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WHITE PHILOSOPHY IN/OF AMERICA

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ABSTRACT. This paper argues that Rorty and Cavell define American philosophy “after” Wittgenstein. Each embraced the historical nature of philosophy, culture and language implied by Wittgenstein’s cultural turn and each sought to reimagine the American tradition in philosophy both by returning to American philosophers before the analytic fracture and by investigating the Idea of America. In both American philosophy and the idea of America discussion of race and racism have been notable by their absence. Only recently has black philosophy begun to raise questions about the “whiteness” of American philosophy yet even Cornel West who has been responsible for “black pragmatism” needs to historicize his philosophy further and to use it to make links to investigating other forms of racism around the world.

Keywords: American philosophy, black consciousness, race, racism, pragmatism

Philosophy occupies an important place in culture
only when things seem to be falling apart –
when long-held and widely cherished beliefs are threatened.

At such periods, intellectuals reinterpret the past
in terms of an imagined future.

Richard Rorty, “Grandeur, Profundity, and Finitude,”
Philosophy as Cultural Politics, 2007, p. 73.

Keep in mind that I come from that part of the world
for which the question of old and new –
call it the question of a human future –
is, or was, logically speaking, a matter of life and death:
if the new world is not new then American does not exist,
it is merely one more outpost of old oppressions.

Stanley Cavell, “The Future of Possibility,” in
Philosophical Romanticism, Kompridis, N. (ed.), 2006, p. 21.

There is a widespread disenchantment
with the traditional image of philosophy
as a transcendental mode of inquiry ...
mindful of the dead ends of analytical modes of philosophizing
it is yet unwilling to move into the frightening wilderness
of pragmatism and historicism with their concomitant concerns
in social theory, cultural criticism, and historiography.
Cornel West, *The American Evasion of Philosophy*, 1989, p. 3.

1. Introduction

The argument of this paper is that Richard Rorty and Stanley Cavell, between them – though in different and sometimes opposing ways – define American philosophy “after Wittgenstein” and taken together they assert something distinctive of the tradition of American philosophy. Rorty and Cavell, now among the elder statesmen of American philosophy – Rorty died in 2007 and Cavell is now in his early 80s – from the point of view of the majority of their colleagues were considered rebels or renegades. This is the case for Rorty perhaps more overtly than Cavell. Each of them spent their careers framing questions about the nature of philosophy and the “directions” it should take after Wittgenstein. Each has continued to ask or elaborate broad metaphilosophical questions about the relation of analytic philosophy both to Continental philosophy and to culture more generally. Each consciously sought to reference their work in relation to the idea and contemporary experience of “America.” Rorty (1979) in his ground-breaking *Philosophy and the Mirror of Nature* positioned himself in close proximity to Wittgenstein, Heidegger and Dewey as he sought to rework and to redefine the tradition of American pragmatism. Dewey came to eclipse both Wittgenstein and Heidegger in his thought as he developed social and political themes in his reflections on America. Cavell (1969), by contrast, first explored the significance of Wittgenstein thought in *Must We Mean What We Say?* before turning to the transcendentalists, to Emerson and Thoreau, to reinvent the origins of American philosophy and explore their contemporary relevance. Each initiated and refined a distinctive style of *writing* philosophy that took seriously the linguistic and cultural turns of the twentieth century that Wittgenstein helped to shape. Each of them took seriously and defined themselves in terms of Wittgenstein’s anti-cartesianism – his rejection of foundationalism and representationalism. Similarly, they embraced the historicism of the later Wittgenstein on the historical nature of language, culture and philosophy.

Yet even given their distinctive contributions and their bold reworkings of the Idea of America and American philosophy, I will argue that neither took their historicism far enough to recognize the central fact of the birth of America – the form of racism that originated with colonization of America and Black slavery. This absence is in part a reflection that the notion of power is not central in their philosophy. It is not until Cornel West appeared on the scene in the 1990s that questions of race made it into mainstream American philosophy and Black philosophy at last became part of the canon and a legitimate object of philosophical study and subject to anthologization. This observation should be hugely surprising because it bespeaks something of the serious lack of historical reflexivity in American philosophy even among its most original and enterprising philosophers, a lack that symbolizes both the privilege and power of America as well as its unexamined and

assumed global centrality as a place and time to philosophize. There is little in either Rorty or Cavell that systematically draws attention to America in any negative sense – the ruthlessness of its colonizing beginnings, its early slave economy, or indeed its consistent foreign policy, defined in a series of wars since the end of WWII: Korea, Vietnam, Iraq and Afghanistan. Rorty and Cavell are good American patriots and their philosophies are patriotic. This essay explores Rorty and Cavell as two leading and distinguished philosophers and Wittgensteinian scholars who explore the question of philosophy in the post-philosophical culture of America, after the end of analytic philosophy.

This lack is not just an excusable occluding of the social or ignorance of the political but rather reflects a consistent and continuing failure of American philosophy in its own self-understanding and in its social and political awareness of itself. Such an interpretation is consistent with the historical approach to the rise of Black consciousness, culture and philosophy, the rediscovery of the racist nature of much Western philosophy, and the recovery of early Black philosophy in the figures of Frederick Douglass, Marcus Garvey, and W.E.B. DuBois among others, the reconstruction of the Black canon and its anthologizations. It is also an interpretation open to challenge on grounds of the development of liberal political theory by Rawls, Nussbaum, and others, and even sits uneasily with critical legal studies and critical race theory which arises out of the philosophical engagement with the cultural history of America. I christen this kind of color-blind philosophy, that which is unaware of its own philosophical historicity, “white philosophy,” a concept which I explore below in conjunction with the idea of America philosophy.

2. The Idea of American Philosophy

It is surprising that few scholars have written about Rorty and Cavell in the same breath or in relation to redefining the contours of American philosophy, a project that to me seems intuitively obvious given their intellectual affinities and differences and in particular they way in which their work serves as a set of reflections on philosophy and the idea of America.

The treatment of American philosophy normally focuses on pragmatism. Armen Marsoobian and John Ryder (2004), editors of *The Blackwell Guide to American Philosophy* basically follow this route elaborating sources of idealism, pragmatism and naturalism before identifying major figures in American philosophy (Peirce, James, Royce, Santayana, Dewey, Mead, Adams, DuBois, Whitehead, Lewis, Langer, Quine, Locke, Buchler) and major themes (community and democracy, knowledge and action, religion, education, art and the aesthetic. What is surprising about this selection is that DuBois makes

it but neither Rorty nor Cavell have entries in the collection. DuBois' selection is curious as he has no company in Black philosophy. David Boersema (2005) writing an entry for *The Internet Encyclopedia of Philosophy* concludes "Despite having no core of defining features, American Philosophy can nevertheless be seen as both reflecting and shaping collective American identity over the history of the nation." Boersema's (2005) entry then goes on to explicate American philosophy standardly in relation to Peirce, James and Dewey. In the twentieth century Boersema focuses on idealism, naturalism, process philosophy, analytic philosophy, Rawls' political philosophy, Rorty and feminism but no mention of Cavell.

The most successful attempt to define contemporary (white) American philosophy in my view is Giovanna Barradori's (1994) *The American Philosopher: Conversation with Quine, Davidson, Putnam, Nozick, Danto, Rorty, Cavell, MacIntyre, and Kuhn*. No Cornel West or Yancy or recognition of Black philosophy but at least the attempt to map a new cartography of postwar American philosophical culture in its "distinctively scientific self-representation" and its post-analytic formulations, bestriding two models or interpretations: "the analytic fracture" that cuts off roots to American pragmatism and early concerns in social or political philosophy and "the post-analytical recomposition" led by Rorty and Cavell. Barradori's (1994) conversations are very helpful in sketching a range of questions although it does not go far enough in its historicist approach to historicize American philosophy in relation to the idea of America, the cultural history of America, and the rise of American power (and perhaps its decline). For this interpretive project the best sources are Rorty and Cavell themselves.

Writing in *American Scholar* "Philosophy in America Today" Rorty (1982) formulated a version of C.P. Snow's two cultures analysis to describe the split between a scientific motivated analytic philosophy and a historically oriented Continental philosophy. He describes his story in five acts: analytic philosophy moves from speculation to science centered around "logical analysis" (1) which turns in on itself committing suicide in ordinary language (2) leaving itself without a metaphilosophy or genealogy (3) and hardening the split between analytic and Continental philosophy and jettisoning Hegel, Nietzsche, and Heidegger (4), thus leaving American philosophy departments stranded between the humanities as their ancestral home and science where they were never accepted. Rorty tells this story as one about academic politics and a split between two kinds of intellectuals: one who believes the best hope for human freedom is to be found in the application of scientific method, the other who sees faith in scientific method as an illusion that masks a nihilistic age. Rorty embraces pragmatism as a form of tolerance.

In his *Richard Rorty: the Making of an American Philosopher*, Neil Gross (2008) begins his conclusion with the observation of how Rorty almost single-handedly had rescued pragmatism as an American philosophy from its

vanishing point. He documents the decline of American pragmatism first described by David Hollinger in his 1980 paper ‘The Problem of Pragmatism in American History’ and goes on to note its rise and flourishing only sixteen years later, described by James Kloppenberg (1996: 100) as “alive, well... and ubiquitous”. Gross in his neo-marxist reproductionist sociology of philosophy goes on to explain the pragmatist revival with reference to leading scholars and also Rorty’s ambiguous position in relation to the new community of pragmatist scholars who turned out to criticize Rorty’s interpretations that had provoked a kind of fury against him. Gross recounts the way in which Rorty developed an attack on the paradigm of analytic philosophy as a whole, calling into question philosophy’s self-image, while rediscovering the pragmatic elements in the thought of the later Wittgenstein and its overlaps with Peirce, James and Dewey to institute nothing less than an American pragmatist reading of the humanities.

Richard Wolin (2010) describes Rorty’s political project in retrospect as something that develops late in his career and involves a break from his “postmodern” friends. Wolin’s characterization of postmodernism is woefully inadequate and not one that Rorty would accept in any measure even though there is an attempt by Rorty to distinguish his own project as distinctively different – what he once called with dripping irony “Postmodernist Bourgeois Liberalism” (Rorty, 1993).

Despite this background, Rorty’s own political interests crystallized relatively late in life, with the 1998 publication of *Achieving Our Country: Leftist Thought in the Twentieth Century*. It was in this work that Rorty sought to combine his philosophical interest in American pragmatism with a commitment to enlightened social reform, whose high water marks had been the Progressive Era and the New Deal. John Dewey who was a family friend whom Rorty had known as a boy and he was one of his intellectual heroes. For Rorty, *Achieving Our Country* also signified a political break with his erstwhile philosophical allies, the so-called postmodernists. He had come to realize, as he says, that it was impossible to reconcile postmodernism’s glib philosophical anarchism with the social democratic credo he had imbibed as a youth and which, in his sixties, he belatedly sought to reactivate.

In *Achieving Our Country: Leftist Thought in Twentieth-Century America* (1998), Rorty differentiates between two sides of the Left, the cultural Left exemplified by postmodernists and a progressive Left, characterized by Dewey and American pragmatism. He criticizes the cultural Left for offering critiques of society, but no alternatives.

I have argued that Rorty must be viewed in his native context as someone who engages the philosophical tradition from the perspective of an American living at the end of the millennium – one who views Nietzsche as a European pragmatist, as “the most eminent disciple of Emerson” (Rorty, 1991: 61) (Peters, 2000). Like Nietzsche, he wants to drop the cognitivism that has

dominated western Intellectual life since Plato, but, unlike Nietzsche and under the Utopian influence of Dewey, he wishes “to do so in the interests of an egalitarian society rather than in the interests of a defiant and lonely individualism” (ibid.). I argue that this is the difference between the last philosophy of the old (European) world, bespeaking “the end of metaphysics” that focuses upon the question of European nihilism and imminent cultural disintegration, and the confident, self-assured, Utopian philosophy of the New World, which, in its youthful confidence, has never experienced itself as a culture in an organic sense nor felt the crushing import of Nietzsche’s question.

It is a New World pragmatist, Utopian philosophy that is able, like European Nietzscheanism, to reject the Enlightenment’s metaphysical baggage of foundationalism and representationalism, and yet unlike its European older cousin, it does not need to jettison the promise of the Enlightenment’s political project. It does, however, substitute a local, historical and contingent sense of self for the transhistorical metaphysical subject of philosophical liberalism. Indeed, Rorty sees no connection between the philosophical and political strands of the Enlightenment. The success of the “American experiment of self-creation” (Rorty, 1998: 23), unlike its European counterparts, does not depend upon or require any philosophical assurance or justification; philosophy, like poetry, is to be regarded simply as another means of self-expression. On this view, it is up to intellectuals and artists to tell inspiring stories and to create symbols of greatness about the nation’s past as the means of competing for political leadership. Narratives of national self-creation ought to be oriented to what the nation can try to become, rather than how it has come to be. And, perhaps, this is the crucial difference of culture and style between Rorty and the European post-Nietzscheans: he believes that the narrative celebration of his nation’s past is the best means to inspire hope about its future, rather than the need to “work through” (in Freudian sense) its troublesome or shameful episodes.

Yet America has shameful episodes in its history which it has barely begun to acknowledge – the Indian genocides connected with colonization and the history of broken treaties, the Black slave plantation capitalism, and the bombing of Nagasaki and Hiroshima, the napalm bombing of Vietnam, to mention a few.

The problem is that Rorty’s narrativism depends upon a situated epistemology: historically verifiable stories are dependent on the place and time of the story-teller and their subjective experience. It is clear that white philosophers have some difficulty telling the story of Black philosophy or the rise of Black consciousness.

While the end of metaphysics is “the final stage in the secularization of culture” (Rorty in Borradori, 1994: 106) and philosophy, radically detraincenditized and deprofessionalized, becomes just one form of “cultural criticism” among others which deprived of any privileged status or definitive

vocabulary, must operate with historical and socially contextual criteria in the same way as the humanities and the social sciences, it is still the case that consciousness, experience and subjectivity are situated and radically context and person-dependent. Rorty's hope at the beginning of this decade was that "English-speaking philosophy in the twenty-first century will have put the representational problematic behind it, as most French-or German-speaking philosophy already has" (1991: 12). This should have put Rorty in the position of the other able to tell the story of philosophy from the position of the exclusion of Black thought. His only concern is that the academic left no longer participates in the "American experiment of self-creation" (p. 23): it has "no vision of a country to be achieved by building a consensus on the need for specific reforms" (p. 15), and it has no program that can deal effectively with the immiseration produced by the globalization of the labor market. In short, the cultural left, by focusing upon issues of race, ethnicity, and gender has steered towards identity politics and away from economic politics, thus fragmenting the left and destroying the possibility of a progressive alliance. But then he repeats the mistakes on the traditional Left by ignoring the question of race in America altogether. Cavell does no better.

Cavell also has sought to wean philosophy off the search for essences in a way that emphasizes a kind of Wittgensteinian therapy that can no longer be seen as foundational in any sense. Cavell certainly recognizes this critical project and believes that by turning to the history of philosophy we can learn something important about ourselves (Cavell, 1969, p. xviii). Few philosophers have picked up on the similarities between Rorty and Cavell. Mathieu Duplay (2004: 41) is one of the few who recognizes that Cavell and Rorty use similar strategies to resituate philosophy as cultural history or criticism after Wittgenstein. He writes:

In *The Senses of Walden*, Stanley Cavell provocatively states that "America [has] never expressed itself philosophically," save "in the metaphysical riot of its greatest literature." A similar insight has prompted Richard Rorty to proclaim that philosophy can no longer sustain its old territorial claims, and that its sole remaining purpose is to supervise the "conversation" between non-philosophical discourses and forms of knowledge. Cavell counters this argument by pointing out that philosophy actually comes into its own when it loses its traditional privileges: if the mission of philosophical conversation is to question the legitimacy of territorial appropriation in the name of a common quest for justice, as it has been since Plato's Republic, then American literature may be better equipped to carry it out than academic philosophy, with its recognized "field" and carefully guarded boundaries.

Literature or narrative takes the place of analytic philosophy in providing the parameters of philosophical discourse across the humanities. Despite the

similarities in one of the few pieces that directly engages with Cavell, Rorty (1981: 762–3) takes him to task for treating “our” cultural history in a cavalier manner, confusing different senses of skepticism.

Cavell switches with insouciance from the narrow and professional identification of “philosophy” with epistemology to a large sense in which one cannot escape philosophy by criticizing it, simply because any criticism of culture is to be called “philosophy.” To resolve this ambiguity, Cavell would have to convince us that skepticism in the narrow sense, the sense used in ritual interchanges between philosophy professors (Green and Bain, Bradley and Moore, Austin and Ayer), is important for an understanding of skepticism in some deep and romantic sense. He would have to show us that “skepticism” is a good name for the impulse which leads grownups to try to educate themselves, cultures to try to criticize themselves. Then he would have to connect this broad sense with the narrow “technical” sense. My main complaint about his book is that Cavell doesn’t argue for such a connection, but takes it for granted. He doesn’t help us see people like Moore and Austin as important thinkers. Rather, he answers the transcendental *quaestio juris* – how *could* they, appearances perhaps to the contrary, be important? – while begging the *quaestio facti*.

In this context I am less interested in Cavell’s skeptical Romanticism or its basis. The question for both Rorty and Cavell does not concern whose response to our cultural history is more real or helpful, but rather how cultural history as philosophy, or philosophy as cultural history, turns on the a radical contextualism and positionality that includes both the “race” and gender of the narrator. My complaint is that neither Rorty nor Cavell provide a recognition of the very obvious exclusion of histories, narratives and philosophies based on “race” and on the status of “white philosophy” in America.

Steve Fuller (2008) argues that Rorty articulated a distinctive voice of American philosophy by repositioning the pragmatists and that he did what Hegel and Heidegger did for Germany, making America the final resting place for philosophy. In the process Rorty sublimated America’s world-historic self-understanding as a place suspicious of foreigners unless they are willing to blend into the “melting pot.” Fuller remarks that Rorty’s thought reflects wider cultural shifts that analytic philosophers are hard pressed to admit and that Rorty successfully and single-handedly turned America into the world’s dominant philosophical power. He distinguishes between Cavell and Rorty in the following terms:

To understand Rorty’s significance, it is worth distinguishing *American Exceptionalism*, which can be found in the original pragmatists and in our time has been best exemplified in the

work of Stanley Cavell, from *American Triumphalism*, which was Rorty's unique contribution (Fuller, 2008: 121).

Fuller's comments while tongue-in-cheek do demonstrate the differences between Rorty and Cavell and the nature of Rorty's frank "ethnocentrism." Rorty's imaginative capacity to recreate narratives in the history of philosophy enabled him to recast both James and Dewey as public philosophers of the American inheritance while also repositioning the leaders of American philosophers in the analytic tradition – W.V.O. Quine, Wilfred Sellars, and Donald Davidson – redefining their relation to him, to pragmatism and to the future of American philosophy in ways that worried his fellow American philosophers deeply. Attempts to unseat his work by taking issues with the details of his interpretations of thinkers like Wittgenstein, Dewey and Heidegger did not faze him and these counter-interpretations even risked misunderstanding his method as Rorty began to generate a list of alternative vocabularies that provided different and more inclusive descriptions aligning him with a host of figures in the history of philosophy while privileging the American canon. In *Philosophy and Social Hope*, Rorty (1999) describes the philosopher (and himself) as one who "remaps culture," who "suggests a new and promising way for us to think about the relation among large areas of human activity."

