

The inner voice

Monika Gatt⁽¹⁾, Marcus Maeder⁽¹⁾, Steffen Marburg⁽¹⁾

⁽¹⁾Chair of Vibroacoustics of Vehicles and Machines, Technical University of Munich, Germany, Marcus.Maeder@tum.de

Abstract

Philosophy is research over time and an applied basic science. This article illuminates the philosophical aspects of an auditory phenomenon, the human inner voice. The purpose of this article is to elaborate aspects of an inner voice and to determine how it faces the audible realm. People are dialogue beings and existentially dependent on experiencing resonance. The concept of the personal equation is used to determine the relationship of self and world in auditory phenomena. For this reason, eight logical approaches to the world of life are presented and defined with regard to auditory phenomena. Anthropological qualities show that this description is divided into qualitative phenomena and spatial distances. Ethical demands must not be excluded. Keywords: Philosophy, Acoustics, Resonance, Ethics, UNESCO

Keywords: STI mapping, work environment, numerical and experimental test

1 METHOD OF RESEARCH

Philosophy calls this an Aristotelian-phenomenological approach. You start from the everyday world you live in, as you find it every day. And here we go. Many people around us claim to have an inner voice. This inner voice leads them and warns them. Contemporary words for this idea are creativity and innovation. Creativity is the inner and immaterial realm of motivation, innovation is the new conception and production of technical devices. In classical Greek philosophy, the inner leadership is called daimonion (greek). At that time, the conception of technical devices did not have the enormous significance it has today, so philosophers referred to the way of life, the Eudaimonia. The inner voice is still purpose in itself. But happiness was the form of life to be attained. The aim of ancient utilitarianism was to bring as much happiness as possible to the world. In the 21st century, the aim seems to be to bring as many technical innovations as possible into the world. Regardless of whether we need them or not. This change of term is still a pity. From a philosophical point of view, the inner voice refers to the ancient conception of soul and genius (latin). And that is why the secret roots of the profession Ingenieur (german) and Engineer (english) and the understanding of audition might be found deeper: deeper in culture, in science and as well in someone's becoming a person. And, finally, narration and fairy telling is an immaterial cultural heritage[1, 2, 3].¹

2 THE PERSONAL EQUATION BETWEEN THE INNER VOICE AND OUTER SOUND, EGO AND REALITY

The first question is whether acoustics is a philosophical problem at all, and if so, in what way? The background is that philosophical answers to a question can only be found if there are philosophical problems at all. This is doubted here.

The first step to interpret acoustics philosophically is to question audition about the conditions of its possibility and to do so metaphysically. The reference point here is called the inner voice. An immaterial resonance space is created.

The author uses the personal equation[6] to describe the individual correspondence with oneself and with the outside world. It is an act of balance between inner and outer space that converges in the voice. The concept of the personal equation goes back to the Swiss psychoanalyst Carl Gustav Jung, meaning the symbolic-mythical

¹<https://www.unesco.de/en/telling-fairy-tales>. (26.5.2019)

regression to oneself to understand the world. This process is analytically reductive and cognitive as well. The organic point of contact between inside and outside seems to be the vocal folds.

There are at least three very controversial versions to philosophically approach the idea of an inner voice as the other side of sound as an equation:

- logical-metaphysical
- anthropological-descriptive
- free in an ethic space of narration.

2.1 Logical-metaphysical basics of the personal equation

The first option, the logical-metaphysical way goes back to understanding the position of me in the world [7, 9, 8, 10, 11, 12, 13, 14, 15, 16, 17]. The following eight possibilities are to be considered, cf. Figure 1, and

