

The Ontological Screening of Contemporary Life: A Phenomenological Analysis of Screens

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Abstract

In this paper we attempt to show how phenomenology, in a traditional methodological form, can provide an interesting and novel basis for thinking about screens in a world where screens now pervade a great many aspects of human experience. In our analysis we aim to give a phenomenological account of screen(ing), that is, of its fundamental and foundational meaning. In doing the phenomenological analysis we ground our argument on the ontology of Heidegger's Being and Time. In doing this we claim that the screen will only show itself, as that which it is, as a screen in-the-world, where screens already are or have their being 'as screens' for this and that purpose, activity or work. We claim, and aim to show, that our analysis provides many insights about the meaning of screens that would be difficult to gain through any other method of investigation. We also argue and show that, although our method is not empirical, its results have important implications for the empirical world.

Key Words: Screens, television, computer, information, information technology, information systems, communication, media, new media, phenomenology, interpretive research, Heidegger.

I. INTRODUCTION

The odds are that when reading this paper you will have nearby, not one but maybe even several screens. Whether at the workplace, at home relaxing with the family, or travelling, or engaged in entertainment, a growing majority of people find themselves increasingly in front of screens – television (TV) screens, personal computer (PC) screens, mobile phone screens, palmtop computer displays and so forth.

In this paper we want to inquire into the significance of this increasing engagement of ours with screens for our understanding of ourselves, the organisations where we work, and the world of everyday life in which we have our being. Directly or indirectly this theme has been researched for some time within the interpretive tradition (e.g. Heim 1993, 1999; Manovich 1995, 2001), and more particularly in the phenomenological tradition (e.g., Idhe 1990, 2002; Sobchack, 1991, 1994). Yet, it is our contention that our approach, both with respect to its methodological form and its ontological grounding will provide something new and meaningful for our understanding of our ongoing involvement with screens.

The paper is structured in three sections. In this introductory section, after providing a brief ontic account of the overwhelming presence of screens in contemporary world, we present the

methodological approach applied as well as the ontological grounds on which the investigation relies. The second section of the paper – A Phenomenology of The Screen – presents the key features and findings of the investigation. Although the entire development, and the full explication of the findings, cannot be presented here due to obvious space limitations, we believe the depth and rigour of the work developed and of its relevance will be manifest. Finally, in the third section of the paper – Conclusions and Implications – we address head on the relevance of this kind of phenomenological work for our assumed empirical world.

An Ontic Account of Screens in its Everydayness

The last decades have witnessed a massive penetration of TV screens into people's day-to-day lives. It is a long way from November 1937, when the BBC made its first outside broadcast - the coronation of King George VI from Hyde Park Corner - which was seen by several thousand viewers, to the landing on the Moon in 1969, carried by satellite to an estimated audience of more than 100,000,000 viewers (EB 1999), to the "Live Aid" music festival, in London and Philadelphia, in 1985, which raised US\$120 million, while attracting an estimated TV audience of 1.5 billion (RM 2002), or to the funeral of Princess Diana in August 1997, followed by an estimated TV audience of 2,500 million (ABCnews 1999), which represents more than 40 per cent of the world's population. More recently, the majority of the world's population watched on TV and on the Internet – that is, on screens – the terrorist attacks on New York and Washington, and followed the live coverage of the war in Iraq in 2003. All these events were and are what they are also, and perhaps mainly, on account of their presentation or display on screens in front of which we increasingly find ourselves.

The personal computer screen seems to be experiencing an even more accelerated spreading than the television screen. In 1985 there were 90,1 and 36,4 computers per 1000 people, respectively in the USA and in the UK. In 2001 the number of PCs in use worldwide surpassed 600 million. It is projected that in three years time, by 2007, that number would have jumped to 1,150 million (CIAI 2004). The diffusion of mobile phones is even more pervasive. In the beginning of this century, the number of mobile phones worldwide was double that of Internet users, well beyond 1,000 million. By the end of 2003 it was estimated that in Europe around 70% of people had a mobile phone (DL 2002).

This pattern of ever-increasing penetration, and implicitly of *colonisation* (Habermas 1987) of the everyday world, by (information technology based) screens is also significant in cultures and regions of the world other than the industrialised West—where the phenomenon is most obvious (Castells 2000). China for example is possibly the world leader in the amount of mobile phones in use (DL 2002). It is evident that screens – being TV, PC, mobile phones', or palmtop screens – are increasingly a medium (way or mode) into and onto reality, and also part of that same reality as well.

Given that the presence of screens in our lives is becoming something obvious, what does it mean for us and our way of being? What does it mean that we spend a significant part of our waking lives in front of screens? To what extent do the screens affect, engaged with, change or direct, our actions in the world? We contend that a suitable response to these questions could in part rely on the essential meaning of the screen, qua screen.

Methodological and Ontological Grounds

Phenomenology as methodological ground

Phenomenology has acquired a variety of meanings over the course of the last century. “A multiplicity of theories, concepts, ideas are held to legitimately bear the name phenomenology” (Tymieniecka 2003: 1). As a philosophical underpinning as well as a method of investigation, phenomenology is currently used in a wide range of fields besides philosophy, such as in anthropology, sociology, psychiatry, psychology, management and organisation studies, communication and media studies, mathematics, education and so forth (refer to, e.g. Moran and Embree, 2004; Tymieniecka 2003). Phenomenology has also been used, in diverse forms, in the information systems (IS) field of research (e.g., Boland 1983, 1985, 1991, 1993; Boland and Day 1989; Ciborra 1997, 1998; Dreyfus 1982, 1992; Haynes 1997; Introna 1997, 1993; Introna and Whittaker, 2002; Introna and Ilharco 2000; Ilharco 2002; Kjaer and Madsen 1995; Mingers 2001; Porra 1999; Winograd and Flores 1986; Whittaker 2001; Zuboff 1988). Most of these IS studies use a variety of phenomenological approaches, in more or less indirect ways—often in combination with other approaches. This paper, in contrast, applies the phenomenological method in its more traditional manner, and does it without any other complementary approach.