3. Narratives of "White Philosophy"

I use the term "white philosophy" to designate the notion of color-blind philosophy which has special application to American philosophy for its extraordinary capacity to ignore questions of race and for its incapacity to recognize the centrality of the empirical fact of blackness and whiteness in American society and as part of the American deep unconscious structuring politics, economics and education. The term that I have neologized for the purpose of this essay comes from critical race studies and is a direct application of whiteness studies.

One of the strongest attacks on "white philosophy" comes from George Yancy, Associate Professor of Philosophy at Duquesne University, who in terms of his own biography describes himself as working:

primarily in the areas of critical race theory, critical whiteness studies, and philosophy and the Black experience. He is particularly interested in the formation of African-American philosophical thought as articulated within the social context and historical space of anti-Black racism, African-American agency, and identity formation. His current philosophical project explores the theme of racial embodiment, particularly in terms of how white bodies live their whiteness unreflectively vis-à-vis the interpellation and de-

formation not only of the black body, but the white body, the philosophical identity formation of whites, and questions of white privilege and power formation.

<http://www.duq.edu/philosophy/faculty-and-staff/george-yancy.cfm>

Yancy (1998) edited *African-American Philosophers: 17 Conversations*, and critical readers on Cornel West (2001) and bell hooks, (2010) as well as the critical collections *The Center Must Not Hold: White Women Philosophers on the Whiteness of Philosophy* (2010) and *What White Looks Like: African American Philosophers on the Whiteness Question* (2004). In “Fragments of a Social Ontology of Whiteness” that constitutes his introduction to *What White Looks Like*, he begins:

Whites have a way of speaking from a center that they often appear to forget forms the white ideological fulcrum upon which what they say (or do not say) and see (or do not see) hinges. In short, whites frequently lie to themselves (p. 1).

He goes to say:

Philosophy is always performed by bodies that are sexed, gendered, and cultural coded in some fashion, and is already always shaped by prior assumptions, interests, concerns, and goals that are historically bounded and pragmatically contextual (p. 1).

Without specific naming “white philosophy” he describes its source and hidden normativity: “The only real philosophy is done by *white men*; the only real wisdom is *white male wisdom*.” He goes on to argue that whiteness “fails to see itself as alien.” To see itself whiteness would have to “deny its own imperial epistemological and ontological base.” By refusing the risk of finding itself in exile “it denies its own potential to be Other... to see through the web of white meaning it has spun” (p. 13). In “Whiting Up and Blacking Out” co-authored with Tracey Ann Ryser he addresses the question of “Naming Whiteness,” extending the line of thought and argument:

Under the influence of European travelogues and colonial films, white philosophers, ethnographers, and fiction writers in the eighteenth and nineteenth centuries, the West came to understand nonwhites as inferior Others. More specifically, the construction of the concept of race functioned epistemologically and ontologically as a prism through which the Other was constructed and render subhuman. The Other was deemed as inferior in virtually every way – intellectually, morally and culturally. The Other was constructed as savage, barbaric, evil, lustful, *different* and *deviant*, in comparison to whites. Whiteness, on this score, served as a metanarrative in terms of which nonwhites functioned as ‘things’ to be exploited and used in the service of white people (Yancy and Ryser, 2008: 1).

In “Situated Black Women’s Voices in/on the Profession of Philosophy” the introduction to a special issue of *Hypatia* devoted to the issue Yancy (2008: 155) come closest to defining the essence of “white philosophy” as an escape from its own historicism.

Doing philosophy is an activity. Like all activities, philosophy is situated. As a situated activity, philosophy is shaped according to various norms, assumptions, intuitions, and ways of thinking and feeling about the world. Fundamentally, philosophy is a form of engagement; it is always already a process in medias res. Despite their pretensions to the contrary, philosophers are unable to brush off the dust of history and begin doing philosophy ex nihilo. Hence, to do philosophy is to be ensconced in history. More specifically, philosophizing is an embodied activity that begins within and grows out of diverse *lived* contexts; philosophizing takes place within the fray of the everyday. On this score, philosophizing is a plural and diverse form of activity. In their attempt to escape the social, to defy history, and to reject the body, many philosophers have pretensions of being godlike. They attempt to defy the confluent social forces that shape their historicity and particularity. They see themselves as detached from the often inchoate, existential traffic of life and the background assumptions that are constitutive of a particular horizon of understanding. It is then that philosophy becomes a site of bad faith, presuming to reside in the realm of the static and the disembodied. Having “departed” from life, having rejected the force of “effective history,” philosophy is just as well dead, devoid of relevance, devoid of particularity, and escapist.

In this line of argument Yancy follows the contours of a case provided by feminist thinkers and also seeks an alliance with them. For instance, Alison Bailey and Jacquelin N. Zita (2007) writing for the same journal provide a set of reflections on whiteness in the United States showing that it has been a long-standing practice in slave folklore and in Mexican resistance to colonialism, Asian American struggles against exploitation and containment, and Native American stories of contact with European colonizers. They chart the emergence of ‘critical whiteness’ scholarship in the past two decades among a small number of philosophers, critical race theorists, postcolonial theorists, social historians, and cultural studies scholars who now ‘focus on historical studies of racial formation and the deconstruction of whiteness as an unmarked privilege-granting category and system of dominance’ (p. vii). Bailey and Zita (2007) argues that this body of scholarship identifies ‘whiteness as a cultural disposition and ideology held in place by specific political, social, moral, aesthetic, epistemic, metaphysical, economic, legal, and historical conditions, crafted to preserve white identity and relations of white supremacy’ (p. vii).

4. The Hope of American Pragmatism

As a New Zealand academic I worked collaboratively with a group of Maori (Ngapui) teachers and members of tribal communities over a period of seven years in the late 1980s and 1990s. Maori are the indigenous inhabitants in Aotearoa/New Zealand and Ngapui is one of the main seven tribes of the northern North Island. With this transformative fieldwork experience I came to work in an American mid-west university with some sensitivity to issues of race by a person of mixed Italian-English ancestry living in a post-white-settler British society.¹ I had been surprised that philosophy courses I took as a student in New Zealand had little to say about “race” and in fact Maori studies had great difficulty asserting itself against the white professoriat at Auckland University (Walker, 1999). The philosophy courses seemed to reflect a curriculum that was not historicist or reflexively sensitive to the local context, with some exceptions (e.g., Salmond, 1985; Oddie & Perret, 1993).

Despite this experience nothing prepared me for the situation I faced in the US or in Illinois even though I had been present for some years before the election of Barack Obama as the first black US president in 2008 – not only the deep structural racism that exists in US society despite Obama’s talk of ‘post-racial politics’ or the thinly disguised racism of the tea-party movement but also the way identity politics in universities prevents talk across theory lines.

I became interested in the philosophy of race and racism while in New Zealand and began rereading the pragmatist canon in terms of the absence of race, learning for instance, that John Dewey (1985) had avoided the topic of race and racism except for one polite essay on “race relations” to the NAACP in 1932. It is also reported that some of his letters are anti-Semitic. I mentioned this fact about Dewey some years ago in passing to James Anderson, the distinguished black historian of education, who said to me ‘Be careful they don’t shoot the messenger.’²

Paul C. Taylor (2004) comments on Dewey’s “silence” in his introductory response to Claude McKay’s³ *Selected Poems*. As he comments: ‘whiteness consists in occupying a social location of structural privilege in the right kind of racialized society (p. 229). Given Dewey’s contextualism, Taylor reads Dewey’s silence as a refusal reflecting the moral psychology of race that helps explains lacunae in his career and, in particular, no references to the Dyer Bill which made lynching a federal crime in the US. Dewey was unaware of his own whiteness that colored his views of education, philosophy, democracy and America.

It is almost as though nothing has been learnt by American mainstream philosophy since Dewey although two recent collections on pragmatism and race, *Pragmatism and the Problem of Race* (2004) and *Pragmatism Nation, and Race: Community in the Age of Empire* (2009), though standing in the

long shadow of Cornel West's (1989) *The American Evasion of Philosophy* go some way towards addressing these concerns. Both books indicate that pragmatism in its classical phase and thereafter has made important contributions to the study of race and racism – its social construction was central to Alain L. Locke's 1915–16 lectures on *Race Contacts*, James, Dewey and Addams railed against metaphysics and promoted the view of the ontological integrity of social groups. West (1989) himself names Wittgenstein, Heidegger and Dewey as those philosophers, inadvertently, who set us free from the confines of a spurious univocalism based on a European projection of its own self-image.

My major operating presumption that became a position I adopted with my students was based on an affirmative response to the question “Does Euro-American modernity, the Western tradition in philosophy, have the intellectual resources to overcome its own institutional racism?” Today I would add “and whiteness”. My answer is an optimistic “yes” even if imperfectly and over the long haul. If I had the space I would argue, for instance, that while contemporary western philosophy in its analytic suit of armor reduced ethics and politics to nonsense and rubble, the Continental driven Hegelian-inspired phenomenology first informed Fanon's existential psychiatry (even though it was marginalized in the Left tradition) and Du Bois' pragmatism (even if he was only recently included as part of a reconstructed canon), and then what West names as the historicist moment in philosophy – Wittgenstein's “cultural turn”, Heidegger's *destruction* of western metaphysics, Derrida's *deconstruction*, Rorty's *demythologization*, Foucault's *genealogy* that all provided “resources for how we understand, analyze and enact our representational practices” (West, 1993: 21). What impresses me greatly is just how recent the rise of black philosophical consciousness is and its contradictory sources of inspiration in the black liberation church, phenomenology and black existentialism, often first registered in forms of poetic and narrative resistance. West's thought really only began to crystallize in the late 1980s with *The Evasion of American Philosophy* (1989) to mature in the 1990s with works such as *Race Matters* (1993) and *Keeping Faith* (1994), to become accepted and anthologized in the 2000s (*The Cornel West Reader*, 2001).

In charting the birth, decline and resurgence of American pragmatism West views it as “a specific historical and cultural product of American civilization, a particular set of social practices that articulate certain American desires, values, and responses that are elaborated in institutional apparatuses principally controlled by a significant slice of the American middle class” (pp. 4–5). He pictures American pragmatism as distinctive philosophy based on its “anti-colonial heritage” and rebelliousness – “a future-oriented instrumentalism that deploys thought as a weapon to enable more effective action – that is more akin to a form of ‘cultural criticism’ in which the meaning of America

is put forward by intellectuals in response to distinct social and cultural crises” (p. 5).

I think he is too kind to American pragmatism, especially given my analysis above, and too quick to see it exclusively as an American philosophy – he like Rorty and Cavell is too much of an American patriot. I would also suggest that black American pragmatism needs to get outside itself by emphasizing its affinities with Africa, not only the tradition of Négritude initiated by Césaire, Fanon and Senghor in the French tradition (as well as its inspiration in the Harlem renaissance) but also the traditions of African indigenous thought, and recognize its potential for globalism by coming to terms with specific forms of black racism in Brazil, China and India, as the west declines and the ‘rest’ rises.

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NOTES

1. Working with Professor James Marshall of Auckland University I collaborated on a series of project located in the north of New Zealand (Taitokerau) to examine questions around the maintenance and control of Maori language (te reo) in school exam practices and the so-called “drop out” (or retention) problem of Maori children. This work is perhaps best illustrated in Peters & Marshall (1988) but see also Peters & Marshall (1990).

2. See Dewey (1985 orig. 1932) and for commentary see Sullivan (2004), Stack (2009) and Fallace (2010).

3. McKay was a Jamaican poet who traveled to the US in 1917 and used the sonnet form to record his responses to the injustices of black life in America. His poem ‘Enslaved’ gives a flavor of his style: Oh when I think of my long-suffering race,/For weary centuries despised, oppressed,/Enslaved and lynched, denied a human place/In the great life line of the Christian West;/And in the Black Land disinherited,/Robbed in the ancient country of its birth,/My heart grows sick with hate, becomes as lead,/For this my race that has no home on earth./Then from the dark depths of my soul I cry/To the avenging angel to consume/The white man’s world of wonders utterly:/Let it be swallowed up in earth’s vast womb,/Or upward roll as sacrificial smoke/To liberate my people from its yoke!

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SUPPORT FOR INDIVIDUAL CONCEPTS

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ABSTRACT. This paper aims to provide support for the view that individual concepts are basic to natural language semantics. First, the use of constant individual concepts allows us to maintain Kripke’s view of proper names as nondescriptional rigid designators in the face of problems created by so-called “empty names.” And second, the distinction between constant and variable individual concepts can function in an analysis of the specific-nonspecific distinction in indefinite descriptions, parallel to Donnellan’s referential-attributive distinction in definite descriptions. Additionally, I respond to arguments that these distinctions are not semantic, and provide evidence that they are.

Keywords: individual concept, definite and indefinite description, semantics

1. Introduction

INDIVIDUAL CONCEPTS are functions from possible world-time points, or situations, to individuals. The notion was introduced (in a somewhat different form) by Carnap (1947), as a suitable analysis of the intensions of proper names and definite descriptions. In his “Advice on Modal Logic”, Dana Scott advocated defining all properties and relations as n-tuples of individual concepts, and the thoroughly intensional grammar devised by Richard Montague and presented in “The Proper Treatment of Quantification in Ordinary English” did exactly that (although he also defined additional representations of semantic value for nonintensional properties and relations in terms of ordinary individuals). Subsequent work within the Montague Grammar framework, following Bennett (1974), eliminated the individual concept foundation of Montague’s grammar as an unnecessary complication. However, more recently there have been moves to reinstitute individual concepts as denotations – cf. e.g. Aloni 2005a, 2005b; Elbourne 2005, 2008.

In this paper I want to add some support for the idea of viewing individual concepts as basic to our semantics. There are two main points that I

would like to make in this effort. First, in §2 below I will argue that the use of individual concepts allows us to maintain (with Kripke, Donnellan, and others) that proper names are nondescriptional rigid designators, while avoiding some serious problems with so-called “empty names”. And then in §3 I will argue that quantifying over individual concepts helps with the semantics of indefinite descriptions. The final section contains some concluding remarks.

Before proceeding, though, it will be useful to make a distinction between VARIABLE INDIVIDUAL CONCEPTS, which can have different values at different times and worlds (or situations), and CONSTANT INDIVIDUAL CONCEPTS which always identify the same individual.¹ Variable individual concepts are associated with ordinary definite descriptions like *the inventor of bifocals*, when they are used attributively; in this case the individual concept in question would be the one which picks out of each world whoever it is who invented bifocals in that world. Constant individual concepts correspond one-to-one with individuals and, I believe, would serve usefully as the semantic values of proper names, indexicals, and referential definite descriptions, and in the interpretation of specific indefinite descriptions.

We turn now to the first argument I want to give, involving empty names.

2. Empty Names

Before getting to the problems associated with empty names, it will be helpful to have a bit of historical background on the semantics of proper names in general.

2.1 Historical Background

Both Frege (1892) and Russell (1905, 1918) suggested that proper names have semantic values similar to those that definite descriptions have. Frege’s example was *Aristotle*, which he proposed might be equivalent to a definite description such as *the pupil of Plato and teacher of Alexander the Great* (Frege 1892: 58n.). Russell used the example of *Bismarck*, which he suggested might call to mind the description *the first Chancellor of the German Empire* (Russell 1918: 171).

Kripke (1980) (following Mill 1851) argued convincingly that proper names are not semantically equivalent to definite descriptions – that they are in fact NONDESCRIPTIONAL (the term is from Salmon 1981). (Cf. also Donnellan 1970.) In addition Kripke characterized proper names as RIGID DESIGNATORS – expressions with the same referent in every possible world.

Meanwhile Kaplan (1977, 1978) argued for the reintroduction into semantic analysis of RUSSELLIAN SINGULAR PROPOSITIONS (RSPs). These are propositions containing actual entities as constituents. While Russell had believed

these to be expressible only by sentences with the demonstrative pronoun *this* (used demonstratively – cf. Russell 1918: 177 and n. 5), Kaplan argued that indexical expressions in general are used to express such propositions.

Kaplan (1977) introduced the terms DIRECT REFERENCE, and DIRECTLY REFERENTIAL, in connection with the semantics of indexicals. These terms are sometimes taken to describe simply instances of reference without the mediation of a Fregean sense – i.e. simple nondescriptionality (e.g. in Salmon 1981: 22). However Kaplan actually intended this term to imply in addition the expression of Russellian singular propositions (as he makes clear in Kaplan 1989).² On this view use of a sentence like (1) would be held to express the proposition in (2).

(1) Obama is slender.

(2) <Obama, the property of being slender>

The proposition represented in (2) has two constituents: one is the person Barack Obama, and the other is the property expressed by the predicate *is slender*. For simplicity's sake, let us refer to this type of theory as the RSP view.

It does not seem as though Kripke originally had in mind this view of proper names. As Kaplan points out, the RSP view of proper names does not leave room for worrying about the reference of a name in a possible world in which the referent does not exist, which is something that Kripke did worry about in *Naming and Necessity* (e.g. p. 21, n. 21; see also the comments of Kripke reported by Kaplan 1989: 569ff.). It is also not the approach incorporated in Montague's 1973 grammar, which does, however, treat proper names as nondescriptonal rigid designators. Instead, Montague (and at least implicitly, it seems, Kripke as well) viewed proper names as expressing constant individual concepts.³ To have something concrete to oppose to (2), it will be useful to introduce some notation. Following Montague let us use the caret, ^, to denote the intension (function from possible worlds to the denotation) of whatever it combines with. Then on the view I am supporting here, use of (1) expresses the proposition represented in (3).

(3) <^Obama, the property of being slender>

The idea is that (3) represents a proposition consisting of the constant individual concept that picks Barack Obama out of each world-time point (or situation) in which he occurs, plus the property of being slender.

Despite the backing of powerful figures such as Kripke and Montague, the constant individual concept interpretation of proper names seems to have fallen by the wayside, while the RSP approach has increased in popularity. The latter has been adopted by a number of influential figures in philosophy

of language (e.g. Richard 1983, Salmon 1986, Soames 1987), and as Stuart Brock put it, “it would not be unreasonable to suggest that this view has become the new orthodoxy” (2004: 278).

I have to say I have some sympathy with Davidson’s (2000) complaint that the postulation of propositions which contain concrete physical objects is a bit mind-boggling. After all, propositions are abstract things that can be the objects of propositional attitudes (Davidson 2000: 286f). But perhaps this is just a cultural bias. I am reminded of Whorf’s description of the (Russellian!) Hopi in contrast to what he assumed were Standard Average European ways of thinking about thinking about things:

Now, when WE think of a certain actual rosebush, we do not suppose that our thought goes to that actual bush, and engages with it, like a searchlight turned upon it. What then do we suppose our consciousness *is* dealing with when we are thinking of that rosebush? Probably we think it is dealing with a ‘mental image’ which is not the rosebush but a mental surrogate of it. But why should it be NATURAL to think that our thought deals with a surrogate and not with the real rosebush? ... A Hopi would naturally suppose that his thought...traffics with the actual rosebush – or more likely, corn plant – that he is thinking about. The thought then should leave some trace of itself with the plant in the field. (Whorf 1941: 149f; italics and small caps in original.)

Unfortunately time prevents a more detailed examination of the issues Whorf raises in this passage. Instead we must turn now to the problems presented by empty names.

2.2 An Initial Look at the Problems

An empty name is a name without a bearer. Traditional examples are names of fictional, mythical, or hypothetical entities – e.g., respectively, *Sherlock Holmes*, *Medusa*, and *Vulcan* (as the name given to the planet which Le Verrier hypothesized to account for perturbations in Mercury’s orbit). Let us start with those. We need to consider the consequences of the RSP theory for sentences like those in (4).

