

## Decision-Making by Aesthetic Capacity; Human-Human Communication and Human-AI Communication in the Working World of Today and Tomorrow

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### Abstract

This paper starts from the observation that in practice business leaders in their decision-making processes use their affective capacity, their felt knowledge or gut feeling, in combination with their cognitive capacity, their thought knowledge. For this observation in detail, a series of business people have been interviewed within several different working settings. The interviews show that this combination adds value to their business. It is concluded that felt and thought knowledge can be practically checked by each other if done systematically in order to contribute effectively to a truthful decision-making process. It is therefore potentially suitable and important for the development of this human capacity to improve decision-making processes and to support employees in a management development environment. Subsequently, these observations are operationalized as Aesthetic Capacity: it is this human capacity that allows to consciously connect cognitive information with affective information by and within any Human-Human communication. More specifically, the objectivative communicative approach by Habermas and the relational communicative approach of Watzlawick are combined in this Aesthetic Capacity. In one further step of this paper, however, there is the new and fundamentally different kind of communication being considered: Human-AI Communication. Here, it is already today becoming visible across society and across nations how humans tend to trust such human-AI communication even more than human-human communication. This paper uses a cross-science approach to explore effective empowerment of the individual in a society dominated by non-rational and/or unverifiable information. This would allow individuals to better utilize the power of non-rational affective information, while also dismantling seductive digital undermining tactics. Therefore, the paper is looking into how the concept of Aesthetic Capacity as discussed so far, may be transferred onto and applied to such technology-shaped communication.

**Keywords:** Aesthetic Experience, Gut Feeling, Aesthetic Capacity, Communication, Decision-Making, Human Capacity Building, Artificial Intelligence

### Introduction

Up to today, business performance and decision-making are strongly determined by cognitive motivations and considerations like business targets and roadmaps. From the perspective of

human behaviour, however, affective motivations also play a role in decision-making and in the connectedness with people and for business opportunities. In this paper, this human attitude is considered as it is conceptualized in the ABC model on attitude of Rosenberg and Hovland and as it is signified within social psychology in which Affective (feelings), Behavioural (interactions) and Cognitive (thoughts) components are distinguished [1-5]. As we are human beings, sensoral impressions and gut feelings are present and available and come to us constantly by aesthetic experiences. In this paper, the informative power of the aesthetic experience and the resulting gut feeling, in this paper called the affective information or felt knowledge, is linked by intrapersonal and/or interpersonal communication to rational cognitive information in order to make that gut feeling accessible for decision-making. For this aim, the paper introduces the specific operationalization of Aesthetic Capacity which would be contributing to decision-making processes in a business performance context.

### **Decision-Making Process in Business Performance**

Studying day-to-day management practices, Mintzberg observed a tendency in management development, specifically in the field of business administration, to focus on competences related to rationality: "The problem with this bundled rationality is, that the power of judgement and intuition is diminishing. How can you feel something when you can't see it? How can you become aware of something when you've never experienced it?" [4,5]. Such a rational management approach may result in a business being less in control and missing business opportunities it cannot see, feel and know. [3-8]. Addressing the affective aspect also give substance to the plea for 'leaving behind the rational subject as proxy for humanness, and embracing instead the figure of the relational self'. It is leading to a new and more accurate control of social dynamics and of vulnerability [9].

Research into decision-making indicates that leaders do consult intuitions, emotions and 'gut feeling' [10]. Emotions and feelings are important indicators as to where beneficial and detrimental dynamics are emerging [11,12]. Drucker (1981) implicitly may demand attention for a good balance between cognitive, affective and behavioural aspects of human attitude but he confirms the impression which also emerges from the leading business literature by Mintzberg and Senge, namely that literature on business management and organizational management has a strong cognitivity approach to management compared to an affectivity approach. In the last decades, however, things have changed rapidly due to increasing uncertainties, speed, dynamics and complexity in society and business. Hence, this study is bridging unconscious and conscious information and impressions to be able to use the intrinsic quality of both in order to get the most accurate picture of reality. The assumption in this paper is that this aesthetic capacity is the precursor for the most truthful decision-making possible.

The aesthetic experience and the aesthetic capacity are therefore not so much approached normatively or ethically, but communicatively. Aesthetics from this point of view enables us to explore and connect actively the separate worlds of unconscious and conscious knowledge without assigning a value judgment to them. It also enables us to further discover the connections between them intrapersonally, as well as this connection interpersonally or between people and even within non-human phenomena such as humens confronted with computer generated information and AI. In order to improve awareness, engagement and decision-making within the business environment, leadership development programmes increasingly recognise that learning by doing (instead of solely training), awareness of the mind-set behind behaviour, and a proper monitoring of performance are needed [13]. In interviews conducted with CEOs from Deutsche Bank, Nissan and Renault, Royal Mail Group

and DuPont, Barton et al observed that increasing uncertainty, speed, dynamics and complexity in business is requiring empathy, sensitivity and gut feeling in order to stay tuned with the team and - beyond it - with society [14]. Management development actually requires insight in social intelligence, the combination of a rational assessment on the one hand and an intuitive-emotional assessment on the other hand which both deliver essential information for human decision-making [15]. It requires 'mind reading', which means the capability to understand beliefs and desires [16].

Decision-making is defined in this paper as: 'a specific commitment to action', to be identified in the steps Define/Diagnose/Design/Decide [5,17]. Mintzberg specifies his definition from an attitudinal perspective and observes a domination of thinking first, the rationalistic way of decision-making. In his opinion business leaders then miss a lot of the complete picture. He proposes to add seeing first and doing first, as an attitude that includes more intuitive decision-making. Feeling first is not identified by Mintzberg and will be explored in this paper [5].

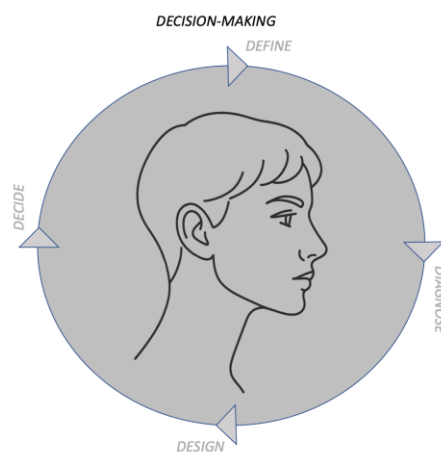


Figure. 1 Decision-making process [5]

### **Aesthetic Experience, Gut Feeling and Aesthetic Capacity**

Aesthetic experience is described variedly in literature. From the perspective of knowledge management, aesthetic experience is described as "knowledge that is created from our sensory experiences, which includes a connection between our thoughts and feelings and how our reasoning around them informs our cognitions" [18]. It is about sensory knowledge and felt meaning and has to do with sensing and intuition and it is 'resulting in an interconnectedness of perception, thinking, and feeling' [19,20]. Aesthetic experience has been described to perceive rhythm in light, sounds, movement and more with its 'focus, intensity and unity in terms of coherence and completeness' and resulting in: "the more people are aesthetically stimulated, the more they operate in a state of flow and the more they are intrinsically motivated" [21-23]. Aesthetic experience and the resulting gut-feeling lead to meaning and values: "in the kind of organic integrity and wholeness which makes the event sensed as deeply meaningful, pervaded by a qualitative continuity which uniquely distinguishes the experience as such" [24]. The wholeness of the aesthetic experience is well captured in the construction suggested by Peacocke: a sensory-mediated experience with mental associations of pleasure, conceptualization, imagination, emotion, disinterest in reality and normativity [25]. The active mutual character of the aesthetic experience is clearly identified by Dewey as a 'process of both doing and undergoing' for it 'requires effort and imaginative activity from the experiencer' [26]. It is a sensorial and intuitive experience [27].

