

Journal of Consciousness Studies

Editor

Valerie Gray Hardcastle, Dean of McMicken College of Arts and Sciences
University of Cincinnati. valerie.hardcastle@uc.edu

Managing Editor

(address for submissions and books for review)

Graham Horswell: graham.jcs@gmail.com
Imprint Academic, PO Box 200, Exeter EX5 5HY, UK.

Associate Editors

Chris Nunn: cnhunn@btinternet.com Jean Burns: jeanbur@earthlink.net
Anthony Freeman: anthony.jcs@gmail.com

Founding Editors

Joseph A. Goguen (1941–2006) Robert K.C. Forman: Forman@TheForge.org
Jonathan Shear: jcs@infonline.net Keith Sutherland, Publisher: keith@imprint.co.uk

Editorial Advisory Board

Bernard J. Baars, Neurosciences Institute; David Chalmers, Australian National University; Ewert
Coussins, Fordham University; Daniel Dennett, Tufts University; Margaret Donaldson, Edinburgh
University; Peter Fenwick, Maudsley Hospital; Stuart Hameroff, University of Arizona; Erich Harth,
Syracuse University; Basil Hiley, Birkbeck College; Nicholas Humphrey, London School of
Economics; Piet Hut, Institute for Advanced Studies; Robert Kenrick, University of Durham;
Christof Koch, CalTech; George Lakoff, UC, Berkeley; Philip Merikle, University of Waterloo;
Mary Midgley, University of Newcastle; Raimon Panikkar, UC, Santa Barbara; Roger Penrose,
Oxford University; Geraint Rees, Institute of Cognitive Neuroscience, Eleanor Rosch, UC, Berkeley;
David Rosenthal, CUNY, John Searle, UC, Berkeley; Huston Smith, Syracuse University; Susan
Leigh Star, UC, San Diego; Roger Walsh, UC, Irvine; Arthur Zajonc, Amherst College.

Manuscript Submissions

For style guide and directions for authors go to www.imprint-academic.com/jcs

Subscription and Ordering Information

See inside back cover

"Do we need this journal?... Yes, we do: there is no other journal quite like it, and one day we shall, I think, look back to its appearance as a defining moment...and at the price, it's a snip!" **Jeffrey Gray, Nature**

"With JCS, consciousness studies has arrived." **Susan Greefield, THES**
"A volatile mixture of refereed articles, interviews and conference reports from all camps (reductionist to mystical) in one of the most exciting areas of research and theory-making." **Gene Feder, The Lancet**

"It is pleasant that we are promised discussions in the humanities as well as in science, with papers on culture and on the philosophy of mind. It will continue to have something for everybody." **David Chalmers, TLS**

"There is clearly a need for an interdisciplinary journal devoted to the subject, and in its first five years the *Journal of Consciousness Studies* has done an admirable job of meeting the need. Though focused on just one topic, it has the widest range of contributors of any academic journal I have read" **Ray Monk, Times Higher Education Supplement**

Journal of Consciousness Studies

controversies in science & the humanities

Vol. 21, No. 5–6, May/June 2014

3 About Authors

Symposium: The Emergence of Consciousness

edited by Yasemin Erden

7 Editorial Introduction:

The Emergence of Consciousness

Yasemin J. Erden

10 Emergence from What? A Transcendental

Understanding of the Place of Consciousness

Kim Davies

33 Running into Consciousness

John Barnden

57 Consciousness, Perspective, Community

Stephen Rainey

75 Contextual Emergence of Intentionality

Peter beim Graben

Regular Refereed Papers

97 Spiritual Consciousness in the Age of Quantity:

The Strange Case of Jean Piaget's Mysticism

Edward J. Dale

120 In Defence of the Self-Stultification Objection

Felipe De Brigard

131 Reflections on the Existence of Difference

Giancarlo Frigato

Types of Parallel Consciousness

152 The Virtual Other:

Empathy in the Age of Virtuality

Thomas Fuchs

174 Alfred North Whitehead's Flat Ontology:

Casting the Bifurcation of Nature as the Other

Brandon Jones

Hard Problem of Consciousness

196 The Oceanic Feeling:

A Case Study in Existential Feeling

Jussi A. Saarinen

CONTINUED

CONTINUED

Wit and Wisdom

218 Th-ink

Ed Subitzky

Book Reviews

220 Galen Strawson,

Mental Reality (Second Edition)

Carlos M. Muñoz-Suárez

228 Douglas Robinson,

Feeling Extended: Sociality as Extended

Body-Becoming-Mind

Michael D. Kirchhoff

236 Robert J. Howell,

*Consciousness and the Limits of Objectivity:**The Case for Subjective Physicalism*

Tom McClelland

241 Harald Atmanspacher and Christopher Fuchs (eds.),

The Pauli-Jung Conjecture and its Impact Today

Chris Nunn

246 Books Received

Published in the UK and USA by Imprint Academic, PO Box 200,
Exeter EX5 5YX, UK

World Copyright © Imprint Academic, 2014. No part of any contribution may be reproduced in any form without permission, except for the quotation of brief passages in criticism and discussion. The opinions expressed in the articles and book reviews are not necessarily those of the editors or the publishers.

The publishers allow authors to post their papers from the *Journal of Consciousness Studies* on their personal websites and their own institution's archive, but only when two full years have elapsed after publication. Please note that all institutions subscribing to the *Journal of Consciousness Studies* get immediate free electronic access via Ingenta®.

JCS is indexed and abstracted in: *Social Sciences Citation Index®*, *ISI Alerting Services* (includes *Research Alert®*), *Current Contents®*, *Social and Behavioral Sciences*, *Arts and Humanities Citation Index®*, *Current Contents®*, *Arts & Humanities Citation Index®*, *Social Scisearch®*, *PsycINFO®* and *The Philosopher's Index*.

ISSN 1355 8250 (print)

ISSN 2051 2201 (online)

Thomas Fuchs

The Virtual Other

Empathy in the Age of Virtuality¹

Abstract: In an age of growing virtual communication the question arises what role the human capacity of empathy plays in virtual relations. May empathy be detached from the immediate, embodied contact with others and be transferred to such relations? In order to answer this question, the paper distinguishes between (1) primary, intercorporeal empathy and (2) extended empathy which is based on the imaginative representation of the other, and (3) fictional empathy which is directed to imagined or completely fictitious persons. The latter is characterized by an 'as-if-consciousness' that maintains the difference between fiction and reality despite the empathy that one feels for the fictitious person. Based on these analyses, the paper further investigates the impact of the growing virtualization in post-modern culture. This is captured by the notions of (1) phantomization as a media-based simulation of direct reality which undermines the as-if-consciousness, and (2) disembodied communication which shifts the modes of empathy towards the fictional pole at the risk of merely projecting one's own feelings onto the other. In sum, human empathy is not bound to immediate intercorporeal contact, but becomes a crucial medium of virtual relations as well, albeit at the risk of projecting fictional emotions.

Keywords: empathy; intercorporeality; virtuality; reality; as-if-consciousness.