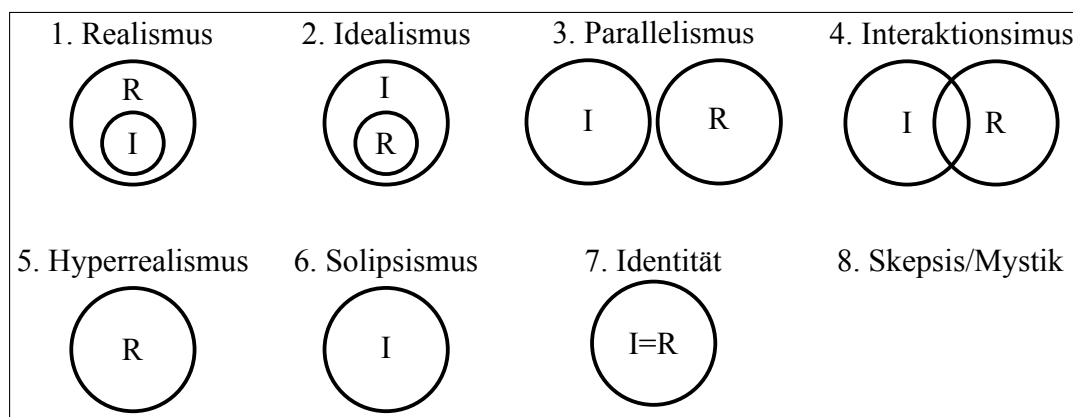


Figure 1. Possible relations between the reality and the ego. R=Reality; I=Ego, reproduced after Blau[7]

defined on a trial basis:

- **Realism:** That I am in the middle of an enveloping reality. Reality is the limit of the Ego. The dominant instance in the formation of the personal, inner human being is reality. Every single being is existentially dependent on the living world giving it its voice.
- **Idealism:** Idealism is the opposite of realism. Reality arises in each individual, each individual ego develops its own reality. A floating reality cannot be determined, transcendence forms the outer framework. This position would be called romantic.
- **Parallelism:** Reality and I exist in parallel and do not form an intersection. There are no points of contact between each individual and a universal reality. The inner voice and the audible sound are independent of each other. Many different worlds are possible!
- **Interactionism:** There is an intersection between the ego and reality. The size is not decisive here, since it must be a question of semantics. With regard to the personal equation between the inner and outer voice, one can assume an overlap here. This ego-world interpretation seems to be very creative, because the worlds seem to balance each other again and again. But this does not have to be the case, since the other interpretations also assume friction. The question remains in which respect and from when on one should speak of a philosophical problem. And although one starts from an intersection, the question is still how it sounds and which symbolic, logical and personal areas interact.

- Hyperrealism: There is only reality. One should not assume an independent ego. In a very narrow interpretation, this is called determinism. We do not accept an inner voice formed by individuality. The vibration of the vocal folds comes from the outside and reflects the outside in the inside.
- Solipsism: There is only me. No reality exists. One can start from the existence of other consciousness, but it does not contribute to the emergence of personality. Whether there is an organ that could be responsible for an exchange, I may not matter. But you have to be careful in the interpretation, because you simply do not know it. And, however personality comes about, when someone speaks, you are aware of the sound of her or him. And there also seems to be a resonance in the other, since one understands each other without having agreed on all the rules beforehand.
- Identity: Ego and the world are one. Distinguishing criteria in consciousness cannot be found.
- Skepticism and Mystic: Discussion is possible, but there is no philosophical conflict.

From the point of phenomenology, the resonance takes place between noetic and noematic realms. This means that intrinsic areas that belong to themselves are to be considered, and brought into resonance of noematics. Noematics are widespread impressions. Meant is an open horizon to the world:

- The entire human anatomy and morphology. The individual skeletal structure of man is meant by that, as well as individual proportions and biological evolution.
- Synesthetic-physical aspects, every perception differs from every other perception in every point in all human beings always.
- Each auditory perception lands on a different biography and motivates other and new ideas, new fantasies and old memories and finds its own processing as a psychoacoustic signal perception.

Philosophy knows the influence of sound through an "auditory lobe"[18], cf. Figure 2, for the unconscious and subconscious, archetypes of sound[19] and at least seven types of listeners[20], seven types of intensity and semantics.

