater emphasis on them? These are some of the questions that need further inquiry.

### CONCLUSION

The goal of this paper was to determine whether, or in what sense, a form of historicity could be attributed to our senses, as seems to be the claim of "sensory studies". As recent studies in psychology tend to demonstrate, there is a core in our sensory impressions that is unaffect-

ed by our culture, language, habits or world views, and in that sense that can be named universal (cross-cultural). This is in line with Husserl (and Stumpf)'s refusal of relativism, a doctrine that would consider that attributes of sensory impressions are function of their sensory or intentional context. As a consequence, historicity and culture-dependency are not to be found in sensory contents themselves, but in the way sensory impressions are processed.

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### **GAETAN ILO**

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### DA LI JE ČULNO ISKUSTVO DETERMINISANO KULTURNOM ISTORIJOM? HUSERL, STUDIJE ČULA I PSIHOLOGIJA

Sažetak: U ovom radu, Huserlova fenomenologija suočava se s idejom da naša kolektivna istorija i kultura koju baštinimo i u kojoj rastemo (uključujući jezik, navike, kulturne vrednosti) utiču na naše iskustvo sveta. Izvučena iz "studija čula" (naime, čulne istorije i antropologije), prva verzija te ideje formulisana je tamo gde se smatra da istorija i kultura aficiraju kvalitet, intenzitet, prostornost i druge atribute čulnih sadržaja koji podleže našem opažanju. Ova prva verzija suprotstavlja se Huserlovoj koncepciji hiletskih datosti iz 1910-ih i 1920-ih, koja, nasuprot tome, pretpostavlja da je naše čulno iskustvo imuno na takve uticaje. U drugom delu, dokazi koji potiču iz savremene eksperimentalne psihologije iznose se kao podrška Huserlovoj poziciji. Naši rani, osnovni čulni procesi čine se bezbednim od svake istorijske, kulturne determinacije, te se kao takvi čine univerzalnim. U trećem i poslednjem delu, pitanje o uticaju istorije i kulture na naše opažajno iskustvo preoblikovano je prema tim dokazima, u kontekstu genetičke fenomenologije. Neka konceptualna oruđa koja potiču iz genetičke fenomenologije zatim se uvode kako bi se u tom novom okviru objasnila istoričnost našeg čulnog iskustva.

**Ključne reči:** Huserl, fenomenologija, čula, istorija, kultura, psihologija, studije čula, genetička fenomenologija

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