Correspondence:
Email: thomas.fuchs@urz.uni-heidelberg.de

[1] Translated by Alexander T. Englert.

Introduction

At the beginning of the twentieth century, Edward M. Forster wrote 'The Machine Stops', a science fiction story that foresees the virtualization of reality (Forster, 1909/1989). Set in a far future, the human population has lost the ability to live on the surface of the Earth. Individuals are now forced to live in isolation from one another in subterranean honeycomb-shaped cells. A mythical, omnipotent machine supplies them with artificial air, nutritional pills, reading materials, televised entertainment, and every other amenity imaginable. It also provides them with visual telecommunication with others because their weakened bodies and senses are no longer capable of the movement outside of the cells that face-to-face communication would demand. Generation by generation they have become so dependent on the machine that they eventually remain helpless when the first signs of dysfunction appear in its operating system. This continues until the day when the machine apocalyptically breaks down, thus leading to the extinction of humanity through the cold hard facts of life.

At the end of the twentieth century, the Wachowskis portrayed a similar version of a negative utopia in their film *The Matrix* (1999). Intelligent machines rule the Earth and harvest humans in huge fields in order to use their bodies and minds as sources of energy. To this end, the humans' brains are fed a simulated reality called 'the Matrix'. In truth, experienced reality is nothing more than an infinite series of digital symbols that flow over the screen at the beginning of the film. It would seem that *The Matrix* is representative of a widespread uncertainty caused by the world of electronic media evolving into a self-sufficient artificial intelligence that further is beginning to generate its own reality. Needless to say, virtuality has become a central theme of postmodernism and the twenty-first century.

However, the question of what is illusion and what is reality is clearly nothing new, having been a central philosophical topic throughout history. This line of questioning is especially *human* because, in contrast to animals, we can doubt reality and imagine things that do not exist — i.e. we can think and act in terms of 'as if'.² The irrational mood in language — would, should, could — is the verbal expression of our ability to fantasize, fictionalize, and virtualize. Until

[2] Of course, one can assume that at least in higher animals the search for food or prey already implies an imagination of the desired object. However, this does not surpass the imagination of what is already known to the animal. In contrast, human imagination is able to construct *new objects or fantasy worlds*. To what extent higher animals, especially great apes, are capable of *pretense*, another kind of 'as-if', is a matter of ongoing debate which I cannot enter into here; see, for example, Mitchell (2002).

the twentieth century this ability remained first and foremost a key for opening up possible worlds, for drafting alternative projects, and for temporarily loosening the shackles of reality. Schiller posited that freedom exists in the space of playing and making art (i.e. in the space of 'as if'), rather than in the space of the work that we toil away with on a daily basis. The position that human beings are fully human beings if and only if they are playing³ could only be maintained on condition that the sphere of this playing remains in contraposition to the sphere of reality — that means, the exception, rather than the rule. Today, however, virtuality saturates more and more of everyday life, invading our workplace, relationships, and free time. Visual media and digital communication influence our lives to such an extent that we could barely cope with reality if they were to disappear. Thus, in a manner they have become a reality machine to which we are connected, much like the humans in E.M. Forster's story.

Constructivist positions in philosophy (especially of a neuroconstructivist sort) are especially well-suited to accompany this development theoretically. A world of interconnected pictures and videos in the form of a constant media presence is mirrored by epistemological theories according to which the world itself is nothing more than a projection, be it a product of subjective schemata of experience or a construct from informational processing in the brain. Such positions maintain that the organization of our senses as such does not mediate reality, rather it produces only biologically useful, survival-beneficial fictions: a 'Cartesian theatre', a 'movie in the head', a 'phenospace', or an 'ego tunnel'. Accordingly, there is no more point in then trying to differentiate between reality, fiction, and illusion:

The current excitement regarding humanity's advances in artificial, virtual worlds overlooks that we have always found ourselves in a *biologically* created 'phenospace': within a virtual reality that has been created via mental simulations. (Metzinger, 1999, p. 243)

First, our brains generate a world simulation, so perfect that we do not recognize it as an image in our minds. Then, they generate an inner image of ourselves as a whole... We are not in direct contact with outside reality or with ourselves... We live our conscious lives in the Ego Tunnel. (Metzinger, 2009, pp. 7–8)

Thus, everything we perceive, everything we know, including what we know about ourselves, is in fact a part of a 'virtual reality' generated by the brain. In this 'ego tunnel', however, the only road to *other*

[3] 'For, to speak out once for all, man only plays when he is in the fullest sense of the word a human being, and he is only fully a human being when he plays' (Schiller, 1967, p.107).

persons is also a virtual one, namely, one via internal simulation. The brain simulates the expressions and actions that occur in the other's body through the virtual activation of our own bodily states; it can then, in turn, project these quasi-experiences onto the other as if we were placed in his shoes. Here a convergence may be seen between neurophilosophical concepts and the simulation theories of social cognition (cf. Gordon, 1996; Gallese, 2002; 2005; Goldman, 2006): empathy and social understanding are regarded as projections onto others of inner representations or models. Expressed pointedly, one could say that the person who perceives the other is not actually interacting with him, but rather with his own internal models or simulations of the other's actions.

Neuroconstructivism goes hand-in-hand with a societal development in which the difference between that which is artificial and natural, between a picture and the original, between illusion and reality, is gradually becoming blurred. To an increasing extent we live in what Sherry Turkle has called a 'culture of simulation' (Turkle, 2011, p. 4). Nevertheless, this development is dependent on our previously described capability for creating fictions, simulations, and the sphere of *as-ifs*. All media as such basically present an ambiguous ontology: on the one hand, they *mediate* reality, based on an 'as-if' of its representation; on the other hand, they tend to push themselves in between the subject and the mediated reality, to become independent and finally present *themselves*. This does not only apply for our cognitive but also for our *emotional* participation in the mediated reality. Our affective relationships to others are increasingly based on mediation and virtuality.

This development, too, is prefigured by as-if-structures inherent in human intersubjectivity. We will see that the emotional perception of the other, i.e. empathic intersubjectivity, often incorporates imaginative or fictional elements — indeed, that empathy may even disconnect from reality completely and turn towards fictions or illusions. One might say that we also connect empathetically with our own imaginations or projections. On the one hand, this results in the potential range of human empathy becoming nearly limitless; on the other hand, however, the further our empathy disconnects from direct, bodily experience, the more it tends to lose contact with the other as such. This implies the risk of the other becoming only an image, a frequently misunderstood projection — a *virtual other*.

In what follows, I will investigate the particular relationship between empathy and virtuality. May empathy be detached from the immediate, embodied contact with others and be transferred to virtual

relations? And if so, what changes does it undergo in this process? In order to answer this question, I will distinguish between three modes of empathy: (1) *primary*, intercorporeal empathy, (2) *extended empathy* which is based on the imaginative representation of the other, and (3) *fictional empathy* as being directed to absent or fictitious persons. The latter mode is characterized by an 'as-if-consciousness' which maintains the difference between fiction and reality despite the empathy that one feels for the fictitious person. On this conceptual basis, I will then pose the question: what consequences will ensue for the development of intersubjectivity and relationships in our society as a result of increasing virtualization of perception and communication? How is empathy transformed when it is increasingly directed to a virtual other?