Some, but not all, of the IS research referred to above aim to engage upon phenomena without *a priori* characterising them as empirical or not, which is in accordance to Husserl’s method (Husserl 1982, 1995). Phenomenologically, any data is of interest provided it appears intuitively in consciousness—that is, originating in our imagination, thinking, or based on our sensory perceptions. A number, a house, a theory, a screen, a PC, a mermaid, etc., all are legitimate objects of intentional consciousness for phenomenological inquiry. Based on this foundational insight of Husserl (Husserl 1995), that which appears in consciousness is what phenomenology should address, without taking *a priori* stands on its empirical existence or not. For example if mathematicians would have to resolve *a priori* whether the number ‘5’ exists empirically or not before they can use it in mathematics then they would certainly have a problem. Yet when we count we use the number ‘5’ effortlessly because we already know its meaning quite separate from any particular objects that we may count. Likewise, when one identifies a particular object as a ‘screen’, then the ‘screen-ness’ of screen must already be understood—be present in intentional consciousness. Without a prior understanding of the ‘five-ness’ of ‘5’, counting will not make sense; without a prior understanding of the screen-ness of a screen, watching it (not just looking at it) will not make sense. Phenomenology deals with this ‘already understood’ prior recognition or essence (number or screen) already implied in the act of intentionality (counting or watching in our examples) as such. Thus, phenomenology addresses this implied *what-is-ness*, in contrast to the question of the empirical existence of what is addressed in such an identification—which is rather a matter of *this-ness* or *there-ness*. For irrespective of its source—sensorial perception, imagination, or mental concepts—every judgement about the particular relies upon an always and already present ‘essence’ or meaning for such a judgement (or intentional act) to be possible in the first place. Thus, phenomenology has its foundational object *prior to*, but *not separate from*, the horizon of empirical existence of particular phenomena. It aims at a pure description of these before any judgement about their empirical existence is made.

Nevertheless, we should note that for phenomenology data from empirical experience is as valid as any other kind of data, as long as it presents itself intuitively¹ in ongoing experience. Indeed this approach supported the development, in the IS field, of a phenomenological strand of research that guides and grounds the analysis of empirical situations. For instance, Boland (1985) and more indirectly Zuboff’s (1988) research belongs within this approach. Its main

¹ Indeed Husserl’s (1982) claim that “we [phenomenologists] are true positivist” is to be understood within this context, which ultimately directs all knowledge to the subject’s ongoing experiencing of the world.

focus lies in the researcher's ability to understand the other, to experience *otherness*, in a specific situation, as it is lived by the one who lives it (e.g., Rogers 1972, 1980).

In contrast with this last approach, this paper tries to recover a more Husserlian conception of phenomenology, focusing on clarifying the fundamental meanings of a specific phenomenon – the screen in this case –, without taking into account its particular characterisation, either as empirical, real, material or ideal. The analysis presented in this paper is rather directed towards the conditions that make the recognition possible of any manifestation, distinction or object, as a 'screen'; in other words towards the fundamental, grounding, meanings of the screen, as a 'screen'. In so doing, we follow the traditional phenomenological method as developed and applied by Husserl and Heidegger, and synthesised by Spiegelberg (1975, 1994). Before proceeding we must stress that there are many different ways in which phenomenology can be applied. Besides the approaches referred to above, it is also widely accepted the practice of applying the results of previous phenomenological analysis as grounding for new investigations – which we also do in this paper – or using phenomenological insights as grounding principles for guiding further research work.

Heideggerian analysis as ontological ground

Methodologically as well as ontologically this paper follows Heidegger's (e.g., 1962, 1977, 1984) practice, which turned phenomenology into a fundamental hermeneutic venture. This means that the application of the phenomenological method to the phenomenon of screen will be contextualised within an explicit ontological account—that is Heidegger's (1962) phenomenology of humanness, as presented in *Being and Time*. Although we tend to follow the major steps of the Husserlian phenomenological method – the phenomenological description, the reduction of the phenomenon to intentionality, the uncovering of the essence of the phenomenon – our detailed analysis within these steps is based more directly on Heideggerian existential phenomenology (our etymological analysis, in particular, is in line with this approach).

At this point we cannot go beyond a very brief sketch of *Being and Time*'s central ontological claims, the full implication of these will become clearer as we proceed in our analysis. In *Being and Time* Heidegger (1962) pointed out that the human way of being (which he calls *Dasein*) is being always and already involved in-the-world. In-the-world, being experts in acting, we are the kind of beings whose existence is an issue for us—our own existence is always already at stake. That our ongoing existence as a particular being matters is our way of being. Thus, we are essentially *ahead of ourselves*, always and already projecting possibilities for ourselves to be this or that particular being in the world. In this projectedness we are revealed as beings already 'thrown' into the world—already committed, compromised and busy with our existence as a project. Thus, towards the future, in which we are to make something of ourselves, we find ourselves already with a past. As an already *having been* in-the-world, projecting into the future, we care: *things, world, being* matter to us as possibilities for our existential project. Hence, Heidegger's fundamental insight is that our intentional relationship with the world is *not epistemic* – as Husserl assumed – but rather practical and ontological. We engage with the world not to know it but rather in already knowing it to *be* our life project. Whenever we find ourselves or take note of ourselves, we find ourselves *already engaged in practical everyday activity* in which things show up as 'possibilities for' our practical intentions. We should again emphasise the fact that our human nature is always one in which the things we encounter already *matter* in some way or another – even if it matters only as useless, boring or irrelevant. This is what Heidegger means when he claims that our way of being is that we always and already *care*. It is impossible for us – as always already immersed or 'thrown-into' the world of humans – to take a wholly disinterested stance in and

towards the world (Heidegger, 1962:176). Thus, we humans (*Dasein*) dwell in the world in which the world is the most familiar (it is simply already evidently there, self-evident and primary). Therefore our relation with the world is essentially ontological in as much as the world already shows up, or reveal itself to us, as it already is, in and through our ongoing project-ness, or comportments.

This ontological account of Heidegger (which we adopt for our analysis below) transforms Husserl's notion of intentionality by insisting that "intentionality must be understood in terms of the structural features of *Dasein*, specially *Dasein's* transcendence, that is, the fact that *Dasein* is already somehow beyond itself, already dwelling in the world, among things, and not locked up in the privacy of its own consciousness as the representationalist, Cartesian picture assumes" (Moran 2000, p.42). For Heidegger consciousness is the ongoing, unfolding referential whole in which every thing is what it is – has its being. Consciousness is always and already grounded in the ongoing practical activity in the world of everyday life. For Heidegger "all consciousness, all knowledge, all human undertakings, are drawn on an ever present substratum: the world, a world that is always already-there, radically primary" (Thevenaz 1962, p.84).

In this introductory section we provided a brief ontic account of the obvious overwhelming presence of screens in contemporary world. We indicated the methodological approach we will apply to the phenomenon screen and briefly introduced the ontological grounds on which the investigation relies. We contend and will aim to show that this kind of phenomenological analysis presents many possibilities for us who have our being in a world increasingly pervaded by screens. In the section to follow we will provide a phenomenological analysis of the phenomenon screen.

II. A PHENOMENOLOGY OF THE SCREEN

A major part of our lives is becoming places, moments, experiences in front of and with screens. Is this significant for our understanding of ourselves and the world we live in? We believe our phenomenological analysis will provide some insights into this question. In a strict phenomenological manner, following Husserl's counsel (e.g., Husserl 1964, 1970, 1995)—striving to get rid of assumptions, presuppositions or *a priori* notions about the phenomenon under inquiry—this paper intentionally passes over important research that address directly or indirectly the phenomenon screen (e.g., Heim 1993, 1999; Idhe 1990, 2002; Manovich 1995, 2001; Sobchack 1994). This option, which is only a methodological turn, is a way of trying to provide a new and useful contribution to the field by proposing a rather traditional, yet we believe novel account of the phenomenon screen in our contemporary world.