- (4) a. Sherlock Holmes does not exist.
- b. Sherlock Holmes was a detective.

On the face of it, both of these sentences seem to be true – (4a) with respect to the actual world, and (4b) with respect to the Conan Doyle novels. In any case both also seem to be meaningful. But as we have just seen, on the currently popular RSP view the sole semantic contribution of a name to a sentence is its bearer. If a name does not have a bearer, it does not have

anything to contribute to a sentence containing it. The results in this case would seem to be what have been called the “gappy” (the term is apparently Kaplan’s – cf. Almog 1991: 218, n. 15), or “structurally challenged” (Salmon 1998: 307) propositions represented in (5).

- (5) a. $< , \text{ the property of not existing} >$
 b. $< , \text{ the property of having been a detective} >$

The propositions represented here are missing a constituent, and thus are not fully meaningful. Furthermore it seems at first glance as though they could not have a truth value, and thus could not be true.

2.3 Attempts at Solution

There is a voluminous literature on the difficult problems just noted. We will look at two general kinds of approaches to solution – what I’ll call the “gappy” and the “no gap” approaches.

2.3.1 Gappy. On the gappy approach, we agree that propositions expressed with empty names are missing a constituent. However, we also note that (4a) is a negative sentence. The analysis in (5a) assigns the negative element narrow scope, but that is not the only possibility. Indeed, (4a) may plausibly be read as represented in (6).

- (6) $\sim < , \text{ the property of existing} >$

In (6), unlike (5), the property of existing is being predicated of nothing, and the resulting gappy proposition is negated. If we view the negation in (6) as expressing an operator which can combine with any proposition (even a gappy one) and yield something that is true whenever its argument fails to be true, then (6) will be reckoned true.⁴

So far so good (though see below), but problems still remain. For one thing, we might consider (4a) (*Sherlock Holmes does not exist*) to express something different from (7).

- (7) Medusa does not exist.

However on this type of analysis both would wind up expressing (6). In Braun’s (1993, 2005) view, that is OK. Our sense that the two sentences express different propositions comes from the fact that two different BELIEF STATES can have an identical proposition as content. When we contemplate (4a) we are contemplating (6) in a SherlockHolmesish way, whereas when we contemplate (7) we are contemplating (6) in a Medusaish way. But Reimer (2001) argues that Braun’s analysis does not satisfactorily capture our intuition

that (4a) and (7) actually have different semantic contents. Pretheoretically, she suggests, ordinary speakers would believe that someone who asserts (4a) says **of Holmes** that he does not exist, while in uttering (7) they say instead **of Medusa**, that she does not exist. Braun's analysis does not account for these intuitions.

Also, we have not yet dealt with (4b) – *Sherlock Holmes was a detective*. A number of scholars have suggested that we treat sentences like this, on the understanding which appears true, as implicitly relativized to the fictional contexts surrounding the creation of the characters.⁵ For the name *Sherlock Holmes*, that would be the context of the Conan Doyle stories. That is, we understand (4b) as though it were prefixed by something like *According to the Conan Doyle stories....* Still, we need to explain how an empty name occurring in that context can add significance. A Fregean might argue that the contexts in question are intensional and call on the senses of proper names, but on the RSP view we are considering there is no sense or intension associated with a name which can be called on to play a role in these sentences.

To these objections I want to add another. It seems to me that, despite the name, gappy propositions are not propositions. Sometimes objects with parts missing can still be correctly classified as the objects they would indubitably be with those parts, but in the cases we are considering I think too much is missing. Consider a board, for instance, which is leaning against the wall in my garage. If I were to put legs on it, it would be a table, but it does not have any legs and never has. It does not seem right to call it a “table,” even a “structurally challenged table.” Or consider a ring, such as my wedding ring. It only lacks filling to be correctly called a “disk”, but it is not a disk, not even a gappy disk, and cannot correctly be called one. I believe those who refer to the objects represented in (5) and (6) as gappy, or structurally challenged, propositions may be misled by their terminology into accepting them as propositions. If I start calling that board in my garage a “structurally challenged table,” pretty soon I may start to think of it as a table. But in this case it is important to bear in mind the lesson (sometimes attributed to Abraham Lincoln) concerning how many legs a horse has if we call a tail a leg.

2.3.2. *No gap*. Other scholars have argued that what we have been calling “empty names” are not actually empty. Instead, they denote abstract objects of one kind or another – creations of authors like Conan Doyle's Sherlock Holmes, the subjects of myths passed down through generations like Medusa, mistaken hypotheses like Le Verrier's planet Vulcan. Salmon (1998), in a major defense of this view for at least some of the problematic names under discussion, cites Kripke (1973), van Inwagen (1977, 1983) and a number of others (Salmon 1998: 314, n. 32; cf. also Soames 2002).

With the no gap approach we do not have the problems addressed in the preceding subsection concerning the content of proposition-like objects that are missing important constituents. Instead we have some new problems: under this theory it appears sentences like (4a) and (4b), repeated below, should be false, contrary to our intuitions.

- (4) a. Sherlock Holmes does not exist.
- b. Sherlock Holmes was a detective.

Abstract mythical or fictional objects do exist (making (4a) false), but they do not have the properties that concrete objects have, like being a detective or a planet (making (4b) false as well). So the defender of the no gap view must somehow explain or explain away our intuitions that the sentences in (4) are true.

There are several lines one might take at this point. One is to argue that the names in question are actually ambiguous; along with the abstract fictional referents alluded to in the preceding paragraph we could also acknowledge referents that exist only relative to the myths, fictions, or hypotheses that introduced the names. The latter type of referent does not exist, but could have the kinds of properties attributed to such an entity. But postulation of ambiguity is almost never considered a satisfactory response to semantic problems of the type we are considering, and Salmon argues that there is no such ambiguity, and in particular no use of the latter type. “There is no literal use of ‘Sherlock Holmes’ that corresponds to ‘Holmes₁’,” where *Holmes₁* represents “an allegedly thoroughly nonreferring use that pretends to name a brilliant detective who performed such-and-such exploits” (Salmon 1998: 300). And in any case this would seem to return us to the problems of the gappy approach, at least for those meanings of the names.

An alternative is to choose instead a pragmatic route, according to which we interpret sentences like those in (4) as though the name in question had such a referent (that is, one that does not exist but (relative to the relevant fictions or myths) has the kinds of properties attributed to it), even though the name does not have a referent. On such an interpretation the sentences in (4) would be felt to be true, even though according to the semantics of English, they are not. That is, we mistakenly take these sentences as though there were such uses of an empty name. Thus Soames remarks that “[t]he propositions asserted...by an utterance of a sentence containing an ‘empty name’ are not limited to those semantically expressed by the sentence uttered” (Soames 2002, 90). So we may construe sentences such as (4) in a way that makes them sound true, but that does not correspond to anything they actually express. (Cf. also Adams and Stecker 1994, Adams, Fuller and Stecker 1997, who adopt a similar pragmatic route within a gappy approach.) But generally speaking the pragmatic alternative has not been favorably viewed.

As argued by Reimer (2001, 2007), among others, the intuitions about sentences like those in (4) seem to be just too strong to be satisfactorily explained away in this fashion.

2.4. Rigidified Descriptions

It is commonly assumed that the problems with empty names we have just been exploring are a result of the RSP theory – the inclusion of entities in propositions. Brock (2004) points out that similar problems arise for descriptonal theories of proper names that incorporate Kripkean rigidity. Brock considers two varieties of such theories. The first is one which postulates world-indexed descriptions; thus *Aristotle* might be held to express the property “the one who was **actually** the student of Plato and teacher of Alexander the Great.” Such a theory runs afoul of sentences such as (8).

(8) Santa Claus might have existed.

Our intuition is that (8) is true, but on the world-indexed description view, (8) says something like “There is a possible world in which the one who **actually** lives at the North Pole and brings presents on Christmas Eve exists”. And this is not true (since no one actually lives at the North Pole and brings presents).

The other rigidified descriptonal view Brock considers is one which views the descriptions in question as always taking wide scope outside any other sentence operators. This approach also has problems with (8); on this approach (8) means something like “There is an individual who lives at the North Pole and distributes presents on Christmas Eve, and that individual might have existed,” which is obviously false.⁶

Brock notes that there is a way out for the theories we have been considering, which is to distinguish empty names from ordinary ones. Ordinary names will continue to be analyzed as nondescriptonal rigid designators – either because they are associated with a uniquely identifying description which is rigidified in one of the two ways we’ve just seen, or because they are treated in the RSP way as contributing their referents to the propositions expressed by sentences containing them. Names of fictional or mythical or postulated entities, on the other hand, will be held to express suitable uniquely identifying properties such as those expressed by definite descriptions. If we are Russellians, then the absence of a referent is not a problem – the descriptions in question are unpacked as quantificational clauses. If we are Fregeans then there is still a problem, since the absence of a referent means that containing extensional sentences cannot have a truth value. Brock himself suggests that some kind of Meinongian abstract entity might serve as a referent, but we saw above in §2.3.2 that this approach is not without problems.

2.5. A Much Broader Problem

What has been ignored in the foregoing presentation, as in most of the literature on empty names (Salmon 1998 being a notable exception), is that there are many instances of empty names that are **not** the names of fictional or mythical or hypothetical entities, but are rather the perfectly good names of entities which happen to no longer exist – like *Sparky Anderson*, *Muriel Hauser* (the name of my mother-in-law), *Lehman Brothers*, and *The World Trade Center*. Since the referents of these names no longer exist, sentences declaring that fact, such as (9), would be subject to the same problem as *Sherlock Holmes does not exist*.

(9) The World Trade Center no longer exists.

Furthermore it would seem that on the RSP view even everyday sentences like those in (10) would be problematic.

- (10) a. The Detroit Tigers hired Sparky Anderson in 1979.
- b. Muriel Hauser spent most of her life in Allen Park, MI.
- c. Lehman Brothers had offices in The World Trade Center.

In each case there is at least one constituent of the sentence that has nothing to contribute to any proposition expressed by the sentence, and in (10c) there are two such. Thus on the RSP view these sentences should not be able to express complete well-formed propositions, or (on Braun's view – see n. 4 above) would be automatically false.⁷ One would expect this disability to correlate at least with a sense of anomaly, and perhaps further an inability to grasp what the sentences are trying to say and an inability to believe that what they say is true (since it is not clear that they say anything). However, of course, none of these consequences are felt.

As we have just seen, Brock concludes that the best way out for those who accept Kripke's conclusions about the nondescriptionality of proper names generally speaking, is to set the names of fictional or mythical or hypothetical entities aside and give them a descriptive analysis. However we can hardly do that for the names of no longer existing entities like Muriel Hauser or Aristotle and still claim to be accepting Kripke's conclusions. Many of Kripke's arguments, after all, involved the names of entities who no longer existed – Moses, Aristotle, Socrates. And others involved entities who existed at the time but no longer do – like Gödel and Nixon. And yet the arguments are as convincing as they always were.

This is where constant individual concepts come in. If we assume that proper names express constant individual concepts then we have constituents of an appropriate type to serve in the propositions expressed by sentences like those above. Sentences like (9) will be true because the individual concept

expressed by *The World Trade Center* is valueless in the actual world after September 11, 2001. The sentences in (10) are true because the constant individual concepts associated with the proper names in question pick out entities from the past that had the properties and relations predicated of them.

When we turn to the names of fictional, mythical, and hypothetical entities there are several possibilities. It may be the case that these also express constant individual concepts. Then some issues arise as to how the constant value is determined, given that there can be no causal contact with the entities in question (Sherlock Holmes, Santa Claus, Medusa). Of course number words show the same semantic properties as proper names, and there can be no causal contact with numbers, so perhaps lack of causal contact is no bar to a constant individual concept. (See B. Abbott 2010 for further discussion of this issue.) On the other hand there is the possibility that Brock (and others whom he cites) is correct in concluding that the names of fictional entities are in fact different from the names of once-but-no-longer existing entities. Perhaps these names are descriptive, and the individual concepts they express are not constant but rather variable ones. In either case I would argue that we are better off than with either the gappy or the no gap solutions discussed above. And more importantly, it is clear that we do not have the massive problems that arise with no longer existing entities on the RSP approach.

2.6 Section Conclusion

In this section we have seen that serious problems arise for the RSP view of proper names – and we have looked at some of the contortions which supporters of that view have had to propose by way of trying to solve those problems. I have been arguing that viewing proper names (and other non-descriptive expressions) as expressing constant individual concepts rather than the individuals themselves allows us to bypass these problems associated with empty names – and especially the important but frequently ignored case of names of entities which once existed but no longer do. We turn now to a somewhat different application of individual concepts – their use in the interpretation of indefinite descriptions.

3. Indefinite Descriptions

My second argument for individual concepts involves their use in the analysis of a certain specific-nonspecific distinction in indefinite descriptions. The terms “specific” and “nonspecific” are used in a variety of ways, so it will be important to be clear on the use intended here. That is the topic of the first subsection below. Following that I sketch an analysis which relies on a distinction in individual concepts; this analysis is modeled on an analysis of

Donnellan's (1966) referential-attributive distinction which was outlined by Kaplan (1978). Some important figures have argued that these kinds of distinctions (both Donnellan's referential-attributive distinction and the specific-nonspecific distinction) are not semantic and thus should not be given a semantic analysis at all. I reply to two such lines of argument in §3.3.

3.1 The Specific-Nonspecific Distinction

The specific-nonspecific distinction I want to focus on here is one which arises in ordinary, nonintensional contexts, where the indefinite description in question is not within the scope of any kind of sentence operator such as a modal or a propositional attitude verb. The distinction has been pointed out by many people; perhaps Lauri Karttunen (1969) was the first in modern times. (Cf. also Chastain 1975, Fodor & Sag 1982.) The idea is that a sentence like (11)

(11) Mary had lunch with a logician.

could be used in either of two ways. Used nonspecifically, (11) simply reports what type of person Mary had lunch with. But used specifically (11) is intended to introduce an entity into the discourse. Other descriptions of the specific use characterize it as "referential," and mention the speaker's having a particular individual in mind (in this case, as the logician Mary had lunch with).

It is important to note that this distinction does not make a difference in the truth value of what is expressed in an utterance of (11). That is, (11) will be true if and only if there is a logician with whom Mary had lunch. Nevertheless I want to argue that the distinction does make a difference in the kind of proposition expressed in an utterance of (11); the specific interpretation will involve the introduction of a constant individual concept while the nonspecific interpretation will not (or not necessarily). In the examples below we will see evidence that this specific-nonspecific distinction is indeed semantic, in the sense that it is conventionalized.⁸

Notice that in some contexts, indefinite descriptions occur unambiguously. In directives such as (12)

(12) Get me a logician!

for example, *a logician* can only be understood nonspecifically. The explanation for this lack of ambiguity is obviously pragmatic: the indefinite description by itself does not identify any particular individual. If the speaker of (12) intended it specifically, the directive would be anomalous since the addressee would not be given sufficient information to comply.

On the other hand casual speech allows disambiguation in the opposite direction, with the use of an alternative indefinite determiner, namely the non-demonstrative (and non-anaphoric) indefinite *this* determiner. That is the *this* which can occur in ordinary existential (or *there be*) sentences like (13):

(13) There was this cool logician at Mary's party last night.

(Genuine demonstratives are not felicitous in ordinary existentials of this type.) As pointed out by Prince 1981, indefinite *this* NPs can only be understood specifically, so that (14a) below, with the non-demonstrative, non-anaphoric, indefinite *this*, does not have a nonspecific interpretation. The adjective *certain* may function similarly in more formal dialects, as shown in (14b).

(14) a. Mary had lunch with this (cool) logician.

b. Mary had lunch with a certain logician.

Instead, *this/a certain logician* in (14) introduces a new discourse entity, and we expect to hear more about this person in subsequent utterances.

As we might expect from the foregoing, use of the specific indefinite *this* or *a certain* cannot occur felicitously in an imperative like those below.

(15) a. # Get me this (cool) logician!

b. # Get me a certain logician!

The fact that these utterances show anomaly indicates that the specific-nonspecific distinction is semantic (conventionalized).

3.2 Proposed Analysis

The kind of specific-nonspecific distinction we have just been looking at has obvious parallels with Donnellan's (1966) referential-attributive distinction. In "Dthat" Kaplan sketched an analysis of Donnellan's referential use in which the definite description would receive an interpretation as a constant individual concept – a function from possible worlds which yields at each world whatever it is that satisfies the description at the world of utterance. He did not pursue that line, of course – concluding that referential definite descriptions should instead be analyzed like demonstratives on his view, in the RSP type of approach we saw above. However, there is nothing to prevent **us** from considering constant individual concepts as a viable alternative analysis, and we have already seen evidence of the superiority of this approach when it comes to the problems associated with empty names. (Note that similar problems would arise for Kaplan's view of empty definite descriptions, on their referential use.)

In the final section of his paper, labeled “Exciting future episodes”, Kaplan listed as #4 “Extending the demonstrative notion to *indefinite* descriptions to see if it is possible to so explicate the $\pm$ specific idea. (It isn’t.)” (Kaplan 1978: 241). It is clear what the problem is, given the RSP view of the referential use of definites: there is no way to identify any particular individual to be the semantic value of an indefinite.⁹ However, if we stick with individual concepts, why couldn’t we distinguish the specific reading of an indefinite description from the nonspecific reading by holding that in the former use we are quantifying over constant individual concepts, and in the latter over (possibly) variable ones? So, my argument here, in brief, is this: if we accept the specific-nonspecific ambiguity of indefinite descriptions, parallel to Donnellan’s referential-attributive distinction for definite descriptions, then the difference between constant and variable individual concepts can serve to interpret both distinctions in a parallel way.¹⁰

3.3 Countering Counterarguments

We have seen some evidence above in §3.1 which would lead naturally to the conclusion that the specific-nonspecific distinction in indefinite descriptions is a conventional (semantic) one. In this subsection I would like to respond to a couple of lines of argument that such a conclusion would be mistaken – that the specific-nonspecific distinction we are concerned with here is **not** a semantic one. The first of these lines of argument comes from the parallel between Donnellan’s referential-attributive distinction for definite descriptions and the specific-nonspecific distinction in indefinites. Kripke (1977) has argued that Donnellan’s referential-attributive distinction is **not** a semantic one. If he is correct it would weaken our arguments for the semantic status of the specific-nonspecific distinction. The other line of argument comes from Ludlow and Neale (1991), who were reviving arguments from Russell (1919). We will consider these two lines of argument in that order.

3.3.1 Kripke’s arguments. Kripke’s 1977 paper “Speaker’s Reference and Semantic Reference” is often seen as establishing conclusively that Donnellan’s referential-attributive distinction is one of speaker meaning rather than linguistic meaning. If that were correct, it would be natural to propose a similar analysis for the specific-nonspecific distinction – something Kripke did indeed suggest (1977: 276, n. 40). It is important to note, however, that Kripke himself was very cautious about his conclusions, claiming only that “the considerations in Donnellan’s paper, *by themselves*, do *not* refute Russell’s theory” (Kripke 1977: 255, italics in original), and allowing that “it may even be the case that a true picture will resemble various aspects of Donnellan’s [picture?] in important respects” (255–6).