Overall, the main goal of the paper is to show that empathy is a complex, multi-level process that may well imply components of imagination, virtuality, or 'as-if'. As such, empathy not only connects quite easily with virtual or fictitious persons and situations, it is even stimulated by imagination and fictionality. However, this occurs at the price of an increasing danger of projections and illusions — a connection that is of particular importance in a culture of growing virtuality.

Empathy and Virtual Reality

Let us first examine the relation between empathy and virtuality. Can it be said that empathy as such entails a fictional component from the get-go — a moment of 'as if'? The difficulty surrounding the challenging task of coming to an understanding of empathy reaches back to the concept's very genesis around the end of the nineteenth century. One finds the same difficulty in the current debate between competing theories: e.g. *theory theory* (Baron-Cohen, 1995), *simulation theory* (Gordon, 1996; Goldman, 2006; de Vignemont, 2009), *theory of direct perception* (Zahavi, 2001; 2011; Gallagher, 2008), *interaction theory* (Gallagher, 2001), or *theory of bodily communication* (Fuchs and De Jaegher, 2009; Froese and Fuchs, 2012). This difficulty can certainly be attributed to the complexity of the phenomenon itself. Empathy develops in different modes and consists in various components. In the following, I will divide it into three modes, namely, primary, extended, and fictional empathy.⁴

[4] Still another mode might be termed 'iterated empathy' as put forth by Edith Stein (i.e. the perception of the empathy of another person connects back in a way to oneself, as, for example, when experiencing shame because of the embarrassed expression of others). Her

a) *Primary Empathy: Implicit or Bodily Components*

Primary empathy arises from direct, bodily contact with another person, i.e. from intercorporeal interaction. If we see someone overtaken by rage, we perceive directly how he is feeling from his expressions and behaviour. We do not require an internal simulation of the rage, which we must first bring forth in ourselves to then project onto the other, nor do we require a theory of human behaviour that instructs us in interpreting his loud voice, balled fists, and contorted facial expression. As Scheler asserted, we see directly in the smile of the other his joy, in his tears his suffering, and in his blushing his embarrassment because we experience him primarily as an expression of a psychophysical whole (Scheler, 1973, pp. 301–2). The resonance of our own body clearly participates in this perceptive act: the rage of the other releases in us sensations that resound throughout our body in the form of tension, cringing, and the impulse to retreat from the encounter, all of which then imbue our perception of the other's rage. In his expression itself we comprehend his emotions because simultaneously this expression elicits from us a bodily impression. One feels the other in one's own body, albeit in a manner of feeling that mostly remains implicit and non-thematic as such (cf. Fuchs and De Jaegher, 2009; Froese and Fuchs, 2012).

The expression of the other thus leaves an impression on us, which now simultaneously elicits an expression in response (e.g. a confused or terrified expression). Again in turn, the other perceives our responsive expression that then modifies his bodily state. As a result, both persons involved engage in a circular, bodily-affective communication without even realizing it. Thus, whenever two individuals encounter each other, their bodies enter into a communicative dance, as it were: glances, gestures, and tendencies towards action embrace the other's body, and their sensorimotor body schemes assimilate to each other. We may also speak of an intercorporeal assimilation or *mutual incorporation* (Schmitz, 1989; 2011, pp. 29–54; Fuchs and De Jaegher, 2009; Froese and Fuchs, 2012). Regarding the affective side of experience, this amounts to *interaffectivity*, which means a continuous interaction and mutual modification of both partners' emotions. This interplay provides an immediate feedback of one's emotions directed toward the other and thus diminishes the risk of merely projecting one's feelings on him.

theory, however, is not included in the discussion at hand (cf. Stein, 1917/1980, pp. 18–9; Thompson, 2001).

b) *Extended Empathy: Explicit or Imaginative Components*

In the last section, I outlined the dynamics of intercorporeal communication which make up the foundation of primary empathy.⁵ Of course, the possibilities of empathic understanding are far from being exhausted by this primary mode. On the basis of our primary empathy, we also come to conjecture about the situation of the other and envision how it must be from his perspective: *what could have made him so angry, so shocked, or so injured? Why was he particularly vulnerable in the given situation? Etc.* In doing so, we expand our understanding and deepen our empathy. But the possibility of putting oneself in the shoes of another goes further than the simple conjecturing about why *he* feels the way he does: in fact, I imagine then how *I* would feel and react if in the same situation. At this point we are certainly employing some form of simulation, which, however, I would prefer to term *perspective taking* or *imaginative transposition*.

This component of empathy is without a doubt very different from the first one discussed. To begin with, it entails an *explicit, cognitive operation*, namely, the conscious envisioning of the situation of the other, which often employs information about him that one could not infer directly from the situation at hand. Also, it involves an *imaginative operation*, that means, a transposition into an 'as-if' scenario (i.e. as if I were the other) which transcends the bodily or physical level. As a result, it seems necessary to differentiate between a primary, implicit, or bodily empathy and an expanded, explicit, or imaginative empathy. The latter already involves a certain degree of virtuality.

Let us briefly examine the currently favoured simulation theory before continuing. It will become evident that it misrepresents and overlooks the level of primary or bodily empathy regardless of the version that one champions:

- First, it represents bodily resonance incorrectly as simulation. Indeed, at this level of sensation one cannot speak of an 'as-if' modality at all because bodily sensations and movement tendencies that are evoked when encountering another person are only implicitly present in one's perception of his expressions and

[5] Cf. for the concept of intercorporeality (*intercorporité*) Merleau-Ponty (1960). It corresponds roughly to the phase of 'primary intersubjectivity' in developmental psychology (Trevarthan, 1979) which is used to designate the phase from birth to about the end of the first year. By 12 months of age, infants are already capable of differentiating accurately varying expressions of emotion in other persons.

emotions.⁶ In Polanyi's terminology, one could call bodily resonance the *proximal* component and the emotion of the other the *distal* component of interactive perception (Polanyi, 1967). The proximal component remains outside of focal awareness, rather it is transcended towards the distal component. In other words, the proximal or bodily component is *transparent* for the perceived emotion of the other; it functions as the pre-conscious *medium* of interactivity and empathic understanding. Therefore, implicit social perception requires neither an internal simulation nor a reflective projection of this simulation onto the other.