Let us remind ourselves that when we investigate the screen phenomenologically, we do not aim to describe any particular screen, nor any actual situation in which one engages with a screen or screens. This investigation is not directed to the empirical screen, but to the grounding criteria, foundational meanings, that, in the first place, enable us to identify each and all particular appearances of screens *as screens*. This is formally indicated as the *screen-ness* of screens. This is the goal as well as the limitation of the phenomenological approach we follow here. We must be careful to not to claim more that our phenomenological analysis provides. Hence, what we intend to think is not the *content* of television as such, or the kind of data or information we work with while facing a PC screen, or a palmtop display, but rather the screen as itself, in its meaning – what does it mean when we engage with a surface 'as a screen'? What are the central meanings or meaning implied in such an engagement? What is a screen as grounding notion or idea within our going on being in the world?

Given this understanding the paper now proceeds with a succinct presentation of the most relevant aspects of the investigation we performed upon the phenomenon of screen.

Describing the Phenomenon Screen

Let us start our analysis by exploring a description of the screen as a screen—or more correctly the screen as and when it *screens*, in its own terms. From the start it is rather surprising what we encounter when starting the phenomenological description of the screen. When trying to describe a screen, a computer screen or a television screen, we immediately note that we never seem to look at a screen, as a ‘screen’. We rather tend to look at screens in watching what appears on them. What seems evident when looking at a screen is the information presented on that screen—the text, images, colours, graphics, and so on—not the screen itself.

To try and look at a screen, and see it as a screen, so not taking into account the particular information² it presents, and all the references with which that same information already appears to us, is apparently not an easy task. We are not familiar with this type of encounter with a screen. Rather our familiarity with screens or displays reveals themselves as things – maybe surfaces – which function in particular contexts and for particular purposes, that is to say, we use screens as we act and relate ourselves to and in the world, mainly within the familiar, organisational or institutional contexts.

This familiarisation does not mean we consciously know what a screen as such is, but rather it means that we are accustomed to screens, that is, we are accustomed in our daily life to perform the kind of activities in which screens are a part, are elements, participate in, or are present as just naturally ‘there’. However, what is familiar is not known simply because it is familiar (Hegel 1977). With Nietzsche (1974, no.355, p.301) we note that: “the familiar is that to which we are accustomed; and that to which we are accustomed is hardest to ‘know’, that is to see as a problem, that is to see as strange, as distant, as ‘outside us’....” Thus, involved in our daily coping, taking for granted what we are transparently using, as a ready-to-hand being (Heidegger 1962), we may fail to see what is closest to us, as that which itself is. In our phenomenological investigation we note to recover this strangeness—that is, that we seem not to see screens qua screens. Nevertheless, this strangeness is not the strangeness of a turned off screen; this latter strangeness is rather revealed in that we note its presence as a mere object, a piece of the furniture as it were. It might be this more superficial strangeness that often moves us to turn on the television or the computer screens we face. Yet it is only when we look at the screen phenomenologically, as screen, functioning in-the-world, and trying to focus our attention on the phenomenon of screen(ing) that we enter the grounds of the screen as an intentional object of consciousness. What do we note?

Screens in screening present, show, exhibit, what is supposed to be *relevant information* in each context, be it a spreadsheet while working at office, or a schedule while walking in the airport, or a movie while watching TV. Screens exhibit what was previously chosen, captured, processed, organised, structured, and finally presented on the screen. But what do we mean by ‘presented on the screen’? What is the information in question? Who presents it? Whom, where and why?

The screen, in screening, finds itself at the centre of the activity: in showing it attracts our attention, often also our physical presence, as it locates our activity; not only, and perhaps not

² We will often use the words “information” and “data” to describe the content that fills the screen. We could equally say content, messages, images, icons, and so forth. Obviously all of these are different in their own right and could be subjected to very interesting analysis. However, for our analysis we consider the specific representational form of that which appears on the screen as non-essential.

in essence, in a particular space but also, and more relevant, in a specific involvement (Heidegger 1962). The screen is often the focus of our concerns in an environment, being at office, working, or at home, watching a movie or the news. Apparently the screen enters our involvement in-the-world—as a screen—when we attend to it by turning it on. When we push the ‘on’ button the screen positions our attention, we often sit down, quit—physically or cognitively—other activities we may have been performing, and watch the screen, as it is the place, the location, the setting, the scene, the intentional experience of consciousness in which what is relevant or supposedly relevant for us at that particular time is happening; that is, as ground, screen displays relevance. We rely on it as a transparent ready-to-hand being that shapes, affects, mediates our own *be-ing* (Heidegger 1962). Yet, this involvement, the shaping and mediation that screening brings does not sometimes happen (and sometimes not), i.e., it is not only when we turn the ‘on’ button that screening is present. On the contrary, *that* we push the ‘on’ button means precisely that the screening of screen—its possibilities in its transparency and pervasiveness—is already there as a horizon of possibilities. As beings-in-the-world (Heidegger 1962) we are already relying and basing ourselves, our possibilities, the references in which we dwell, and the whole phenomenon of our in-the-world-ness (Heidegger 1962), on this very *screenhood* of screens in which we already dwell. We will return to this claim again later on in the paper.

From our initial attempt at ‘seeing’ the screen, as it screens, we note that a screen gathers the attention of the people that surrounds it. The actions of those people are usually directly shaped by the presence of the turned on screens, by the kind of information they present, and by the understanding people surrounding implicitly assume of that data, which generates – or assumes – particular compartments and attitudes. The description above of a screen points to the notions of showing relevant information for and about each particular situation, of calling for attention, of suggesting relevance, of acting as mediation between ourselves and the world, and of gathering and positioning what is appropriate in each particular context. We now have a first phenomenological description of some central aspects of the screen. It is worth noting at this point that the description of the screen above is also valid for what we know as displays; for instance, for palmtop displays. In the analysis we will aim to show that there is no fundamental phenomenological difference between a screen and what we refer to as a display³ – they both maintain themselves (have their meaning) in-the-world in and through the phenomenon of *screening*.

In the next section we briefly present some of the relevant features of our etymology of the words ‘screen’ and ‘display’. We will attempt to trace and ‘uncover’ the paths of meanings of both words, juxtaposing them with the description already performed.

Analysing the Etymology of Screen

In trying to trace back the evolution of the meanings of the words ‘screen’ and ‘display’ our phenomenological account of the etymology of these words is intended to penetrate (to make more obvious) the realm in which the words ‘screen’ and ‘display’ speak and maintain their meanings:

“What counts, rather, is for us, in reliance on the early meaning of a word and its changes, to catch sight of the realm pertaining to the matter in question into which the

³ Indeed other words we use to refer to screens, such as output device, dumb terminal, cathode ray tube, liquid crystal display, flat panel display, and so forth, are multiple modes of showing particular aspects, functionalities, or perspectives of screens. They are all phenomenologically related to the phenomena ‘screen.’

word speaks. What counts is to ponder that essential realm as the one in which the matter named through the word moves” (Heidegger 1977:159).