Citing Grice's distinction between what one's words mean and what one might mean in uttering them (e.g. in Grice 1975, 1989), Kripke suggested that the content of Donnellan's referential use might in fact amount to nothing more than a proposition which a speaker may intend to convey in producing an utterance which includes a definite description, but which is not literally expressed. In so arguing Kripke (following Donnellan) assumed a view of the referential use which involved the possibility of misdescription. For example, someone uttering (16),

(16) The guy drinking a martini over there is really cute.

and intending to use *the guy drinking a martini over there* referentially to pick out a particular person, would be held by Donnellan to have said something true even if the intended referent were not drinking a martini, as long as they were really cute. But as Wilson 1991 (among others) has pointed out, similar possibilities for misdescription exist for **any** type of NP, including proper names (as noted also by Kripke himself), as well as pronouns and, most importantly, definite descriptions used **attributively**. This kind of difference between semantic content and speaker's meaning exists across the board, and is thus orthogonal to Donnellan's distinction. A number of scholars (Kaplan 1978, Wettstein 1981, Reimer 1998, among others) have in fact advocated a view of the referential use according to which the semantic content of the definite description is entailed to hold of the referent. Thus (16) would not be true on either attributive or referential construals in the situation described.

Kripke's main argument in the 1977 paper involved several hypothetical languages, called "Russell languages," which incorporate Russell's analysis of definite descriptions. Either the language is such that Russell's analysis is stipulated to be correct for definite descriptions, or (in the strongest case) the language lacks definite descriptions altogether. Kripke argued that in such languages, speakers would use definite descriptions or their quantificational counterparts in order to convey propositions about particular individuals. Even in ordinary English, he noted, one might say, archly, *Exactly one person is drinking champagne in that corner, and I hear he is romantically linked with Jane Smith*, using a quantificational expression to communicate a proposition about a particular individual (Kripke 1977: 266). Since referential usages would arise in such a language, the fact that they occur with English definite descriptions does not show that Russell's analysis is not correct.

In response, Reimer (1998) has pointed out that the fact that definite descriptions in English are **frequently** and **standardly** used in a referential way supports Donnellan's claim of ambiguity. As she notes, it is difficult to know what more would be required to establish the claim that an expression had a particular meaning beyond the fact that it is frequently and systematically used to express that meaning. Reimer gives an analogy from language change

(I'll substitute a slightly simpler example): one might argue along Kripkean lines that, e.g., *want* means only “lack” and not “desire,” since in a language where it is stipulated that *want* just meant “lack,” people would use it to convey propositions about desiring. Of course that is just what happened historically in English, but we would not want to conclude, given the existence of that past stage of English, that in **current** English *want* means only “lack” and not “desire.” Interestingly, at the very end of his paper Kripke acknowledges such a possibility: “I find it plausible that a diachronic account of the evolution of language is likely to suggest that what was originally a mere speaker’s reference may, if it becomes habitual in a community, evolve into a semantic reference” (1977: 271). Indeed, given that the definite article in English evolved from a demonstrative determiner, it is most likely that the referential use arose first and the attributive only later.

Thus it is not at all clear that Kripke has successfully shown that Donnellan’s referential-attributive distinction is not semantic or conventional. Given the evidence above in §3.1 that the specific-nonspecific distinction is conventional, its parallel with Donnellan’s distinction is another argument that Donnellan’s distinction is as well. We turn now to arguments put forward by Ludlow and Neale.

3.3.2 Ludlow and Neale’s arguments. Ludlow and Neale (1991) approve of Kripke’s pragmatic analysis of Donnellan’s referential-attributive distinction, and, noting his comment that a similar approach should apply to the specific-nonspecific distinction in indefinites, take on the job of carrying out that suggestion. Ludlow and Neale actually introduce several different conceptions of the specific interpretation of indefinite descriptions – labeled respectively “referential,” “specific,” and “definite”¹¹ – but intend to argue that “none of these uses needs to be regarded as reflecting anything semantical in nature” (172).

Early in their discussion Ludlow and Neale introduce Russell’s conception of propositions expressed with referring expressions, according to which they contain actual entities. This is the RSP analysis we criticized above in §2. In so doing, they continue: “it will be convenient to follow him in this, but nothing in the present paper turns on this conception of a so-called *singular* proposition” (Ludlow and Neale 1991: 172; italics in original). However in fact, as we shall see, their arguments against recognizing a specific reading for indefinite descriptions at times rest heavily on exactly this conception of what would be expressed in that case. Thus two of Russell’s (1919) arguments which they cite approvingly go as follows. Consider an utterance of (17).

(17) A man from York died last night.

Suppose first that Jones, from York, did die last night. Still, the addressee of (17) can perfectly well understand (17) without any acquaintance with Jones (or, one might add, with any other individual from York). Ludlow and Neale add: “If I had uttered ‘Jones died last night,’ the situation would be very different. ‘Jones’ is a genuine referring expression, and by Russell’s Principle, it is necessary to establish the referent of ‘Jones’ in order to understand the proposition expressed” (175).

Similarly, suppose that there are no men from York at all:

Then clearly my utterance of ‘A man from York died last night’ was not about Jones or anybody else. But if ‘a man from York’ is interpreted as a referring expression then no proposition was expressed: there is no object answering to the descriptive condition and hence no object to make it into any proposition. Yet my utterance still expresses a perfectly determinate proposition. In fact the proposition expressed by my utterance is false. A proposition is expressed independently of whether the denoting phrase actually denotes. With a referring expression, however, if there is no referent then no proposition is expressed. (Ludlow and Neale 1991: 175.)

Note that if we interpret indefinite descriptions, construed specifically, using constant individual concepts, then these arguments do not go through. In uttering (17) a speaker would be expressing a general proposition in either case (that is on either the specific or the nonspecific interpretation) – the difference lying only in what kind of individual concept is involved. And the absence of any men from York would be no bar to interpreting an utterance of (17) specifically as well as nonspecifically.

It might be thought that Ludlow and Neale only use this particular conception of singular propositions in order to explain Russell’s arguments. However, they admit that they intend to use Russell’s strategy in their own arguments, and a bit later in the paper they make the following remark.

The claim that referential usage (as we define it) is a reflex of something semantical is nothing short of the claim that, on occasion, indefinites have the characteristic properties of genuine referring expressions. But this claim does not stand up to serious scrutiny. **Recall that a noun phrase *b* is a referring expression just in case its bearer is a constituent of the proposition expressed by an utterance of a sentence containing *b*.** (Ludlow & Neale 1991: 178, boldface added.)

It is clear from this remark that, contrary to their earlier claim that the RSP analysis is not essential to their critique, they are in effect **defining** referentiality as the production of RSP type propositions.

I should make clear that I am not arguing that indefinite descriptions are referential on their specific uses, if “referential” means that there is a particular individual which is required to have certain properties or bear certain relations if the utterance in question is to be true. On the view proposed here, indefinite descriptions on their specific use are quantificational, just as they are on the nonspecific use. Still, I am arguing, the difference is semantic, lying in what kind of individual concepts are in play – constant ones or variable ones.

Ludlow & Neale consider specific uses of example (18) (Ludlow & Neale’s ex. 2 with underlining added).

(18) A convicted embezzler is flirting with your sister.

They say:

let us suppose that, contrary to *S*’s [that is, the speaker’s] expectations, *H* [the hearer] is not in a position to determine who *S* has in mind.... Would *H* thereby be deprived of the possibility of grasping the proposition expressed by *S*’s utterance?

Intuition suggests not. So if the Russellian analysis is to be undermined, the semantical ambiguity theorist must present an argument to the effect that *H* would be so deprived. (Ludlow & Neale 1991: 178)

However this conclusion does not follow if the semantical ambiguity theorist is not proposing that the specific reading involves the expression of a Russellian singular proposition. In particular, on the view I am supporting here, where specific readings involve existential quantification over constant individual concepts, there is no prediction that an addressee cannot grasp such a reading without knowledge of which individual the speaker had in mind in making the assertion.

3.4 Section Conclusion

In this section we have been looking at the specific-nonspecific distinction in indefinite descriptions. We have seen some evidence that this distinction is semantic, in the sense that it is conventionally encoded. Kaplan (1977) had suggested that Donnellan’s distinction could be analyzed with a distinction in individual concepts – constant individual concepts for the referential use and variable ones for the attributive use. (As noted, he abandoned the constant individual concept analysis in favor of the RSP analysis.) As Donnellan’s distinction parallels the distinction in indefinite descriptions, a plausible analysis of the latter is in terms of a distinction in which kind of individual concepts are being quantified over – constant vs. variable. In support of this

line I have tried to counter some arguments against the claim that Donnellan's distinction, as well as the specific-nonspecific distinction, is semantically encoded.

4. Concluding Remarks

In this paper I have tried to support the use of individual concepts in natural language interpretation by discussing two kinds of cases in which they might prove useful. We looked first at the interpretation of proper names, where the use of constant individual concepts allows us to incorporate the features of nondescriptionality and rigid designation which Kripke (1980) has so successfully argued for, without running into the serious difficulties with empty names encountered by the alternative RSP analysis. Secondly, I have argued that the use of individual concepts, and specifically the difference between constant and variable ones, can provide a suitable analysis of the difference between the specific and the nonspecific interpretation of indefinite descriptions.

NOTES

1. It should be clear that I am not assuming Lewis's (1968, 1986) counterpart view of cross-world identification, according to which no individual inhabits more than one possible world. Lewis's view clashes sharply with our intuitions concerning individuals over time, and following Kripke (1980: 15ff) I will assume that it is also not correct for variations in worlds/situations.

2. Salmon (e.g. 1998) and others use the term MILLIAN for the view that proper names contribute their bearers to the meanings of sentences containing them, but this usage is suspect. Mill held that proper names have only denotation. However he did not say that the denotation of a proper name serves also as its connotation. Braun (2005: 620, n. 2) also notes the misleadingness of the term "Millianism" for the analysis of proper names as expressing Russellian singular propositions. The constant individual concept view we are about to explore has at least an equal claim to the term.

3. I am simplifying Montague's analysis in ways not relevant to our present concerns.

4. David Braun (1993, 2005) has been a major defender of the gappy approach. He argues that even simple sentences with empty names may express gappy propositions with truth values, although those values will always be false. On Braun's view (ia) expresses the false gappy proposition in (ib).

(i) a. Medusa exists.

b. $\langle \text{ } \rangle$, the property of existing

5. Cf. e.g. Lewis 1978, Brock 2002. And cf. also H.P. Abbott 2008, ch. 12, for relevant discussion.

6. The problem just described only arises assuming, as we have been, that existence is a property. However Brock shows that even without this assumption, the wide

scope version of rigidified descriptionism will have a problem very similar to the one shown here. See Brock 2004: 292.

7. Salmon (1998) appears to assume that the proposition expressed by *Socrates does not exist* is **not** a gappy proposition, despite the fact that *Socrates* currently lacks a referent. He devotes a page or so to discussing the fact that, on his analysis, the **proposition** expressed by *Socrates does not exist* does not exist (286–7), but never explains (at least as far as I can see) why this nonexistent proposition is nevertheless complete and not gappy, or structurally challenged. Certainly the meaning of *does not exist* exists now, so the only thing that would seem to be missing on the RSP view is the meaning of *Socrates*.

8. See Stalnaker 1974: 479 for clarification of two senses of “semantic” (as opposed to “pragmatic”) – one involving truth conditions, and the other involving conventionalization.

9. Donnellan (1978) proposed that the specific use of indefinite descriptions involves the speaker having a particular individual in mind as the entity spoken about, where that entity would play a role in the truth conditions of such utterances. King (1988) argues convincingly against this proposal.

10. Östen Dahl (1988) is another who has observed the similarity between Donnellan’s referential-attributive distinction and the specific-nonspecific distinction in (unembedded) indefinite descriptions that we are discussing here. Dahl calls the specific reading “P-specific”, where “P-” stands for “pragmatic” in the sense that truth conditions are not affected by whether the indefinite is interpreted specifically or nonspecifically. Toward the end of his paper Dahl mentions briefly a difference between “stable” and “unstable” individual concepts, which seemed to me to parallel to the difference I want to invoke here between constant and variable individual concepts. However in a personal communication, he has indicated some important differences between the two ideas.

11. I must confess to an inability to make intuitive contact with these fine-grained distinctions.

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CONSTRAINING THE TIME WHEN LANGUAGE EVOLVED

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ABSTRACT. The precise timing of the emergence of language in human prehistory cannot be resolved. But the available evidence is sufficient to constrain it to some degree. This is a review and synthesis of the available evidence, leading to the conclusion that the time when speech in some form became important for our ancestors can be constrained to be not less than 400,000 years ago, thus excluding several popular theories involving a late transition to speech.

Keywords: emergence of language, human prehistory, speech, ancestors

1. Introduction

That modern humans have language and speech, and that our remote ancestors did not, are two incontrovertible facts. But there is no consensus on *when* the transition from non-language to language took place, nor any consensus on whether it was a sudden jump or a gradual process. In this paper, I will explore to what extent the timing of the transition to language can be constrained by fossil, archeological, genetic, and other evidence. A fuller discussion of this and related issues can be found in Johansson (2005).

2. Upper Limits

Very little can be said about upper limits on the age of language. Our closest relatives today do not have language in any reasonable sense, at least not in the wild. A reasonable inference from the lack of native ape language is that the last common ancestor of us and the other apes also lacked language. The alternative, that language evolved earlier and was subsequently lost in the chimpanzee lineage, appears implausible – why would something as useful as language be lost by a species heavily engaged in social communication?

The last common ancestor of humans and chimps almost certainly lived less than 10 million years ago (mya) (Benton and Donoghue, 2007), and conceivably as recent as 4 mya, though such a recent date is becoming difficult to reconcile with fossils. The current best estimate from molecular data is around 5 mya (Pääbo, 2003).

The oldest known fossils that with some confidence can be assigned to the human line are those in the genus *Ardipithecus*, from 4-6 mya, found in Ethiopia (Haile-Selassie et al., 2004; White et al., 2009). Other possible contenders for the earliest proto-human fossil are *Sahelanthropus tchadensis*, a skull found in Chad (Brunet et al., 2002), from about 6-7 mya with a puzzling mixture of features making it difficult to classify, and *Orrorin tugenensis* (Senut et al., 2001) just below 6 million years old, found in Kenya.

The discoverers of *Ardipithecus*, *Sahelanthropus* and *Orrorin* all consider their own fossil to be a human ancestor, and the others to be side branches (Cela-Conde and Ayala, 2003). I find the case for *Ardipithecus* somewhat more compelling, especially after the recent discovery of large parts of a skeleton (White et al., 2009), but the jury remains out. All these fossils have sufficient similarities with both humans and other apes that they are likely to be quite close to the branching point in the family tree. This would give an estimate from fossils of the most likely age of the last common ancestor somewhere in the vicinity of 6 mya, consistent within the uncertainties with the molecular estimate. Benton and Donoghue (2007) gives 6.5 mya as an estimate of the minimum time since the fossil split.

But beyond this common ancestor there is no way to place any more stringent upper limit on the time of language emergence. It may appear unlikely that e.g. australopithecines possessed language 2-3 mya, but there is no hard evidence that excludes it. Australopithecines appear to have lacked some speech adaptations, as discussed in the next section, having an ape-like hyoid bone (Alemseged et al., 2006) and thorax innervation (MacLarnon and Hewitt, 2004), but this does not exclude simpler forms of speech, much less non-speech language modalities. It has also been argued both that a minimum brain size is needed for language, and that the presence of language implies a human-like material culture. Both of these arguments are somewhat plausible, but it is by no means established that they exclude language in Lucy.

Thus, the best firm upper limit that can be placed on the time of language emergence remains a bit beyond 6 million years ago.

3. Lower Limits

All modern human populations have language, obviously. Given that language has at least some biological substrate (if not necessarily an innate grammar)

this implies that the most recent common ancestor of all modern humans had language, and had all the biological prerequisites for language.

The fossil record of anatomically modern *Homo sapiens* goes back to nearly 200,000 years ago in Africa (MacDougall et al., 2005; Marean, 2010). The molecular data likewise strongly support a common origin for all extant humans somewhere around 100,000 – 200,000 years ago (Ayala and Escalante, 1996; Wood, 1997; Bergström et al., 1998; Cavalli-Sforza and Feldman, 2003; Fagundes et al., 2007; Atkinson et al., 2008). The so-called ‘Mitochondrial Eve’ (Cann et al., 1987; Saville et al., 1998; Cavalli-Sforza, 1998), the putative common ancestress of all women, was at the forefront of this molecular wave, but she has since been joined by a corresponding “Y-chromosome Adam” (Fu et al., 1996; Dorit et al., 1995; Pääbo, 1995), somewhat more recent than Eve, as well as by data from nonsex-linked genes (Fischman, 1996), and from X-chromosomes (Disotell, 1999). The relation between population divergence times and genetic coalescence times is non-trivial (Hurford and Dediu, 2009), but it is hard to reconcile the genetic data with a common ancestor of all modern humans living much less than 100,000 years ago. It follows that the origins of the human language capacity cannot be more recent than 100,000 years ago.

This conclusion is consistent with archeological evidence of the spread of *Homo sapiens* out of Africa and the peopling of various continents, notably Australia 50,000 years ago or more (Hudjashov et al., 2007), and with evidence from morphology (Schillaci, 2008) and DNA (Macaulay, 2005) that indicates an ancient split between some Australasians and other Eurasian populations. In particular, Andaman islanders appear to have been genetically isolated for 65,000 years (Macaulay, 2005) and nevertheless have fully human language.

This 100,000-year lower limit already excludes theories that connect the origins of language with the apparent “cultural revolution” in the archeological record around 40,000–50,000 years ago, discussed in the next section.

For at least some aspects of language, stronger time limits are possible. Our habitual use of speech is reflected in certain aspects of our anatomy that can be studied in fossils. Speech adaptations can potentially be found in our speech organs, hearing organs, brain, and in the neural connections between these organs, as well as the genes controlling their development.

- *Speech organs.* The shape of the human vocal tract, notably the lowering of the larynx already in infancy, is very likely a speech adaptation, even though some other mammals, such as big cats, also possess a lowered larynx (Fitch, 2009). Speech would not be impossible with an ape vocal tract, but it would be less expressive, with fewer vowels available (Lieberman, 2008; de Boer and Fitch, 2010). Furthermore, the vocal tract in living mammals is quite flexible, and a resting position different from the human configuration does not preclude a dynamically lowered larynx, giving near-human vocal capabilities, during vocalizations (Fitch, 2009). The vocal tract itself is all soft tissue and

does not fossilize, but its shape is connected with the shape of the surrounding bones, the skull base and the hyoid. Already *Homo erectus* had a near-modern skull base (Baba et al., 2003), but the significance of this is unclear (Fitch, 2000; Spoor, 2000), and other factors than vocal tract configuration, notably brain size and face size (Bastir et al., 2010), strongly affect skull base shape. Hyoid bones are very rare as fossils, as they are not attached to the rest of the skeleton, but one Neanderthal hyoid has been found (Arensburg et al., 1989), as well as two hyoids from *Homo heidelbergensis* (Martínez et al., 2008), all very similar to the hyoid of modern *Homo sapiens*, leading to the conclusion that Neanderthals had a vocal tract adequate for speech (Houghton, 1993; Boë et al., 1999; Boë et al., 2007; Granat et al., 2007, but see also Lieberman (2007) and Fitch (2009)). The hyoid of *Australopithecus afarensis*, on the other hand, is more chimpanzee-like in its morphology (Alemseged et al., 2006), and the vocal tract that Granat et al. (2007) reconstruct for *Australopithecus* is basically apelike.