This extraordinary sensational feeling is just as extraordinarily described by Adorno: 'Aesthetic experience is that of something that spirit may find neither in the world nor in itself; it is possibility promised by its impossibility' [28]. Finally, a connection between the affective and cognitive information, between the felt and thought knowledge, is beautifully captured in the definition by Munck & Gielen: 'the unique, singular experience when you touch the world with all your senses and the world touches you. The moment when everything comes together, when everything seems to fit, and you understand everything. No wit, no word can fathom it. No scientist who can explain it. No rational explanation. And yet this feeling is a fact, a blatant truism, not fiction. Love, or something. Is it only affect, emotion, sensation? Maybe, but a feeling that understands' [29].

In this paper, the pragmatic-philosophical approach of Dewey, its dynamics of interaction and its inherent attractiveness, are put central in order to identify both the sensational and the interactive qualities of such experiences as they take place intrapersonally as well as interpersonally.

Gut feeling or intuition are human processes in which rapid and unconscious emotions simultaneously influence non-emotional behavior, contributing to decisiveness, reaction speed and confidence [31]. Intuition is essential in strategic decision making (Baldacchino et al., 2023, Calabretta et al., 2017, Kopalle et al., 2023, Samba et al., 2022) [30]. Hence, in this paper, gut feeling or intuition are defined as 'the learned productive use of unconscious information for better decisions or actions' [32]. Gut feeling is what Pearson calls a consequence of interoception in which the body experiences sensations that remain cognitively unconscious but do lead to an emotional body reaction. The 'turning on' of that emotional body reaction takes place, among other things, via the aesthetic experience.

In line with this description of the aesthetic experience in this paper, this aesthetic experience guides also the positioning of Aesthetic Capacity. The dynamics of this Aesthetic Capacity are well described by Portera: 'the capacity, involving perceptual, cognitive and emotional processes, to enter into a pleasurable/non-pleasurable and expressive relation with objects, artworks, natural phenomena, or other people' [33]. Its inherent attractiveness is clearly formulated by Brown as 'the ability to understand, interpret, and articulate feelings that are elicited by a particular object or experiences' [34]. This synthesis aspect of Aesthetic Capacity means the combining of unconscious affective and conscious cognitive information, or respectively, felt and thought knowledge; it includes the understanding of having a 'click' with, or being attracted to something or someone. It is observed in all the eight interviews with business representatives which are used as the basis for this paper, and by which the operationalization of Aesthetic Capacity is examined. As a result, in this paper, the Aesthetic Capacity is positioned as a human capacity powered by the combination of aesthetic experiences (including sensory sensitivity and emotional responsiveness) and intra- or interpersonal communications (including cognitive engagement and personal interpretation). Thus, Aesthetic Capacity is essential in making choices and taking decisions through the synthesis of affective and cognitive information.

### **Critical Reflections on Consulting the 'GUT'**

The importance of affective information as part of human capacities in business decision-making is widely differing in the literature [35]. Tuning-in with others and with yourself is a fundamental part of human communication. Without synchronizing in rhythm, no real intra-human nor inter-human connections can be made. Aesthetic experience is foundational in tacit

engagement [36]. It is not easily integrated in current distributed contexts [37]. On the one hand, there is the observation that the world is so complex that no matter how much data can be made available, it cannot compete with the knowledge and insights which feed someone's gut feeling [38]. On the other hand, it is important that gut feeling is critically considered and weighed. In other words: how can you trust your 'truth'? According to strategy professor Olivier Sibony, there 'speaks the voice of intuition as loudly and clearly in situations where it is incompetent as it does in situations where it is well informed'. [39]. Entitled 'Don't Trust Your Gut', complex systems scientist Eric Bonabeau gives an overview of the human vulnerabilities when applying affective information, e.g. gut feeling and aesthetics [40]. Why does such communication shaped by affective experiences not always work? Because rationality is not properly connected to gut feeling [41]. Feelings as part of affective reality are fast, but not necessarily reliable: 'The crucial quality of feelings – their immediacy – is also what makes them potentially misleading, spawning overreactions and fear' [42].

According to Kahneman and Klein, an adequate interpretation and understanding of gut feeling requires a regular environment, predictability, and an experienced practitioner so that it is known what to expect based on experiences with some good feedback [43]. Apart from these preconditions for an adequate assessment of felt knowledge (Kahneman's System 1: the intuitive human thought system with characteristics such as unconscious, fast, associative, emotional), the authors do not elaborate on how felt knowledge can be explicitly questioned by and connected to thought knowledge (Kahneman's System 2: the analytical human thought system with characteristics such as conscious, slow, reflective, rational). This research aims to bridge both systems by questioning the gut feeling as a consequence of System 1, and by using the analytical template as constructed out of Habermas and Watzlawick as an expression of System 2 (see sections 2.1 and 3.2).

## **Aesthetic Capacity and Communication**

### **Human-Human Communication: Habermas and Watzlawick**

The interactive nature of Aesthetic Capacity implies a yet undefined form of communication in two ways: firstly, communication between the source of the aesthetic experience and the one experiencing it, and secondly, intrapersonal communication between the generated unconscious information (gut feeling) and the available conscious information (cognition). In the recent past, the nature and quality of social interaction have been extensively described by Watzlawick and by Habermas. The insights of both authors give substance to the aforementioned interaction which may take place both within a person and between persons, as an act of communication with yourself or with others. In answering the question of how social order is possible, Habermas reflected through his theory of communicative rationality that, in addition to cognitive-instrumental rationality, there is also a communicative rationality. Here intelligibility, truth, correctness and truthfulness are essential in the process of the individuals' ability to understand the truth of any statements society subscribes to, or to question these standards of society [41]. The communicative rationality is carried out in Habermas' theory on the basis of four validity claims:

- the comprehensibility of what is said ('clarity'),
- the truth of what is asserted ('truth'),
- the truthfulness of the intention ('sincerity'),
- the correctness of what is said ('legitimacy').

These claims describe the attitude of communication partners towards each other. Ultimately, this leads to an insight to be able to decide in a moral or political sense, for example: 'May or can I do this or not? Do I think this is true or not?'