Thus, although our phenomenological analysis does share some concerns with linguistic analysis, it goes beyond it. This analysis is not destined to ‘bring back’ the historical original meaning of the words screen and display, but rather to bring forth “the meaning of the thing [the context of action] itself, around which the acts of naming and expression took shape” (Merleau-Ponty 1962:xv).

The origins of the word ‘screen’ can be traced back to the 14th century. According to the *Merriam Webster Dictionary* (MW) the contemporary English word screen evolved from the Middle English word *screne*, from the Middle French *escren*, and from the Middle Dutch *scherm*. It is a word akin to the Old High German (8th century) words *skirm*, which meant shield, and *skrank*, which meant a barrier of some kind. The word screen still suggests another interesting signification, further away from us in history. It is a word “probably akin” (MW) to the Sanskrit (1000 BC)⁴ words *carman*, which meant ‘skin’, and *krānti*, which signifies ‘he injures’ (MW). These meanings, possibly, are the ones from which the Middle Age words evolved. The Sanskrit meaning suggests the notions of protection, shield, barrier, separation, arose, possibly within the older Proto-Indo-European language, as metaphors of the concept of skin—possibly that of human (or animal) skin. When we say “his geniality is just a screen” (MW) we are relying on this notion of separation, of a barrier, between what is the surface – symptoms, appearance, superficiality - and what is inside that surface – disease, the thing itself, essentiality. Indeed it seems not too difficult to admit that an expression with the same meaning as the one above could be “his geniality is just a skin”.

Today the word screen is used both as a noun and a verb and its contemporary plurality of meanings can be brought together along three main themes: *projecting/showing* (e.g., TV screen), *hiding/protecting* (e.g., fireplace screen), and *testing/selecting* (e.g., screening the candidates) (OPDT 1997:681-2). Is there a central intent, distinction, or feature, common to all these specific meanings of the word screen? We would suggest that the central intent is a demand or a call for attention, which was pointed out in the subsection just above.⁵ Projecting and showing (e.g., TV screen) assumes a target or audience whose attention is to be captured. Without such audience (target) showing (projecting) will not make sense. Projecting and showing calls for the attention of audience or to the target. Hiding and protecting (e.g., fireplace screen) assumes something to be excluded from attention. Without exclusion from attention hiding would not make sense. Hiding and protecting calls for the exclusion from attention. Testing and selecting (e.g., screening the candidates) assumes the attention of those that ‘select and test’. Without such attention selecting cannot be said to ‘select’. Testing and selecting calls for the attention of those selecting. Thus it seems sensible and reasonable to propose that a central intent of the multiple meanings of ‘screen’ is *the presumed necessary attention* implied in *ongoing screening*, for screening to make sense. Taking into account the work presented thus far, we summarise this meaning as ‘*calling for attention*’.

⁴ Sanskrit - the language in which ‘The Vedas’, the oldest sacred texts, are written - was an early form of an Indo-Aryan language, dating from around 1000 BC. The Indo-Aryan languages are supposed to derive from the hypothetical Proto-Indo-European language (before 3000 BC) from which also could have evolved Slavic, Baltic, Classical Greek, Latin, Germanic and other families of languages. Old High German, Middle English, and Middle Dutch, belong to the *West* branch of the Germanic family. Middle French belongs to the Italic (Latin) family (Crystal 1987).

⁵ Elsewhere we have demonstrated this central intent through sound analysis. Due to space limitations will not pursue such an analysis here (Introna and Ilharco 2000).

Before moving on to our analysis in the next phase we believe it necessary also to give a phenomenological account of the etymology of the English word ‘display’, which is often used as a synonym for screen with regard to information technology devices. Let us now briefly present our key findings on this matter.

The word ‘display’ entered the English language as a verb in the 14th century, and as a noun in the 17th century (MW). As a verb display means “to put or spread before the view” (e.g., *display* the flag), “to make evident” (e.g., *displayed* great skill), “to exhibit ostentatiously” (e.g., he liked to *display* his erudition) (MW). As a noun it means “a setting or presentation of something in open view” (e.g., a fireworks *display*), “a clear sign or evidence”, an exhibition (e.g., a *display* of courage), an “ostentatious show”, “an eye-catching arrangement by which something is exhibited” (MW). These notions of showing, in open view, and making evident are central to the word display. What are the necessary conditions for making sense of these meanings? First, and as grounding meaning, we submit that the necessary condition is *attention*. This is so because without the attention of those to whom the arrangement is evident—to whom the display displays—that same arrangement would not be evident.

It is worth noting the way in which in the word display the notion of attention is linked to the idea of apparentness, of something that is immediately clear to all, of something for which there is *already agreement*. Yet if the ‘attention’ mentioned is our attention, as those engaged with the screen, to what does ‘evidence’, ‘relevance’ and ‘agreement’ refer? Is the issue of evidence, relevance and agreement a matter of the *content* of that which is on the screen or does screen in its fundamental meaning (or screening) already presume them?

Performing the Phenomenological Reduction on Screen

What is now needed in a more decisive clarification of the phenomenon screen(ing). Phenomenologically we are not directed at any particular screen; nor the PC, nor the TV, nor the mobile phone screen, neither this nor that screen, or kind of screen. The object of our investigation is simply the *screen* as such – that which makes us to recognise something as a screen and not, for example, as a mirror. What this precisely means will become clear, we hope, when entering the phenomenological reduction.

Up to now in one way or the other we have here and there relied on experiences of particular screens. Notwithstanding this way of proceeding is just that – a way, a manner into that which enable us to distinguish, to identify, to see something as a screen. The object of this investigation is the grounding and decisive criteria that enable us to experience a screen as a screen – the criterion on the grounds of which we distinguish a screen as such. Thus, the phenomenon screen has its essential contours primary to any and to all cases or classes of screens. It is not relevant for this investigation to consider whether it refers to TV screens, PC screens, IMAX screens, wall screens or whatever screens. As long as one recognises something as a screen, this paper relates to it. Screen is phenomenological analysed not as an empirical object, an event or state of affairs, but as *intentional objects of our attention*, which is formally indicated, as referred to above, as the *screen-ness* of screens.

Hence we now focus our analysis on the phenomenon screen(ing) as intentional object of consciousness, not ‘in’ thought, or as we assume it appears in an ‘outer empirical world’. In this paper the notion of consciousness is used in a phenomenological manner, and not in the way some contemporary authors of consciousness studies may refer to it. Consciousness and intentionality is not merely what is ‘in the head or mind’ of the subject. We would say—for the sake of establishing a bridge to mainstream Cartesian epistemologies—that consciousness and intentionality are/is always and already situated, simultaneously ‘in the mind’ *and* in the living ongoing world (life-world) of the actors and the enquirers (for further discussion refer

to Cairns 2001). It is now important that we suspend—as a methodological condition of our analysis—the necessity of any *particular* empirical world. This means ‘reducing’ the phenomenon screen to that which already appears in our always already situated consciousness, disregarding characteristics that value it as a particular empirically ‘existent’ thing, while attempting to preserve its content as fully as possible.

