# Socio-emotional experience in human technology interaction design – a fashion framework proposal

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**Abstract.** Technology designers and developers can be understood as social experience (SE) mediators. In user experience (UX), notions of SE have served to identify and define the factors contributing to human-technology interaction (HTI). Three dominant perspectives have been promoted in UX discourse: 1) SE of brand, brand value and consumer culture; 2) technology design as mediator of human-to-human interactions; and 3) meaning generation through action and interaction between actors. Symbolic interactionalism understands meaning as occurring through dialogue, in the construction of the social self, promoting self-reflection as a social construction. This theorisation of social experience is valuable in the context of HTI as it allows for greater insight into the immaterial dimensions of technology integration in human societies. The purpose of this paper is to break down the factors contributing to social emotional experience of technology through illustrating how it operates according to fashion – temporality and spatiality in culture. This is a theoretical paper that presents a review of social experience, social emotional and collective emotion based literature in light of fashion and design. The result is a presentation of a proposed fashion framework of social emotions in technology interaction design (FASHEM). Based on symbolic interactionism, FASHEM helps break down emotional technology experience into a matrix of self, other, design semiotic interactions.

**Keywords:** Social experience, Emotions, Fashion, Human-technology interaction, Symbolic interactionism, Culture, Cognition.

## 1 Introduction

> *"Fashion speaks a tension between the crowd and the individual at every stage in the development of the nineteenth and twentieth century metropolis."*
>
> ([1], p.11)

Collective emotions (CEs) are phenomena that have been examined in great detail in the fields of cultural and social psychology (see e.g., [2][3]), sociology, cultural studies and politics, particularly in relation to political propaganda [4], the role of the arts and

design in facilitating this propaganda [5], and indeed the links between fashion, politics and technology [6]. While any form of cultural production may be considered technology, as it is intentionally created by human beings for a purpose, what is often known as technology (from the times of industrialization and beyond) encompassing artefacts and systems such as machinery and information technology (IT) can be understood as part and parcel of cultural circumstances. Technology (machinery and IT especially) has been used as symbolic vehicles in various cultural movements such as last century's Bauhaus, a modern movement that offered a new cultural exchange and vision for the era [7]. Bauhaus has just been revived as a symbolic signifier by The President of the European Commission, Ursula Von Der Leyen, under the program called *The New European Bauhaus.* It metaphorically represents a creative and interdisciplinary initiative, convening a space of encounter to design future ways of living, situated at the crossroads between art, culture, social inclusion, science and technology, and which reflects the principles and objectives of current sustainable development as well collective co-creation in the operating environment of the 2020s [8].

Design culture that, according to Guy Julier [9] encompasses designers, production, and consumption, is a culturally specific practice, driven almost entirely by strategies of differentiation. It may be understood as the relationship between the process of value, of creation and circulation and of practice, where the designer's role is in the generation of value. And not just commercial but also social, cultural, environmental, political and symbolic value. Value generation occurs in an expanded field of activity whereby cultural information is filtered through a range of platforms and moments. Non-material elements, such as existing knowledge networks, legislation, political pressure, economic fluctuations and fiscal policies, are also contextual factors on which these draw. That is, culture formulates, formats, channels, circulates, contains and retrieves information. Design, therefore, is more than just the creation of visual artefacts to be used or 'read'. It is also about the structuring of systems of encounter within the visual and material world [9], where technology designers and developers can also be understood as social experience (SE) mediators.

### 1.1 Fashion and Collective Emotions

Fashion, in turn, can be understood as a general concept that reflects society and culture. Therefore, thinking through fashion can deepen the understanding of human social life, that is, circulating sociocultural dynamics, tangible and intangible systems of value signification, as well as individual and collective agents [10] relevant to human-technology interaction (HTI) development practices. Although fashion is most commonly associated with commodities that signify modernity, desirability, and a particular lifestyle (see e.g., [11][12]), it can also be treated as a cultural form of life that applies virtually to the human experience in its entirety and rooted in the very nature of the human being as such [13] (introduction) – indeed, life provides a solid concept for interaction processes and therefore anticipating cultural and life form changes is essential when designing for the future [14]. Fashion also brings with it the dimension of temporality (see e.g., [15][16]) (often referred to as *Zeitgeist*, "the spirit of the era") as well as the dynamics of collective behavior and mutual adaptation (see e.g., [15] [17])

Thus, in addition to objects, the concept of fashion also refers to the way in which certain forms of culture are disseminated, valued and experienced at a given point in time [18]. Hardly any area of contemporary social life is not subject to fashion [17].

When considering the connections between design, technology, culture, and the human mind(s), it is helpful to understand these connections through collective cognition and emotions. CEs in particular, are a way of explaining how, in relation to cultural production – design and technological discourse – people generate particular emotional reactions and experiences. Design objects alone, without matching mental contents, or previously learned knowledge of the designs held by people who encounter them, possess no meaning [19][20]. People of the same culture often share mental representations and underlying patterns of thought [14]. Apperception is the term used for describing how people process the information represented in design, whereby the information available in the forms and characteristics present in the artefacts and systems are integrated and associated with already mentally stored, or previously learned knowledge [21]. This covers all aspects of the construction of information contents in mental representations [22]. That is, interpretative processes that occur through informational assimilation and integration are what enable design to exist and operate. It is once an individual possesses knowledge that matches and recognizes the encountered phenomena (i.e., actualized design product), that it maintains the power to signify or mean something [23].

### 1.2 Design, Culture and Social Experience

Given the cultural, or higher level nature of these designs – people needing to learn about design in order to associate it with e.g., values, actions or functions – it should be understood that design cognition and experience is always dependent on social processes [24][25]. For example, Van Rompay [26] raises the issue of the ability to *metaphorize* due to the fact that people who interact with products often make implicit comparisons, not only with products in different categories, but also with products and other phenomena (such as other people). This process occurs in order to learn about one object by combining the knowledge of it with another. In addition, he reminds us of the role of *conventions* that are learned through interacting within a culture and that help to readily associate objects with specific socio-cultural values and purposes [26].

Expressiveness of a specific form is enabled through learned responses and associations shared by a group. Certain formal qualities may thus symbolize ideas imbued with emotions [27]. We learn about designed products (i.e., real world objects, systems, services, processes etc.) through other people, and similarly to them, we also learn about the qualities of its experience [28]. Thus, an element of this *social experience* (SE) is CEs. CEs are always dependent on the interplay between actions, emotions and context within the frames of societal discourse [29]. “Collective emotions… play a pivotal role both in shaping the individual and societal responses to conflicting events (i.e., collective and group-based emotions) and in contributing to the evolution of a social context that maintains the collective emotions that have developed” [29] (p. 442). According to the review of Van Kleef and Fischer [30], CEs are qualitatively different from the experience of individual emotions, thus underlining the importance of studying emotional

phenomena at the group level. For example, they provide additional insight into ways in which similarity and identification shape emotional experiences in groups [30].