- *Hearing organs.* Some fine-tuning appears to have taken place to optimize speech perception, notably our improved perception of sounds in the 2–4 kHz range. The sensitivity of ape ears has a minimum in this range, but human ears do not, mainly due to minor changes in the ear ossicles, the tiny bones that conduct sound from the eardrum to the inner ear. This difference is very likely an adaptation to speech perception, as key features of some speech sounds are in this region. The adaptation interpretation is strengthened by the discovery that a middle-ear structural gene has been the subject of strong natural selection in the human lineage (Olson and Varki, 2004). According to Martínez et al. (2004), these changes in the ossicles were present already in the 400,000-year-old fossils from Sima de los Huesos in Spain, well before the advent of modern *Homo sapiens*. These fossils are most likely Neanderthal ancestors, that Martínez et al. (2004) attribute to *Homo heidelbergensis*. In the Middle East, ear ossicles have been found both from Neanderthals and from early *Homo sapiens*, likewise with no meaningful differences from modern humans (Quam and Rak, 2008).

- *Brain.* Only the gross anatomy of the brain surface is visible as imprints on the inside of well-preserved fossil skulls. In principle, the emergence of e.g. Broca's area could be pinpointed this way. But other apes have brain structures with the same gross anatomy as both Broca and Wernicke (Gannon et al., 1998; Cantalupo and Hopkins, 2001), so the imprints of such areas in the skulls of protohumans tell us nothing useful about language. The rewiring of neural circuits that would tell us something useful, does not leave any fossil traces.

- *Lateralization.* There is no clearcut increase in general lateralization of the brain in human evolution – ape brains are not symmetric (Balzeau and Gilissen, 2010) – and fossils are rarely undamaged and undistorted enough to be informative in this respect. But when tools become common, handed-

ness can be inferred from asymmetries in the knapping process, the use-wear damage on tools, and also in tooth wear patterns (Uomini, 2009; Frayer et al., 2010), which may provide circumstantial evidence of lateralization, and possibly language (Steele and Uomini, 2009). Among apes there may be marginally significant handedness, but nothing like the strong population-level dominance of right-handers that we find in all human populations. Evidence for a human handedness pattern is clear among Neanderthals and their predecessors in Europe, as far back as 500,000 years ago (Frayer et al., 2010), and some indications go back as far as 1 mya (Uomini, 2009). To what extent conclusions can be drawn from handedness to lateralization for linguistic purposes is, however, unclear.

- *Neural connections.* Where nerves pass through bone, a hole is left that can be seen in well-preserved fossils. Such nerve canals provide a rough estimate of the size of the nerve that passed through them. A thicker nerve means more neurons, and presumably improved sensitivity and control. The hypoglossal canal, leading to the tongue, has been invoked in this context (Kay et al., 1998), but broader comparative samples have shown that it is not useful as an indicator of speech (DeGusta et al., 1999; Jungers et al., 2003). A better case can be made for the nerves to the thorax, presumably for breathing control (Fitch, 2009). Both modern humans and Neanderthals have wide canals here, whereas *Homo ergaster* have the narrow canals typical of other apes (MacLarnon and Hewitt, 1999; MacLarnon and Hewitt, 2004), indicating that the canals expanded somewhere between 0.5 and 1.5 million years ago.

- *FOXP2.* When mutations in the gene FOXP2 were associated with specific language impairment (Lai et al., 2001), and it was shown that the gene had changed along the human lineage (Enard et al., 2002, but see also Diller and Cann (2009)), it was heralded as a “language gene”. But intensive research has revealed a more complex story, with FOXP2 controlling synaptic plasticity in the basal ganglia (Lieberman, 2009) rather than language *per se*, and playing a role in vocalizations and vocal learning in a wide variety of species, from bats (Li et al., 2007) to songbirds (Haesler et al., 2004). Nevertheless, the changes in FOXP2 in the human lineage quite likely are connected with some aspect of language, even if the connection is not as direct as early reports claimed. Relevant for the timing of the emergence of human language is that the derived human form of FOXP2 was shared with Neanderthals (Krause et al., 2007, but see also Benitez-Burraco et al. (2008) and Coop et al. (2008)), and that the selective sweep driving that form to fixation may have taken place more than a million years ago (Diller and Cann, 2009), well before the split between *Homo sapiens* and Neanderthals.

In conclusion, the fossil evidence indicates that at least some apparent speech adaptations were present in Neanderthals. No single one of these adaptations is compelling on its own, but their consilience strengthens the case

for Neanderthal speech in some form. The presence of speech adaptations implies the presence of speech, or at least some form of complex vocalizations (though not vice versa – the absence of adaptations would not imply the absence of at least simple speech).

The apparent presence of speech in Neanderthals sets a lower limit for the age of speech at the time of the last common ancestor of us and the Neanderthals (unless one postulates major gene flow between the two lineages or, implausibly, the independent evolution of the same set of adaptations in both lineages). It has long been a controversial issue whether the Neanderthals actually were a separate lineage, or just a subspecies of *Homo sapiens*, and whether there was any significant admixture when modern humans replaced Neanderthals in Europe (Herrera et al., 2009). But a modest amount of admixture near the time of Neanderthal extinction does not materially affect the conclusions here, as the speech adaptations were in place in Neanderthals well before *Homo sapiens* invaded Europe and brought the two populations into proximity.

Early genetic evidence from fossil DNA in Neanderthals clearly supported their separateness (Hodgson and Disotell, 2008), and indicated that the last common ancestor lived at least 400,000 years ago (Krings et al., 1999; Höss, 2000; Beerli and Edwards, 2002; Knight, 2003; Caramelli et al., 2003; Endicott et al., 2010), though the limited statistics makes it impossible to exclude a modest level of admixture. The fossil evidence points in the same direction, with the earliest modern humans in Europe more resembling Africans than Neanderthals (Tyrrell & Chamberlain, 1998), though archaic features in some fossils may be interpreted as evidence of hybridization (Rougier et al., 2007; Trinkaus, 2007).

A draft sequence of the full Neanderthal genome was presented recently (Green et al., 2010), in which substantial similarities were found between the Neanderthal sequence and modern Eurasians. Green et al. (2010) interpret this as strong evidence of gene flow from Neanderthals into the common ancestor of modern Eurasians, but caution is in order as it is extremely difficult to exclude contamination with modern human DNA during excavation and processing of the fossils (Lalueza-Fox, 2009). Wall and Kim (2007) found evidence of both severe contamination and other problems in earlier work by Green et al. (2006). Firm conclusions should await replication.

There is no consensus on the taxonomy of the transitional fossils from around the time of our common ancestor with the Neanderthals. The names *Homo heidelbergensis*, *rhodesiensis*, *antecessor*, *helmei* and others are all in current use (Endicott et al., 2010). It is, however, quite well established that all of these have their roots in *Homo erectus* (*sensu lato*), so I will use the name *erectus* for our last common ancestor.

4. The Revolution that Wasn't

The archeological record has frequently been invoked as support for the late, sudden appearance of language, due to the perception of a technological and creative revolution around 40,000–50,000 years ago (e.g. Binford (1989), Klein (1999), Li and Hombert (2002)).

Language use in itself is not archeologically visible, but other forms of symbol use may be, and may be used as indicators that some level of semiotic abilities has been reached. Invoking ancient art, including pigments and personal ornaments, as indicators that the artists were capable of symbolic thought, or even as an indicator that language had evolved, is fairly common (Mellars, 1998; Henshilwood and Dubreuil, 2009). Some hunting techniques that require complex planning and mental time travel, such as snares and traps, may also be evidence of modern human cognition (Wadley, 2010). The precise connection between the decorative use of ochre and shell beads, and specific forms of language is, however, not worked out in detail, and not well supported (Botha, 2008).

The supposedly sudden appearance of advanced art and advanced tools in the caves of Europe about 40,000 years ago is often taken as evidence of a cognitive leap (Klein, 2008), indicating the origin of language. However, the appearance of a sudden dramatic “cultural revolution” around 40,000 years ago, has turned out to be largely an illusion caused by the predominance of European sites in the documented archeological record, and possibly some Eurocentrism among archeologists (Henshilwood and Marean, 2003). *Homo sapiens* did indeed invade Europe rather suddenly about 40,000 years ago, bringing along an advanced toolkit – but that toolkit had been developed gradually in Africa over the course of more than 200,000 years (McBrearty and Brooks, 2000; Van Peer et al., 2003). Some aspects, such as blade technology, go back as far 500,000 years (Johnson and McBrearty, 2010). Discoveries of works of abstract art (Henshilwood et al., 2002; Texier et al., 2010), pigment use (Barham, 2002; Henshilwood et al., 2009; Watts, 2009), and personal ornaments (Bouzougar et al., 2007; Henshilwood and Dubreuil, 2009; d’Errico and Vanhaeren, 2009), all substantially older than 40,000 years, add further support to the long timescale of McBrearty and Brooks (2000). Also outside Africa some evidence of early pre-40k symbolic behavior has been found in the Middle East (Mayer et al., 2009).

The debate over the supposed revolution is reviewed by Bar-Yosef (2002) and Henshilwood and Marean (2003).

There was indeed a substantial and rapid increase in the *frequency* of modern human behavior in the Early Upper Paleolithic, but that increase may well be caused by demographic factors (Zilhão, 2007; Cartmill, 2010) rather than any cognitive changes. Similarly, ecological and energetic factors, rather than cognitive differences, may explain the sparsity of the Neanderthal artistic

record, as evidenced by some undeniably modern human populations (e.g. Tasmanians) leaving archeological records resembling those created by Middle Paleolithic Neanderthals (Roebroeks and Verpoorte, 2009).

There is also possible evidence for simple art that actually predates the appearance of both Neanderthals and modern *Homo sapiens* (Bahn and Vertut, 1997; Bednarik, 2003), in the context of *Homo heidelbergensis* or possibly even *Homo erectus*.

Objects of the same type that are interpreted as evidence of symbolic behavior when found in a *sapiens* context, have also been found associated with Neanderthals in Europe (Langley et al., 2008; d’Errico, 2008; Watts, 2009; Zilhão, 2007; Zilhão et al., 2010) as well as objects that can reasonably be interpreted as art (Appenzeller, 1998; d’Errico et al., 2003; Wynn and Coolidge, 2004). While these findings are simpler and less frequent than the ornaments and figurative art of later *Homo sapiens* (e.g. Bahn and Vertut (1997) and Conard (2003)), they nevertheless push back the origin of the biological capacities needed for symbolic behavior at least to the common ancestor of Neanderthals and us, some 400,000 years ago or more. And given that symbolic capacities are a prerequisite for language, and may be interpreted as indicative of the presence of language, this adds support to the case for Neanderthal language in some form, and for the time limit inferred from anatomy in the previous section.

5. Conclusions

Fossil evidence indicates that speech optimization of our vocal apparatus got started well before the emergence of *Homo sapiens*, almost certainly more than 400,000 years ago, probably in *Homo erectus*. As the speech optimization, with its accompanying costs, would not occur without strong selective pressure for complex vocalizations, presumably verbal communication, this implies that *Homo erectus* already possessed non-trivial language abilities.

There is no real evidence indicating just how complex language *erectus* had. It must have been complex enough to require fine-grained vocal distinctions, but this need not imply anything like modern grammar. They may have been at a holophrastic stage, or they may have had nearly full human language – it is difficult to imagine any way to tell. On one hand, *erectus* is the first hominid with a brain size approaching the modern human range – there are modern humans alive today with *erectus*-sized brains and excellent language skills – and they were also the first to spread out to many different habitats on different continents. But on the other hand their comparatively simple, static culture argues against their having modern human cognitive skills. In particular, it is quite clear that they lacked the cumulative cultural evolution that is so characteristic of modern humans. Given that they are

different from modern humans in such fundamental ways, their having full modern human language appears unlikely.

Language need not have started in a spoken modality; sign language may have been the original language (e.g. Corballis (2002)), likely building on mimesis (Donald, 1997; Zlatev et al., 2005). This means language may be older than speech – but hardly younger. A lower age limit on speech remains a firm lower limit on the age of language at the *erectus* level, if not necessarily on full modern grammar.

Modern humans, after parting company with the Neanderthals perhaps close to half a million years ago, would have acquired the remaining features of modern language in parallel with acquiring modern human anatomy. Both aspects must have been finished before modern humans started spreading over the world, perhaps 100,000 years ago. The last common ancestor of all humans today, probably living in Africa not so long before this exodus, is the likely speaker of Proto-World, the putative common ancestor of all the modern language families, and the earliest language which we may have any remote hope even in principle of ever reconstructing. But there is no reason to believe that this Proto-World was the *first* language spoken – as discussed above, our ancestors may have had language for a million years already. The details of those earlier proto-languages are likely to remain opaque for the foreseeable future.

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LANGUAGE, *VORSTELLUNG*, AND MEANING AS USE

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ABSTRACT. The paper focuses on the tension between Wittgenstein’s “meaning as use” and his ubiquitous use of *Vorstellung* in the *PI*. My argument opens with a rough sketch of a theory of natural language in which *Vorstellung*, defined as variation of perception, plays a prominent part. I then address the distinction between intension and extension in relation to meaning, redefining extension as an essential component in a *Vorstellung* oriented theory of language. Wittgenstein’s treatment of *Vorstellung* in the *PI* is discussed in relation to my challenge of the assumed privacy of mental images. Employing his own “private language” arguments, I propose to replace *Vorstellung* as mental image by the notion of schematization. So redefined, *Vorstellung* is reviewed in relation to assertability conditions and the aboutness of language. The conclusion suggests a reconciliation of the tension between the demotion of *Vorstellung* and its pivotal use in the *PI* by subsuming *Vorstellung* under a broadened notion of “use”.

Keywords: Wittgenstein, *Vorstellung*, intension, extension, language, perception

1. Introduction

If meaning is use in Wittgenstein’s public sense and *Vorstellung* looms as large as it does in the *Philosophical Investigations* and his other manuscripts, then the use he makes of *Vorstellung* is an important language-game with a special relationship to meaning. Before I address this relation in detail I want to propose a picture of language, though not quite a traditional picture language, in which *Vorstellung* occupies centre stage. A string of substantial, recent publications in the field of the philosophy of language may give the impression that the turn to *Vorstellung* has been rightly discarded as an unwarranted reduction of meaning to psychology and that the research domain of natural language has now been secured and its problems are largely resolved, or at least are resolvable in a certain way. (LePore and Smith 2006; Devitt and Hanley 2006; Davis and Gillon 2004) It is in the spirit of present-

ing an entirely different approach to natural language that this paper has been written. As such it is part of an attempt to reinsert *Vorstellung*, translated here as “mental replication and variation of perception,” into the theorization of linguistic meaning. It would cause little controversy if one were to say that all features of language, from phonemes to syntax and pragmatics, serve the production and communication of *meaning*, even if one were to acknowledge at the same time that semantics is by far the least successful theoretical enterprise in the linguistic arena. Nor would it raise eyebrows if one were to align the bulk of existing language studies in order to demonstrate their function in such an emphasis. But it would be an entirely different matter if one were to put forward the hypothesis that *all features of natural language are in the service of the imaginability of linguistic expressions*. (Ruthrof 2011)

Such a claim flies in the face of the vast majority of theoretical positions on natural language, and yet I want to place this claim at the very heart of this paper. In this choice I have been encouraged by a reading of Wittgenstein which pays attention to the dominant role in the *PI* of such propositional attitude phrases as “*Ich koennte mir leicht vorstellen ...*” (I could easily imagine), “*Wir koennen uns nicht denken ...*” (we cannot think of), “We can imagine ...”, “Suppose” How important a role *Vorstellung* actually plays in the *PI* becomes clear by imagining what would happen if we were to eliminate the author’s use of *Vorstellung* and all its derivatives from this text. The *PI* would simply collapse. And without paying attention to *Vorstellung* we may very well be led, as Wittgenstein was himself in the *Tractatus*, “to think that if anyone utters as sentence and *means* or *understand* it he is operating a calculus according to definite rules.” (*PI* §81) The argument in favor of my opening hypothesis is developed in six steps. I begin with a summary of the kind of ingredients and their relations that could make up a theory of meaning in which perception and *Vorstellung* play a prominent part as components of language. Second, the paper takes issue with the standard view of *intension* and *extension*, reserving intensions as appropriate only to formal sign systems and offering a redefinition of extension. In a third move, I address Wittgenstein’s use of *Vorstellung*. The fourth section asks the question of how private mental images really are. I do so from the perspective of Wittgenstein’s “private language” argument. In step five I propose to replace the notion of “mental image” by the more general notions of “mental schema” and *degree and manner of schematization*. Section six addresses the kind of “assertability conditions” that govern the language game of *Vorstellung* and the *aboutness* of language. The paper concludes with a proposal for resolving the tension between Wittgenstein’s public definition of meaning as “use” and his own ubiquitous use of *Vorstellung*.

2. How Does *Vorstellung* Relate to Language?

I take it to be one of the tasks of speculative philosophy to design the kind of frames of inquiry needed in anticipation of science being able to produce a new paradigm for the description of mental acts. Such a new paradigm is evolving as we speak, even if at present we can be no more than reasonably confident about its general direction. (Just et al. 2010) Once our colleagues in neuro-semantic have advanced their research to the point where they are able to offer a persuasive picture of the relation between the semantic features of natural language and their neural basis, philosophers should be ready to assess its results in terms of what actually occurs in language, challenging, as well as interacting with, the new science. This is my second motivation for constructing the kind of *projectionist pragmatics* advanced here. What is meant by projectionist? While Hume's projectionism refers to the human propensity to spread our mental acts across the world, in Kant, projectionism is enlarged to cover all *a priori* principles required to form judgments, even to the point where perception, his absolute starting point of knowledge, is colored by the transformations that *Anschaungen* undergo in human cognition. In Hintikka's mildly Kantian formulation, "as far as our thinking is concerned, reality cannot be in principle wholly disentangled from our concepts." (Hintikka 1969: 109) The kind of projectionism envisaged here is compatible with such a Kantian perspective, while focusing on the mental acts required for placing a sentence in the *Vorstellungswelt*, such that its signifiers are activated by an appropriate combination of nonverbal signs under the auspices of *sufficient semiosis*. The habitual or interpretive decision of what is to be imagined in accordance with the directionality and semantic scope of the expression is in each such case a mental *projection*, which renders "scope" even more controversial than it already is. (Hintikka 1997)

The correction to the Wittgenstein's picture of language proposed here is intrinsically *pragmatic* in the sense that so-called natural language semantics is, strictly speaking, a contradiction in terms. Though many books have been written on the topic, they are all, without exception, disguised pragmatic theories. This is so because the meaning events generated from the given examples of necessity require a pragmatic act of placing the signifiers in a social context. Not even a seemingly neutral Austinian "locution" in speech act theory can be instantiated as meaningful without some sort of "illocution," even if this amounts to no more than the "illocution" of exemplification. (Austin 1962; Searle 1977) In this strict sense, only a fully formalized semantics could claim the title "semantics" without contradiction; but then, it would no longer deal with natural language, only its formal principles emptied of what makes natural language "natural." From this angle, it is obvious that the kind of projectionist theory advanced here is from the very start of its conception a "pragmatics" rather than a "semantics." If meaning is the community guided

activation by speakers of strings of signifiers by nonverbal mental materials governed by concepts in terms of directionality, quality, quantity, and degree of schematization, then each meaning event is by definition a pragmatic event. More briefly, if linguistic meaning is the event of an intersemiotic embedding of signifiers in the communal *Vorstellungswelt*, then all meaning acts in natural language are *pragmatic*.