We note that this intentional object, the screen in our already situated consciousness, in being a screen, is *not* some pure isolated and abstract thing that has meaning in itself as such. We emphasise: phenomenologically approaching the screen means trying to establish its fundamental meanings that enable us to recognize an object, a notion, an idea, a phenomenon in intentional consciousness, as a screen and not as something else. We claim as self-evident that for us to grasp the meaning of the screen as such, we need to have already presumed its world. The screen shows up as that which itself is in and only in its own *worldhood*. By ‘worldhood’ we mean, following Heidegger (1962), the referential whole within which things have meanings and are what they are. It is important to remember that when we use the terms ‘world’ or ‘in-the-world’ then it is to this worldhood that we refer. Thus, the screen, in its essential meaning, is a something always already *in-the-world* (Heidegger 1962) and not an isolated object in the ‘mind’ of the subject, so to speak. Nevertheless, it seems that its being, as it appears in intentional consciousness, as a screen, is one of always already calling for attention, while already referring to its functioning in a world in which it makes sense. This sense of the screen, which is grounded on the other things and activities in the world to which it refers to and by which it is referred to as well, is essentially screen as attention, as relevance for us in-the-world. Thus, having suspended the supposition of the necessary existence in any particular empirical world – as much as we are able to do so without losing the screen-*hood* of the screen – we discover that in consciousness screen qua screen, a screen to be screen, still seems to require as necessary ‘attention’. Without ‘calling for our attention’ screens would no longer be screens. Thus screens, in their screen-ness, are promises of bringing to present, or displaying, what is relevant, while simultaneously hiding their claimed physical being behind that same relevance. These contours, we should stress, can appear only against an already there, assumed background, of worldness.

Screens function in the flow of our involvement in the world, that is, transparently as ready-to-hand beings (Heidegger 1962). Because the information displayed always ‘shows up’ within our involvement it is already presumed relevant - that is, information deserving our attention. This aspect is a crucial one. That information or information is not just or simply presumed relevant, but *already presumed* relevant. Its relevance does not depend on its specific content but on a particular involvement in-the-world in which we dwell and within which screens come to be screens. It is not up to anyone of us to decide on the already presumed relevance of screens; that is what a screen is – a framing of relevance, a call for attention, a making apparent of a way of living. Thus, the reduced phenomenon of screen is something devised to attract - or rather that already has - our attention and locate our action as acting beings in the world of ongoing activity.

This last argument can be made clearer by realising the kind of puzzling difficulty one has to go through in order to imagine a situation in which screens do not present relevant information at all. For example, a PC monitor at the NY Stock Exchange showing permanently the changing schedule of the trains of the suburbs of some African city; or the monitor of the cash registers of a supermarket showing air traffic control information. They may have an initially curiosity value but will quickly become ornaments in the background. Nonetheless, we concede, we might still attempt to recognize those screens as screens; yet, we would relate to them as some strange, odd, inapt, out of place screens. The screen-ness of screen, its fundamental meaning, seems to be in complete contradiction with the way in which we access those strange screens. Another example will help us in clarifying the point we want to stress in

here. Can we imagine what a man from the XV century might think when confronted with a screen of an Automatic Teller Machine (ATM)? That surface we refer to as a ‘screen’ would merely be a potentially curious object for him. It would not be a ‘screen’ because it would be impossible for him to conceive that particular screen in its essential meaning. That screen would not be a screen for that man because the screen, as it shows up within an involvement whole, *was not already* a screen for him; he would simply not recognise it in its grounding meaning. For him screens, as screens, do not have any meaning, and therefore do not exist as screens. These cases demonstrate the difficulty to imagine these surfaces *as screens* because in order to do it we would need to abandon the essential meaning of the screen – calling for attention, framing relevance – and yet, because obviously we cannot simply ‘turn off’ our already knowing of what a screen is, still force ourselves to use that same essence of screen to understand an object that looks as having lost its meaning as a screen.

Screens display relevant information for us in each situation that engages us within the involvement whole in which we relate ourselves to the world. However, the information on the screens is not the kind of ‘world’ information we immediately and intuitively grasp as everyday human beings already busy in-the-world. Information on screens is not ‘natural information’, according to Borgmann’s terminology (1999:7-54). Rather this information is produced in such a way that it only appears for us (grabs our attention) in our *particular* ‘involvement whole’ (Heidegger 1962) in which it refers to our activities and our activities refer to it—within a particular ‘form of life’ (Wittgenstein 1967). Screens claim a *be-ing* – ongoing existence – in-the-world as focal interpretative entities, presenting, displaying, relevant information for our involvement and action in the world. Screens flow along the making evident our involvement in-the-world, because they present an already interpreted and selected, screened, world to us, which is already consistent with our ongoing involvement in that world, within our ongoing way of being. Hence, foremost and primarily what screens show is not the information that appears ‘on’ the screen, *but a form of life as such*; a form of life—or referential whole in Heidegger’s (1962) terms—in which displays hold (screen) references to a great many ‘things’ that are meaningful and that engage us in this or that particular world.

This phenomenological reduced description of screen shows how closely intertwined the ideas of attention, relevance and world are in the essential meaning of the screen—as such it also suggests references to the notions of agreement and truth. However, this is not enough for a fully phenomenological characterisation of the phenomenon screen. In order to reach the essential meaning of the screen(ing) we must now try to reach beyond this common ground to identify the strictly necessary elements for the phenomenon screen to be what it *is*.

Investigating the Essential Meaning of the Screen

To gain phenomenological access to the essential meaning of the screen is not to generalise. Generalisation itself already presupposes the existence of some essential meaning, for example “the abstraction of the general idea ‘red’ is arrived at by leaving out of account all those respects in which several red objects differ in order to hold on to that respect in which they are similar. But the concept of similarity (or even respect) which is in question here itself presupposes the very comprehension (of the essence of ‘red’) which it is supposed to account for” (Macann 1993:9). Moreover, as is evident from our analysis thus far, the notion of ‘essence’ we use accounts for some grounded and temporalised way of unfolding, that evolves and changes in-the-world (Heidegger 1962, 1977). It does not point to some supposed static concept, object or Platonic idea. Rather we take the investigation of the essence of the screen—in recognition of the work of Heidegger—to be an attempt to uncover the fundamental meanings, the grounding references, the main and decisive contours, of the

growing and pervading presence of screens in our contemporary world. The way in which screens are screens in-the-world, the essence of screen(ing), is of course common to all screens. Within that which is common to all screens there is something that is essential, and indeed there might be something that in spite of being common is just accidental. The essential common ground of screen is common not only to the examples analysed but to *all* potential examples of that phenomenon, because the essence is such that without it there is no phenomenon. Let us proceed now to attempt to uncover this essential ‘common ground’.