In listening, a distinction is made between:

- the expert,
- the good listener,
- the educational consumer,
- the emotional listener,
- the resentment-listener,
- the entertained listener and
- the indifferent listener.

At this point we might apply the three-finger rule of philosophy: What can I know? What should I do? What can I expect from it?[21]

We would therefore work on a matrix to make acoustic research more reliable, objective and repeatable, we should at least ask which aspects of an auditory phenomenon can really be known, which interpretations can be derived from it ethically and what we generally expect from it. If we explore a sound for its own sake, that would be the philosophical approach, or if we explore the sound because it has a certain purpose, e.g. what function a sound has and how it is defined.

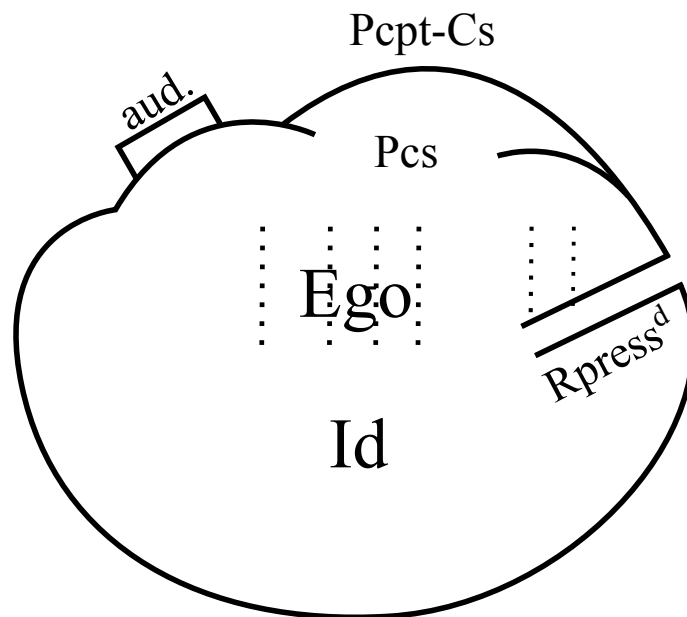


Figure 2. Auditory Lobe, reproduced after Freud[18]

2.2 An anthropological-descriptive diagnosis of privacy space in relation to outdoor noise

Here, too, the Aristotelian phenomenological method is applied. The fact is that every person knows the feeling when another person comes too close to him or her or is not close enough, i.e. has a kind of feeling for privacy[22]. They too have noetic and noematic aspects. What does an acoustic distance mean to me personally and how can I relate the outside space philosophically to it?

In questions of distance one distinguishes the

- intimate area (within 1.6 feet),
- the personal area (up to 4 feet),
- the social-consultative space (up to 10 feet) and
- the public space.

A distinction is made between:

- kinesiological,
- thermal,
- olfactory,
- visual and
- acoustic influencing factors.

In order to continue problematizing, we focus on the acoustic signals. They appear as aural-oral couples. And we distinguish near from far, close from not close. In the very close, intimate area, one speaks of the audibility

of swallowing noises, rumbling and soft coughing. In collegial everyday life, but above all in public space, such mutual perception is only tolerated if one is close to one another. One does not want to hear these noises from strangers, for example in the overcrowded subway. In return, it is also desirable to hear such noises from a very close person. The question here is also whether, and if so, what influence moaning sounds have on the inner voice and what role breathing plays. There could also be some kind of feedback, an inner personal resonance-dynamic, which is motivated by breathing. This process is influenced when (audible?) breathing fails to occur and also when it is dynamized, for example, by sports activity. Of course, one must also consider the effect the quietly audible self-talk has on people's morphology. In the personal area one assigns to the sound of the voice predicates like whispering, soft speaking and intimate style. In the social sphere, conversations are called consultative, modified and casual. In public space, we use a loud voice when talking to a group, we raise our voices. It looks as if the inner voice is already strongly influenced here, let alone when you scream or pelt noises at people who drown out and outdo the abilities of your own voice. It is medically diagnosable which (negative) influence too loud screaming has on the vocal folds. It should also be noted that musicians suffer, for example, from hearing damage as a result of instrumentation. But what are the immaterial consequences for everyone? What kind of creativity develops in the context of these oral and aural dimensions?