- Second, simulation theory generalizes incorrectly the possibility of imaginative transposition or simulation, e.g. in Goldman's version (2006), to include all kinds of empathy. Granted, one can think of typical examples of simulation: when I hear, for example, that someone has missed his plane, I can imagine myself in the same situation as if I had just gone through the same ordeal, and as a result feel his disappointment or anger. Yet, this form of imagination only appears in higher, and most likely verbally structured, levels of social cognition; it is, however, unnecessary for the direct understanding of another's anger on the basic level of empathy.

c) Fictional Empathy

Let us now return to the connections between empathy and virtuality; a closer examination of these connections allows us to discover much more than just the notion of expanded empathy. For empathy can also be extended towards fictive persons or non-personal agents, a phenomenon which I call *fictional empathy*. As causes and objects of this mode of empathy consider the following:

- inanimate or non-living objects like the geometric figures set in motion around each other in the experiment conducted by Heider and Simmel (1944), which then created the impression for the participants that a sort of romantic relationship existed between a circle and a triangle;
- robots, avatars, or computers that demonstrate 'as-if' intentionality (think, for example, about HAL, the onboard computer of

[6] This is also the case if the bodily resonance includes imitative components, e.g. movement impulses that mirror gestures and actions of others — possibly as mediated by the brain's system of mirror neurons. These imitative tendencies too, however, remain typically unconscious, which inhibits the complex process of simulation and reflective projection from taking place at all. For a critique of the trend to shift simulation to *subpersonal*, or more specifically, to neuronal processes, cf. Gallagher (2007).

the spaceship in Stanley Kubrick's 2001: *A Space Odyssey*, which develops more and more of a personal identity throughout the film and for which one feels some sort of empathy during the climax when it 'dies');

- images of persons (photographs, portraits, etc.) as well as persons in films;
- characters in novels, e.g. Oliver Twist or Anna Karenina (Radford and Weston, 1975);
- letters or other messages from persons who are real but not present.

Clearly, we are dealing with very different occasions and objects that can potentially awake fictional empathy:

- first, there are inanimate objects that stimulate our bodily resonance through their *qualities of expression* or movement patterns;⁷
- second, there are inanimate objects that suggest *purposefulness* or *intentionality* through their behaviour (which is further increased due to the possibility to interact with these objects, as in the case of computer games or in cyberspace);
- finally, there are persons who are only given to us via virtual means, e.g. in pictures, films, writings, or in our imagination; here, however, there must be a differentiation between real (non-present) persons and purely fictive ones.

Such catalysts of our empathy are almost always accompanied by an *as-if-consciousness* that can manifest itself in differing forms. One form is the peculiar consciousness of pictorial media: I perceive this picture as a picture or this film as a film, that means, I perceive its content as if it were real. There is what has been termed an '*iconic difference*' (Boehm, 1978) between the picture as an object in the world and the world *within* the picture, and somehow we are aware of both modes of reality simultaneously.⁸ Also, there is the consciousness we have when fantasizing: while imagining fantasy worlds we are still aware of our own imagination as imagination. Another form of

[7] This sort of stimulation is especially apparent when one observes how children interact with their surroundings. A child may call an empty balloon 'that poor balloon', or may refer to a descending line as 'sad', or experience a teacup lying on its side as 'tired' (cf. Werner, 1959). Accordingly, children 'breathe life' into their toys and experience them as possessing a sort of quasi-consciousness.

[8] In his *Sophist*, Plato already tackled the problem that images display an ambiguous status between being and not-being: 'Stranger: Then what we call an image is in reality really unreal. — Theaetetus: In what a strange complication of being and not-being we are involved!' (Plato, e.g. 1875, *Sophist*, 240 b/c).

as-if-consciousness can be found in symbolic or metaphorical comprehension (e.g. when a child pretends that a banana is a telephone), or also in role playing games (e.g. when children play pretend and act like thieves or ship captains). Further, when we empathize with an actor on the stage, we do so at least with a latent awareness that he is only acting out his role.⁹ In the case of movies, this awareness is pushed more or less into the background due to the deep *immersion* of the audience member into the experience, even though it typically continues to function normally.¹⁰ We suspend our understanding of the fictionality; we give ourselves over to the illusion, albeit always with a *split awareness*.

Is there in fact a principle difference between real and fictional empathy? As regards primary or intercorporeal empathy one can indeed conceive of certain forms of fictionality that allow it to varying degrees — consider interaction with fictive agents in cyberspace or identification with movie characters that can achieve similar levels of emotional intensity, or even more intense levels, when compared with real encounters. As regards secondary empathy or imaginative transposition, it already entails a component of virtuality or an as-if-consciousness: when I put myself into the shoes of the other, I do not actually become the other, and I remain aware of this.

What then is the difference? Naturally, in states of fictional empathy we remain conscious of the fact that we are not actually engaged with a bodily present other because even the actor in a theatre does not interact directly with us. Thus, it would be wrong to posit some sort of ontological illusion, as if we were mixing up fiction and reality. The as-if-consciousness which we are dealing with here is different in nature: while imaginative transposition conceives of the other as actually being given and while the as-if is solely directed at the intentional act of transposition ('as if I were in your shoes'), *fictional* consciousness posits the other as *not actually being given* (this also applies for

[9] Such a state becomes even more noticeable via the confusion and shock that befalls us when we become aware that an actor is 'breaking character' or is suffering from a real fainting spell.

[10] Woody Allen's film *The Purple Rose of Cairo* (1985) toys masterfully with our latent fictional consciousness. In the film, an obsessed female fan of a particular cinema hero frequents daily a movie theatre in which she yearningly follows the character's every move until one night he miraculously steps off the screen and descends into the filled theatre. The other actors in the film, which continues to play, get angry and begin to break character while attempting fruitfully to get their fellow performer back into the movie. Allen emphasizes the nesting doll aspect of the unfolding fiction within a fiction by giving the movie that the actor has stepped out of the same title ('Purple Rose of Cairo') as the one he has directed.

the theatre as far as the actress is actually given, but Maria Stuart is not).

Nevertheless, empathy remains possible; for in giving ourselves over to the illusion we let our as-if-consciousness retreat so far into the background that the fictional mode of our empathy may even become more intense than primary or extended empathy. Fictional emotions result from fictitious characters that we *identify* with: we may authentically cry about Anna Karenina though we know that she never really existed. Indeed, this so-called 'paradox of fiction' is not based on an irrational attitude or on any sort of illusion, rather on the peculiarity of fictional consciousness to oscillate with split awareness between both conceptions of the perceived character or event.¹¹

This split awareness is, however, a cognitively sophisticated achievement, an achievement stemming from early childhood (Fuchs, 2012) that remains precarious and can also be lost — then the 'as-if' gives way to an illusory reality. This is a classic motif in literature: Ovid's Pygmalion falls in love with a statue of Aphrodite that he himself sculpted and it comes to life as a result; and E.T.A. Hoffmann's student Nathanael is enchanted by a mechanical puppet, Olympia, while he simultaneously scolds his human fiancée, Clara, in a fit of insanity for being a lifeless automaton and pushes her away in the process. In such cases, empathy loses its grasp of reality because of its engagement with one's own illusions, projections, and figments of imagination.

In psychopathology, psychoses are often correlated with a breakdown of the imaginative 'as-if'. In the literature, cases are described in which addictive computer games cause the outbreak of delusional empathy: at a certain point, the young patients began to believe that their computers were alive and playing devious tricks on them (Podoll *et al.*, 2000; Schmidt-Siegel *et al.*, 2004). Thus, they became incapable of differentiating between the mediating *carrier-object* and the mediated *reality* as such; in other words, they lost the 'iconic difference' which is constitutive for our consciousness of imagery (see above). Of special significance is finally the phenomenon of 'transitivism' in cases of schizophrenia (*cf.* Fuchs, 2010). Here, perspective taking in interpersonal encounters loses its 'as-if' character and progresses into a conflation of one's self with the other, as can be seen from the following example:

[11] *Cf.* for the 'paradox of fiction' Radford and Weston (1975); Lamarque (1981); Carroll (2007).