Imagination, “by discovering what one can and what one cannot imagine” (Hammond et al. 1991:76), is the key to the continuation of our analysis. This analysis aims to strip out of our preliminary phenomenon of screen(ing) its accidental elements, that is, those elements that in spite of being common are not necessary for a screen to be a screen. We, who already have our being in a world pervaded with screens, do not need empirical observation for discovering the answers we need because in every new variation in imagination we know the object we describe is an object of that same kind, a screen, if we recognise it as such, as a screen. Thus, the implicit criterion of recognition - *my ability to recognise the object as the object it is* - is the decisive way of this essential (*eidetic*) reduction (Husserl 1995, 1970; Spiegelberg 1975, 1994).

Firstly, we note that the same supposed empirical surface can be considered a screen and not considered a screen even if it displays the same information, as is clear from our example of the ATM, above. If we have a mirror, with the size and shape of a screen, it displays information – the images it reflects – but we do not consider it to be a screen but a mirror. Yet we can have a screen displaying exactly the same image of that mirror and consider it a screen and not a mirror. So, what is the criterion that is implicit in this imagined experience?

Mirrors *reflect*, screens *present*. This means the kind of information displayed by these different objects have diverse origins. In the case of mirrors it is merely reflecting back what it receives. In presentation there operates a fundamental process of ordering. Presentation always assumes a theme, in the way that a jigsaw puzzle, to be a jigsaw puzzle, assumes a whole that will be its ordering criterion. Furthermore, the theme of the presentation, of the screening of screens, assumes, or derives its meaning from, a form of life that renders it meaningful as a relevant presentation. As Wittgenstein (1967, no.241, p.88) argued words do not refer to something because we agreed it, rather they already have meaning because we share a form of life.

Information presented on screens does not depend essentially on the perceiving subject’s perspective as such (i.e. it is not just its interpretation) but rather on the themes and forms of life in which it already functions as meaningful. Screens present selected data, that is, information that was previously selected to be displayed or information that is displayed because it is in accordance with a previously set theme for the presentation of information in a form of life. This last criterion means that the kind of information presented is relevant information for the situation within the context where that screen makes sense *as a screen*. Because screens as screens always present pertinent information - as ‘themes’ in ‘forms of life’ - they gather and locate the attention of the people surrounding them. In watching, one could of course disagree with the relevance of the particular information being presented on the screen, but that evaluation itself is already relevant for the situation the viewer finds herself in. It may indeed be a crucial part of the context that precedes a relevant action of the subject, that is, a choice, a decision, a path. Hence, disagreement over what is presented on the screen is grounded on a previous and foundational agreement on our involvement in-the-world, in a world where screens *screen*. This essential notion that grounds the phenomenon screen is expressed through the notion of *already agreement*.

Hence, screens are not mirrors in that they do not reflect whatever they face. They are a presentation of what is already relevant within the flow of our purposeful action. However, we must also note that in selecting for presentation, in displaying – thus in making relevant or evident other possibilities are necessarily always implicitly excluded; this is precisely one of the central common meanings of the word screen nowadays, selecting, choosing. Thus, the screen conceals and filters in its revealing; in screening, it filters and as such also hides as it displays. For this to be the case, there is the logical necessity of a *previous agreed grounding* on the basis of which something can be filtered, can be *screened*, at all. That grounding, that primordial criterion, is a particular way of living or form of life, we have been referring to. This form of life, in its most primordial meaning, is an addressing of the realm of truth. Heidegger noted (1977) in his investigation of the Greek concept of truth that the word for truth, *aletheia*, meant the simultaneous revealing and concealing of something. To reveal implies to conceal; reveal and conceal both, mean to filter, that is, to screen. The revealing and concealing of screen implies an already there form of life, implicitly and fundamentally shared and agreed, on the basis of which events, the others, nature, and things in general are revealed as something, that is, already meaningful (Heidegger 1962).

To clarify this notion of agreement further, which points to the essential meaning of screen(ing), we note that a screen always presents information of and in the world, which simultaneously implies or implicitly refer to this very ‘worldness’ of the world. Information on the screen is always accessed within my ongoing flow of activity - for example the screen of the ATM is the world of my ongoing banking activity, the screen at the airport is the world of my ongoing travel activity. Thus, an understanding of the idea of screen already implicates the idea of always already being in-the-world, of being *towards something* (Heidegger 1962), for example towards catching a plane, *for the sake of an other something* (Heidegger 1962), for example, for the sake of being a respected and accountable manager. Hence, this involvement in-the-world, within which screens are what they are, point to the ideas of attention and relevance referred to above, but also equally to the more essential notion of agreement as well.

We must emphasise that our discussion refers to screens, qua screens, which collect and attract attention. The agreement, implied in them, refers to an ontological understanding, which is the basis on which our own actions in the world gain their references and significance (Heidegger 1962). Obviously it does not mean that one has to agree with the terms, conditions, analysis, or format of that which is shown. The agreement addresses the referential whole within which the screen is a screen that attracts our attention as part of our ongoing activity in a form of life. Let us now develop this ontological importance of screens further by taking up the clue of the *correspondence between sight and truth*—taken to be that which reveals what ‘is’—hinted at when analysing the etymology of display.

In-the-world we, as the beings that we ourselves are, have a tendency to assume the primacy of seeing (Heidegger 1962). The screen is first and primordially seeing, watching, perceiving with the eyes. Seeing, according to Heidegger (1962:214), is “a peculiar way of letting the world be encountered by us in perception”. In *everydayness* (Heidegger 1962) the human sense of sight performs a central role in our involvement in-the-world (Heidegger 1962). What is at stake in this supremacy of seeing, so to speak, is not a characteristic or feature of humans, but an ontological conception of being human *in which cognition is conceived as seeing*. For us this fundamental conception, of the ontological primacy of seeing, grounds the way in which screens unfold in-the-world as screens, already relevant—rather than as mere dynamic surfaces. Let us elaborate this claim some more.

Heidegger (1962:215) notes that the early Greeks conceived cognition in terms of the ‘desire to see’. Aristotle’s (1998: 4, n. 980a) treatise *Metaphysics* opens with the sentence “By nature, all

men long to know”. In order to capture what Aristotle wrote, with reference to ancient Greek, Heidegger suggests that we must stay with the original meaning of the sentence, which would then translate as: “The care for seeing is essential to man’s Being” (Heidegger 1962:215). That such a reading is correct is supported by the text of Aristotle that follows that sentence:

“By nature, all men long to know [i.e., The care for seeing is essential to man’s Being]. An indication is their delight in the senses. For these, quite apart from their utility, are intrinsically delightful, and that through the eyes more than the others. For it not only with a view to action but also when we have no intention to do anything that we choose, so to speak, sight than all the others. And the reason for this is that sight is the sense that especially produces cognition in us and reveals many distinguishing features of things” (Aristotle 1998: 4, n. 980a).