Watzlawick distinguishes two worlds, two realities, in communication: the First Order Reality (the real, objective reality) and the Second Order Reality (the perceived, subjective reality) - in other words: objective reality and subjective reality. Communication has been interpreted by Watzlawick through 5 axiomata:

- All behavior is communication.
- Communication means influencing people with words and especially without words.
- Everyone has their own truth. What I mean is not necessarily true for anyone else.
- When I say something, I say something about how I want the other person to treat me.
- Who is in power? Communication is symmetrical or complementary, depending on whether the relationship to each other is based on equality or difference [44,45].

Both authors consider communication as a multi-layered and essentially human phenomenon. They place great value on human interaction and the formation of social structures. Habermas uses communication in order to be able to make any rationalized observation, thus objectifying the content of communication. Watzlawick is interested in what arises as truth in the dynamics of communication, from his axiom 'everyone has their own truth'. Watzlawick's approach therefore places emphasis on the added value of subjectivity within communication. Taken together, both these approaches form a suitable and appropriate set of instruments. Objectifying by rationalization (ic Habermas) and mutual truthfinding by connection (ic Watzlawick) are of distinctive value because of their supposed potential to unlock, test and make available the valuable unconscious (or affective) information for decision-making. Both approaches are therefore important for the distinctive operationalization of Aesthetic Capacity as presented in this paper. This new operationalization is further explored by means of the data from the 8 interviews referred to above.

### **Human-AI Communication**

The Aesthetic Capacity for decision-making has so far been launched as a human capacity as it supports to distinguish between felt and thought knowledge. Its criteria are distinguished based on data with a human interpersonal and intrapersonal communicative character. Through human communicative action, both knowledges are combined in order to be able to make a genuine contribution to the human decision-making process.

The first follow-up question posed in this paper is: what is the potential of such an operationalization of aesthetic capacity in situations in which there is a comparable need to obtain the most truthful possible picture of reality? Is Aesthetic Capacity adequate in separating the wheat from the chaff in situations with fake news, constructed realities such as with AI, and is it able to disprove prejudices? And would AI be adequate in checking the felt knowledge when applied within the Aesthetic Capacity capabilities?

A further exploration of the potential of Aesthetic Capacity to distinguish real and fake presence is relevant given the abundance of it in nowadays (online) society. In the past, the technology pioneers of our communication systems world-wide have promised information, knowledge and, above all, access for and connection between people: 'We are creating a world that all may enter without privilege or prejudice accorded by race, economic power, military force, or station of birth...a world where anyone, anywhere may express his or her beliefs, no matter how singular, without fear of being coerced into silence or conformity...Your legal concepts of property, expression, identity, movement, and context do not apply to us. They are all based on matter, and there is no matter here' [46]. A brave new world, then, characterized by what Arendt has called the conditions for a common world: 'Only where things can be seen by many

in a variety of aspects without changing their character, so that those who deal with these things know that they are the same see, however differently they may see it, the reality of the world can take its true and reliable shape' [47]. But things have turned out differently.

The ubiquity of information and communication technologies is creating new ways of being present and thus a dynamic development of first and second order realities (resp. the objective and the subjective world by Watzlawick) have been created with it. More and more, our choices and decisions as citizens (in democratic elections), as consumers (via marketing), and as people (via news provision and personal communication) are partly determined by messages that primarily want to appeal to our gut feeling. They are created and transmitted by artificial intelligence, and both, their origin and their intention are not clear within the communication process – they even may never become clear at all! In this environment of today, social media and AI are playing an increasingly important role. Finding the truth in communication has become extremely important as a reality check. It concerns these relatively new aspects of our living environment, especially given the increasing uncertainty about whether information through technological communication channels is fake or truth. Furthermore, the political or societal positions of this constructed reality are increasingly being questioned. Recently published opinions in public media on artificial intelligence and gut feeling or intuition show a rather diverse picture. There are expectations that AI can be complementary to gut feeling and that in combination they contribute to good decision-making [48]. There are further expectations that AI can provide alignment when felt and thought knowledge diverge [49]. It is, however, frequently assumed that AI has limitations with regard to, among other things, common sense, context recognition, feelings and awareness, and moments of gut-feeling [50]. And it is stated that given the increasing size and complexity of data in our society, it is not possible to control decision-making purely rationally and a combination with intuition frequently appears necessary. In addition to AI of today, Artificial Intuition is mentioned as Fourth Generation AI that would result in true intelligence (combining intellect with intuition) after the First Generation of AI (descriptive analytics), the Second Generation (diagnostic analytics) and current Third Generation of AI (predictive analytics) [51].

Conversely, social media are often the domain of spreading preconceived and primary reactions and positions that are not or not fully weighed with facts and context. Through its explicit questioning in a form of communicative action, it can be assumed that these situations could also be assessed for truthfulness with the tools of Aesthetic Capacity. AI may play a supportive role. That is part of the brief exploration of Human-to-AI communication in this article, as a spin-off of the operationalization of Aesthetic Capacity in a human-to-human situation.

## **The Research**

### **Research Questions**

As discussed above, the potential of affective information can be substantial in taking decisions when this affective information is connected to and checked against cognitive information. The paper argues that this process requires the objectification and the mutual truthfinding as constructed based on Habermas and Watzlawick, respectively. Thus, the paper examines the possibility and added value of the connection between such felt and thought knowledge by exploring and analyzing the operationalization of Aesthetic Capacity with the components mentioned by Habermas and Watzlawick. As mentioned above already, the paper extends this line of arguing by looking more closely into how AI may be influencing and re-shaping human communication today and in the near future.

Subsequently, the research questions are:

- What is needed for a distinctive human capacity (i.e. Aesthetic Capacity) that combines cognitive and affective information effectively and truthfully in a decision-making process?
- What is the potential of the operationalization of Aesthetic Capacity for critical assessment of potentially biased informations like fake news, products and outcomes of AI systems, and non-reflected attitudes of communication partners in order to achieve effective and truthfull intrapersonal, interpersonal and human/non-human communication?

## Research Design

The operationalization of Aesthetic Capacity is considered in this paper in a business performance context. The aforementioned pragmatic-philosophical approach of Dewey is the starting point for answering the research questions. It implies that research should provide insight into the presence of the sensation of aesthetic experience as well as the interactive dynamics (between unconscious and conscious knowledge) of the aesthetic capacity. In the research design of this paper, which examines the phenomenon of intuitive and felt meaning, a qualitative analysis of the data is appropriate to describe this phenomenon as comprehensively as possible. This paper uses the Interpretative Phenomenological Analysis (IPA) method [62,63] for this purpose because of its central focus on "lived experience" as the subject of study. Good communication objectifies true facts (Habermas) and it develops a shared truthfinding (Watzlawick). As discussed in this paper, the best possible basis is thus created for taking a decision, making choices or drawing conclusions. The data for this paper consist of 8 interviews with people in a business context: business leaders in the Netherlands including Transnational Corporations (TNCs), Multi National Enterprises (MNEs), Non-Governmental Organizations (NGOs), and Public Bodies. Situations were selected from the interviews in which there was a combination of decision making and non-rational considerations like feeling or intuition. The text analysis of the selected situations from the interviews was done entirely from the perspective of the interviewees: what they said about their experiences concerning decision-making. All 8 interviews were conducted in 2014-2017; they were selected on the basis of the interviewees' successful managerial roles. Subsequently, they were divided over the mentioned organizational types in order to perform a broad and diverse exploration of this operationalization across different fields of business.