Another strong impulse motivating the arguments presented here has been dissatisfaction with standard descriptions of language conceived from the vantage point of formalized language derivatives, resulting in a shriveling of the “naturalness” of natural language. (Tarski 1956: 267) Given the political power of such descriptions, it should not come as a surprise that only a handful of linguists and philosophers of language are beginning to reinsert the long neglected and yet most central ingredients into the theorization of language: mental acts. (Jackendoff 2002; Hurford 2007) This “corporeal turn” has been as long in coming as it has been necessary. (Ruthrof 1997) Yet in spite of a number of research enterprises pointing towards “embodiment,” there is to date no fully-fledged theorization able to embrace the new insights in a coherent theory of natural language. (Gallese and Lakoff 2005; Johnson and Lakoff 1999; Varela et al. 1993; Sweetser 1990) It is against this background that the present paper, as well as its forerunners, has been conceived. (Ruthrof 1997; 2000; 2009; 2010) The bare bones of a theory of natural language at the heart of which I place *Vorstellung* might look like this.

I preface my proposal by asking two questions. (1) What do we need for a theory of meaning? and (2) What do we need for a theory of meaning in which perception and *Vorstellung*, its mental replication and variations, play a central role? In answer to the first question I suggest that a theory of linguistic meaning must tell us how arbitrary linguistic signifiers or expressions are transformed such that the speakers of the language understand what the signifiers are *about*. This could be achieved by an *intensional* theory according to which meanings are the sort of “definitions” we find in dictionaries, or by an *extensional* theory according to which signifiers have been systematically related by a culture to classes of objects in the world, or a combination of the two, by a simple *verification* theory in which sentences are meaningful if they are true and meaningless if they are false, or by a *truth-conditional* theory in which sentences are meaningful if we can establish the conditions under which they can be judged as to whether the state of affairs they reflect is indeed the case or not. None of these options will be chosen as a promising avenue towards a satisfactory account of meaning in natural language. Some of my reasons for their rejection will emerge as the paper unfolds. In answer to the second question I propose the following redefinitions of meaning, the linguistic sign, the signified, and the concept. I also add the notion of *sufficient semiosis* as the communal set of constraints within which individual speech performance typically occurs.

Meaning in natural language is the activation by individual speakers under the guidance of a speech community of arbitrary, empty linguistic expressions by nonverbal, iconic, mental materials governed by concepts in terms of directionality, quality, quantity, and degree as well as manner of schematization. The *linguistic sign* is made up of an arbitrary signifier and a *motivated* signified. The *motivated signified* consists of iconic, mental materials regulated by the concept. The *concept* is a social rule which regulates the iconic, mental materials of the motivated signified in terms of directionality, quality, quantity, and degree and manner of schematization. *Sufficient semiosis* consists in the boundaries established and maintained by the speech community that constrains and delimits individual competence and performance in terms of *imaginability* (*Vorstellbarkeit*); ostension; phonological, syntactic, and lexical use; embedding; recursivity; predicability; entailment; compositionality; appropriate pragmatic activation of signifiers (e.g. degree and manner of schematization); and language-games (e.g. referring).

As a consequence of these definitions, *Vorstellung*, as redefined, is now at the centre of each and every meaning event. Depending whether our language use is habitual or interpretive, non-conscious and conscious processes will dominate the way *Vorstellung* functions in our linguistic performance. Given the emphasis here on the association of linguistic expressions with perceptual and quasi-perceptual realizations, a number of traditional approaches to meaning in the philosophy of language will have to be rejected. Meaning is argued here to be neither determined by definition, or *intension*, nor by the relation of a term to a class of things in the perceptual world, or *extension*, at least in the standard sense, nor by any *verificationist* or *truth-conditional* relations, but rather by whether a sentence is *imaginable* within the bounds of *sufficient semiosis*. If it is, meaning can be established; if it is not, the expression is meaningless. So far, what has been said, however, looks like no more than reckless assertion. So, on what grounds are some of these other theories, or rather bases for theories, so readily dismissed? Having dealt with the relation between truth-oriented theories and *Vorstellung* elsewhere, I will focus in the following section on *intension* and *extension*. (Ruthrof 2011)

3. Intension and Extension

Meaning in natural language is sometimes described in terms of *intension* and sometimes via *extension*. This pair of concepts is useful up to a point. We can regard *intension* as the kind of meaning that is defined by the internal relations amongst definitionally governed terms. In a relation of $x = y + z$, y is intensionally defined as $x - z$. Intension, then is a purely *syntactic* operation in formal sign systems. But how would this work in natural language? Applying the same criteria to ordinary language, dictionaries are prime examples of

intensional relations. So someone could learn a dictionary by heart and as a result would be in a position to know a great many syntactic substitutions. Yet without at least *one* extensional link that person would only have a syntactic grasp of signifiers, but no signifieds. She would have a language without pragmatics. For the purpose of defining meaning in natural language, then, *intensions* do not look promising, even though, for speakers of a language they are handy shortcuts to not yet learned or forgotten meanings. When in doubt as to the meaning of a word, we turn to a dictionary. In this sense, dictionaries are part of the communal, regulatory side of languages; in short, they are part of *sufficient semiosis*. Yet, if we call the verbal substitutions of a dictionary “meaning,” we have embraced an *intensional* conception of meaning without being aware that none of the dictionary entries could mean anything unless we had already acquired the pragmatic link between at least one entry and the “outside of language,” either in its perceptual sense or as part of *Vorstellung*.

Instead of calling this “outside” the perceptual world of objects, in terms of the theory advanced here, we shall call it the *Vorstellungswelt*, the imagined world of a culture.

As the contradictions that flow from the translation of “*Vorstellung*” as “image” show, the two can only be sometimes used as synonyms without pragmatic damage. For example, neither the level of generality of *Vorstellung* nor its broad semantic scope from *replication* to the wildest speculative fantasies are well looked after by “imagination,” which favors the *imaginary* and *merely* imaginary. The term *Vorstellung* is chosen here throughout for its analytical sense of “putting in front of one’s mind,” its sense of any particular imagined instance, as well as for its sense of generality which allows an olfactory or gustatory *Vorstellung* where “image” tends to introduce a misleading analogy. At the same time, the world of *Vorstellung* is not just the “outside of language” but also contains natural language as part of our mental equipment. Wittgenstein typically invites his readers to “think of” or “imagine” a sentence, as well as a variation of perceptual reality in *Vorstellung*.

No suggestion, however, is being made here that the *Vorstellungswelt* is some free-floating domain. Quite the contrary, the *Vorstellungswelt* of each culture is anchored in the perceptual world. Yet since perception is always already modified by *Vorstellung*, cultural worlds typically differ from one another to certain degrees. What is more important is the observation that such anchoring is not a continuum, but rather a sporadic occurrence. Compare, for example, the way Hilary Putnam thinks language is linked to the perceptual world. “It seems as if language is like a great balloon, anchored to the ground of non-linguistic fact only by a number of widely scattered and very thin (but all-important) ropes.” (Putnam 1979: 4f.) We can take these remarks on board while insisting that language is part of a much larger balloon, the *Vorstellungswelt* which, like Putnam’s language, is fundamentally ground-

ed, though in a sporadic fashion, to the world of our senses. How does this position affect the notions of *intension* and *extension*?

I cannot address here the literature on *intension*, which is as impressive as it is vast. What I can do is pick out one intriguing defense of *intension* as the king pin of linguistic meaning presented by William Dowling. (Dowling 1999) Attempting a double rehabilitation of New Critical interpretive practice and the intensional theory of meaning advocated by Jerry Katz, Dowling insists that “determinate meaning” is as much part of the inside of language as is syntax. The New Criticism is seen as a sensitive forerunner of the kind of intensional picture of language we find in Katz. (Katz 1990; 1972) Two stanzas of John Donne’s “A Valediction: Forbidding Mourning” serve Dowling as demonstration.

Dull sublunary lovers’ love
(Whose soul is sense) cannot admit
Absence, because it doth remove
Those things which elemented it.

But we, by a love so much refin’d
That our selves know not what it is,
Inter-assured of the mind,
Care less, eyes, lips, and hands to miss.

Dowling makes the startling claim that the central meanings we construct in our reading of these lines are *intensional determinations*. But here lies a fundamental error which can be teased out by a comparison of the poet’s stanzas with a sign system in which Dowling’s assertion is actually demonstrable. In $x = y \times z$ the formal sense of x or its “meaning” is *intensionally* fully determined by its relation to the specific combination of x , y and z . As in the poem, knowledge of the sign system of which this equation is a part is essential to be able to make this observation. The crucial difference is that knowing a formal sign system and knowing a natural language are two *fundamentally* different capacities. In the formal, *intensionally* governed sign relations, it is *only* knowledge of the syntactic rules that is needed. In natural language, and its use in the poem, syntactic competence is also a necessary but not a sufficient condition. Here meaning can be achieved *only* if we are able to project a quasi-perceptual scenario of human interaction and speech to fit the words in their specific order. This we can do only if we have the double experience of human life in *Vorstellung* and its possible, highly schematic representations by language. Nor should we conflate these two. Although they go together in human existence, knowledge of life and language cannot be assumed as given. That interpreting the poem is not as easy for young readers is not just the result of limited experience of language but equally the consequence of a still evolving world of their *Vorstellung*. The

tentatively anchored balloons of language and *Vorstellung* are still being filled. Why then do I think that Dowling's analysis is flawed? He thinks that the entire pragmatic performance required to bring these lines to life is *contained* in the signifiers. Yet *signifiers* are empty by themselves, "arbitrary" in Saussure's terminology, and so their *aboutness* cannot be contained *in* them. They are in need of *extensions*, or *signifieds*, for instance in the sense defined earlier. The question, though, is what kind of *extensions* we are talking about that would offer the best predicate for explaining the meaning events of natural language.

Extensions, in contrast to *intensions*, can be regarded as the links between a sign system and its outside, classes of things we discover in the real world, a possible world, a fiction, or our *Vorstellungswelt*, that is, the kinds of things that constitute the mental world of a culture. Since natural language is not self-sufficient like formal systems, it is therefore fundamentally *extensional*. But here the problems only begin. Philosophers are sharply divided as to what sort of extensions we are talking about when we describe language. If Putnam's language balloon is only sporadically anchored in the actual world, *extension* as the secure link between words and world does not go through, nor does Putnam's own preference for scientific theories. It is not just that the balloon analogy bites here as well, it is also that we can't entrust a scientific elite with the stewardship of natural language. Too much is at stake, and in particular the all-important idiomatic character of language, a feature which defies mathematization and curtails discursivity, and yet contributes crucially to Tarski's "naturalness" of natural language. (Tarski 1956: 267) What we are looking for is a connection which is all-embracing rather than 'scattered'. If the physical world, its scientific theorization, and propositions summing up referential backgrounds have to be discarded as *extensional anchors*, we may wish to consider our nonverbal readings of the world and their modifications in *Vorstellung*. Given the bias of this paper, it is to *nonverbal readings*, to iconic, mental materials that we turn, consisting of olfactory, tactile, thermal, aural, gravitational, visual, emotional and other readings of the world, under communal, conceptual regulation, as defined above. If we accept this picture, meaning would be *extensional* in the special sense of a relation between signifiers and nonverbal mental acts.

4. Wittgenstein's *Vorstellungsklavier*

To shield such a picture of language from the challenges of subjectivism and mental solipsism, we must address the question of how the *competence* of individual speakers relates to the speech community. An equally serious problem to tackle is the charge of the *private* nature of mental acts, an issue I will discuss below. While it is safe to reject the idea that natural language

can be called a *symbolic system* in which everything is entirely ruled by definitions and so is objectively public like chess, we cannot but agree, as do most philosophers of language, that Wittgenstein is right in his critique of the very possibility of a *private language*. (Wittgenstein 1966: §202; 243ff.) Language cannot be private *of necessity*. Put simply, the reason for this is that our conception of language entails that it is governed by rules, and what is so structured is communicable in principle. We shall see shortly that this argument does not however protect Wittgenstein from being employed against the very element he wishes to ban from natural language, *mental acts*. But first, a few remarks on the public nature of language. Certainly, in actuality, there is no language that is not embedded, at least potentially, in a speech community and its pedagogy as a training apparatus for the speakers of the language. Such pedagogy, in the broad sense, amounts to making individual speakers competent in the task of linking linguistic expressions with appropriate mental, nonverbal scenes. This is why when we hear or read a sentence such as “The engagement between x and y is off” we are able to imagine, at least in a schematic manner and even if we don’t want to, the scenario the sentence refers to. The guidance the speech community so exerts upon its members can be regarded as a complex network of *constraints*, which I have summed up under the term *sufficient semiosis*.

At the centre of the theorization of natural language as a public phenomenon is Wittgenstein’s definition of meaning as “use” (*PI* §30, 43, 138), as for example in his statement that the “*Gebrauchsarten* (kinds of use) of ‘understanding’ make up its meaning.” (§532) Given the parlous state of natural language semantics it should not be surprising that this pragmatic notion of meaning has become so very influential. In order to render meaning observable, Wittgenstein strips it of any possible mental, private component, instead focusing on the way the speakers of a language publicly engage in a variety of overlapping *Sprachspiele* or language-games. As such, meaning can be equated with *use*. “The meaning of a word is its use in the language,” at least in most cases, as he qualifies. (*PI* §43) As powerful an intervention in the longstanding debate about an adequate natural language semantics and pragmatics this has been, its main drawback is that while it describes well what we *see* and so satisfies scientific demands for evidence, it may very well cover up features of natural language that are not so readily identified, yet likewise play a necessary role in the meaning process, a suspicion underlying the arguments developed here.

If we stay with Wittgenstein’s position on meaning as “use,” the tentative proposal for meaning as the community guided activation of signifiers by nonverbal mental materials does not go through. We must then either abandon such a scheme or modify the Wittgensteinian picture to let mental acts in through the backdoor, but not without redefining their character. To choose the latter course is to significantly broaden Wittgenstein’s notion of “use.” I

will do so by employing his own strategy which he mounts against the possibility of a private language. But first, a brief look at the motivation behind his arguments in the *Philosophical Investigations*. In the *Tractatus*, which he strongly qualified in his later work, Wittgenstein had regarded propositions as *Bilder* for possible states of affairs. (TLP 4.01) The states of affairs so depicted are the sense of a proposition. This postulates a relation between reality and his picture which he describes both as “pictorial form” (TLP 2.151) as well as a “logical form” (TLP 2.18). Furthermore, language as the “totality of propositions” (TLP 4.001) presents pictures which can be either true or false. (TLP 2.21)

As Michael Beaney argues, in the *Philosophical Investigations*, Wittgenstein has performed a turn from “simples” to “samples.” (Beaney 2006) In the *PI*, the simples that are supposed to make up language are rejected in favor of *Sprachspiele* out of which every natural language is composed. Propositions are no longer regarded as the definitionally ruled common denominator of language (*PI* §65) and replaced by looser forms of relations, “family resemblances” (*PI* §65) and language-games (*PI* §7, 22, 24, 47, 49, 53, 65, 77, etc.) This results in a radical complication of the relation between language and what it is about. What is retained, however, is the public nature of meaning. Just as the operations of logic and the senses of their propositions are open to inspection, so too are language-games publicly displayed, much as any other communal performance. Wittgenstein now makes two critical interventions. One, he stands the Augustinian “naming theory” of language on its head by saying that names are the result rather than a condition of language-games. (*PI* §49) In another decisive move he claims that “it is not the purpose of the words to evoke *Vorstellungen*. (It may, of course, be discovered that that helps to attain the actual purpose).” (*PI* §6) Here, Wittgenstein refers back to §2 in which he characterizes a “primitive” language in which *Vorstellung* appears to do important work, but only covers part of what we now call a language. As the *PI* unfolds, it is grammar, rules, the community of speakers, and justification that are stressed as more important ingredients. The question is whether Wittgenstein’s *Vorstellungsklavier* merely produces occasional and incidental tones in the meaning symphony of natural language, whether such tones are a constant side effect, or whether the melodies so created are an indispensable and necessary feature of linguistic meaning. “(Uttering a word is very much like striking a key on the piano of our imagination).” (*PI* §6) If one of the first two answers proves to be correct, then the definition of meaning as use stands confirmed. However, if the last answer is more appropriate, then both meaning and use have to be redefined to include the very mental acts Wittgenstein set out to eliminate. Or, rather, we may have to agree with his elimination of *Vorstellung* as mental “image” as too specific a candidate for meaning, only to replace it by something else at

a more general level. What we must retain, though, is Wittgenstein's insight that meaning is best described as a process rather than a property.

Any such attempt at redefining Wittgenstein's "use" faces a massive obstacle, his sustained rejection of *Vorstellung* as a mainstay of natural language. Another difficulty is the bugbear of the translation into English of the term *Vorstellung* itself, confounded by its ubiquitous use throughout the *PI*. "*Vorstellung* is not an image, but an image may correspond to it," depending on the kind of *Vorstellung* we are talking about, one might add. (*PI* §300) Or again later, "*Vorstellung* must be more like its object than an image." (*PI* §389) When Wittgenstein writes of the *Vorstellungsbild*, "image" will do. But more often than not the translation of *Vorstellung* as "image" muddies the theoretical waters, especially when it comes to gustatory, thermal, olfactory, auditory, gravitational and other non-visual sensory impressions. Perhaps the best solution is to leave the original term untranslated and allow readers to gradually get the author's intended meaning, as they get accustomed to his "use" of the term in context, and perhaps even by means of appropriate *Vorstellungen*. A case in point is Wittgenstein's phrase "*motorische Vorstellung*." Although we have equivalent quasi-visual mental representations, the emphasis is clearly on a *kinetic* conception.

In order to foreground public use as the assertability condition for meaning, Wittgenstein is trying to wean us from the habit of associating language with *Vorstellung*. This is why he speaks of *Vorstellung* as "foggily drawn scenes" which cannot "explain intention" and points out that "we communicate with other people without knowing if they have this experience too." (*PI* p. 155) In a strict sense of "knowing," Wittgenstein is of course right. What he wants to get away from is the psychological contamination of the process of meaning. "I meant *this* by that word" is a statement which is differently used from one about an affection of the soul' (*Affektion der Seele*). (*PI* §676) However, the elimination of something as ethereal as the "affection of the soul" is not the same as getting rid of *Vorstellung*, of which we can have a much more robust conception. Certainly, within a speech community, we take it on trust that its members have more or less the same *Vorstellungen* as we do. Moreover, Wittgenstein's objection could, with much the same justification, be made to seeing hearing, smelling, feeling, or tasting. Sometimes, we ask "Can you smell what I smell?" on the assumption that the other person shares roughly the same olfactory apparatus and interpretations, which can be verbally confirmed. The same may go for the *aboutness* in *Vorstellung* of language in general.

In his task of demoting *Vorstellung* as an important ingredient of language, Wittgenstein speaks of "image-mongery" (*Vorstellerei*), which "is of no interest to us." (*PI* §390) He cautions against a primitive view of language, as well as allowing the analysis to oscillate "between natural science and grammar." (*PI* §392) He is adamant that the process involved in *Vorstellung* tends to be

a distortion (*PI* §368) inclined to introduce absurd scenarios, such as imagining a parrot whom God has given the gift of inner speech. To this Wittgenstein objects by saying that first I have to imagine a god, then an unlikely situation. *Vorstellung* is thus heaped on top of *Vorstellung*. (*PI* §346) One could of course intervene here by pointing out that there is no difference between *Vorstellung* and language in terms of their fictional potential. Indeed, in both perceptual and fictional usage, language and *Vorstellung* appear to run parallel with one another without any final destination.