In its turn, this thesis rests on Parmenides’ (c.515 BC - ?) early conception of Being – “For thinking and Being are the same” (Parmenides in Heidegger 1984). In order to clarify this position of Parmenides, Heidegger takes the word translated in the last quotation as ‘thinking’, and seeks the roots of its original ancient Greek meaning, which is ‘to perceive with the eyes’ (Heidegger 1962:215, fn.3). Accordingly, this view of cognition implies, “Being is that which shows itself in the pure perception which belongs to the beholding, and only by such seeing does Being gets disclosed. Primordial and genuine truth lies in pure beholding” (Heidegger 1962:215). Such an ontological conception of seeing is at the core of Western thought, and grounds many chief epistemological developments ever since. Saint Augustine also noted this priority of ‘seeing’—this correspondence between seeing and cognition. In this regard Heidegger (1962:215) refers to Saint Augustine’s notes from *The Confessions*:

“We even use this word ‘seeing’ for the other senses when we devote them to cognizing (...) We not only say ‘See how that shines’ (...), but we even say ‘See how that sounds’, ‘See how that is scented’, ‘See how that tastes’, ‘See how hard that is’ (...) Therefore the experience of the senses in general is designated as the ‘lust of the eyes’; for when the issue is one of knowing something, the other senses, by a certain resemblance, take to themselves the function of seeing—a function in which the eyes have priority” (Saint Augustine quoted in Heidegger 1962:215-6).

This priority of seeing, in which cognition is understood as seeing, and thus seeing as the access to truth, gets revealed in a particular way in the phenomenon of screen. In the phenomenon screen, seeing is not merely being aware of a surface. The very watching of the screen as screen implies an already there ontological agreement about the nature of the world; a world that is relevant (and true) to us that share it, in and through the screening of the screen. This is a fundamental insight if we are to understand the power of screens in contemporary organisations and society. Hence, *the essential way in which the screen is what it is in-the-world is addressing or mediating our being in the world by displaying or presenting relevance*. This relevance seems to have as its constitutive condition some sense of an already there agreement. The agreement gets constituted in the realms of the possibility of truth, that is, it is because of the possibility of truth, grounded on the ontological conception of truth as beholding, that the screen always and already displays relevance. However, the essence of screen, as we have been uncovering it, is not a pointing out of truth as such. Instead it points to relevance—a relevance against a background of *aletheia*, of the possibility of truth. Hence, clarifying our position, we should say that the kind of *Ge-stell*, or ‘enframing’ (Heidegger, 1977) that is the screen is a *framework*, an enframing, in which truth is the background that makes relevance to appear.

Can we now bring together the different strands of our analysis by re-thinking these concepts essential for the screen to be what it is? In reflecting on this essence we may ask the question: why does the screen in its essence not show the invisibility, the concealing, implicit in the

presence of a screen as a ready-to-hand being? If the essence of a screen is to address our being in the world, that is, our activity in the world, by presenting relevance, why does the screen make itself invisible, indeed difficult to grasp as such – that is, show itself as not relevant, while we focus the information and not the screen itself? Why in essential unfolding of screen does this invisibility not show itself?

The answer to this direction of questioning – to which the several lines of this investigation are pointing to – is that this invisibility is itself essential to screen qua screen. The invisibility of screens is not only the invisibility of the screening of particular screens but also the invisibility of the very essence of screen, which, as hinted in our analysis thus far, would only be correctly accessed if fully accounted within the essential background against which a screen is what it is. This is so because, as pointed out above, the phenomenon of screen in its essence has ontological contours. This is to say, not only that screen, in its essence has concealment – they conceal that which is excluded – but also and more fundamental, that screens conceal what they are for us, as screens: a form of life.

To conclude, the phenomenological meaning (Heidegger 1962, 1977) of screen qua screen reveals itself as a grounding already agreement. It is this already agreement that calls for our attention, attracts us, makes us look at the screen in its screen-ness, *and simultaneously condemns to forgetfulness that which was agreed upon*, precisely because it is not an agreement but an already agreement, a form of life in which the screens can be said, in a very profound way, and recovering our etymological analysis, to be its *skin*. One might agree or disagree on what is on the foreground, but one is unable to question the very ground, the background, on which one anchors oneself to bring things to the foreground; and this background of already agreement is precisely what is most essential for the phenomenon screen to be what it is in-the-world.

III. CONCLUSIONS AND IMPLICATIONS

In Section I we gave an account of the overwhelming presence of screen in contemporary world. We also gave an exposition of the methodological and the ontological grounds of the paper. In the section above we showed that screen, in its essential meaning, in its *screening* as a screen-in-the-world, is relevance and calling for attention, and that its grounding meaning is already agreement. In this final section we ask an often assumed decisive question: so what? What are the empirical consequences of the findings presented? Why and how is this investigation relevant? What is the legitimacy of phenomenology in tracing back its findings to the empirical world?

Before discussing the empirical implications of our analysis we must state more explicitly the relation between the essential meaning of a screen—as articulated through our phenomenological analysis—and our engagement with a particular physical object in a particular situation. This relation, at the heart of phenomenology, is often misunderstood and is also relevant to the question of the empirical implications of phenomenological analysis. Let us consider the meaning of a word as an example. If we say that the meaning of the word ‘organise’ is ‘to give orderly structure to something’ then we are not saying that every person that uses it in every particular situation means exactly that. We are however saying that unless something of that meaning (to give orderly structure to something) is assumed in its use in the particular situation it would not make sense to use it and it might as well be substituted by some other word. Likewise when we orient ourselves towards an object as a ‘screen’ in attending to it, its essential meaning—outline in our analysis—is already assumed otherwise we might as well recognise it as something else. For example the white wall in the lecture

theatre becomes a ‘screen’ when I, the lecturer, switch the overhead projector on and project a slide on it as part of the lecture. Not because there is a light shining on it or that there are some images on it, but because the students and I conduct ourselves towards it as a ‘screen’. Indeed, this orienting ourselves towards it as a screen makes sense—seems self-evident—because we (lecturer and students alike) already dwell in-the-world where screens *screen*. Thus, the wall ‘as a screen’, attracts our attention as we assume—based on the practices typical of the lecturing and teaching world—that something relevant to our own possibilities for being what we are (i.e. students and lecturer) in the world of teaching and learning might appear on it. The moment it attracts our attention it already screens. Thus, our ongoing engagement with the images on the wall assumes, and is grounded by, the ongoing meaning of the wall as a ‘screen’. However, if I proceed to place a random collection of unrelated images on the overhead projector and tell the students that it is really just to amuse myself then their engagement with the light and images on the wall changes. It would no longer make sense (in the context of the learning and teaching world) to call it the ‘screen’—it would have lost its essential meaning. We might indeed still refer to it in our language as a ‘screen’ but we would not conduct ourselves towards it as a screen. Thus, the essential meaning of the phenomena is not ‘in’ this or that particular material object as such but rather ‘in’ the way in which it functions in the world (of learning and teaching in the case), and the way in which we (as being in that world) comport ourselves towards it as part of ongoing activity in that world—the world of teaching and learning.