Oftentimes CEs are discussed on a relatively general level. Yet, from this general definition we can understand CEs as emotions that are experienced by numerous people in a similar way within particular societies [31]. Saying this, while the emotions experienced may resemble one another, there may be many different reasons for why individuals experience phenomena in a certain way. That is, expressed emotions may seem similar if not identical, but the qualities of the experiences, or elements and memories through which the emotions are derived may differ radically from one person to the next. Saying this, emotions provide a key 'spiritual' and/or cognitive, experiential link from one person to another. Group emotions, or group-based emotions, serve to connect different individuals within a group [32]. Group membership in itself, and what it reflects in terms of values and actions, is a hub for emotions, and emotional experience through identification. When group membership becomes a salient part of the self, one begins to feel emotions on behalf of the group rather than simply as an individual [30].

## 2 Collective and group emotions in culture and social contexts

Both CEs and group emotions are ways of describing how individuals experience emotions through social, cultural, and other collective events and discourse. These collective experiences may be difficult to separate from solely individual or subjective experiences [33]. This is where culture itself enters the picture, as the relationship between culture and psychology has been a keen area of study for centuries. A cultural approach involves the assumption that emotions are constructed by the process of culture [34]. Emotion theorists have sought the universality of emotions in different cultures. For example, Mesquita, Frijda and Scherer [35] point out that hedonic experiences and making contacts with others, among others, share this universality. However, Mesquita and Ellsworth [36] specify that what is culturally universal is a link between appraisal patterns and emotions, rather than emotions *per se.* Such dimensions may include, for example, *novelty, pleasantness, control certainty, agency,* and *compatibility* with personal or social values. Cultural psychology can be understood as the scholarship of the ways in which cognitive and affective (bodily emotional processes) as well as behavioural ways of being are formed through cultural constructs and socially manifested meanings [37]. This is extremely important to consider when attempting to surpass the limitations of cognitive and behavioural psychology as it is culture and social practice that aids in explaining higher order associative practices and intentionality.

According to Back, cultural activity is, firstly, a product of social norms, the state of technology and the need for self-expression, and secondly, it is a product of creativity and structure, where creativity can be translated into a recognized work. In this way, cultural activity is partly determined by social and psychological factors and is partly free objects of creativity [38]. From a fashion perspective, this is related to the seminal concept for describing its function, that is identity which is also linked to self-realization and chosen life forms that are social in nature [11]. From this perspective, we may begin to understand that cultural context plays a key role in informing emotions [29].

Power & Dalgleish admit, one of the important characteristics of emotion is its role in communication with others [39]. People have unique social experiences that they bring with them to social interactions, and these past experiences (along with expectations and emotions) become part of any social context [40]. Lazarus reminds that to understand what is happening regarding emotions in immediate social encounters, "one must keep in mind that each participant is reacting to cues or signals from the others" [41] (p. 379). That is, social emotions require the development of mutuality and must be created in the minds of more than one individual by implicit or explicit agreement. Therefore, social interaction requires mental processes that enable the construction and implementation of common plans. These processes crucially depend on the fact that each actor has a "self-model" [42].

A social psychological approach to culture leads to focus placed upon the dynamics of collective behavior, as people fit their lines of action together and in the process, *create* culture, especially in the context of small groups. This "culture-in-the-making" approach draws heavily from a symbolic-interactionist perspective and focuses on how people communicate to develop shared understandings. In this perspective culture may be viewed as a "structure of feelings," and the emotions and values linked to shared understandings are grounded in the social contexts in which they are developed and experienced [40]. This is also how fashion often begins, and what Blumer refers to in the collective process, when requirements assessment forms the basis for acceptance or rejection. In Blumer's words, fashion "represents an organic sensitivity to objects of social experience" (p. 284) [43]. Mesquita, Boiger, and De Leersnyder's model of "cultural mandates" (including norms, ideals, or goals) shows that emotions have social functions: they help individuals to achieve certain social goals. The model is based on how people appear to construct their experience of a given emotion within *a particular situation* in ways that match the cultural mandate [44].

### 2.1 Cultural symbolism and social context

Humans create their own worlds and distinguish among artefacts according to their significance [45] as well as how these respond to concerns based on the symbolic characteristics and experiential benefits beyond interaction [26]. Symbolic life, the existence and dynamics of signifying elements (signs, symbols, forms that stand for and refer to something outside themselves) [19][20], is generated, instilled and maintained through culture and cultural practice [46][47]. Symbols permeated through culture are both tangible, as seen within the technological design landscape, as well as intangible, i.e., the meanings, actions and values we associate with these technological designs. Technology embodies rules, habits or routines, practice, as well as narratives, concepts, myths and even art (intentionality converted into expression) [48]. While Geertz [46] and Keesing [47] would argue that these are relatively stable, we on the other hand acknowledge the ephemerality of culture. Culture is always in flux [49]. It is the changes within culture that derive from evolving social, political, economic, environmental etc. conditions that can additionally arguably seen within the expressions of fashion [50].

Based on the above mentioned relationship between culture, cognition, psychology and emotions, the role of social context in affecting emotions is imperative. It is through social processes that the symbolic (and arguably behavioural) world gains its ground, and thus, emotions are highly dependent on social context as it frames and attributes particular meanings to various signifying elements in varying compositions. If we could imagine information in its raw form as collections of tangible objects (building blocks or atoms; assemblages) for instance, we could understand social context as the multi-sensory, embodied, discursive scaffolding that frames, structures and organises information. This structure provided by social context operates in terms of meaning – what the information signifies, describes and means within action-communication situations, and the valence (positive-negative) or weighting (passive-active - arousal) of this information in terms of emotional value [51]. Ashmore, Deaux and McLaughlin Volpe [52] described the connections between emotions and social context as a "general and continuing multi-layered and interwoven set of material realities, social structures, and shared belief system that surround any situation" (p. 103). In fact, Ashmore and colleagues argue that social contexts are the main source or generator of individually experienced thoughts, feelings and actions. They also however, argue that through removing physical contexts and concentrating on social ones, it is possible to distinguish the roots and degrees of temporality via which specific emotions are experienced.

We argue that social contexts cannot be neatly separated from physical contexts. In fact, there are social dimensions to every physical context and social conditions for every physical aspect, particularly when considering design and technology [53]. To illustrate, the physical element or physicalized embodiment of a design object denotes temporality through style, size, scale, functionality, and how it connects with social cultural discourse [9]. Time provides an immaterial yet ever present physical frame, or series of capsules (design could be interpreted as these series of time capsules) through which cognition, emotions and experience evolve, especially when considering human-made artefacts and systems. For example, according to Saariluoma and Oulasvirta [54], the critical question in experience analysis is how one essentially perceives the meaning of "being in the world" in interaction. Such an approach draws attention, not only to the constructive relationship between human experience and intentions, but also to its material-socio-cultural-historical circumstances [54]. This is also what Forlizzi recalls: designers must pay attention to the ebbs and flows of time and the phrasing of interactions [55]. For example, the importance of presence and its implications is important to understand in creating any physical environment, but in experiencing virtual reality (VR), its necessity has been particularly emphasized [56]. Nature on the other hand, despite its regeneration, can be interpreted in Western cultures in particular, as more static and constant [57].