2.3 The personal equation as a free, ethical and healthy room of narration

The German Committee of the UNESCO declares 2016, that talking to one another, like fairy telling, is an integral constituent of society and an immaterial cultural heritage. The interpretation of talking as the central bearer of meaning of a culture can be applied well at this point. It is a trip to yourself. This is because talking to one another as a design of the personal equation is used here in at least two ways: on the one hand as the basis of the ego-world constitution as discussed under point 1 and on the other hand as a design element of a personality. If we are often restricted in the interpretation of the outside world and held back in expressivity, then we can develop ourselves completely freely, since we speak to ourselves here. We tell ourselves, for example, exam-relevant content, we narrate for ourselves our own life and thus shape the past. Story telling means profiling individuality. That is why it is about which boundary conditions, which limits the ego sets for itself. There are three main limits to talking to oneself:

- by technology,
- by ethics,
- by ourselves.

Technology itself is not a serious problem. It is clear that technology sets limits to man as a production of matter to compensate man's deficiency. On the contrary, it is precisely this human need for help that ultimately drives research. So we are strongly influenced by technical products as far as our freedom in dialogue is concerned. Many of our wishes can be fulfilled immediately, analog and especially digital. Last but not least, the economic system influences our perception of needs and desires. Desires are generated from a kind of collective unconscious and seem desirable without us being aware of their origin. The unquestioned devotion to technology seems to be a huge problem[23]. First and foremost, the self-imposed nuisance caused by noise is one of the limits.

If we do not understand each other well enough for acoustic reasons, this clearly reduces our quality of life, but also the pleasure gained through personal skills. We irritate each other!

What about ethics? The inner communication and dialog is first and foremost a question of inner guidance. This means openness, tolerance and wisdom in classical terms. As a measurement method for ethical behavior, philosophy knows the classical approach to virtues and vices[24, 25, 26]. Philosophy knows the discursive power of duties just as well[27] and the golden rule. The problem here is probably to be found in merchant ethics. This commercial approach in acoustics is definitely outdated. Because much of what has been produced

with conviction is not needed, for example too noisy surroundings. Machine noise has long penetrated the private and intimate listening area.

Ourselves. The third aspect of limitation by ourselves refers to the private sphere, i.e. ethical boundary conditions. One consciously chooses a certain behavior in order to remain personally in balance and to create harmony in the listening room. This presupposes that responsibility for results is taken consistently. In line with UNESCO's requirement to recognize the value of narration and talking to one another, it is therefore suggested that the inner voice might be emphasized again as a special narrative moment, that new forms of creativity might be identified and that in the end free healing spaces might be approached.

3 CRITICAL ACKNOWLEDGEMENT

This article presents the non-material phenomenon of the inner voice as an ethical regulator in a positive sense. A biological existence cannot be defined with certainty, but it can be assumed that the vocal folds play an important role as a membrane between inside and outside, between inner and outer voice. In the debate about the ego-world relationship as a large-scale search for the marginal areas of the personal equation, it is precisely refutation that challenges us. One reason for this is that all these aspects always occur in the same time and each individual is able to present additional interpretations of the world. It is also conceivable to take an approach that focuses on an inner voice that is too loud. The inner navigation is then to be understood as so loud that the outside world cannot be transformed into an equation, that is balance. Another problem arises when the genius consistently does not listen to itself, the inner voice consistently listens away and is already deaf to itself. Furthermore, it should be critically examined that the criteria for the private sector must in any case be enriched by global aspects. The globe migration of peoples, as well as the permanent mobility of many people and climate change makes a definition of qualitative space phenomena almost impossible. Therefore, the research results, which do not include such a strong force as the inner voice, are doubtful. The inner voice gives home. People need a home.