Based on the works of Habermas and Watzlawick, an analytical tool has been constructed for this content analysis of the interviews, as a method of natural language analysis. The template for this content analysis has been built up from 8 codes derived from Habermas' validity claims and Watzlawick's two communication worlds of the objective reality and the subjective reality [44,52]:

- Is there any gut feeling in this situation?
- Is the gut feeling taken seriously?
- If that is the case:
- Do the parties understand each other, is what is said linguistically intelligible and comprehensible? [Habermas validity claim: Clarity]
- Is what is being said true?' [Habermas validity claim: Truth]
- Is the intention in the contact pure and aimed at the common goal, is the dialogue honest (or sincere) in what is said? [Habermas validity claim:: Sincerity]
- Is there a correct fit, is what is said (and hence does done) right or appropriate in the light of existing norms or values? [Habermas validity claim: Legitimacy]
- Is there symmetrical or complementary communication, and is it actively used or broken? [Watzlawick axiom V: Symmetry]



- In case of an incompatibility or distortion, is the discommunication critically questioned and discussed and are issues of symmetry and complementarity also identified and discussed? [Reflection on communication and action according to both, Habermas and Watzlawick]

The presence and functionality of this operationalization of Aesthetic Capacity is verified from the perspectives of the interviewees, from what they observe and indicate. This human capacity is then verified in the interviews, more specifically in the parts of the interviews in which the gut feeling is mentioned in the decision-making situation and how it is treated by the interviewee. It leads to gaining insight into the degree of appearance, distinctiveness and unambiguousness of this capacity. Finally, conclusions can be drawn on the level of confirmation, functionality and completeness of the operationalization of Aesthetic Capacity in a decision-making context.

### **Findings Derived from the Interviews**

As described above, the eight interviews were conducted to explore the specifications and requirements for Aesthetic Capacity applied to decision-making. The guided interviews were conducted around the central question on how the interviewee manages the aesthetic experience and gut feelings in business practice and with business contacts, and how is it related to rationality and cognition in decision-making. From the eight interviews, eight different situations have been derived which have been identified as relevant for Aesthetic Capacity applied for decision-making. The selected situations in the interviews have been observed and analyzed with the described template as the analytical tool.

#### **#1: Feelings Unchecked**

A situation about two professional consultants experiencing colourism and its impact on decision-making.

'We ourselves have experienced that we had to provide training to the higher management and the board of the organization, at company X. And that we came there and that the receptionists did not treat us well. [...] She gave us a map of how to walk and I immediately said, are you sure we should go there, because I think we should be at another building. Well, that receptionist said she was sure. So we neatly follow that map and we arrive at a room that is a cleaning shed and the lady in question who manages that thing there looked at us and was so pissed off. [...] The management of company X joined us and then the lady brought us to the training we had to provide to make an excuse that we were late because there was a reason that we were late and we could use that right away in our training, yes, as a kind of casuistry. [...] That training was about diversity and inclusion, so that was fine. But these are experiences that you do not only have yourself and not once, but unfortunately more often, and that you have often seen in your environment [...] You can't stand by and see something happen that is simply not correct, then you have to act on it, that's kind of how we work'.

The 'gut-feeling' ('did not treat us well') of the interviewee is not followed by critical questioning and checking with the receptionist. The presupposition and possible prejudices of the interviewee are thus maintained. The relationship between affective and cognitive information is not established, nor is that relationship between the interviewee and the receptionist reflected upon. This asymmetric situation, intrapersonal and interpersonal, was not questioned and broken-through. Thus, for both persons considered here, aesthetic-capacity-in-practice means actually: they are missing the meaning of the situation which they both are in. They

are not verifying communication which would have led them to reasoning about and, thus, to resolving this situation. For both persons, there was apparently no interest or reason to check their feelings, which resulted in a non-starting of Aesthetic Capacity and in the continuation of a mismatch between the real and the felt world, Watzlawick's first and second order reality. This situation illustrates the distorted view of reality if Habermas' demands of clarity, sincerity, truth and legitimacy are not carefully checked. Furthermore, both intra- and interpersonal communication is not symmetrical, but complementary. Everyone stays in their own disconnected role and position without reflecting upon it. The decision-making comes forward as a fuzzy not-truthful process and it is therefore leading to some disappointing experience for both sides of the communication.

## **#2: Appreciation of The Unthinkable**

A situation on the requirements for decision-making about the unthinkable, by a CEO of a multinational logistics company.

"[If you] only go for that rational then it takes too long and you are therefore too late to decide. If you only go by feeling and you say those facts, I believe it all and I know it all so well, then you make very big blunders and that is of course disastrous for the continuity of the company. [...] Yes, yes, so yes then you have a fairly large part that works on feeling or yes investments or changes within the organization or that you very quickly have the feeling that this can become something and then you test that [...] That rational is, so to speak, necessary to prevent disasters [...] and that intuitive is much more that you dare to think out of the box [...] Then you get perspectives that you have not thought about in advance and that brings you back together."

In this situation, it gives for the interviewee the impression of presence of both gut feeling and rationality. They have been explicitly and deliberately checked with each other to prevent disaster. There is understanding of the situation, and there is a sense of truth of both the real world and the subjective world, and the interviewee realizes that they both must be brought together. It is unclear how a possible common goal plays a role. The correct legitimacy seems to be achieved by active (intrapersonal) communication between rationality and gut feeling. It is not clear to what extent the communication is symmetrical or complementary. The impression is given that it is symmetrical and supportive to effective decision-making. Both 'selves' are apparently in an equal position. This situation illustrates a complete check of Habermas' criteria clarity, sincerity, truth and legitimacy. Intrapersonal communication is symmetrical (equal) and largely reflected upon. First and second order realities are brought together successfully. The decision-making comes forward as a clear and directed process.

## **#3: Good Talks with Yourself**

A situation about how felt and thought knowledge are consciously connected intrapersonally by a CEO in a multinational petrochemical industry.

'I think at first, the first thing is always very quick intuition. But then you have to be careful not to reason from your intuition, so you have to verify that. So you do that by rationalizing observations. Then you want to adjust your intuition. My intuition does play a big role, yes. Absolute. I can't analyze everything. In fact, that would be ineffective, because then a list must have been checked before starting. Always verify and then also through open questions, because if I do not ask yes and no questions, yes, you see that I actually see my thoughts confirmed. While with an open question you sometimes come to very nice surprises, which

also make you a lot smarter. That is yet another style of leadership [...] At a certain point you feel, I think, we should take a look again, why we made those plans the way we did then, and was that right? So it really depends on the situation. When reason prevails and when intuition prevails [...] The greater the amount, the more your intuition plays a role'.