### 2.2 Emotional Culture

Structural socio-politics, situations, events and changing or depending of available information strongly influence collective emotional climates [52]. These contexts along with their contextual cues, help guide emotional orientations. Another concept that can be linked to this collective and social way of understanding emotional experience is

that of emotional culture. Emotional culture consists of the combination of culture, social context and the overall emotional value attributed to the repertoire. An emotional culture instils immaterial, value-based and emotional rules of practice that are anchored by meaning for various members and groups in society. For instance, to look at the communicated emotional culture of modern tech companies – i.e., that of Google, Gofore and Facebook – strategic design moves hand-in-hand with the ethos (philosophy), vision and ambition of the companies. Attached to ambition and aspiration alone, and housed within the design of both the marketing and communication material, user interfaces, as well as the internal organisational design, from wallpaper to professional titles, specific emotional qualities are projected and fostered within the organisational groups (creating frames) [58].

Organisational culture in itself is a composite of fashion [59]. Traditional top-down operation models with steep hierarchies and multi-layers of bureaucracy are no longer in fashion. Instead, more collaborative, horizontal-style companies in which each expert employee feels empowered by their own ability to influence is more the rage [60]. This mode of sensibility is conveyed additionally through the brand image as well as through the products and services that are created and promoted by the companies, whereby communication (e.g., marketing, styling, packaging, events and the milieu) with the audience, plays a significant role, as does the generated use culture – how people understand not only the product use, but also the social dynamics that exist around the products [61]. In this way, we can understand the SE of contemporary tech products as a fashion phenomenon that is permeated from the core of organisational ideology outwards to the grassroots of society – how we see the design objects we consume, and how we see ourselves with the designs and through these in relation to other people. To say this and when fashion is rejected from material and treated, in accordance with Kawamura, as a symbolic tool that exists in people's minds and beliefs [15], fashion can be seen as an embodiment of sociocultural climate.

## 3 Symbolic interactionism and its function in social experience

On this note, we move towards symbolic interactionism (SI). According to SI, meaning occurs through dialogue [43]. In fact, something so seemingly singular as an individual's identity, subjective experience and sense of self is argued as manifesting and being the product of continual processes of interactions that occur through symbolism. SI puts a label on the semiotic logic of both human-technology interactive processes, and human-human interactive processes – explaining the continuum of experience as a reciprocal, cyclical and concurrent network of symbols and their attribution of meaning (interpretation) [62]. As George Herbert Mead emphasizes, "[m]an lives in a world of meaning" (p. 382) [62], and fashion is undeniably a phenomenon of symbolic meanings. According to Matteucci and Marino, "[f]ashion thus attests the existence of a reality in which what is essentially required is not the capacity of interpreting differently a certain "given," but rather the ability of perceptually moving within an aesthetically

thick space" (p. 56) [63]. Thus, meanings are often connotative and reflect the communication of socio-cultural values [26]. In this respect, to understand meaning making in interaction, one has to go beyond objects.

Shott [64] examined the relationship between emotion and social life. She argued that SI is apt for the analysis of the processing, experiencing, construction and expression of emotions, particularly in light of the social nature of emotions. In fact, not only did Shott highlight the social contingency of emotions, she also posited that emotions play a major role in social control and order. Shott draws on Schachter's [65] definition of emotion as a physiological (affective) state of arousal experienced and defined (interpreted) by an individual as being emotionally induced. Here, emotions are understood as comprising two distinct parts, that of psycho-physiological processing of information on an affective level and the cognition, or cognitive labelling of these affects. The mental and linguistic (cognitive-linguistic) acts of labelling emotions can be seen to strongly rely on social and cultural principles that aid in the definition of cognitive-affective interpretation. It was Clifford Geertz [66] who once said that, "[n]ot only ideas, but emotions too, are cultural artifacts" (p. 81). To go even deeper into this discussion we may note that social arrangements prescribe "feeling rules" [67] – the types of feelings or emotions that are socially allowed to be experienced (publicly, or admittedly) and expressed. This may also be conveyed into the realms of designed artefacts and technology and the emotions that are expected to be experienced in relation to creations or 'creative intensities' – i.e., *satisfaction* [68] when talking about information technology use, *excitement, desire,* and *passion* [69][70] when talking about artistic, creative wearables. Even within these small examples there is a dichotomy established between the *me* or *I* (human) and its closeness to what is worn, and what is intentionally creative, to the *technology* – human versus technology, even in social emotional discourse [71].

### 3.1 The self and self-representation in social emotional experience

In fact, in relation to the self and self-representation, Psychologist and Philosopher William James [72] distinguished between the '*I* self' and the '*me* self'. Whereby, the 'I self' was understood as being the information people are aware of regarding themselves in relation to the world. The 'me self' comprised the ways in which an individual subjectively experiences themselves through for instance, self-concepts, self-views, self-image and self-schema. When comparing this insight to popular semiotic views presented by Charles Sander Peirce [23] and Ferdinand de Saussure [73] for instance, we can see that the phenomenological 'I self' is pragmatic, and uses information presented in the external world as a means of catalyst for interpretation and comparison in the internal mental world. The 'me self' resembles de Saussure's views on semiotics in that here, everything is mentally bound – there is no understanding *really* of the external or so-called material world, as everything we know occurs mentally. The signified and signifier cannot be removed from the interpretation as such. In SI however, there is a synthesis of these views existing on the social, discursive and interpretive levels. Thus, to inject the self once again into the discussion, we may draw on Ulric Neisser's [74] understanding of self-representation and self in that the way that one represents the self

also affects the experience of self. Neisser uses terms such as ‘ecological self’ to express how the self exists in networks of systems, and the ‘interpersonal self’ as the ways in which the self exists as a verbal and non-verbal social construction that manifests through interaction with others.

Both the ecological self and the interpersonal self are interesting to gauge from the perspective of HTI design and development processes. This enables the application of SI to analyse the SE of technology experience through the lens of fashion. These days the ecological self for instance, manifests through multidimensional and complex systems, both atomically (physically) and digitally. Our environments and contexts are both natural and physically constructed. We may live in an airtight eco-smart home that is electronically dependent, in the middle of the forest. Already these juxtaposed material conditions interact with our social ideologies and values in such a way that specific cognitive-affective states glaze over our sense of state, belonging and identity according to how we see our so-called eco-friendly home contributing to environmental sustainability, and how we identify with the nature we are surrounded by. Then, when considering the hyper-textual, hyper-contextual environments we are a part of and interact with through online information every day, our sense of self, self-representation and emotional states emerging through social and symbolic interactions, the domain of social emotions becomes ever more complicated.