A young man was frequently confused in a conversation, being unable to distinguish between himself and his interlocutor. He tended to lose the sense of whose thoughts originated in whom, and felt 'as if' the interlocutor somehow 'invaded' him, an experience that shattered his identity and was intensely anxiety-provoking. When walking on the street, he scrupulously avoided glancing at his mirror image in the windowpanes of the shops, because he felt uncertain on which side he actually was. (Parnas, 2003, p. 232)

In this example, it becomes quite clear that perspective taking or imaginative transposition requires an as-if-consciousness similar to that during the perception of one's mirror image. In order to interact with others, one must be able to *simultaneously alternate and differentiate* between one's own bodily perspective and the virtually imagined perspective of the other — i.e. one must be able to assert one's self in the face of the other. If this split awareness breaks down, then it may lead to a quasi-borderless empathy in which the subject loses himself in perceiving the other.

Midway Summary

Empathy has proven to be a complex phenomenon that consists, on the one hand, of *implicit*, bodily components arising out of direct intercorporeality, and on the other hand, of *explicit*, cognitive and virtual components, which are made possible due to our consciousness of imagery and fantasies, i.e. due to different modes of as-if-consciousness. Depending on the situation, these components will take on differing degrees of importance; we could arrange them in the following row according to increasing virtuality:

primary empathy intercorporeality	expanded empathy perspective taking	fictional empathy fiction, imagination
--------------------------------------	--	---

Figure 1. Modalities of Empathy.

This means: the more directly I am in bodily contact with another and, as a result, more integrated into a shared situation, the more active my primary empathy becomes. Oppositely: the more that the bodily communication diminishes, the more important the role of the virtual or imaginative components of empathy become. On this spectrum, the degree of immersion — i.e. the extent to which one enters into the virtual world and identifies with its characters — is influenced by differing factors: literary texts enable us to directly know the 'inner life' of the characters through, for example, inner monologues; films

heighten our empathy for the protagonists especially through editing techniques, close-up shots, the accompanying soundtrack, etc. Finally, immersion reaches a new level with virtual realities that offer the possibility of *interacting* with virtual characters or avatars.

Without doubt fictional empathy takes place within the realm of our imagination. As a result, I remain to a certain extent within my own imaginative world, because many things can be imagined, and there is always the danger that I succumb to my projections.¹² On the contrary, the bodily presence of the other possesses its own resistance, for just as he appears for me in his body, so too does he elude me. Bodily communication does not progress in a seamless fashion (i.e. it does not signify a contagion or complete conflation), rather it entails a subtle oscillation between resonance and dissonance that, in turn, helps drive the process of interaction. In studies involving infants, Tronick (1998) was able to show that affective communication between a mother and her child is precisely characterized by a shifting between 'matches' and 'mismatches', i.e. successful communicative mirroring as well as disturbances in communication along with subsequent 'repairs' of affect attunement.

Even as adults we experience the other in every exchange as both opening up towards us through his face and expressions, while simultaneously withdrawing from us to a certain extent. Levinas (1999) even claimed that the possibility of intersubjective experiencing depends on understanding the face of the other as always maintaining a moment of the foreign and the ineffable, thereby thwarting my every attempt to reach a complete understanding — i.e. permanently transcending the world of my subjective impressions. Persons become real for one another in so far as they acknowledge each other as beings to whom 'there is always more than meets the eye'. They show themselves in their appearance and simultaneously remain beyond it. This reality of the person can, however, escape one's empathy, and indeed as we have already seen, on two conditions: first, if the resistance in bodily communication is missing and the fictional components get disconnected from the encounter with the other; second, if the as-if-consciousness disappears and the difference between image and actuality, illusion and reality is lost. As a result, the illusory projection of the other replaces the face-to-face encounter with him.

[12] This is why electronic communication favours (seemingly) intense relationships and the acceleration of emotional opening up, whereas real contact with the other in flesh and blood often does not fulfil what the participants have expected from each other.

Current Attempts in Virtualization

Against this theoretical backdrop, let us now turn our attention to some current cultural tendencies towards virtualization, which were already mentioned in the introduction. A shared trait of the media and virtual worlds is a suspension of immediate bodily experience, a *disembodiment*, in which physical contact is minimized and the modalities of empathy lean in the direction of the fictional pole. To illustrate this phenomenon, I will characterize disembodiment according to two aspects:

- (a) phantomization, i.e. the dissolution of differences between image, illusion, and reality;
- (b) disembodied or virtual communication.

(a) Phantomization

Already in 1956, Günther Anders described 'phantomization' (*Phantomisierung*) as the media-based simulation of direct reality: the surest way to obscure reality is to copy it constantly and everywhere, and indeed in such a manner that the facsimile-character of the copies themselves becomes so obscured that 'the world disappears behind its copies' (Anders, 1956/1994). As a result, reality, copies, and fiction become more and more difficult to tell apart. Forms take shape that lie somewhere between being and appearance, which Anders named 'phantoms', namely signs or images that appear in the guise of embodied things. Similarly, Baudrillard (1978; 1982) described later the 'simulacrum' as a media-based, simulated hyperreality, which no longer allows the differentiation between the original and the copy, (especially television) create a virtual contemporaneity with the whole world, i.e. a virtually shared world-moment. Originally, a constitutive element of imagery was the temporal differentiation between the image and that which it portrayed; it was always a *recreation* of its object. A simulation, however, goes hand in hand with simultaneousness of image and reality.

Instead of being just mediations, then, such media sources come closer and closer to replacing reality itself. To still perceive an image as an image, i.e. to remain conscious of the 'as-if' and thus to maintain the 'iconic difference', is becoming increasingly difficult when one considers the image's evolution from a drawn picture to photography, and then to film, and finally to live broadcasting. In a quasi-hypnotic state, the audience at some point gives up the endeavour to maintain the difference between the original and its copy: the 'as-if' breaks

down. The illusion consists in allowing the copying of reality to be covered over and in forgetting that there also exists a *real* accident apart from the viewed crash in the televised car race. With long-running soap operas, reality shows, and interactive television, the medium itself intends to remove all differences between fiction and reality. The result of this development is what Anders named 'media idealism'; the world turns into a spectacle and the viewers become passive recipients of the images that the media sources send them.¹³

While the TV viewer remains a passive spectator of images, computing media integrate their users into sensorimotoric interaction, regardless if it consists of virtual actions or verbal exchanges, and in the process enable new forms of immersion. As an interactive and communicative partner, the computer also becomes a potential object of empathy, which can even be ascribed personal attributes and quasi-intentions, and which — especially in the case of smartphones — will become almost libidinally cathected (think, for example, about the gentle stroking over the touchscreen). The actual melding, however, of body and computer is first introduced via virtual reality in computer games and in cyberspace: no longer a passive spectator, rather transformed into an interactive agent, the user experiences the magical impact of his own activity, and the immersion reaches its maximum level. The illusion of one's own body in motion in the digitally created space favours also the identification with avatars or other surrogates, not to mention the empathic interaction with virtual persons. One could even speak of an 'incorporation' of virtual space.