The speed of the gut feeling is recognized, as is the importance of the orderly checking of that feeling. The respondent actively verifies without wanting to direct the response (open questions) and he is open to new insights thanks to this combination. Intra-personal as well as interpersonal communication are mentioned in order to verify the gut feeling. Verification points have not been further elaborated upon. There is a clear tendency to understand both the situation, and the other party. There is no doubting the sincerity and the truth. There is also a check on legitimacy, which is questioned by the interviewee by checking gut feeling. The interviewee does not exclude the possibility that there could be a misunderstanding, given the action of probing and thus gaining insight into the intention of the other party. It gives the impression of decision-making based on realism. The symmetry between the 'selves' develops towards complementarity with increasing amounts. Similar to Situation 2, this situation illustrates the complete check of Habermas' criteria clarity, sincerity, truth and legitimacy. From a Watzlawick perspective, intrapersonal communication is symmetrical (equal) and it is largely reflected upon. In addition, this situation highlights the risk-dependent and situational aspects of the approach. First and second order realities are brought together successfully. The decision-making comes forward as a clear and directed process.

#### **#4: 'Real' World**

A situation about how the choices in decision-making processes are made by the CEO of a multinational shipping company.

'Because I firmly believe that you can't do things with your head alone. Sometimes you have to make decisions just because it feels right, or whatever. If you want to do things with your head, I'm talking about the spreadsheet generation, you're actually always thinking about all the scenarios of what could happen, meaning financially, you're covering all of that. Of course, there was a contract between the parties involved, that is so thick, really, unbelievable. Every possibility or deviation is included in it. Then someone said to me, ninety-nine percent of what's in there is never going to happen and three percent of what's likely to happen is probably not in the contract. I also liked that, because it says something like that, you can't foresee everything, you just have to let some things take their course. So that sometimes means that you have to go by what you do feel.'

There is recognition of the relevancy of gut feeling beside rationality. As a result of his intrapersonal communication, the interviewee questions the relevance of the rationally reached agreement and he notes that this is an unrealistic reality because it is lacking obvious and important options. Rationality can therefore also describe an apparent reality with which Watzlawick's axiom could work in two directions: rationality tests gut feeling, and therefore also: gut feeling tests presumed rational reality. There is a clear perception of and check on Habermas' clarity, truth, sincerity and legitimacy. From a Watzlawick perspective, there is room for a shifting symmetry towards complementarity as a result of increasing unpredictability of business. It gives the impression of decision-making with realism. This situation includes intrapersonal as well as interpersonal communication to bridge Watzlawick's first and second order realities. The decision-making comes forward as a clear and directed process.

## **#5: Hiring by Heart and Head**

A situation in which the CMO of a national media company explains how to establish confidence amidst felt and thought knowledge.

'I always trust my intuition very much and I always find it the hardest when you are in a situation where you start doubting your intuition. Is it right or wrong? The annoying thing is that you start to deviate from it and then you always learn that you were right [after all]. That is really bad. That you think [...] I just don't listen to myself. You start doubting yourself. [...] But of course, intuition is not a fixed thing, it is important and has to do with hiring people. The times that I let someone else talk me out of my intuition because someone said: yes, this man or woman is so good at this, this and this, right. [...] That you then think yourself: it feels like it's not a very good candidate. But yes, maybe that's exactly the case, because it's someone [the other assessor] who has such a different skill set than I do and it's actually very good to have a different skill set. And then after six months you just think: oh, I really shouldn't have done that. [...] Most of the time it doesn't work anyway. On the other hand, there are always exceptions that prove that it can work. No, you have to listen to it [intuition] carefully, but you can't just blindly rely on it. And thank God, because otherwise it would be very boring'.

The gut feeling is questioned actively: is it true or not true? And is there a real understanding? The doubts are also apparent: about the candidate as well as about the perception of the candidate. There is a real consideration of Habermas' truth and sincerity, and legitimacy is checked actively on the intrapersonal level. Nevertheless, a second opinion (Watzlawick's reflection), for example, has been used as a contribution to clarity. It is apparently not used as an extra tool to gain more insight in truth, sincerity and legitimacy. It indicates a combination of a complete, however puzzled intrapersonal communication, on the one hand, and an incomplete interpersonal communication by exchange of insights, on the other hand. It is leading to a feeling of dissatisfaction with the final decision which has been taken for the reason that at the beginning, the rational arguments had not been checked in balance with the gut feeling. It includes Watzlawick's asymmetry between the assessors, as well as between the 'selves' on an intrapersonal level. The decision-making is influenced by uncertainty in balancing the felt and thought knowledge.

## **#6: The Game Experience**

A situation that tells how an award-winning developer of computer games uses experiences to install a proper connection between felt and thought knowledge and how by that strategy, he gets to an efficient production process.

'I just think that when I compare myself to other people, I find it much more fun than most game designers to be confronted with that mindset of other people. So one thing I really like is playtesting [...] That gives me new information to better understand how to make it more attractive to them. Yes, more attractive or less painful, less frustrating. It can make it a better, more intuitive experience, something that aligns more closely with something that works for them.[...] So you make a game and you see where people stop or people like certain things. [...] And you can read that from ten parameters that you have built in and that you perform analysis on the data, but for me that is so far away from what I already intuitively find much easier and more fun to extract data from.[...] There's just so much nuance missing in the data. So yes, say, the quarter second, so to speak, that someone looks at a screen longer, I could see it if I was sitting next to him, but it would be very difficult to extract it from the data. [...] While what I do is try to go very deeply into that individual experience in order to remove the

barriers. [...] So yes, a real life playtest with someone on the street is probably much more productive and useful for me to do, say, build in analytics for a month and then analyze for a week’.

In this situation, the interviewee is very aware of the fact that the self-perceived experience of players of a game adds insight and knowledge to the actually analyzed pattern of behavior of the players. He places interpersonal communication with the players above a mere representation by numbers. It is absolutely clear to the interviewee that he must incorporate his own observations, as a form of felt knowledge, into the analysis of the game's operation and success. In so many words, he is of the opinion that these sensory-observed insights and knowledge are distinctive for the way in which he can make the design of the game more attractive, and by that strategy, more effective as a game. The experience, the metaphorical aesthetic experience, is used here to improve the technical design of the game. The felt knowledge is used to improve rational design, 'that gives me new information to better understand how to make it more attractive to them'. Ultimately, this contributes to a more complete connection for the designer with the game's players. The main juxtaposition and use of thought and felt knowledge, of the objective and subjective world, are also present. Obviously, the game developer and the gamers do understand each other in an asymmetrical way, they both are implicitly aiming at a common goal (having a nice game). This all means that the fit between both 'selves' (the intrapersonal selves in the game designer) as well as between both parties (the interpersonal communication between designer and players) is mainly determined by the quality of and the common interest in the (trans-)action. It is apparently much less influenced by the degree of interaction. Within this creative process, the game developer does have an aesthetic experience when the gamers are observed, but the observation is not verified with the gamers. At most, a match is made with the separately obtained data about the behavior of the gamers. The intrapersonal interaction of the artist, resulting in his games, does have all the characteristics of an operationalization of Aesthetic Capacity: the communication between the cognitive and affective 'self' of the designer, is checked on Habermas' truth and clarity, and with a shared sincerity and confirmed legitimacy. By nature, both game developers and gamers have their own roles and positions. The level of relationship is therefore complementary and not symmetrical. The decision-making comes forward as a clear and directed process.