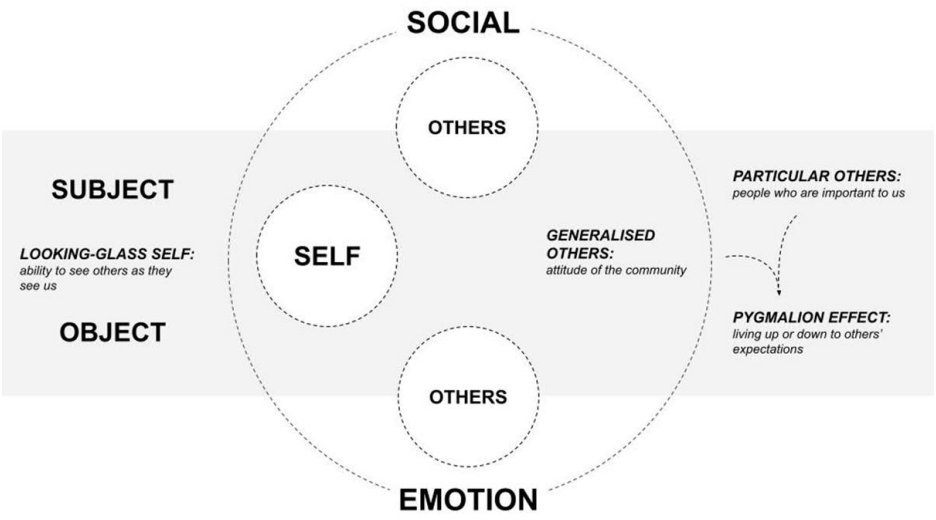


**Fig. 1.** Fashion, technology and symbolic interactionism in social emotional experience (Adapted from [75] & [43])

Yet, this interpersonal self exists as a part of these highly complex systems. It is through social systems and order that we have arrived upon this social-technological complexity [76]. Our systemic existence is contingent on the societal developments of our environment. This existence is manifested and defined through interpersonal relations and interactions that are either confirmed, reinforced or rejected by emotions –

positive and excited emotions for example, versus negative and repellent emotions. We define ourselves in relation to others and how we connect through these social emotional processes. Symbolic interactionism is one way of viewing these complex and dynamic relationships that determine emotional experience through social processes in relation to the self. SI is based on the argument that humans possess a sense of self that renders them conscious of their own actions and being in relation to others []. The self can be seen as both a subject and an object. The self as subject, is a being with agency. This view on the self is one of a person who can choose for themselves – they can choose what to consume, how to express themselves in relation to what and who they would like to be. The self as object exists when we observe and are aware of ourselves and the way we behave. In this scenario our identity and sense of self, combined with self-concept provide a basis for social meanings that are highly dependent on the culture we live in and the reactions of others [75].

Others in any given instance, comprise those who we do not know or who are not particularly significant to us from the perspective of our concept of self, as well as the particular others, who are important to us. While all others (individuals) have the ability to influence our emotions, it is quite strongly the particular or significant others who play key roles in shaping them [77]. As emotions are highly contingent on expectations (they are a way of preparing the mind and body for action/interaction), we also find ourselves either living up to, or living down to the expectations others have for us. This is known as the *Pygmalion* (or Rosenthal) *Effect*, named as such after the Greek myth of the sculptor Pygmalion who fell in love with his own statue creation that embodied all his ideals of the perfect women and wife. The physical form dictated his belief that if the statue would be a human, she indeed would be perfect in all respects [78]. In reflection of this, we may see that expectations greatly influences our behavior (e.g., consumption), self-expression, performance and realisation, as we react (implicitly or explicitly) to these expectations. For example, Lazarus states that the power of external directives over individual persons arises, at least in part, from the desire to conform to what others do and say [41]. In addition, arguably, we also construct ourselves according to the expectations we hold of ourselves respectively and aim to match what we aspire to be within our social-technological context [74].

### 3.2 Self, expectations and conformity

We do not only comply with people's expectations however, we also conform to their behaviour and expression (appearance, spoken and body language etc.), through our anticipation of what we feel they expect from us – our self-consciousness versus or in light of our self-schemata. Humans, as social-emotional beings, are propelled into conformity that has been scientific demonstrated on numerous occasions in experiments such as the Asch conformity task [79]. In the Asch conformity task [80] an individual participant takes part in a group situation, believing that the other members of the group are also there as participants. The other group members however are confederates planted in the situation. The group members are shown a line and then are required to choose a line (1 out of 3) that matches the presented line. As the experiment progresses, the confederate group members unanimously choose the wrong line. Even in Asch's

original experiments, approximately 30 % of the participants chose the wrong line in conformance with the rest of the group. Similar patterns can be seen in the elevator experiment, for instance, conducted by *Candid Camera* in the 1960s that showed people in an elevator turn and adjust their bodies according to where other elevator travellers were facing [81]. These are very much social technological examples of how humans operate in relation to one another. Here, we argue that this conformity and adjust of behaviour also operates on emotional and experiential levels.

It was Hildred Geertz [82] who argued that cultural systems possess patterned ideas about particular forms of interpersonal relationships and their associated cognitive-affective states. Geertz additionally mentioned that these represent a small portion out of a spectrum of social emotional experiences, operating in a somewhat stereotypical fashion – that is, we take the social-cultural idea of what emotions are expected in relation to what context and which people and often allow this to shape our own emotional experience of subsequent phenomena. This process is known as emotional socialisation [64] or even emotional specialisation [82] when considering the cognitive-affective process versus the expressive or representational one – how intensely one will show their deep emotions.

### 3.3 Feeling Rules

The ideas of Geertz [82] link to Goffman's [83] research on impression management. Impression management concentrates on rules and principles that function within differing forms of social interaction. Goffman argued that people manage and control their outward emotion strategically. While this is valuable information from the perspective of measuring emotional experience through face gestures for instance, the explicit processes of social emotional experience on a cognitive-affective level were relatively undealt with in his work. Emotional psychology scholars [84][85] proposed the term "emotion work" to describe the way in which emotions operate in social situations. Hoschild [67] expanded on this with his coined term "feeling rules" that served to emphasise the fact that people not only regulate their externally expressed emotions, but they also attempt to feel and experience the emotions that they expect *should be felt* in certain social situations. This is due to there being a dual layer of emotion guessing, or emotion matching – that which we feel we should be feeling in relation to the user through the lens of empathy, and then naturally, the emotion and situation of the user with which we are attempting to emphasise.

Not only is there the tension between what should be felt and displayed with what perhaps may, if ever, come naturally as in primary emotional processes or basic emotions [19][70] – that is, instant cognitive-affective reactions that are directly triggered by stimuli such as fear, disgust, excitement etc. – but these "feeling rules" also influence how we genuinely feel. Whether this be a question related to, "if we say it often enough we start believing it," or regarding the emotional quality of these overlapping processes (e.g., stress of trying to cover the feeling of disappointment), remains to be seen and is highly dependent on context [86]. In fact, feeling rules are engrained in our social fabric that strongly define how we imprint encounters, which in turn affects our emotions.