It would seem that Wittgenstein's assault on *Vorstellung* has to do with his reluctance to conduct the theorization of language via any form of *interiorization*. In the use of language, he writes, "it seems to us as if there were something coupled to these words, which otherwise would run idle ... As if, so to speak, they geared into us." (*PI* §507) It is not surprising that when Wittgenstein speaks as the engineer he was supposed to become, the externalization of the workings of language would be at the forefront of his mind. Not always however, does *Vorstellung* get the short shrift. Occasionally he concedes that *Vorstellung* can also function as mental replication. "The aspects of the triangle: it is as if a *Vorstellung* came into contact, and for a while remained in contact, with the visual impression." (*PI* p. 176) A similar emphasis can be found in Wittgenstein's observation that "*Vorstellung* must be more like its object than an image." (*PI* §389) But even then, we are left in no doubt as to where to find the essence of language, which "is expressed in grammar." (*PI* §371)

At times, Wittgenstein charges his interlocutor and, it would seem the reader, with the bad habit of "steering towards the idea of an inner ostensive explanation." (*PI* §380) Without being able here to address the much-rehearsed domain of "ostensive definition," I would qualify Wittgenstein's position by saying that his critique only works as long as we see a few ostensive explanations in isolation. As soon as we embed ostensive procedures in an ostensive series and other nonverbal explanations and comparisons, typical of teaching situations, the problem disappears. It is easy to guide the student towards the color, shape, or weight of an ostensively used object by reference to color scales, illustrations of forms, and the process of weighing in conjunction with verbal clues. As often in philosophy, if we cast our net too narrowly, a problem arises that does not occur in social practice. Quine's "indeterminacy of translation" is another case in point. The indeterminacy dissolves in sustained cultural interaction. The same rehabilitation can be made in favor of ostensive moves in *Vorstellung*. Likewise, Wittgenstein's objection to *Vorstellung* in §443 is open to question. "'Here is a red patch' and 'Here there isn't a red patch.' ... The word 'red' occurs in both; so this word cannot indicate the presence of something red." Yet both sentences require that we are able to imagine the color red. Furthermore, the negation rests on our faculty of imagining its opposite, presence. Wittgenstein recedes from this

kind of explanation to the use of the term “*Satz*,” which could be rendered either by “sentence” or “proposition.” The standard translation goes with the latter. “The assertion of the negative proposition contains the proposition which is negated, but not the assertion of it.” (*PI* §447) Do we not vary propositions as well as sentences according to their modalities? Of course we have been trained to do so. But do we not do so in *Vorstellung*, even if there would be no difference if we did it on paper? At the very least, performing a negation in *Vorstellung* has the advantage of the economy of speed. And perhaps speed is one of the advantages that made *Vorstellung* such a successful, evolutionary addition to the human make-up. Imagining a leopard behind foliage beats being taken by surprise.

There also hovers the more general question above the *PI* and its demotion of *Vorstellung* in that the discursive strategies of the *PI* interact in such a manner that Wittgenstein’s critique cannot be taken as radically as it usually has. Not only is the text a ‘perpetual dialectic’ between the author, his “imaginary interlocutor,” and the reader (Kripke 1982: 3), the reader must also deal throughout with a multiple and complicated imaginary scenario. We must follow the author’s instructions to “imagine,” “suppose,” “think of” a variety of mental scenes, and construct two personae, the author and the author’s less insightful alter ego, and their thoughts, quite apart from our own interpretive negotiations. In all this, *Vorstellung* proves an indispensable tool; so much so that we could say that for every *Sprachspiel* there is a corresponding *Vorstellungsspiel*.

Nor is everything that Wittgenstein wrote in the *Tractatus* wiped out in the later *PI*. Rather, the *Tractatus* is now seen as a specific and very limited language-game of logic that cannot be taken as a basis on which to describe the infinitely more complicated relations characteristic of natural language. For example, the idea that “If I know an object I also know all its possible occurrences in states of affairs” is compatible with Wittgenstein’s tendency in the *PI* to invite the reader to ‘imagine’ this or that scenario as a reliable guide to understanding.” (*TLP* 2.0123) Except that now it is an imaginative process rather than propositions that do the work. So frequently is this device employed throughout the *PI* that without it Wittgenstein’s very philosophical style of inquiry could not get off the ground. Certainly and importantly, *Vorstellungsspiele* play as much a role in the book as do *Sprachspiele*. Phrases such as “We can imagine ...,” “It is easy to imagine ...,” “Think how ...,” “Now imagine ...,” or “Suppose ...” ask the reader to conjure up and participate in imaginary variations of possible actual scenarios, an exercise that is at the very heart of his philosophizing. He not only takes it for granted that we can entertain possible occurrences in our *Vorstellung*, he takes such advantage of this capacity that one may wonder whether this is merely a methodological device he found more convenient than to point to actual perceptual situations, or whether *Vorstellung* is perhaps more deeply implicated

in language than his rejection of mental representations as components of meaning suggests. As Wittgenstein insists, “it is *not* the purpose of words to evoke *Vorstellungen*,” even if the latter may prove helpful in the “practice of the use of language.” (*PI* §6; 7) What is not entirely clear is whether this prohibition is as categorical as it looks or whether it is motivated by getting the reader to grasp the centrality of the public nature of meaning as *Gebrauch* and the concomitant nesting of individual use within the confines of a speech community. Or, perhaps the gulf between these two alternatives is not as wide as we may think. If so, we may ask how the reader typically follows Wittgenstein’s instructions in the *Vorstellungsspiel*, a special version of “following a rule.” We cannot help but play with variations of possible perceptual and quasi-perceptual scenarios such that our mental replication of the color sepia in our as well as in other people’s *Vorstellungsklavier* appears in such a way as to make it fit into all kinds of “occurrences,” including those belonging to memory. We can do this because we are in a position to “free” our initial experience and subsequent cases from their singularity. This ability is not a verbal act, but rather a precondition of being able to think in terms of classes, kinds, sets, and other subsumptions and as such must have preceded the invention of language by a very long shot. Nor is it plausible that whatever kind of “thinking” that tigers perform is restricted to specific percepts. Their finely honed hunting techniques are the result of training and experience both of which must draw on classifying non-linguistic conceptualization. Much the same must be assumed about our hominid ancestors. The moot point here is what *form* such pre-linguistic conceptualizations take. If they are not linguistic, nor propositional, they could be something like generalized percepts or *nonverbal schematizations*. Whichever the appropriate description, natural language did not have to invent all its generalizations into kinds and classes, but was more likely in a position to impose refinements on an already available procedure. In the *PI*, Wittgenstein is torn between foregrounding *Vorstellung* as a methodological device and dismissing it as a legitimate component of meaning, since “nothing is more wrong-headed than calling meaning a mental activity!” (§693)

Indeed, there may very well be a contradiction in the *PI*. On the one hand, *Vorstellungen* are dismissed as private and not belonging to language, on the other, they appear indispensable in the process of communication, of which language plays an essential role. As the text of *PI* demonstrates, there can be little doubt that *Vorstellungsspiele*, for Wittgenstein, occupy a central place in our mental life and, just like *Sprachspiele*, are “part of an activity, or a *Lebensform*.” (*PI* §23) The tight relation which I am arguing here exists between *Vorstellung* and language seems to be assumed by Wittgenstein in this passage. “When we forget which color this is the name of, it loses its meaning for us; that is, we are no longer able to play a particular language-game with it. And the situation then is comparable with that in which we

have lost a paradigm which was an instrument of our language.” (*PI* §57) Baker and Hacker’s analysis shows that Wittgenstein merely uses this as a possible objection to his position, rejecting the relationship between simples of language and simples of *Vorstellung*. Yet even if we replace simples and samples by two parallel systems, those of language and the *Vorstellungswelt*, if there were no relation between the two, Wittgenstein’s entire method of inviting us to project mental scenarios in order to get at the nature of language would be spurious. According to Baker and Hacker, “A speaker who assigned meaning to ‘red’ by reference to mental images and then forgot what color red was would be just as badly off as one who assigned meaning to ‘red’ by reference to a single physical sample which he later lost.” (Baker and Hacker 1983: 117) But this is not a plausible representation of what could be going on here. If a speaker lost his *Vorstellung* of “red” in connection with the term she could be retrained by the community. If the community as a whole dropped the shared mental schematization of “red,” its meaning would indeed be gone, as is the case with lots of forgotten combinations of signifiers and their activation by communal, conceptual regulation of iconicity. So, either Wittgenstein is wrong or Baker and Hacker’s interpretation is. Certainly, the kind of systemic relation between *Vorstellung* and language that Wittgenstein urges the reader to perform cannot be empty. If it is, that is, if our *Vorstellung* fails us, then *meaning* fails. And since meaning in the *PI* is the use of a particular language-game, if *Vorstellung* fails, we are at the same time incapacitated to play the language-game. Note, however, that it was not first our ability of engaging in the language-game but rather the loss of the connection of the perception of a color and its name. To invoke Putnam’s thinly anchored balloon once more, the failed connection between an *imagined* color in *Vorstellung* and its name was the source of the failure of *meaning*. This shift is supported by Wittgenstein in the same paragraph, where he insists that “the meaning of the word ‘red’ is independent of the existence of a red thing.” Perceptual existence is of course different from *Vorstellung*; after all, the latter depends on the former. Could we imagine a color that does not exist? Some mixture that does not exist on the spectrum? So much seems certain, for each individual speaker, losing the *Vorstellung* of red would also destroy its meaning for that person. In terms of meaning being a community regulated process, such a speaker would be pragmatically handicapped. Now the merely incidental connection between mental act and word has been seriously compromised. The two main reasons why Wittgenstein did not pursue the significance of *Vorstellung* in this respect seem to me his behaviorist convictions and an unacknowledged Fregean assumption of the private nature of mental images. It is to the second of these likely motives that the next section addresses itself, with a double emphasis on the alleged privacy of mental representations and the question whether Wittgenstein has perhaps eliminated such phenomena too readily.

5. How Private Are Mental Images?

When Frege dismissed *Vorstellung* from *Sinn*, he felt he had good reasons to do so. Driven by the ideal of a pure and unambiguous *Begriffsschrift*, he thought it would be possible to transfer the characteristics of formal sense to natural language sense without damage to the description of language. This is why he did not deem it necessary to give any justification for his equivocation of the sense of geometric entities and the sense of such natural language terms as “morning star” and “evening star.” Yet, justifications are normally a *sine qua non* in philosophy. Frege must have been sure that there was no problem to address. So it was just another similar step to disrobe the employment of natural language terms further by removing the component of *Vorstellung*. In this case, however, Frege did provide an explanation, namely that since different persons have different *Vorstellungen* associated with linguistic expressions, such associations distract from the purity of thought to which the components of sentences contribute. (Frege 1970) Though Wittgenstein was skeptical of the “clarity of logic” that “bedazzles” us when we look at natural language, he still seems to have been too much in the shadow of Frege’s scientific enterprise to completely shake off the last remnants of this kind of mathematization. Certainly, mental images are not to be invoked as components of meaning in the picture of language that emerges from the *PI*. They are at best incidental. One objection one can make to Wittgenstein’s critique of the picture theory is that it does only half the job. Intent on correcting the false start of the *Tractatus*, Wittgenstein was driven to show the shortcomings of that sort of picture theory in which propositions and the facts of the world are related in an isomorphic fashion. This is perhaps why he terminates his critique once he had shown that mental images may occur and that they may even assist us in understanding certain things, but cannot provide a basis on which to build a theory of natural language.

Wittgenstein’s caution concerning *Vorstellung* applies not only to the specifics of mental images but also to their generalized form, even though the original text carefully distinguishes between the two, “*Vorstellung*” and “*Bild*.” As a result, a conflict arises in the English translation. Comparing the German original and the English texts of the *PI* we find that Wittgenstein’s *Vorstellung* and *vorstellen* are invariably translated as “image” and “imagine,” a practice which contradicts Wittgenstein’s point that “a *Vorstellung* is not an image, but an image may correspond to it.” (*PI* §301) This means that his objection to regarding mental acts as components of linguistic meaning is actually stronger than it appears in the translation. Not only are the specifics of mental images discarded, but also the more general level of mental activity of *Vorstellung* of which images are a small part. So we need to ask and answer two questions, how private are mental images and how private are *Vorstellungen*? Perhaps both of them can be answered by applying the criteria

provided by Wittgenstein himself in his critique of the notion of a “private language.”

Roughly following Kripke’s summary, the “private language” argument looks as follows. We can accept that our language expresses concepts which, once acquired, we are justified in applying. Yet, Wittgenstein insists, “an ‘inner process’ stands in need of outward criteria” (*PI* §580). We can find such outward criteria in “circumstances, observable in the behavior of an individual, which, when present, would lead others to agree with his avowals.” (Kripke 1982: 100) This is why we must look at circumstances under which speakers employ a language-game in such a way that they can be said to have followed the relevant rules. Individual rule following, however, remains below the radar of determination. What is required is the way an individual speaker follows rules within community constraints. The success or failure of individual rule practices can now be ascertained as an empirical fact open to communal agreement. Whatever inner process makes natural language what it is, and whatever its performance by individual speakers, it is at the level of *sufficient semiosis* that it is decided whether or not someone can be regarded as a speaker the language.

In both Kripke’s and this account, Wittgenstein’s theory of natural language is “one of assertability conditions.” (Kripke 1982: 110) The “private language” claim however also fails on the grounds that following a rule privately violates the very concept of a rule as something any person could follow. And since a language is by definition rule governed and so communicable, such a “private” language could be private only *de facto*, but not in principle. What then about a person who uses “private” words “to refer to what can only be known to the person speaking; to his immediate private sensations. So another person cannot understand the language”? (*PI* §243) Since here too, as Baker and Hacker show, “linguistic competence (understanding a language) is mastery of a rule-governed technique,” speaking of a “private language” is a contradiction in terms. (Baker and Hacker 1983: 267) Or, in P.F. Strawson’s words, “the idea of a language of *any kind* used only by one person was an absurdity.” (Strawson 1971: 28) The proof of the pudding is neatly provided in Bill Bryson’s account of “Boontling, or harpin’ boont,” which started as an attempt at creating a private language, but got out of hand and for forty years survived as a local dialect in Boonville, north of San Francisco. (Bryson 2008: 232f.) If language is by definition always already social, then we should be persuaded by the claim made by John Lyons that “there is an intrinsic connection between meaning and communication.” (Lyons 1981: 32) But all this leaves us with a dilemma as we resume our discussion of mental images. On the one hand, mental images are said to be private; on the other, they appear to play a big part in social interaction. This dilemma could be resolved if one were able to show that

mental images are likewise subject to rules, even if such rules may prove a little more obstinate to identify than those of language.

In an imaginary dialogue between P. and Q., John Wisdom has P. open the conversation by saying “When you say ‘How blue the sky is’ you know what you mean but I don’t know and can’t know what you mean and nor can anyone else.” (Wisdom 1973: 27) To any ordinary English speaker this sort of statement looks nothing short of ludicrous. Of course, we *roughly* know what P. means in the sense of *understanding what he is saying*. Even a color blind person has become attuned to take on trust that whenever someone utters this sort of sentence, she understands what the words amount to pragmatically and accepts the statement on condition that the way she imagines the sky is consistent with the typical way people with normal vision say they see it. In other words, the sentence “How blue the sky is” is regarded by members of a speech community as standard verbal communication of mental images to be taken on communal trust.

Mental images, I want to say, are not as private as they are assumed to be in the literature and very much for the same reasons that Wittgenstein invokes for his position on the necessarily public nature of language. For whatever goes on when we have mental images is not private *of necessity*. It too is subject to constraints and typification. Consider the following cases of actual pictorial representation. When eight “mad” Buddhist monks of the Song dynasty in China in the 12th century AD united to paint, they created a wild “expressionism,” Chinese style. Wild it may be, but it is immediately recognizable as a style, which means there are regularities within the seeming chaos. Not only have art specialists isolated these rules for the educated elite, the style itself has had its own pedagogic effects, training Chinese audiences over many centuries into appreciating the special quality of those paintings and the regularities of their iconicity. And once so trained, the viewers’ mental images tend to move along the structural lines laid down by those monks. Cubist mental images became a fashion once Picasso had made his pictorial deviations from the norms of painting his personal style. The Picasso museum in Barcelona neatly demonstrates the painter’s transition from the rules of the academy to the rules of the new paradigm. Much the same can be said of music and all other arts, repeating as they do this training of communal, mental acts by way of the constitution of ever new rules for *Vorstellung*. Such is the working of the sublime, as that which cannot yet be presented but must be, imposing rules in defiance of established forms. (Lyotard 1992: 15)

The most pervasive and non-sublime of all such nonverbal, mental grammars is the televisual screen on which prefabricated combinations of language and mental images appear as a never ending digital stream. As a result of this pedagogy, the viewer must make an effort not to reproduce the televisual images of blue helmeted soldiers on the verbal cue of “United Nations

peacekeepers.” Such is the power of the repetition of nonverbal typifications. In addition to cultural constraints on our mental images, there are biological constraints starting with the pre-given ratio of 1 million visual input cells compared to 1 billion neurons turning the incoming information into human perception. Roughly the same ratio applies to the perceptual realizations initiated by our other four senses. It is with reference to such ratios that Johnson and Lakoff, for example, speak of “neural concepts.” (Johnson and Lakoff 1999: 19) What interests us here is that the intrinsic human neural activity far outstrips that of its perceptual antennas by such an immense margin. Nor is it likely that this asymmetry is restricted to a mere quantitative difference. Since we are able to vary perceptions infinitely, at least in principle, in *Vorstellung*, the resulting variations are likely to be different also in kind. After all, Wittgenstein’s *Vorstellungsklavier* is able to replicate as well as dramatically distort perceptual input. None of these variations, though, as we have suggested, should be assumed to be any less structured than language. Hence the difficulty of originality in art.

The claim of the structured and therefore rule governed nature of mental images has found recent support also in the idea that “conceptual blending” is already part and parcel of the human perceptual machinery long before the arrival of language. Indeed, according to Gilles Fauconnier and Mark Turner, conceptual blending had to evolve to a high degree of complexity before natural language could arise. “Language arose as a singularity. It was a new behavior that emerged naturally once the capacity of blending had developed to the critical level of double-scope blending.” (Fauconnier and Turner 2002: 181) Before this advanced stage of largely unconscious operations in the human brain was reached hominid development had already achieved the capacity of “single-scope blending,” conceptual “compression” and “decompression” relative to conceptual “frames.” As an example of single-scope blending the authors cite the sentence “He digested the book,” where the conceptual domains of eating and reading are integrated in a way that allows us to unite all the features we tend to associate with each process. As a result, “the topologies of the inputs” reappear in the topology of the blend. In the conceptual blending of “double-scope networks” the relation between the topologies is complicated in that the “inputs clash on causality, intentionality, participant roles, temporary sequence, identity, and internal event structure” resulting in highly creative blends. As the authors demonstrate, interpreting such forms of blending reveals a complexity of interconnections which, in actual language use, remains typically hidden. (Fauconnier and Turner 2002: 131–135) What is relevant for our discussion here is the non-conscious as well as conscious background of nonverbal materials that are conceptually compressed, decompressed, blended and refined by language. Compression and decompression can be aligned with *degrees of schematization*, while single-scope

and double-scope blending would be covered by the *manner of schematization* in our initial set of definitions.