This would seem to initially contradict the thesis of 'disembodiment' formulated above. However, it is in fact the almost perfect hand-eye coordinating linkage between user and computer that circumvents the experiences of resistance and foreignness that are characteristic of our normal bodily encounters with the world (this manifests itself in concepts like 'internet surfing' or 'browsing': they indicate the *minimization of resistance* via a medium that offers limitless possibilities for movement and, thus, an almost omnipotent self-experience). Consequently, the reality of the resistive body of flesh and blood is suppressed along with its multimodal sensations, its stirring emotions and its need for food, drink, or sleep, in favour of a

[13] 'The world has now become mine, my idea (*Vorstellung*); indeed, it has transformed itself into an "idea for me", as soon as one is prepared to understand "idea" in two senses: not just in the sense suggested by Schopenhauer [of course, Anders is referring here to Schopenhauer's 'The world as will and idea', in German: '*Die Welt als Wille und Vorstellung*'], but rather also in the theatrical sense [*Vorstellung* in the sense of 'performance']. The idealistic element exists now in this *for me*...' (Anders, 1956/1994, p. 112).

purely functional body coupled with some virtual media source, which in its functioning has become completely transparent and shows no indication of itself any longer.¹⁴ Thus, it is precisely the disembodied interaction with digital or visual media that may transition into highest degrees of immersion.

(b) *Disembodied Communication*

Traditional televised media were the precursor to the replacement of real encounters through moments of pseudo-presence. In the meantime, however, virtual encounters are becoming increasingly a characteristic of everyday life *in toto*. Instead of interacting with embodied persons, we interact more and more with pictures and symbols. We are served by automatic notices and are greeted by our computers; we constantly leave behind electronic traces, produce e-mails, tweets, or blogs, and our voicemail system speaks on our behalf.

But even there where we communicate with actual others, this interaction is taking place in an increasingly disembodied form (Kang, 2007). More and more areas of life are migrating into digital space; virtual communities are thriving. On the one hand, this facilitates and multiplies our social relations; on the other hand, in the internet the other is 'nowhere'. Taking place at different times, imagination and encounter are disconnected, or the actual encounter may even be avoided completely, thus creating a phantom-like 'presence in absence'. The other remains but an intersection of various components of information that I piece together during our communication. To what extent do self-stylization, constructs, fictions, and projections make up my picture of him? These differentiations as such seem to lose their meaning. Telecommunication accelerates and multiplies the contacts, yet they are lacking the felt reciprocity of bodily resonance. Instead, the cognitive elements of communication rule supreme. This does not mean that virtual relationships are lacking an affective cathexis completely — on the contrary, precisely because the non-sensuous means of communication leave so many blank spaces there remains even more room for the projection of feelings onto the other. However, what is in fact lacking is *interaffectivity*, i.e. the direct feedback from the embodied contact, based on emotional cues and expressive gestures by which we perceive one another empathetically. Instead, the internet produces fictional or 'phantom emotions' which

[14] According to visionaries of cyberspace, like Minsky (1990) and Moravec (1990), this will progress to the point of a neo-gnostic dualism: they propagate the overcoming of the mundane and dreary world of the material body in favour of a pure sphere of information and mind that is free of any material contamination.

are, as Eva Illouz has described, not directed to the actual other but rather to oneself:

Fictional emotions may have the same cognitive content as real emotions, but they are generated by involvement with aesthetic forms and are self-referential: that is, they refer back to the self, and are not part of an ongoing and dynamic interaction with another. In that sense, they are less negotiable than real-life emotions which may be the reason why they have a self-contained life of their own. (Illouz, 2012, p. 210)

Such fictional emotions are triggered by linguistic signals from the other and may even become most intense, though their actual object is absent. Nevertheless, since they seem to be directed to a real other who, after all, exists somewhere in the world, their fictional character is easily covered over. Whereas the 'as-if' is maintained in the case of one's empathy for Anna Karenina, it tends to elude one's awareness in disembodied relations to others, as for example in electronic dating procedures:

...the style of imagination that is deployed in and by Internet dating sites must be understood in the context of a technology that disembodies and textualizes encounters, linguistic exchange being the means to produce psychological intimate knowledge. The intimacy that is produced is not experiential or centered on the body but rather derives from the production of psychological knowledge and modes of relating to each other. (*Ibid.*, p. 228)

Moreover, since electronic transmissions between opposite ends of the Earth require nothing more than the click of a mouse, *online* interaction lacks experiences of foreignness and of increasing intimacy. The space that would otherwise need to be bodily crossed is removed; without a moment's delay, participants reach their addressee immediately. The novel space of virtual sociality is highly homogeneous: the fine gradations between distance and intimacy are levelled out, and the nuances and retardations inherent to other social interactions tend to disappear. Everybody seems to be equally near to me. As a result, the virtual communication tends to produce a pseudo-intimacy, which those engaged would avoid if they were in direct contact. The other has become a projection surface, a product of my imagination, indeed, an object for my caprice. One push of a button and the virtual community disappears in the blink of an eye, as quickly as it was established: I wasn't actually ever *present* at all.

As a result, virtual media produce extended networks of weak connections that can be maintained and accessed without requiring significant investment of time and effort, while at the same time the jump in

mobility within society makes the upkeep of personal relationships increasingly difficult. The quality of empathic relationships in varying degrees of intimacy is increasingly making way for the amassing quantity of contacts from homogeneous virtual space. There is evidence in cross-temporal studies for a significant decline in empathic abilities since the beginning of this century.¹⁵ One of the possible contributing factors could well be the rise of virtual relations and fictional empathy which occurs at the price of a diminishment of embodied communicative skills and primary empathic abilities.

Summary

The increasing trend of desensualization, as well as the proliferation of digital worlds of signs, of phantom imagery, and of illusionary presences have all contributed to create an artificial world, which, as Bernhard Waldenfels wrote, 'inserts itself between seeing and the seen, saying and the said, between communicating and the communicated, between doing and deeds, between emotion and its expression' (Waldenfels, 1995). The culture of growing virtuality and simulation is connected with a disembodiment, a retreat of bodily and intercorporeal experiences. Simultaneously, empathy tends to separate itself from these experiences and shift into virtuality — into a space where we are confronted by hybrid forms of the other as a mixture of appearance, simulation, and illusion, and where the medium and the mediated reality are increasingly confused. In the process, the prevailing modalities of empathy move from the intercorporeal pole toward the virtual and projective pole of the spectrum (cf. Figure 1 above).