## 4 Emotional Appraisal towards a social model of experience

From this perspective we may also observe a multi-levelled appraisal process. Appraisal theory in its basic understanding can be described as the argument that emotions and emotional states arise through continual information processing (cognitive-affective processes) in which humans (or animals) evaluate phenomena against their core concern – wellbeing and survival [87][88]. Personal meaning, which is what arouses emotions, is the product of appraisal. Although emotions are responses to events that are important to the individual [89], and as previously discussed, the person-environment relationships that arouse emotions most often take place with other people. However, two individuals that construe situations quite similarly and agree on the facts, may still react through very different emotions. This is influenced, for example, by personality variables as well as the reality through which they have appraised the adaptational significance of facts. Personal meanings are nonetheless relational – they have to do with how relationships affect our well-being [89][90]. Whether this be social or cultural wellbeing, or direct physical safety, our emotions and the cognitive-affective – mental representational level and physiological level of experiencing them - can be seen as an in-built and highly evolved mechanism to adjust our actions to maximise our chances of self-preservation. From this perspective, it is arguably apparent that social interactions, hierarchies and processes are key components to this self-preservation and its associated cognitive-affective evaluation process [87][90].

Lazarus prioritizes three appraisal components in which culture has a major impact on acquired and considered goals. These are goal relevance, goal congruence or incongruence, and type of ego-involvement. Relevance of an important goal means the potential for strong emotions. Although individuals differ, Lazarus argues that culture influences the values, goals, and main hierarchies that members acquire and express, including their identities [41]. Smith and Mackie [91] indicate that it is possible to conceptualize and explore emotions based on people's social group membership which may become part of a person's "social identity" - an extended version of the self. Authors reassure that when a significant group identity becomes salient, people think of themselves and fellow in-group members as "we" (p. 349). Moreover, like any emotional reaction, the authors recall that group-based emotions may change when the appraisals that generate them also alter. In the case of group-based emotions it is especially likely that social influence from other in-group members may directly influence an individual's perception and appraisal of a situation [91]. Thus, it is possible that appraisal itself may be partly mediated by social interaction. For example, evaluations of personal relevance may develop over the course of conversations with others during which appraised conclusions are negotiated dynamically between interactants rather than formulated completely in either individual mental system [2]. Overall, Mesquita and Ellsworth explain in more detail of the universality of the emotion: "if people from different cultures appraise a situation in the same way, they will experience the same emotions. If they experience a different emotion, it is because they have appraised the situation differently, and appraisal theories allow us to specify (at least roughly) what this difference in appraisal is likely to be" [36] (p. 233).

Manstead and Fischer [92] refer to the appraisal of others' reactions to the emotional event as *social appraisal.* Appraisals of other persons can have a large impact on the course of an individual's process of appraisal. Here, the authors propose a *reappraisal* (the term used by Lazarus [41]) to refer to ongoing evaluation that differs from appraisal only in the sense that it comes later. One basis for this point of view is that the self is almost always entailed in emotion. That is, what is appraised is not the event *per se*, but the event-in-relation-to-self, and the event that is appraised is also very likely to be appraised in relation to the reactions of others. The latter is constitutive of the emotion process, in the sense that it can influence both the perception of coping potential and the way in which the appraisal process unfolds over time [92]. Mesquita, Boiger, and De Leersnyder [44] use the expression "doing emotions" to describe the active process of meaning making that is consequential for the way in which individuals navigate their social environment, and thus also constantly reappraising emotions. Authors highlight that the process also involves selective attention and meaning making [44]. Indeed, John Dewey has portrayed the complexity of the process of experience by drawing from it a stormy ocean in which waves collide, or ripple forward [93]. In general, an idea that the emotional experience is a process, has been widely shared among so-called appraisal theorists.

### 4.1 Motivation, emotions and technological experience

Motivation has been recognised as a key basis for emotional appraisal [94]. Oatley, Kelter and Jenkins [34] raise three different social motivations: attachment, affilication, and assertion. In design processes where human positive emotions are most often the subject of consideration, the first two in particular are central. Affiliation draws individuals together; typical positive emotions associated with affiliation are affection, warmth, and liking. Similar to Abraham Maslow [95] with his hierarchy of motivation and needs, Ellsworth and Scherer [94] identify the motivational basis of emotions as encompassing needs, goals and values. They focus on the goals of survival, maintaining positive social relationships, the enjoyment of pleasurable experiences, and even goals embedded in mundane acts such as fetching a cup of coffee. Ellsworth and Scherer go on to emphasise differences between cultures that are shuttled through varying content and elements in social dimensions such as identity, values, justice and norms. These differences, however subtle or exacerbated, cause alterations in the characteristics of goals and priorities. Moreover, in addition to the collective vision of norms, values and justice, there is also the recognition of the importance of self, the social identity and dynamics of self, as well as the conceptualisation of the other. These points strongly correlate with Blumer's [43] theory of symbolic interactionism, as well as many other studies related to self and self-representation [72][74]. The basic principle of this insight is that social species such as human beings rely on other similar beings for their survival. This is where technology, its design, and the fashions that manifest and are manifested by technology design is so important. Technology, the material and systemic realisation of thought, norms, action and ideologies are the *boundary objects* that aid to bridge individuals. They are concrete touchpoints that connect people and their

behaviour. Technology assists social organisation equally as much as social organisation can be considered technology in and of itself. Mass symbolic expressions that take place through technology fashion can be seen as the embodiments of norms (shared rules), status (brand and quality), appropriate and inappropriate behaviour as well as prerogatives (privilege) [9].

Emotions can be seen as a mode of regulation. It is the experience of emotions – i.e., the enthusiasm of a colour (handbag), logic (intuitive user interface) or the experience of an enlarged (celebrity) *self* through vlogging (influencing) – that serves to regulate and conform behaviour to the norms of the context and times. Therefore, the dimensions of value relevance, external standard compatibility, legitimacy and authenticity are also considered a part of appraisal criteria through which we cognitively and affectively evaluate phenomena. We appraise other people and external phenomena equally as much as we evaluate ourselves [96]. The self is appraised in light of a self-ideal, salient social identity or self-concept [97]. This dimension comes close to William James' description of the *me self* [72]. This is also where an understanding of internalised or implicit ethics come into play, as often the reflective evaluation of self is contingent upon a comparison of the individual's being and behaviour in light of their self-ideal and internalised moral code – what they believe to be either right/good or wrong/evil.

In respect to the way in which culture influences this process we can see that culture influences self-concept differentiation [98][99]. Self-significance is greatly reliant on the social environment's "feeling rules" – how the self can be emphasised in relation to the collective [100][101]. Emotional reactions and the ways in which emotional experience influences the composition of these reactions are strongly connected to emotional regulation, representation of self, and how this regulation aids in maintaining social coherence [102]. Additionally, appraisals of events and phenomena are very likely to differ from one culture to the next, depending on the role they play within the respective societies. Yet, while the content and semantic value of this content differs across cultures, there are universals that can be observed in relation to appraisal patterns and resulting emotional experiences. Just like technology and its design fashions, cultures and societies are continuously evolving human products – thought, feelings and action move through trends – from the seemingly new or novel to states of mundane and then outdated [41]. These time and situation specific factors are vital to the processing of emotions in light of any phenomena, none the least technology design and its fashions.