Our phenomenological conclusions should not be taken as conceptual or theoretical ‘definitions’ of some sort. That is neither the aim nor the possibility of phenomenology. Rather, we claim, in accordance with the Heideggerian ontology on which this paper is based, and with the phenomenological method applied, that the most important implication of our findings in the empirical world is the potential of their available meaning in ongoing, absorbed, practical activity in the world – their readiness-to-hand in Heidegger’s terminology.

Furthermore, grasping the essence of a phenomenon does not lie fundamentally in its direct articulation in language, but in an embodiment that affects and shapes our actions and the appearances of the phenomenon, as we become involved with it (Heidegger 1962, Dreyfus 1991, Polt 1999, Introna 1997, Polanyi 1973) – “we know more than we can say” (Polanyi 1973). Our ongoing action in-the-world always and already relies on a non-thematic grasp of essences, for which phenomenology as an *ex-post* activity is not relevant at all. However a phenomenological uncovering of essences does play a role in our dealing with phenomena. The making explicit of the essence of screen has the potential of informing (in Boland’s (1983) sense as ‘inward forming’) our ongoing embodiment and action in the world where screen pervade our being. As such it has the potential to trigger particular kind of actions, based on the findings presented.

Phenomenological understanding is an arresting of new experiences and descriptions that make sense for us in the realms of our life. As these insights make sense for us, as they are considered appropriate in terms of our coherent working, functioning, ongoing life, we apprehend them and make them elements of our being. What is apprehended becomes part of the past experience that we are. The embodiment of a description, which comes from its relevance, usefulness, appropriateness in actual experiencing, usually leads to a new knowing how that tends to affect our actions intuitively and permanently. As we are able to experience new distinctions in action, new paths and new meanings emerge for us. Thus, the absorption of new distinctions, while changing our being, affects our future behaviour. Although this changing behaviour cannot be predicted, the pattern of action would tend to repeat what we genuinely and intuitively understand that has worked the way it should (Dreyfus 1991). So, describing, thinking and reflecting, influence action in the degree to which they transform the ongoing activity of living beings, and thus become a grounding ‘knowing how’—this is why

“thinking changes the world” (Heidegger 1984: 78); this is why phenomenological understanding affects action.

Our findings on screen are thus devised, as they make sense for those who access them, to become part of their embodied structures as human beings, and in that way enter the realms of action where screens have become pervasive. The opening up of the essence of screen is in itself the central answer to the question of what our findings imply for the assumed empirical world. Its implications and consequences draw on the readiness-to-hand of a grasping of essences, and thus on their relevance for our ongoing action in-the-world.

Some Further Empirical Implications of the Findings

This paper is focused on uncovering the essential meaning of the screen, not on expanding possible empirical consequences and implications of the findings, which, bearing in mind our exposition of above, obviously is a never-ending task. Having said that, and given the understanding presented above, we offer here an illustrative effort of trying to point out some concrete examples of the empirical relevance of our phenomenological findings, as they might emerge from action.

The power of the screen to grab and hold our attention is the already assumed agreement it is based upon, as its ongoing horizon of possibility to be what it is, a screen. Thus it is to this already agreement that we need to return if we want to understand its possibility (and limits). We indicated in our analysis above that this agreement is not some cognitive agreement (such as a contractual agreement) nor is an agreement on the particular content displayed, but rather an agreement in form of life. By this we mean that the screen, in order to be a screen, assumes in its screening an already shared referential whole of language, symbols, practices, beliefs, values, and so forth, for its ongoing being. What does this mean if we want to establish a screen as a screen? It is well known that users accept information systems more readily if they are involved in the process of development. However, we should note that this involvement does not only mean agreement about design (content) but more importantly it implies a sharing and co-constitution of a form of life as the assumed possibility for the screen to be a ‘screen’. This is already fairly well accepted in the cooperative design tradition. However, our phenomenological analysis brings something more important to the fore.

Once a screen is established as a screen it immediately and simultaneously conceals what is not revealed as well as its own essence (the already agreement it is based on). In this concealment that which is on the screen becomes disproportionately valued. Thus, that which is ‘on’ the screen has an assumed authority over that which is not. Adams (1993:59) in his discussion of television concludes about the television screen: “all that is important is revealed on television while all that is so revealed on television acquires some authority.” The power of television to reinforce what is presented just by the presentation itself has important consequences in our daily lives. But this power does not belong to the essence of television but rather to the essence of screens. Thus, the most interesting conclusion from our point of view is the following: as that which is on the screen gains authority it becomes more difficult and less likely for that which is not on the screen to be revealed since the screen in its screening already *has* our attention. This revealing/concealing (or claiming/silencing) possibility of screens is what makes screens particularly powerful and dangerous. In our view thinking through this conclusion in terms of systems and organisational change is very important. Unfortunately we do not have the space to do it here.

This section only served to highlight some of the possibilities of the empirical ‘application’ of our phenomenology of the screen qua screen. These are taken as merely explorative. It is hoped that this section is sufficient to show the potential of phenomenology to enhance and develop

our understanding of the complexity of our involvement in a world increasingly pervaded by screens. Yet, we should recall that phenomenological findings base their legitimacy on the tradition of the phenomenological approach, on the rigour of the method applied, and on the potential readiness-to-hand of the findings. The central empirical relevance of phenomenology relies on the self-evidence, intuitiveness and appropriateness in which its findings appear for those who engage in sharing them.

Concluding Remarks

To conclude, we should say that in phenomenology every description, reasoning, argumentation or suggestion is always open to further scrutiny. There is always the possibility for new investigations to take the phenomenon researched and show that some particular development or some specific conclusion cannot be fully supported by logic or self-evidence. We believe this paper, which remains open to that possibility, followed rigorously the phenomenological method of investigation, offering an essential account of the phenomena of screen as it is in-the-world (Heidegger 1962), in its very screen-hood. It shows, we hope, that phenomenology provides many insights about the *is-ness* of this phenomenon that would be difficult to be gained through any other method of investigation. It also shows that although phenomenology is not itself empirical, the results of its application might have important implications for the empirical world.

We do not claim to have articulated the phenomenon of screen in the only possible correct phenomenological way. We would have never embarked in such an attempt. Moreover, the very theoretical foundations and methodology that bound this investigation dismiss such kind of assertions. What we claim is to have followed a path that belongs to the Western phenomenological tradition, and in so doing to have opened the phenomenon of screen, and its overwhelming presence in our contemporary world, in a new, meaningful and useful way.

Besides this central intention of enhancing our understanding of screens in-the-world, we intended this paper to contribute in clarifying and showing the possibilities of the phenomenological method of investigation, as it was first designed by Husserl and subsequently developed by Heidegger. We hope the paper helps to bring phenomenology, much in its traditional form, to a more central role in contemporary academic research, particularly in an epoch where men again are increasingly searching for what ourselves, the world, things and events *are*.

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