As an overall result, it should be noted that the world of life connects the engineering sciences and the philosophical concepts with each other, although it is still work to do in what way philosophical problems exist here at all.

But it is also important that certain inner inclinations and sources, with all self-control and responsibility, must remain a secret.

REFERENCES

- [1] Diagne, M. Critique de la raison orale. Les pratiques discursives en Afrique noire. Préface de Bonaventure Mvé-Ondo. Niamey, Paris, Dakar, 2005.
- [2] Diagne, M. De la philosophie et des philosophes en Afrique noire. Préface de Paulin Hountondji. Paris, Dakar, 2005. "Oralité et Philosophie", P. 29 ff.
- [3] Kagame, A. Sprache und Sein. Die Ontologie der Bantu Zentralafrikas. Heidelberg, 1985. (Originally published UNESCO), 1976.
- [4] Lomonosov, M. Selected writings in two volumes. Volume 1, Natural Sciences. Berlin, 1961. p. 329.
- [5] Berdjajev, N. The I and the world of the object. A philosophy of solitude and community. Darmstadt, 1959. p. 24.

- [6] Jung, C.G. Theoretische Überlegungen zum Wesen des Psychischen. In: GW, Bd. 8, §§ 343-442. Olten, 1976.
- [7] Blau, U. Die Logik der Unbestimmtheiten und Paradoxien. Heidelberg, 2008. P. 26. Review: Ralf Schindler, Institut für mathematische Logik und Grundlagenforschung, Universität Münster. https://ivv5hpp.uni-muenster.de/u/rds/blau_review.pdf.
- [8] Hountondji, P. African Philosophy. Myth & Reality. Bloomington and Indianapolis, 1996. P. 35, 43, 45, 49.
- [9] Hountondji, P. Combats pour le Sens. Un Itineraire Africain. Bamenda, North West Region, Cameroon, 2013. P. 67 ff.
- [10] Whitehead, A. N.; Russell, B. Principia mathematica, With a contribution of Kurt Gödel, Frankfurt a. Main (Germany), suhrkamp taschenbuch wissenschaft, 1986.
- [11] Whitehead, A. N. The Concept of Nature: Tarnier Lectures, Trinity College. 1919.
- [12] Whitehead, A. N. Science and the Modern World, Lowell Lectures, 1925, The Free Press, New York (USA), 1997.
- [13] Whitehead, A. N. An enquiry concerning the principles of natural knowledge, Cambridge: University Press, 1919.
- [14] Whitehead, A. N. Symbolism: Its Meaning and Effect, Barbour-Page lectures, University of Virginia, 1927, Fordham University Press, New York (USA), 1985.
- [15] Whitehead, A. N. An Introduction of Mathematics, Oxford University Press, Oxford London Glasgow New York, 1958.
- [16] Whitehead, A. N. Process and reality, Griffin, D. R., Free Press, New York (USA), corr. ed., 1978.
- [17] Husserl, E. Husserliana. Collected Works, Martijunus Nijhoff; Dordrecht, Kluwer Academic Publishers, Den Haag (Netherlands), since 1950.
- [18] Freud, S. The ego and the id, Pacific Publishing Studio, 2010.
- [19] Jung, C.G. The Archetypes and the Collective Unconscious, Princeton University Press, London, 2nd edition, 1968.
- [20] Adorno, T.W. Dissonanzen. Einleitung in die Musiksoziologie, Frankfurt am Main, 1973.
- [21] Kant, I. Die drei Kritiken. Logik. Ein Handbuch zur Vorlesung, Hamburg, 2000.
- [22] Kant, E. The Hidden Dimension, New York, 1966. P.126/127.
- [23] Freud, S. The Basic Writings, New York, 1966.
- [24] Aristotle. Nicomachean Ethics. Oxford, 2009.
- [25] Foot, P. Natural Goodness. Oxford, 2010.
- [26] Foot, P. Virtues and Vices and Other Essays in Moral Philosophy. Oxford, 2002.
- [27] Kant, I. Metaphysics of Morals. Cambridge, 2017.