### 4.2 Fashion Framework of Social Emotions in Technology Interaction Design – a Proposal (FASHEM)

Based on the matters mentioned above, we feel the need for the introduction of a model that can serve as a framework for more precisely understanding the socio-emotional experience of human-driven technology design. As established above, technology is cultural and social [96]. Design and the ways in which fashions socially manifest can be seen to both represent and generate the compositions of emotional experience. For these reasons we propose a framework for understanding fashion as a paradigm in

the social emotional experience of technology. Our model incorporates a SI approach to the induction and sustainment of social emotions experienced in relation to technology by embracing its existence in a specific (hyper-contextual) environment, at a specific time, in a particular culture. This is where fashion reflects sociocultural phenomena and movements that affect human life forms and manifest as material and/or immaterial signifiers.

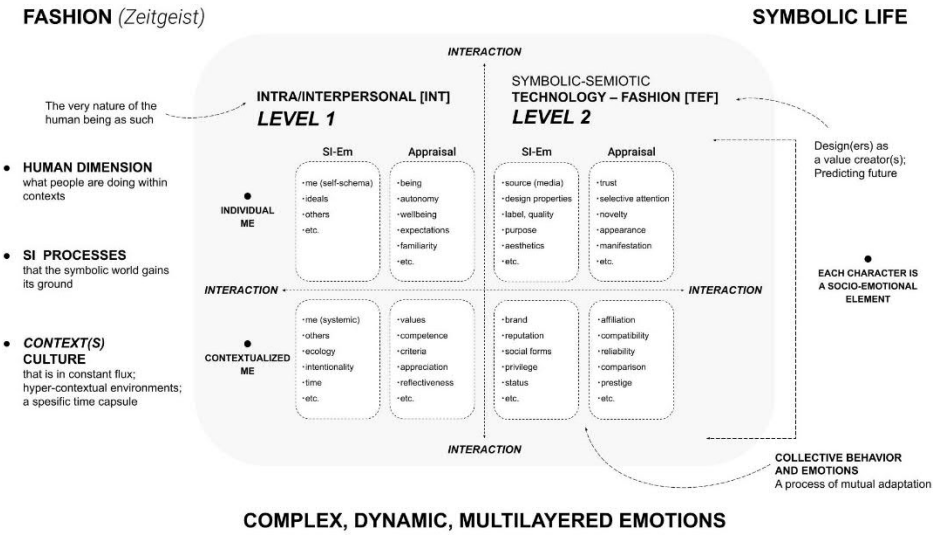


**Fig. 2.** Fashion framework of social emotions in technology interaction design [FASHEM]

The proposed model comprises three distinct dimensions: 1) the context – cultural context, environment, situation etc.; 2) the human dimension – what people are doing within these contexts; and 3) Symbolic Interaction (SI) processes. These components of social emotional experience are constantly acting and are interacting on various levels. The elements in the model are presented in a simplified form. It should be noted that in reality the various elements overlap with varying intensity depending on context-intentionality relations. In the first phase of the Fashion Framework of Social Emotions in Technology Interaction Design (FASHEM) we concentrate on the dynamic interactions occurring on the intrapersonal and interpersonal communication. These take a stance, firstly, in the socio-emotional characters through 'individual me' (self-schemata; self-concept; *I self*) and 'contextual me' (ecological self; *me self*) in intra and interpersonal interactions. Secondly, Level 2 (SYMBOLIC-SEMIOTIC TECHNOLOGY–FASHION [TEF]) refers to how this interaction and emotional experience of interaction takes place in relation to technology design and its properties. As we argue, technology is designed, consumed and exists in fashion paradigms – societal, industrial, scientific etc. These trends exist through temporality and symbolic discourse – associating and assimilating the perceived phenomena with previously learned knowledge. Finally, the framework guides the discovery of accurate socio-emotional characters so that they can

be incorporated as part of the emerging technology interaction design. Each character is a socio-emotional element (presented in the model in a most simplified form).

Through this social-cultural approach to emotions and their appraisal we also understand that emotions are complex – for as Ortony and Turner [88] pose, "What's basic about basic emotions?" They not only can conflict and contradict one another – to feel happy to be sad, or, as in the case of "feeling rules" to know that one needs to feel and express grief at a funeral, because hysterical laughter upon remembering a funny incident would not be acceptable at such an event – but they exist on levels. Our emotions are both generated through and operate in relation to collective behaviour and shared group sentiment (socially constructed ways of expressing emotion). We can understand the designer's and design team's work as that of value creator, or indeed 'value collector' – carefully studying and understanding values (cultural, social, personal) and how they operate through the symbolic properties of design, then attempting to channel these through output (product, service and system design).

When understanding these dynamics on a collective level, we may see that technology provides a pivot, node or symbol upon which numerous intra and interpersonal emotional, experiential and interactional processes can anchor. While they are not fixed in any way from an interpretational perspective, they do provide a set point through which these processes manifest and can be shared, or communicated, from one individual to the next. For this reason, the experience of technological design is never *not* a social emotional process. Nor, can technology in its various forms and logics, ever be separated from fashion. Technology and its support of repetitive action as well as transference of values is always collectively consumed and expressed. Yet, as with culture, is constantly evolving. It is temporally and situationally dependent, as are the emotions we experience in relation to them. Our bodies, our minds and our language change in sync with technological fashions [1]. Wilson [1] goes on to mention that, "[f]ashion parodies itself" (p. 10). Ephemerality is elevated to cult in which intense emotions are experienced among the collectives. Yet, through this elevation there is also a mocking of the moral foundations or pretensions that are represented within culture. The timeliness or temporary state of fashion in itself reveals the construction of societies and their cultures. Just like "feeling rules", technology and its fashions simultaneously create a false sense of reality while actually serving to structure lived social reality.