It is my thesis that constructivism corresponds to a cultural development in which the differences between copies and originals,

[15] In a cross-temporal meta-analysis of 72 studies conducted between 1979 and 2009, Konrath *et al.* (2011) found that dispositional empathy in American college students showed a decline of over 40%, with the major drop occurring in the samples after 2000. The most pronounced decline was found in measures of *Empathic Concern* and *Perspective Taking*. The authors point to virtual relationships and internet technology as one of the possible factors involved in this development: 'With so much time spent interacting with others *online* rather than in reality, interpersonal dynamics such as empathy might certainly be altered. For example, perhaps it is easier to establish friends and relationships online, but these skills might not translate into smooth social relations in real life' (*Ibid.*, p. 188). They also refer to studies showing that, on the other hand, people today have a significantly lower number of close others to whom they can express their private thoughts and feelings (McPherson *et al.*, 2006). While it would certainly be overhasty to reduce the causes for such findings to the rise of social networking and media technology since the beginning of the century, one may at least assume that the new technologies of communication have not increased, but rather hampered, primary empathic abilities of younger individuals.

appearance and being, virtuality and reality increasingly disappear. Certainly there remain good reasons for not accepting the thesis that the world is nothing more than a mental construct or a movie inside our heads. Perceptions are not representations or ideas, and even our ideas are constantly being either confirmed or proven false by the world. In order for such a corrective relationship, however, two conditions are required: first, that one actively deals with the world and, second, that one experiences concrete encounters with others. Both conditions act as checks and balances for our conceptions, ideas, and illusions. In our interaction with the world, the corrections take place via direct reaction, success, and failure; in our direct encounters with others, via resistance, the foreignness of the other, and the oscillation of perspectives that every encounter sets in motion.

The last criterion for reality is comprised of surprises or unexpected events which jolt us and which we can never predict. That which is real reveals itself through an otherness, unpredictability, and resistance that must perennially be overcome anew.¹⁶ Reality, however, disappears to the extent of its 'compliance', i.e. the frictionless way in which it saturates the senses and circumvents attentive, critical perception (Fuchs, 2008). Moving and interactive images are especially well suited for dominating one's senses, capturing one's gaze, and connecting directly to one's imagination. It is not for nothing that images have been considered throughout humanity's cultural development as possessing mythical powers, which has often lead to their being made into taboos or banned in the attempt to curtail their magical and transformatory force. We live, however, in a society that is more inundated by images and in which they are less censored than at any other time in history. If we desire direct contact with concrete reality, then we must learn to manage this flood and to connect our sensuous experiences with our embodied presence.

Crucial in this context is the question of the reality of the other. If all real living consists in meeting, as Buber writes (Buber, 1958, p. 25), then the manner in which we encounter one another will decide the extent to which we are in tune with reality at all. The other is the only being that transcends beyond the bare world as given 'for me', beyond media-based idealism or the neuroconstructivist inner space from which we would never be able to escape. Only the other frees me from the cage of my imaginings and projections in which I can only ever encounter myself. The ethical claim that extends from the other is

[16] One could argue that components of surprise and resistance are also part of virtual games. However, here they belong to the preset frame of the game and, as such, they are expected by the player.

ultimately wrapped up in his physical presence: in his glance, in the sound of his voice, in his face. And only when others become real for us in this manner can we become real for ourselves. The virtual presence of the other cannot replace intercorporeality.

Acknowledgments

The author wishes to thank two anonymous reviewers for their careful remarks and recommendations which have helped to improve the paper.

References

- Anders, G. (1956/1994) *Die Antiquiertheit des Menschen, Bd. I.: Über die Seele im Zeitalter der zweiten industriellen Revolution*, München: Beck.
- Baron-Cohen, S. (1995) *Mindblindness: An Essay on Autism and Theory of Mind*, Cambridge, MA: MIT Press.
- Baudrillard, J. (1978) Requiem für die Medien, in Baudrillard, J., *Kool Killer oder der Aufstand der Zeichen*, Berlin: Merve Verlag.
- Baudrillard, J. (1982) *Der symbolische Tausch und der Tod*, München: Matthes & Seitz.
- Boehm, G. (1978) Zu einer Hermeneutik des Bildes, in Gadamer, H.-G. & Boehm, G. (eds.) *Die Hermeneutik und die Wissenschaften*, pp. 444–447, Frankfurt/M.: Suhrkamp.
- Buber, M. (1958) *I and Thou*, Gregory Smith, R. (trans.), Edinburgh: T. & T. Clark.
- Carroll, N. (2007) *The Philosophy of Motion Pictures*, London: Blackwell.
- Forster, E.M. (1909/1989) The machine stops, in *Collected Short Stories*, London: Penguin Books.
- Froese, T. & Fuchs, T. (2012) The extended body: A case study in the neurophenomenology of social interaction, *Phenomenology and the Cognitive Sciences*, 11, pp. 205–236.
- Fuchs, T. (2008) Wirklichkeit und Entfremdung. Derealisationen in Psychopathologie und Kultur, in Fuchs, T., *Leib und Lebenswelt*, pp. 260–282, Kusterdingen: Die Graue Edition.
- Fuchs, T. (2010) Phenomenology and psychopathology, in Gallagher, S. & Schmicking, D. (eds.) *Handbook of Phenomenology and the Cognitive Sciences*, pp. 547–573, Dordrecht: Springer.
- Fuchs, T. (2012) The phenomenology and development of social perspectives, *Phenomenology and the Cognitive Sciences*, (published online first).
- Fuchs, T. & De Jaeger, H. (2009) Enactive intersubjectivity: Participatory sense-making and mutual incorporation, *Phenomenology and the Cognitive Sciences*, 8, pp. 465–486.
- Gallagher, S. (2001) The practice of mind: Theory, simulation or primary interaction?, *Journal of Consciousness Studies*, 8 (5–7), pp. 83–108.
- Gallagher, S. (2007) *Simulation trouble, Social Neuroscience*, 2, pp. 353–365.
- Gallagher, S. (2008) Direct perception in the intersubjective context, *Consciousness and Cognition*, 17, pp. 535–543.
- Gallese, V. (2002) The roots of empathy: The shared manifold hypothesis and the neural basis of intersubjectivity, *Psychopathology*, 36, pp. 171–180.
- Gallese, V. (2005) Embodied simulation: From neurons to phenomenal experience, *Phenomenology and the Cognitive Sciences*, 4, pp. 23–48.
- Goldman, A. (2006) *Simulating Minds: The Philosophy, Psychology, and Neuroscience of Mindreading*, Oxford: Oxford University Press.