### **#7: The Two Coaches**

A situation that tells about the identification and valuing of both felt and thought knowledge by a young and successful entrepreneur, who is, however, not yet able to connect both experiences adequately.

'I have a coach in business terms, but I also have a coach in my feelings. So I have two coaches that I see regularly, where I share certain things at different levels so maybe I'm also aware of certain things. [...] I'm very intuitive and I actually do almost everything I've done on my gut feeling. Only my ratio sometimes confuses me. That's the thing. And then I do not get that feeling anymore. That is really very difficult. That's something I can't explain to anyone either. Then they think: what are you saying? But they are two different things and they cannot be connected with each other’.

From the perspective of the interviewee, the thought knowledge and the felt knowledge are here identified and valued separately, without the ability to connect them, or better: to communicate between them adequately, despite attempts and coaching. They appear not to



be connected yet, neither to feed each other. So the felt knowledge is absolutely there, but not in a way that it is able to mediate the thought knowledge. It is available, but not synergized smoothly and it depends on other impulses that are decisive on which impression to follow: the thought knowledge or the felt knowledge. Apparently there is no adequate questioning from a Habermas' perspective to provide sufficient clarity to bridge the two self-images. Habermas' truth, sincerity and legitimacy are weakly present and they are separated in the active connection between felt and thought knowledge, amidst an abundance of aesthetic experiences which are thus not decoded properly. There is symmetry between the two 'selves' in terms of awareness but not in terms of balance. Apparently decisions are taken fragmented from an Aesthetic Capacity point of view. This situation includes intrapersonal communication to bridge Watzlawick's first and second order realities, but it lacks the reflective attitude in order to bridge these realities effectively. The decision-making comes forward as a not yet integrated process.

### **#8: A Museum Perspective**

This situation tells about a museum director who consciously and regularly organizes an aesthetic experience to check whether the whole thing is still right.

'The aesthetic experience contributes a lot to my business success. A lot. Everything, almost, actually. Yes, and when I go somewhere, I find the aesthetic experience very important. Yes, that's all. Certainly in a visual world like this. I mean, if I walk through the museum shop and I see that everything is fine, then I don't do anything about it. But they also know that if I walk around and I see something that I don't like, that I change it immediately and say: hey, come on, come on. In a nice way, easy. So you do achieve something with that. [...]. A colleague museum director first walks two laps around the museum before he comes in to see if everything is fine. And he also says, you should at least visit your own museum once a week, so you can see if there are still things there and to have that experience yourself. And I do that too'.

Here the interviewee consciously realizes an aesthetic experience, and then, this felt knowledge is assessed for checks by communication with the thought knowledge. The interviewee makes it clear that her own experience is distinctive here. She also makes it clear that she is concerned with 'everything being fine': everything must be right and in the right place. In other words: she wants to guard her click with her museum. There is not a specific check on Habermas' clarity, truth, sincerity and legitimacy but a more general check by 'whether everything is fine'. From a Watzlawick perspective, there is reason for assuming symmetry for she is in power to modify things in the museum if necessary. This situation includes intrapersonal communication to bridge Watzlawick's first and second order realities.

## **Synthesis, analysis, and verification of Aesthetic Capacity**

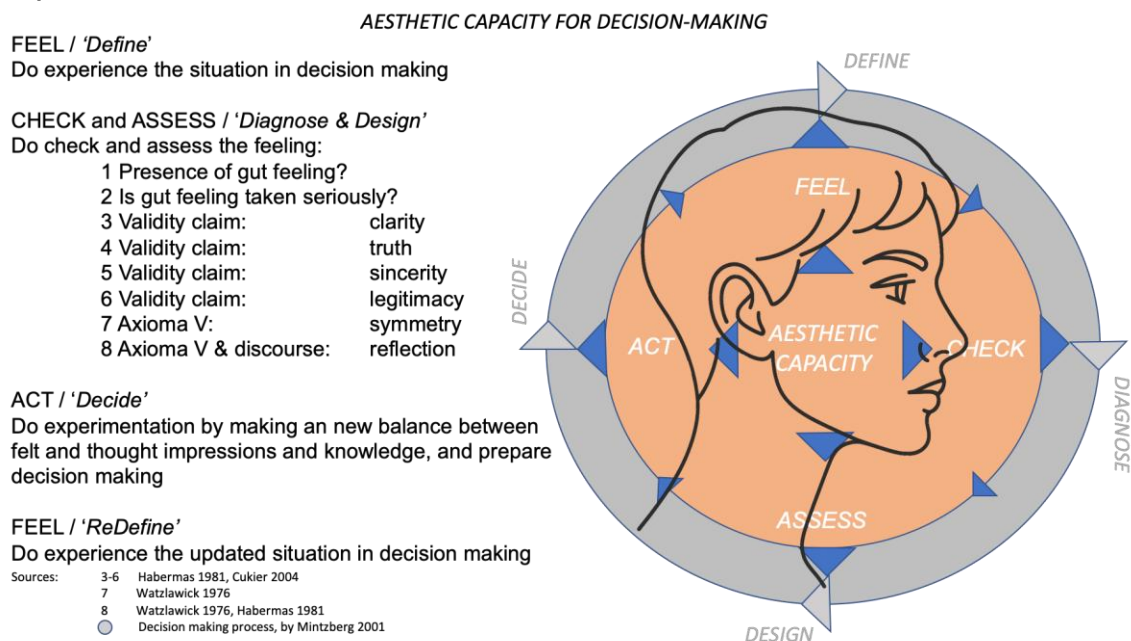
### **Synthesis**

In the selected situations from the interviews in this study, this interpretation allows us to pay close attention to the influence of checked felt and thought knowledge on a supposed truth from which confidence is subsequently derived. And it shows at the same time how quickly misinterpretations and misunderstandings arise when that match is not made completely or properly.

Aesthetic Capacity has here been combined with communicative qualities and actions as a new operationalization of this human capacity. This Aesthetic Capacity is an operationalization as

well as a synthesis of scientific insights in aesthetic experience [21,33,34] and communication [41,44], contributing to establishment of trust and truth [41,44], and to be enriched with insights in being present [36,47,53]. Thus, this operationalization is fitting into the missing link between head and heart as identified by Mintzberg which is distinctive for adequate decision-making, and it is an expression of feeling first. Aesthetic Capacity has, thus, been identified as a distinguishable human attitudinal factor (compare Figure. 2). This results in the following definition of Aesthetic Capacity:

Aesthetic Capacity for decision-making is a communicative operationalization of the human capacity to create affective information through aesthetic experiences and intuitive feelings within and between people in a professional relationship, and to combine and test this information against the cognitive representation of reality through comparison, consideration and assessment, ultimately making a choice or decision. It, thus, can contribute to a more complete understanding of the nature of the connection with yourself and/or with other people in order to support truthful decision-making processes. This capacity is a genuine human capacity that can potentially be supported by AI (Computer Aided Aesthetic Capacity), as well as it can potentially be used to check AI-generated information for clarity, truth, sincerity and legitimacy.