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## References

1. Wilson, W.: Adorned in dreams – Fashion and modernity. Virago Press, London (1985).

2. Parkinson, B.: Emotions are social. British Journal of Psychology, 87(4), 663–683 (1996).
3. Von Scheve, C., & Ismer, S.: Towards a theory of collective emotions. Emotion review, 5(4), 406–413 (2013).
4. Jasper, J. M.: Emotions, sociology, and protest. Collective emotions, 341–355 (2014).
5. Clark, T.: Art and propaganda in the twentieth century: The political image in the age of mass culture. Harry N. Abrams, New York (1997).
6. Jansens, F.: Suit of power: fashion, politics, and hegemonic masculinity in Australia. Australian Journal of Political Science, 54(2), 202–218 (2019).
7. Riley, N., & Bayer, P. (Eds.): The elements of design: A practical encyclopedia of the decorative arts from the Renaissance to the present. Free Press (2003).
8. European Union (2021): The new European Bauhaus. https://europa.eu/new-european-bauhaus/index_en, last accessed 2021/01/28.
9. Julier, G.: The culture of design. Sage, London (2014).
10. Rocamora, A.: Thinking through fashion: An introduction. In: Thinking through fashion – a guide to key theorists, pp. 1–27. Bloomsburg, London (2016).
11. Svendsen, L.: Fashion: A Philosophy. Reaktion, London (2006).
12. Breward, C., Evans, C.: Fashion and Modernity. Berg Publishers, London (2005).
13. Matteucci, G., Marino, S. (Eds.): Philosophical perspectives on fashion. Bloomsbury Publishing, London, New York (2016).
14. Saariluoma, P., Cañas, J. J., & Leikas, J.: (2016). Designing for life: A human perspective on technology development. Palgrave MacMillan, Springer, Cham (2016).
15. Kawamura, Y.: Fashion-ology: an introduction to fashion studies. Berg, Oxford (2005).
16. Rocamora, A., & Smelik, A. (Eds.): Thinking through fashion: A guide to key theorists. Bloomsbury Publishing (2015).
17. Aspers, P., Godard, F: Sociology of Fashion: Order and Change. Ann. Rev. Soc., pp. 172–192 (2013).
18. Crane, D., Bovone, L.: Approaches to Material Culture: The Sociology of Fashion and Clothing. Poetics. 34, pp. 319–333 (2006)
19. Rousi, R.: From cute to content: user experience from a cognitive semiotic perspective. Jyväskylä studies in computing, 171. University of Jyväskylä, Jyväskylä (2013).
20. Saariluoma, P., & Rousi, R. Symbolic Interactions: Towards a Cognitive Scientific Theory of Meaning in Human Technology Interaction. Journal of Advances in Humanities, 3 (2015).
21. Saariluoma, P.: Apperception, content-based psychology and design. In Human behaviour in design, pp. 72–78. Springer, Berlin, Heidelberg (2003).
22. Saariluoma, P.: Foundational analysis: Presuppositions in experimental psychology, vol. 2. Psychology Press, Hove (1997).
23. Peirce, C.S.: The writings of Charles S. Peirce, a chronological edition, vol. 8, 1890–1892. Indiana University, Bloomington (2009).
24. Oatley, K.: Social construction in emotions. In: Handbook of emotions, pp. 341–352. The Guilford Press, New York (1993).
25. Campbell, K., Gibson, S., & Gramlich, C.: On conversation and design: A socially constructed practice. Technology, Pedagogy and Education, 14(1), 9–24 (2005).
26. Van Rompay, T. J.: Product expression: Bridging the gap between the symbolic and the concrete. In: Product experience, pp. 333–351. Elsevier, Amsterdam (2008).
27. Fiore, A. M.: Understanding aesthetics for the merchandising and design professional. A&C Black, London (2010).
28. Hastrup, K., & Hervik, P. (Eds.): Social experience and anthropological knowledge. Routledge, London (2003).
29. Bar-Tal, D., Halperin, E., & De Rivera, J.: Collective emotions in conflict situations: Societal implications. Journal of Social Issues, 63(2), 441–460 (2007).

30. Van Kleef, G. A., & Fischer, A. H.: Emotional collectives: How groups shape emotions and emotions shape groups. Cognition and Emotion, 30(1), 3–19 (2016).
31. Stephan, W. G., & Stephan, C. W.: An integrated threat theory of prejudice. In: Reducing prejudice and discrimination, pp. 225–246. Erlbaum, Hillsdale (2000).
32. Smith, E. R.: Social identity and social emotions: Toward new conceptualization of prejudice. In: Affect, cognition and stereotyping: Interactive processes in group perception, pp. 297–315. Academic Press, San Diego (1993).
33. McDowell, J.: Subjective, intersubjective, objective. Philosophy and Phenomenological Research, 67(3), 675–681 (2003).
34. Oatley, K., Keltner, D., & Jenkins, J. M.: Understanding emotions. Blackwell publishing, Oxford (2006).
35. Mesquita, B., Frijda, N. H., & Scherer, K. R.: Culture and emotion. In: Handbook of cross-cultural psychology, 2, pp. 255–297. Guilford Press, New York (1997).
36. Mesquita, B., & Ellsworth, P. C.: The role of culture in appraisal. In: Appraisal processes in emotion: Theory, methods, research, pp. 233–48. Oxford University Press, Oxford (2001).
37. Valsiner, J.: Cultural psychology. In: The encyclopedia of cross-cultural psychology, pp. 319–327. Wiley, New Jersey (2013).
38. Back, K. W.: Modernism and fashion: A social psychological interpretation. The psychology of fashion, 3–14. Lexington Books, Lexington (1985).
39. Power, M. J., & Dalgleish, T.: Cognition and emotion: From order to disorder, 2nd Ed. Psychology Press, Hove (2008).
40. Kaiser, S. B.: The social psychology of clothing: Symbolic appearances in context. Fairchild, New York (1997).
41. Lazarus, R.: Emotion and Adaptation. Oxford University Press, Oxford (1991).
42. Oatley, K., & Johnson-Laird, P. N.: Towards a cognitive theory of emotions. Cognition and emotion, 1(1), 29–50 (1987).
43. Blumer, H.: Fashion: From class differentiation to collective selection. The Sociological Quarterly, 10(3), 275–291 (1969).
44. Mesquita, B., Boiger, M. & De Leersnyder, J.: Doing emotions: The role of culture in everyday emotions. European Review of Social Psychology, 28(1), pp. 95–133 (2017). doi:10.1080/10463283.2017.1329107
45. Krippendorff, K., & Butter, R.: Semantics: Meanings and contexts of artifacts. In Product experience, pp. 353–376. Elsevier, Amsterdam (2008).
46. Geertz, C.: Ethnic conflict: Three Alternative Terms. Common Knowledge 2(3): 54–65 (1993).
47. Keesing, R.M.: Theories of culture. Annual Review of Anthropology, vol. 3, pp. 73–97 (1974).
48. Crilly, N., Good, D., Matravers, D., & Clarkson, P. J.: Design as communication: exploring the validity and utility of relating intention to interpretation. Design Studies, 29(5), 425–457 (2008).
49. Naylor, L. L.: Culture and change: An introduction. Greenwood Publishing Group, Westport (1996).
50. Edwards, T.: Fashion in focus: Concepts, practices and politics. Routledge (2010).
51. Russell, J. A.: Emotion, core affect, and psychological construction. Cognition and emotion, 23(7), 1259–1283 (2009).
52. Ashmore, R. D., Deaux, K., & McLaughlin-Volpe, T.: An organizing framework for collective identity: articulation and significance of multidimensionality. Psychological bulletin, 130(1), 80–114 (2004).
53. Wigelius, H., & Väätäjä, H.: Dimensions of context affecting user experience in mobile work. In: IFIP Conference on Human-Computer Interaction, pp. 604-617. Springer, Berlin, Heidelberg (2009).