- Gordon, R.M. (1996) 'Radical' simulationism, in Carruthers, P. & Smith, P.K. (eds.) *Theories of Theories of Mind*, pp. 11–21, Cambridge: Cambridge University Press.
- Heider, F. & Simmel, M. (1944) An experimental study of apparent behavior, *American Journal of Psychology*, 57, pp. 243–259.
- Illouz, E. (2012) *Why Love Hurts: A Sociological Explanation*, Cambridge: Polity Press.
- Kang, S. (2007) Disembodiment in online social interaction: Impact of online chat on social support and psychosocial well-being, *Cyberpsychology & Behavior*, 10, pp. 475–477.
- Konrath, S.H., O'Brien, E.H. & Hsing, C. (2011) Changes in dispositional empathy in American College students over time: A meta-analysis, *Personality and Social Psychology Review*, 15, pp. 180–198.
- Lamarque, P. (1981) How can we fear and pity fictions?, *British Journal of Aesthetics*, 21, pp. 291–304.
- Levinas, E. (1999) *Die Spur des Anderen. Untersuchungen zur Phänomenologie und Sozialphilosophie*, Freiburg/München: Alber.
- McPherson, M., Smith-Lovin, L. & Brashears, M.E. (2006) Social isolation in America: Changes in core discussion networks over two decades, *American Sociological Review*, 71, pp. 353–375.
- Merleau-Ponty, M. (1960) Le philosophe et son ombre, in *Signes*, Paris: Éditions Gallimard.
- Metzinger, T. (1999) *Subjekt und Selbstmodell*, 2nd ed., Paderborn: Mentis.
- Metzinger, T. (2009) *The Ego Tunnel: The Science of the Mind and the Myth of the Self*, New York: Basic Books.
- Minsky, M. (1990) *Mentopolis*, Stuttgart: Klett-Cotta.
- Mitchell, R.W. (ed.) (2002) *Pretense and Imagination in Animals and Children*, Cambridge: Cambridge University Press.
- Moravec, H. (1990) *Mind Children: The Future of Robot and Human Intelligence*, Cambridge, MA: Harvard University Press.
- Parnas, J. (2003) Self and schizophrenia: A phenomenological perspective, in Kircher, T. & David, A. (eds.) *The Self in Neuroscience and Psychiatry*, pp. 217–241, Cambridge: Cambridge University Press.
- Plato (1875) *Sophist*, in *The Dialogues of Plato*, with analyses and introductions by B. Jowett, vol. 4, Oxford: Clarendon Press.
- Podoll, K., Habermeyer, E., Nöller, B., Ebel, H. & Sass, H. (2000) Internet als Wahnhema bei paranoider Schizophrenie, *Nervenarzt*, 71, pp. 912–914.
- Polanyi, M. (1967) *The Tacit Dimension*, Garden City, NY: Anchor Books.
- Radford, C. & Weston, M. (1975) How can we be moved by the fate of Anna Karenina?, *Proceedings of the Aristotelian Society*, 49 (Suppl.), pp. 67–93.
- Review of Philosophy and Psychology*, 2, pp. 541–580.
- Scheler, M. (1973) *Wesen und Formen der Sympathie* (6. Aufl.), in *Ges. Werke*, Bd. 9, Bern/München: Francke.
- Schiller, F. (1967) *On the Aesthetic Education of Man in a Series of Letters*, Wilkinson, E.M. & Willoughby, L.A. (ed. & trans.), Oxford: Clarendon Press.
- Schmidt-Siegel, B., Stompe, T. & Ortwein-Swoboda, G. (2004) Being a webcam, *Psychopathology*, 37, pp. 84–85.
- Schmitz, H. (1989) Über leibliche Kommunikation, in Schmitz, H., *Leib und Gefühl. Materialien zu einer philosophischen Therapie*, pp. 175–218, Paderborn: Junfermann.
- Schmitz, H. (2011) *Der Leib*, Berlin: De Gruyter.
- Stein, E. (1917/1980) *Zum Problem der Einfühlung*, München: Kaffke.

- Thompson, E. (2001) Empathy and consciousness. *Journal of Consciousness Studies*, 8 (5–7), pp. 1–32.
- Trevarthen, C. (1979) Communication and cooperation in early infancy: A description of primary intersubjectivity, in Bullowa, M. (ed.) *Before Speech*, pp. 321–347, Cambridge: Cambridge University Press.
- Tronick, E.Z. (1998) Dyadically expanded states of consciousness and the process of therapeutic change, *Infant Mental Health Journal*, 19, pp. 290–299.
- Turkle, S. (2011) *Alone Together: Why We Expect More from Technology and Less from Each Other*, New York: Basic Books.
- Vignemont, F. de (2009) Drawing the boundary between low-level and high-level mindreading, *Philosophical Studies*, 144, pp. 457–466.
- Waldenfelds, B. (1995) Ein menschlicher Traum für Wachende, in Lenk, H. & Poser, H. (eds.) *Neue Realität: Herausforderung der Philosophie*, pp. 190–204, Berlin: Akademie Verlag.
- Werner, H. (1959) *Einführung in die Entwicklungspsychologie*, 4th ed., München: Barth.
- Zahavi, D. (2001) Beyond empathy: Phenomenological approaches to intersubjectivity, *Journal of Consciousness Studies*, 8 (5–7), pp. 151–167.
- Zahavi, D. (2011) Empathy and direct social perception: A phenomenological proposal, *Review of Philosophy and Psychology*, 2, pp. 541–558.

Paper received July 2013; revised February 2014.

Name
Address *
.....

Home phone no Email
* Credit card customers must supply cardholder registered address

ANNUAL SUBSCRIPTION RATES: Vol. 21 (2014)

12 issues. Print prices inc. accelerated delivery (UK/USA), rest of world surface.

Libraries: \$606/£303 + VAT (online only); \$736/£368 (online and print)

Individuals (online and print): \$174/£87; Students: \$132/£66*

*(full-time student status evidence & course completion date required)

Individuals with UK bank accounts can also subscribe for only £22 per quarter by

Bankers' Direct Debit. Contact sandra@imprint.co.uk for details.

☐ Enrol my library/individual/student subscription ☐ Airmail extra: \$86/£43

Free with new subscription. Choose one of the following books:

☐ *Partial Memories*, by Ernst von Glasersfeld

☐ *Mindworlds*, by J. Andrew Ross

☐ *Ten Years of Viewing From Within*, ed. Claire Pettimengin

☐ *The Mind, The Body and the World*, ed. Brendan Wallace et al.

☐ *Trusting the Subject, Parts 1 and 2*, ed. Jack & Roepstorff

☐ *Psi Wars: Getting to grips with the paranormal* ed. J. Alcock et al.

☐ *Emotion Experience*, ed. Evan Thompson & Giovanna Colombetti

☐ *Between Ourselves: second-person approaches* ed. Evan Thompson

☐ *The Man Who Tasted Shapes*, by Richard E. Cytowic

Back Volumes Special Offer

Full set of back volumes 1–20 (1994–2013) @ 80% discount (online only*).

Individuals/Students: \$696/£348

* for online and print editions add £98 (UK), £202/\$404 (ROW).

☐ Please enter my discount back volume order.

Payment Details

☐ Cheque (pay 'Imprint Academic') \$ (US bank) or £ Sterling (UK bank)

☐ VISA ☐ MASTERCARD ☐ AMEX ☐ MAESTRO ☐ DELTA ☐ JCB

Card No Expiry date

Security code (last 3 digits on back) Signed

Credit cards (except US Amex) charged at £ Sterling rate and converted by your card issuer

Complete and send to: Imprint Academic, PO Box 200, Exeter EX5 5HY, UK
Tel: +44 (0)1392 851550 sandra@imprint.co.uk