**Figure 2** Aesthetic Capacity for decision-making. Here, it is expressed in a Feel-Check-Assess-Act process which resonates with Mintzberg's decision-making process Define/Diagnose/Design/Decide [5]. The 8 steps of the (self-)communication process within Check and Assess are based on Watzlawick and Habermas as discussed above in detail.

### Analysis of Aesthetic Capacity in practice

The operationalization of Aesthetic Capacity for decision-making is constructed conceptually with a template consisting of 8 criteria from a communicative action perspective. Four of them, the Habermas validity claims, have been made operational following Cukier in order to be able to verify whether those objectifying criteria are present in the situations, explicitly or implicitly [52]. Two of them, the Watzlawick axiomata, have here been made operational in order to verify the subjective relational aspects. All criteria appear to be present in all situations, whether actively used or not. A further inquiry on the level of Aesthetic Capacity which might be requiring an extended critical discourse analysis, is not part of this paper. Nevertheless, an indication of the extend up to what level these criteria are meeting reality is

part of the description of the situations within this paper. From the interviews it can be concluded that the operationalization as well as the development of Aesthetic Capacity varies. It consistently emerges in the interviews that in decision-making, there is the presence of two worlds of reality: the affective world and the cognitive world, and there is also in general the human tendency to bring those two worlds as closely together as possible. The range of situations includes the two worlds on an intrapersonal level as well as on an interpersonal and organizational level.

The two research questions can now be discussed and answered based on the literature and the data included in this research report.

- What is needed for a distinctive human capacity (i.e. Aesthetic Capacity) that combines cognitive and affective information effectively and truthfully in a decision-making process?

From both the literature and the selected situations for this paper, it has become obvious that aesthetic experiences, gut feeling, and aesthetic capacity play an important role in decision-making, including making choices and drawing conclusions. The selected situations also show that communicative action is used in a wide variety of ways, both intrapersonally and interpersonally in order to test gut feeling. This is usually not done completely according to the mentioned template as formulated in this paper. Both the interviews and the literature show the following pattern: in communication between people and in communication with oneself, the rational cognitive information and the non-rational affective information are being generated and they play both a relevant role in decision-making. It can be noted that the former is experienced much more consciously than the latter. In the end, however, the latter, the affective information, often turns out to be more decisive. The felt knowledge coexists with the thought knowledge, the subjective reality coexists with the objective reality. The active communication between both those knowledges varies on an intrapersonal level as well as on an interpersonal level. The added value mentioned also varies. It can provide insights and knowledge that otherwise would not have become available. It thus can contribute to establishing truth and trust. It generates enthusiasm and energy, and it connects people in a more intensive way, through engagement toward the level of common responsibility. It can result in an experienced 'click' with one another.

Such aesthetic experiences may sometimes also create confusion when the cognitive information and the affective information do not lead to the same conclusion. Nevertheless, the added value is that navigating and decision-making in business context can take place based on a more complete picture of the decision topic. Furthermore, from the interviews it is apparent that Aesthetic Capacity seems to enhance focus, speed and synchronicity intrapersonally while connecting thought and felt knowledge. This is supportive in avoiding obstacles, reducing risks, preventing disappointments, and benefitting chances. Based on the results of the interviews, the 'feel-check-assess-act'-process as indicated in figure 2 appears to be two-directional: firstly, to yourself (in permanent conversation with your own Self: do I trust my truth?), and secondly, checking on other available information than the affective information ('is what I feel confirmed by what I think and know: do I trust that 'truth?'). Ultimately, as the interviews show, the conversation with yourself determines whether it is your truth, your reflection on reality as well as on human values. This reflection and critical questioning of combining thought and felt knowledge also provides access to individual moral values and standards, as Martha Nussbaum made clear [54]. These values can then be adjusted to make an individual assessment instead of moving with the crowd. It does, however,

still require an active attitude or an ambiance within which such critical questioning can take place.

### **Analysis of Aesthetic Capacity within Human-AI communication**

All situations discussed so far reflect a human-to-human relationship which gives the opportunity to communicate among humans in order to get things clear for adequate decision-making. In the on-line situations of today which are not represented in the situations of this paper as described, the communication between human and machine appears, first of all, as a variation in the interpersonal communication as identified so far and it may intentionally be the same kind of communication. Here the check of the felt knowledge by Habermas' validity claims and Watzlawick's axiomata of the Aesthetic Capacity comes forward as an essential component of the operationalization of aesthetic capacity. There are, however, more complex problems coming up when we consider Human-AI communication of today and tomorrow. It is this new and fundamentally different kind of communication to be considered here: Human-AI Communication per se. It is already today becoming visible across society and across nations how humans tend to trust such human-AI communication even more than human-human communication. Therefore, the paper is looking into how the concept of Aesthetic Capacity as discussed so far, may be transferred onto and applied to such technology-shaped communication. Hence, we are referring back to our Question 2 as mentioned above.

- What is the potential of the operationalization of Aesthetic Capacity for critical assessment of potentially biased informations like fake news, products and outcomes of AI systems and non-reflected attitudes of communication partners in order to achieve effective and truthfull intrapersonal, interpersonal and online communication?

For this question, we are looking again at the interviews describing situations of communication without any AI involved. How may AI contribute to improving these communication processes? As some examples, we may be looking at the Situations #2, #3 and #8 – here it is visible how the quality of a balanced and consistent application of aesthetic capacity needs focus and depth, speed and synchronicity intrapersonally in decision-making. Furthermore, we may be looking at Situations #5 and #6 – here it is visible how unbalanced and inconsistent weighing of felt and thought knowledge leads to fuzziness (#5), inefficiency and confusion (#6). Is AI capable in offering added value by strengthening Aesthetic Capacity?

AI may help in various ways in assessing and developing further the gut-feeling by employing online information, and in attempting truth-finding by identifying disinformation, fake news and misleading content. For such functionalities in online situations, the power of the fact-checking properties concening the actual online information through AI may in particular give rise to a kind of Computer Aided Truthfinding device: a Truth Filter beyond the spam filter. To answer these questions more in depth, however, the relevant characteristics and known applications of AI must be considered. These are in particular, on the one hand, automatic fact checking, finding out about fake accounts, visual and contextual analysis. There are, however, on the other hand, the well-known risks of AI biases in the basic data, hallucinations and disinformation, and the lack of clarity when making choices in the final AI output. Accordong to the Research Question 2, it is central to what extent the combination of aesthetic capacity and communicative action might be able to assess the corresponding AI outcomes for their substantive truthfulness.

Thus, following the concepts of AI applications in human communication somewhat further, the initial explorations of the 8 interviews in this paper provide certain indications and potentials for applying AI. In Situation 1, AI could have supported the receptionist by generating information about the guests of the enterprise on that day so that the receptionist knew who she was really dealing with at that moment and she could thus make the correct referral. In Situation 2, AI could provide the required speed to check the rational information. In Situation 3, the 'I can't analyze everything' obstacle may be met to some extent by AI support. In Situations 4 and 5, the question may be raised whether AI could be supportive in a sort of fact-finding for the foreseeable future. In Situation 6, the question can be raised whether AI is able to generate good and adequate 'intuitive experiences'. In Situation 7, the question can be raised if AI can support to align rational and non-rational confusion within one individual person. Concerning Situation 8, the director of the museum, however, demonstrates the superiority of human-human encounter without any need of AI support: she is fully relying on her own individual process of checking daily the working patterns of her museum while experiencing the unrestrained reality of human-human communication within her team.