54. Saariluoma, P., & Oulasvirta, A.: User psychology: Re-assessing the boundaries of a discipline. Psychology, 1(05), 317–328 (2010).
55. Forlizzi, J.: The product ecology: Understanding social product use and supporting design culture. International Journal of design, 2(1) (2008).
56. Huang, M. P., & Alessi, N. E.: Presence as an emotional experience. Studies in health technology and informatics, 148–153 (1999).
57. Coates, P.: Nature: Western attitudes since ancient times. John Wiley & Sons, Hoboken (2013).
58. Dorst, K.: The core of 'design thinking' and its application. Design Studies, 32(6), 521-532 (2011).
59. Stensaker, B.: Culture and fashion in reform implementation: Perceptions and adaptation of management reforms in higher education. Journal of Higher Education Policy and Management, 20(2), 129–138 (1998).
60. Christopher, M., Lowson, R., & Peck, H.: Creating agile supply chains in the fashion industry. International Journal of Retail & Distribution Management, 32(8), 367–376 (2004).
61. Da Silva, O., Crilly, N., & Hekkert, P.: Intentions and the aesthetics of artifacts. In: Proceedings of IAEA, 148–152 (2014).
62. Mead, G. H.: The nature of aesthetic experience. The International Journal of Ethics, 36(4), 382–393 (1926).
63. Matteucci, G., & Marino, S. (Eds.): Philosophical perspectives on fashion. Bloomsbury Publishing, London (2016).
64. Shott, S.: Emotion and social life: A symbolic interactionist analysis. American Journal of Sociology, 84(6), 1317–1334 (1979).
65. Schachter, S.: Emotion, obesity and crime. Academic Press, New York (1971).
66. Geertz, C.: Local Knowledge and Its Limits: Some, Obiter Dicta. The Yale Journal of Criticism, 5(2), 129–135 (1992).
67. Hochschild, A.R.: Emotion work, feeling rules, and social structure. American journal of sociology, 85(3), 551–575 (1979)
68. Nielsen, J.: Iterative user-interface design. Computer, 26(11), 32–41 (1993).
69. Beaudry, A., & Pinsonneault, A.: The other side of acceptance: Studying the direct and indirect effects of emotions on information technology use. MIS Quarterly, 34(4), 689–710 (2010).
70. Hekkert, P. Design aesthetics: principles of pleasure in design. Psychology science, 48(2), 157 (2006).
71. Keirl, S.: 'Seeing' and 'interpreting'the human-technology phenomenon. In The future of technology education, pp. 13–34. Springer, Singapore (2015).
72. James, W.: The Principles of Psychology. Henry Holt and Company, New York (1890), https://www.gutenberg.org/files/57628/57628-h/57628-h.htm, last accessed 2021/02/02.
73. De Saussure, F.: Course in general linguistics. Columbia University Press, New York (2011).
74. Neisser, U.: Five kinds of self-knowledge. Philosophical Psychology, 1(1), 35–59 (1988).
75. Beasley, P.: Symbolic interaction theory – a fashion case study (2015), https://paulbeasleydesign.wordpress.com/2015/02/26/symbolic-interaction-theory-a-fashion-case-study/, last accessed 21/01/28.
76. Rzevski, G.: Complexity as the defining feature of the 21st century. International Journal of Design and Nature and Ecodynamics, 10(3), 191–198 (2015).
77. LaRossa, R., & Reitzes, D.C.: Symbolic interactionism and family studies. In Sourcebook of family theories and methods, pp. 135-166. Springer, Boston (2009).
78. Raudenbush, S.W.: Magnitude of teacher expectancy effects on pupil IQ as a function of the credibility of expectancy induction: A synthesis of findings from 18 experiments. Journal of Educational Psychology, 76, pp. 85–97 (1984).

79. Walker, M.B., & Andrade, M.G.: Conformity in the Asch task as a function of age. The Journal of social psychology, 136(3), 367-372 (1996).
80. Asch, S.E.: Studies of independence and conformity. A minority of one against a unanimous majority. Psychological Monographs, 70(9, Whole No. 416) (1956).
81. Candid Camera. Human behaviour experiment in lift antics, https://www.youtube.com/watch?v=XZDLbbfT9_Q, last accessed 2021/02/10.
82. Geertz, H: The vocabulary of emotion – A study of Javanese socialization processes. Psychiatry – Interpersonal and Biological Processes, 22(3), pp. 225–237 (1959).
83. Goffman, E.: The presentation of self in everyday life. Doubleday, New York (1959).
84. Ekman, P., & Friesen, W.: The repertoire of non-verbal behaviour: Categories, origins, usage and coding. Semiotica, 1(1), pp. 48–98 (1969).
85. Ekman, P.: Biological and cultural contributions to body and facial movement. In: Anthropology of the body, pp. 34–84. Academic Press, San Diego (1977).
86. Wetherell, M.: Feeling rules, atmospheres and affective practice: Some reflections on the analysis of emotional episodes. In: Privilege, agency and affect, pp. 221–239. Palgrave Macmillan, London (2013).
87. Frijda, N.H.: The laws of emotion. American Psychologist, 43(5), 349–358 (1988).
88. Ortony, A., & Turner, T.J.: What's basic about basic emotions?. Psychological review, 97(3), 315–331 (1990).
89. Lazarus, R. S., & Lazarus, B.N.: Passion and reason: Making sense of our emotions. Oxford University Press, New York (1996).
90. Smith, C. A., & Lazarus, R.S.: Emotion and adaptation. Handbook of personality. Theory and research, 609–637. Guildford, New York (1990).
91. Smith, E.R., & Mackie, D.M.: Dynamics of group-based emotions: Insights from intergroup emotions theory. Emotion Review, 7(4), 349–354 (2015).
92. Manstead, A.S., & Fischer, A.H.: Social appraisal. Appraisal processes in emotion: Theory, methods, research, 221-232 (2001).
93. Dewey, J.: Art as experience. Penguin, London (2005).
94. Ellsworth, P.C., & Scherer, K.R.: Appraisal processes in emotion. Handbook of affective sciences, pp. 572–595 (2003).
95. Maslow, A.H.: A theory of human motivation. Psychological Review, 50(4), 370–396 (1943).
96. Stanfill, M.: The interface as discourse: The production of norms through web design. New Media & Society, 17(7), 1059-1074 (2015).
97. Tangney, J.P., & Fischer, J. (Eds.): Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride. Guilford Press, New York (1995).
98. Markus, H.R., & Kitayama, S.: Models of agency: Sociocultural diversity in the construction of action. In: Vol. 49 of the Nebraska symposium on motivation. Cross-cultural differences in perspectives on the self, pp. 18–74. University of Nebraska Press, Lincoln (2003).
99. Frijda, N.H.: The emotions. Cambridge University Press, Cambridge (1986).
100. Hochschild, A.: The managed heart: Commercialisation of human feeling. University of California Press, Berkley (1983).
101. Gordon, S.: The sociology of sentiments and emotion. In: Social psychology: Sociological perspectives, 562–592, Basic Books, New York (1981).
102. Frijda, N.: Emotion experience. Cognition & Emotion, 19(4), 473-497 (2005).