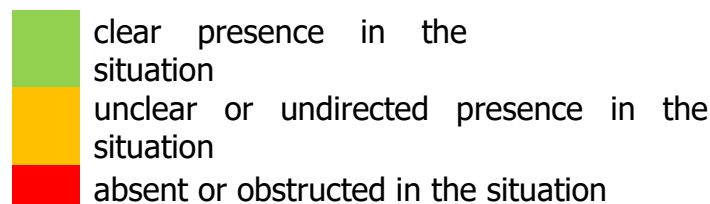
Let us look beyond these 8 cases discussed so far. AI may be used in some more general ways within human communication processes. As one example, it may get applied to support finding clarity about the individual felt knowledge of one human person, AI may track any activities of this person so far and check their consistency based on recorded preferences and likes, and it may use that fundamental knowledge as a reference to assess the felt knowledge versus the thought knowledge of this person. Concerning this one person, it may even be applying the communicative criteria as formulated by Habermas and Watzlawick and it may be checking on truth in order to generate more trust. AI will do that more consistently and completely than any human may ever be able to. It is, however, questionable whether this automated simulation of the specific aesthetic capacity for one specific human being is addressing fairly enough and deeply enough the focus and depth, speed and synchronicity of that person. But may the AI even be affecting decision-making in some wrong directions? For such AI support of communication functionalities in human-to-human situations, a trustworthy AI interface is necessary and even then, these AI activities may negatively affect the focus and depth, speed and synchronicity of felt and thought knowledge of the human concerned.

### **Verification**

By adding the communication insights of Habermas and Watzlawick, the evaluative component of Mintzberg's decision-making process becomes more systematical and more complete. This verification then gives an impression of the extent to which this operationalization of Aesthetic Capacity is present and which role is Aesthetic Capacity to play in the preparation of decisions to be taken. In figure 3, its presence is indicated in three levels. The explanation concerning the 8 Situations is given in Chapter 4.



	Situations as selected from interviews							
Template codes /	1	2	3	4	5	6	7	8
Gut feeling								
Taken seriously								
Clarity								
Truth								
Sincerity								
Legitimacy								
Symmetry								
Reflection								



**Figure 3** Results of the template analysis of the situations

In the situations, the gut feeling is the dominant starting point (situations #1, #3, #4, #5, #7, #8), or more or less in balance with cognitive insights (situation #2, #6). Clarity is often present (situation #2-#6) but also absent (#1, #7). Truth is absent in situation #1 and present in the other situations but mainly actively questioned. Sincerity is present in a varied way and sometimes unclear (situation #2). Legitimacy is absent (situation #1), unclear (situation #5) or explicitly present (situation #6). Symmetry is absent (situation #1, #7) or emphatically present (situation #3, #4, #5). Reflection is absent (situation #1) or confusingly present (situation #7) and clearly present (situation #2, #3, #5, #8). Taking all situations into account, Aesthetic Capacity is, therefore, present with all its criteria, but it is applied very variedly and it is not completely applied in all 8 situations. The resulting decision-making appears complete and realistic and seems to be in line with the interviewee's wishes. In situations #1 and #7, a large part of the criteria is used unclearly or without focus and sometimes it is deliberately ignored or obstructed. The decision-making in these situations appears to be incorrect or fragmented. Thus, the added value of this operationalization speaks from the situations, Aesthetic Capacity is well able to unlock, interpret and use the unconscious information and to perform truthfinding in decision-making. On an intrapersonal level there appears to be an enhancement of focus, speed and synchronicity while connecting thought and felt knowledge (in the situations #2 en #3). Here, it is successful compared to the other situations in which doubt, insufficient connectedness and reduced selfconfidence are leading to less clear choices or decisions. On the interpersonal level, this operationalization in a direct human-to-human communication seems to add value to truth-finding and trust-building.

## Conclusions

Aesthetic Capacity as a human capacity allows to consciously achieve through communicative action the connection between felt and thought knowledge. It may also be promising in other contexts where affective and cognitive information needs to be connected in order to obtain a

realistic picture of reality as starting point for decision-making. Operationalization of aesthetic capacity for advanced decision-making indicates that choices and decisions can be made more thoughtfully and more trustfully. It is an unavoidable tool in our strongly individualized society where institutions provide less and less protection for communication of the individuals within society. The individual appears today to be a kind of revenue model which is directly approachable via technology. Therefore, the person is becoming the object of unsolicited revenue-creating strategies, and thus, the resilience of the individual must be strengthened against such strategies. Adequate human capacities are essential for this strengthening process. The operationalization of aesthetic capacity supports this process of trustfully making choices and taking decisions.

Furthermore, Aesthetic Capacity provides new insights in recommendations for further research as noted in literature in various ways. It can be part of the mental models that support the 'inner knowledge' and it may provide guidance to the 'mental map that human beings make of each other, the world around them and their own self' [55]. It may contribute to enhance reliability in intuitive decisionmaking by enrichment of human capacities to judge intuition in decision making [30]. It may provide a mental method for how leaders may use Aesthetic Capacity as a human capacity for managing felt meanings [18]. And it fits in with the concept of the New Mind [56]. Among other concepts, it comes up as an approach to develop further the relationship and communication between the self and the environment, between the subject and the object. In fact Aesthetic Capacity has the potential to combine subject and object to some integrated and more complete picture of the world, of our interpersonal relations, and ultimately of ourselves, as an answer to the question that "it asks us to think again about the fundamental nature of the relationship between ourselves, each other and reality" [56].

Aesthetic Capacity for truth-finding in intrapersonal and interpersonal communication can be relevant for the development of a human capacity that can keep pace with technological communication, as part of a full-fledged human-machine interface. This may lead to defining requirements for the communication with any anonymous communication device, leading to reformulation and refinement of Aesthetic Capacity, specifically made suitable for the online medium. Indeed, there seem to be opportunities for AI to support the adequate application of aesthetic capacity. This may be subject for further research.

Further research is needed in practical operationalization of the Aesthetic Capacity in human-to-human communication as well as in human-machine situations in which the online confrontation with AI is increasing and issues of truth and trust are being raised. Given its potential for disclosure and operationalization of felt knowledge in processes of creation and engineering, further research in the usability of Aesthetic Capacity in designing and moulding procedures and products in any technological process is promising. Furthermore, Aesthetic Capacity combined with communicative action as constructed in this paper, can be brought forward in future research as part of human capacity-building and Experiential Learning as described by Kolb [60]. Given the intrapersonal and the interpersonal potential of the concept, additional research is needed to get insight into the ways Aesthetic Capacity can be applied in assessment and improvement of performance of employees by training and personal development. Such research may come up as part of the business policy of human resource management [57-61].

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