The story of the long evolutionary road from simple mental blending in mammals to human simultaneous, multiple assemblages of meanings in double-blending in conjunction with language, as presented by Fauconnier and Turner, suggests that we should discard the view of mental images as lacking organization, structure, and rules. To this extent, then, mental acts are not as free or private as we have been led to believe. If we accept this correction, Wittgenstein's notion of following a rule applies also to *Vorstellung*. This paves the road for the claim that the combinations between words and their mental projections can be understood as fairly well established patterns which are neurally transmitted, culturally modified via pedagogy and reinforced by semiotic practice to form a pivotal part of our *Vorstellungswelt*. The same, *cum grano salis*, holds for nonverbal signification. As David Crystal notes, "the communicative value of tactile activities is usually fairly clear within a culture," that is, also in our *Vorstellungswelt*. (Crystal 2008: 6) This does not mean that members of a speech community have all been trained into producing such combinations in identical fashion. Nor is strict synonymy a necessary condition for communication. As Putnam notes, linguistic *competence* is always only a mastery of a portion of the totality of a language. This, he argues, is a consequence of the "linguistic division of labor." (Putnam 1977: 246; 228) Nor is any individual pragmatic mastery of specific meanings ever identical with that of any other speaker. And yet communication occurs, because both *competence* and *performance* are embedded in *sufficient semiosis*. We understand the language and our fellow language users *sufficiently* to guarantee successful linguistic exchange. Roughly the same observations can be made about the competence and performance in the domain of *Vorstellung* and mental images. Each member of a cultural *Vorstellungswelt* shares, produces, and communicates with the help of mental images and other mental projections because they are similar enough; they *suffice*. This makes mental acts *intersubjective* rather than private. They have been *de-privatised*.

6. From Image to Schematization

It is now time to return to Wittgenstein's insistence that "a *Vorstellung* is not an image, but an image may correspond to it." (*PI* §301) Wittgenstein here employs the ordinary use of the term *Vorstellung* indicating a level of generality of which mental images may be specific instantiations. Olfactory memories, for instance, are thus subsumed under *Vorstellung*, though not as images. A further step on the ladder of generalizing mental acts is Kant's distinction between the schema as "monogram" and the image as its specific realization. "The image," writes Kant, "is a product of the empirical faculty

of reproductive imagination; the schema of sensible concepts, such as of figures in space, is a product and, as it were, a monogram, of pure a priori imagination, through which, and in accordance with which, images themselves first become possible.” (B181/A141f.) One obvious reason for needing a level more general than mental images is that much of the specifics of *Vorstellung*, such as gustatory, thermal or gravitational readings or realizations of our own emotions and sensations are not well characterized as images. This is where a reworking of Kant’s schematism may prove a trustworthy old avenue for new thought. If Kant’s “monogram” is the general schematic condition for mental images and other sensuous readings, such as olfactory realizations, the schema must however not be assumed to be “congruent” with such mental realizations. It cannot be transformed into an image at all. “The schema of a pure concept is something that cannot be brought into an image, for it is pure synthesis,” serving as it does the purpose of subsuming all “*Vorstellungen*.” (A142/B181) It is at the level reserved by Kant for the monogram as a *tertium comparationis* that we are able to collect and compare our nonverbal readings of the world and their extensions and variations in *Vorstellung* by way of a more general process of *schematization*.

What Kant lacked, of course, was the benefit of an evolutionary theory and so he viewed the entire human epistemic apparatus from his top-down transcendental, speculative perspective, even though, to his credit and in the face of so many idealist mis-readings of his work, he insisted throughout the *Critiques* on the primacy of perception. Unlike Kant, we are in a position to turn the procedure around and view perception itself as the complex result of a long trajectory at the beginning of which stands mere cellular interaction. Molecular action, then, rather than perception, is where the interaction of organisms and world takes its long drawn out beginnings. (Fitch 2008) Now mental acts can be seen as the intrinsic evolutionary result of information exchange amongst cells monitoring the success or failure of an organism’s interaction with its *Umwelt*. In this reversed scenario, it is most likely that human intrinsic intentionality had already reached an advanced stage when natural language gradually transformed mere perceptual being into something radically new, a creature able to compress, decompress, and hierarchically order its *Vorstellungswelt*, as well as creatively experiment with those mental resources. This raw picture is supported also by recent observations made by Noam Chomsky concerning the “essential uniformity of natural languages” which we can explain as a result of “the fundamental structure-building block” he calls “Merge.” (Chomsky 2002: 29) Rather than seeing such ordering as the consequence of linguistic syntax, as does for example Derek Bickerton, it seems much more likely that language transformed an already existing perceptual and gestural *proto-syntax* into the kind of refined relations we now associate with natural languages. (Bickerton 1981; 1990; 1995) Nor is it likely that the rich intrinsic world of *Vorstellung* was suddenly replaced by

linguistic constructions. Why should they not have lived side by side to this very day? If so, the question is how perception, *Vorstellung*, and language relate to one another. Or, more to the point, what role do perception and *Vorstellung* play in language and how could we account for such a relation? Consider the distinction between so-called concrete and abstract terms.

This well-established distinction shows that both concepts must be broad, subsuming as they do very different intensive magnitudes as well as kinds of “concreteness” and “abstraction.” At the same time, we note that the distinction is merely directional, leaving us in the dark as to where “concreteness” should be separated from “abstractness.” That this is a theoretical problem only and not a dilemma that language users are bothered by demonstrates, for example, how wrong-headed the standard formulations of the so-called “sorites paradox” are; if, that is, they are meant as a characterization of natural language rather than an exercise in logic. Language users *know* when to use “fast” rather than “slow,” “poor” rather than “rich” without much worrying about the absence of a logical dividing line between the meanings of the two terms. Nevertheless, we should ask what sort of “abstraction” is operative in such cases as in natural language generally. Is it “generalization” or “formalization”? Formalization understood as radical stripping of mental material content, of the reduction of reference and deixis to zero, only occurs in formal sign systems. In the sign sequence $x = y + z$ we have full formalization, but it is not natural language. In “the right of every citizen to education” no such abstraction takes place. Rather, we are dealing here with generalization or, perhaps more precisely, with *degrees of schematization*. In the language introduced by Fauconnier and Turner, we could say that the materials covered in concrete terms have been “compressed,” in abstract terms they are “de-compressed.” (Fauconnier and Turner 2002: 115–119) Yet what is it precisely that has been so compressed and de-compressed? I suggest that it is the iconic, mental material which, in the linguistic meaning event, reappears as the quasi-perceptual content regulated by the concepts of natural language. This is where we must leave Kant’s monogram rule behind in order to be able to differentiate degrees of generalization on a scale from highly concrete to highly abstract schematizations, according to linguistic expressions and their pragmatic context of *Vorstellung*. We must be able to account for the difference between the generality of “I said baking, not deep frying” and the relative specificity of “baking a cake” and “baking a potato.” (Pustejovsky 2006: 369–393) How do we do this? We have been taught to imagine the two different scenarios which endow the two different kinds of baking with two different *imaginable schemata*. On the other hand “baking” on its own is understood by way of a much broader schema waiting to be specified.

According to Wittgenstein, the meaning of “bake” in all three instances is their use, a behaviorist externalization and abbreviation of a complex process. For does this formulation capture meaning when it is externally unavailable?

It is only because we know different kinds of baking and at the same time have been trained to use certain strings of words to describe them that we can be said to be speakers of a language. But what does such competence consist in? The ability to formulate appropriate propositions? They surely can be constructed, but not as a must rule. However, without imagining the appropriate mental scenarios “in a flash” we would not be able to see the crucial differences. If linguistic meaning is determined by the relation of language and world, in the absence of relevant perceptual situations, it is the *Vorstellungswelt* rather than the immediate *Wahrnehmungswelt* that we must rely on. This is where semantic externalization runs aground. And the vast bulk of language use relies on *Vorstellung* rather than perception. This is precisely why Wittgenstein, throughout the *PI*, employs the *Vorstellungsspiel*. But is it essential for meaning?

The assumption to be argued for is that *Vorstellung* as carrier and modifier of perception is not only incidental to language and useful in discussing language, as Wittgenstein thought, but that it is an essential ingredient, one without which language could never ascend to meaning. What does not follow is that *Vorstellungen* and linguistic meaning can be equated. Rather, it is the process and event of appropriate combinations of linguistic expression that constitutes meaning as use. This in no way dismantles Wittgenstein’s proposal that meaning should be defined at the level of and as “use,” but will require a modification of the concept of use, a task I shall attempt below. Important to note is that something like the Kantian schema and the notion of *degree and manner of schematization* allow us to both accept Wittgenstein’s criticism of *Vorstellung* as a carrier of meaning and refine his analysis to grant mental acts their legitimate role in language. To do this, I suggest that we employ the same strategy by which Wittgenstein proceeds from individual rule following to following a rule under community control. I have already suggested that mental acts not be defined as private but rather as *intersubjective* and so governed by rules in principle. Now we need to establish the link between mental acts at the level of schematization with the speech community. It would be odd to assume that the speech community were in charge only of verbal communication and had nothing to do with our *Vorstellungswelt*. Quite rightly, Wittgenstein never questions that the community is always already also the guarantor of the way we imagine the world around us. Otherwise he could not, as he does without justification, invite his students and readers to make the myriad mental moves he does throughout the *PI*. This suggests to me that the *Vorstellungswelt* is as indispensable an ingredient of *sufficient semiosis* as are the specifics of linguistic constraints. In this respect, then, we can simply adopt Wittgenstein’s own practice.

7. Assertability Conditions and the “Aboutness” of Language

Kripke’s explanation why he regards Wittgenstein’s theory as “one of assertability conditions” is that the speech community “can assert of any individual that he follows a rule if he passes the test for rule following applied to any member of the community.” (Kripke 1982: 110) What kind of test then is the community applying in the following case? “Lying is a language-game that needs to be learned like any other,” says Wittgenstein. (*PI* §249) How do we decide whether an utterance is the use of the language-game of lying, understood as a deliberate misrepresentation of what is the case? Take a sentence such as “She had promised him to be kind.” This looks straightforward enough. If she had not intended to be kind but said she would be, it was a lie. But what sort of conditions would allow us to check whether the appropriate rules had been followed? Typically, perception does not provide the required “assertability conditions.” (Kripke 1982: 73ff.) In the bulk of language use we must rely on mental reconstructions and approximations, that is, *Vorstellung*, as indeed Wittgenstein does in his dialogue with his readers. Without a mental rehearsal of the relevant situations of what it would be like for the sentence to be a straightforward statement of fact or a lie, we would not be in a position even to judge whatever evidence may be available. All this places a big question mark on the reduction of meaning to “use” in Wittgenstein’s public sense. Certainly, if it worked, the externalization of meaning would permit public scrutiny of language use by way of *justification*. On the other hand, *Vorstellung* escapes the public eye. So “how can I *justify* that I form this *Vorstellung* in response to these words?” (*PI* §382) We cannot accept the description of *Vorstellung* as “testimony,” because it is really only a description of what someone is “*inclined* to say.” And “how does one point to a *Vorstellung*?” (*PI* §386) Nor do we have any criterion for judging whether two *Vorstellungen* could be called the same. “What is the criterion for the identity (*Gleichheit*) of two *Vorstellungen*?” (*PI* §377) After all, the word ‘same’ is justified only if someone else can also regard it as justified. (*PI* §378) Yet it is not only *Vorstellung* that is thus placed under scrutiny. In keeping with these criticisms, Wittgenstein also takes observation sentences to task. “To the *private* transition from what is seen to the word, I could not apply any rules” for “the institution of their use is lacking.” (*PI* §380) The only way out for both *Vorstellung* and perception, then, is the assumption of a culturally shared mental world. That we are justified in making such an assumption is not something Wittgenstein would want to entertain. But is it not a *necessary* assumption given what we already know about the human brain and the massive and all-pervasive pedagogy that streamlines the contents and structures of our minds?

Without some such assumption, meaning as “use” remains stuck in its *syntactic* straitjacket, with no ropes to anchor the balloon. This suggests

that Wittgenstein's notion of meaning as use is the public application of *intensionally* defined signifieds within the constraints of language-games. One may be tempted to read the *PI* in this way by the author's frequent alignment of natural language with examples from arithmetic, geometry, and chess. In order to get to the *aboutness* of language, however, we must be able to connect the syntactically ordered, empty signifiers, their *intensional* relations, with a domain outside of language, which cannot be done without an *extensional* connection. For unlike formal systems, language is not a syntactically defined, self-sustained sign practice. Understating the origins of natural language, Saussure held such a view, insisting that linguistic meanings were determined by the differential relations between signifiers, the chess game analogy of language. (Saussure 1974:120, 22, 88, 110) This move results in a vicious circularity that severs the vital connection between *Wahrnehmungswelt* and *Vorstellungswelt* on the one hand, and language on the other. Is Wittgenstein repeating the same kind of differential idealization? Is natural language then indeed a homo-semiotic and mono-semiotic sign system? (*PI* §31, 33, 197, 205, 337; p. 155) I want to employ his own example to demonstrate the problem. "Suppose I said 'a b c d' and meant: the weather is fine ... What is supposed to be the criterion for my having *that* experience." (*PI* §509) What Wittgenstein does not take into consideration here is the role of the speech community which sanctions the links between linguistic expressions and what they are about. Since we have grown into language as a pre-given system, we are lured into thinking that its meanings are inside the expressions. If they were, ostensive teaching would indeed be superfluous. The reason why "a b c d" do not grant us the experience of 'the weather is fine' is that the community has not sanctioned *this* particular combination of sound sequence and *aboutness*. Furthermore, the letters "a b c d" by themselves have already been customized to be employed in different circumstances. This means that meaning as use must somehow cater not only for the public display of linguistic competence in justifiable performance but also for the way the speech community has pre-arranged what counts as the appropriate *aboutness* of linguistic expressions. In this respect, Wittgenstein's advice "Let the use *teach* you the meaning" proves insufficient. (*PI* p.181) One way to fill the explanatory gap would be to follow Kripke's proposal to regard names as "rigid designators" by applying his move to a broad spectrum of signifiers. Putnam has already taken a step in this direction by including natural kind terms and mathematical magnitudes in a modified communal process of "baptisement." (Putnam 1979: 203ff.; 231f.) I am not sure whether this direction will lead us to a rich description of natural language.

We often use the interrogative "What *are* you talking about?" We ask this question when we are not sure what the preceding linguistic expressions were *about*. Or, what the person speaking to us was trying to *point to* by means of language; or what I was supposed to *imagine* as a result of her words.

In such cases, we expect a rephrasing for clarification. Yet it is not the rephrasing itself that is the purpose of our indirect speech act. Rephrasing is only the necessary intermediary step for the actual purpose of the original statement to be understood. What is missing is the *aboutness* of language. But here an obstacle arises. Wittgenstein's notion of *Verstehen* appears reluctant to accommodate anything beyond thought in a minimal, syntactic form. He wants to hold on to a syntactic notion of *Verstehen* in two senses. In one sense we understand a sentences if we substitute it by one that says the same. This would be an "understanding" of the kind that operates when we consult a dictionary. In the second sense, Wittgenstein wants to emphasize the uniqueness of understanding a sentence precisely the way it is, as for instance in a poem. (*PI* §531) This, once more, seems to suggest that part of Wittgenstein's view of natural language meaning is *intensional*, a suspicion supported also by his skepticism in defining the purpose of language. Is it "to convey thoughts"? (*PI* §304) or that "someone else grasps the sense of my words"? (*PI* §363) By way of an answer he asks, "what thought is expressed, for example, by the sentence "It's raining"? (*PI* §501) Nor does grammar "tell us how language must be constructed in order to fulfill its purpose. ... It only describes ... the use of signs." (*PI* §496) We are at a loss then to determine from these statements what precisely Wittgenstein took a thought to be. We do know that he did not think that the Fregean purity of thought was applicable to natural language, for Wittgenstein explicitly rejected the analogy with calculus in the *PI*. Yet the distinction he draws between *Denkapparat* and stomach in the following quotation suggests that thought is regarded as stripped of emotions. "As if the purpose of the sentence were to convey to one person how it is with another: only, so to speak, in his thinking and not in his stomach." (*PI* §317) Clearly, language, contrary to Frege, communicates more than thought in any narrow sense. At least in this sense, *Vorstellung*, in which thought plays but a part, would be compatible with Wittgenstein's description of meaning as use.

So far our focus has been on the question of "what is use?" and its relation to *Vorstellung*. We should also ask the question "what is use, as defined by Wittgenstein, used for"? One answer could be "to convey the specific *aboutness* of language." Yet language-games cannot be as specific as individual sentences; rather they act as generic frames for the pragmatics of specific linguistic expressions. "Requesting, thanking, cursing, greeting, praying" are all broad linguistic schemata within the confines of which specific sentences can be formed. (*PI* §23) "Could you please hand me that tumbler over there?" or "I wonder what his idea of 'freedom' consists in" are singular applications of language-games. Their *aboutness* exhibits a specificity that is absent in the raw contours of the language-game. We may have grasped the fact that a question has been asked, but we may still want to ask, "What precisely do you mean?" While the category of the language-game was understood, its *aboutness*

was not. If this distinction were disallowed, the concept of language-game would lose its class character which sets it apart from the specific moves we are justified in making within a language-game. The use of a language-games, then, cannot provide meaning, only specific moves within a language-game can. In other words, the definition of meaning as use cannot be pegged at the level of the language-game.

Of course, no theory of language can legislate that meaning be defined as the purpose of language. Nor can we discover a definition as we might an empirical object. A definition is a choice and an imposition. Let us define *x* as follows. All we can do is to aim for the most promising level in our analysis at which we undertake the definition of “linguistic meaning.” For Wittgenstein, this level is the public arena of “use.” The objection to this choice made here is that it needs to be specified and above all that it leaves out essential ingredients that distinguish meaningful expressions in natural language from those of other sign systems, such as the role of *Vorstellung*. There are, however, some pointers in the *PI* towards the possibility of a reincorporation of mental acts in the notion of use. As Wittgenstein himself demonstrates, it is impossible to analyze natural language without recourse to *Vorstellung*. Indeed, in much of social life we cannot but make assumptions about processes which are not available to public scrutiny. But this does not mean that justification and assertability are therefore completely out of reach. In the longer term, we will notice whether our assumptions were justified or not, and the bulk of those assumptions typically turn out to have been justified. The same holds for natural language itself. When Wittgenstein notes that “in language, expectation and fulfillment touch one another” he has involved *Vorstellung* in an important way. (*PI* §445) What is the function of *Vorstellung* in this relation? We must assume a double system to be at work here, consisting of *linguistic competence* and *Vorstellungswelt*. At the same time, the two must be sufficiently aligned such that our *Sprachspiele* and our *Vorstellungsspiele* can be matched in acts of meaning. Both systems can be specific or highly abstract, with gradations in between. They are both characterized by *degrees of schematization*. Nor does it matter whether expectation and fulfillment refer to actual or fictional contexts. Expectation and fulfillment are able to make contact because linguistic competence and *Vorstellung* are intricately intertwined in the minds of speakers of a language. Whether expectation and fulfillment actually touch one another in language is not something we can witness, except in *Vorstellung*.

Another feature in Wittgenstein’s *PI* that requires *Vorstellung* is the *directionality* of language, as in his formulation of the meaning as an act of “going up to the thing we mean.” (*PI* §455) This implies a mental turning, a turning in *Vorstellung*. And this turning towards something is an approximation of the turning towards something already performed by someone whose words we are constructing as meaningful. “Meaning something,” Wittgenstein con-

firms a little later, “is like going up to someone.” (*PI* §457) In other words, the public use of ordered signifiers is accompanied by the *Vorstellung* of the “thing we mean.” That this process can be “*blitzartig*” (in a flash) strengthens its characterization as a social routine, at least in habitual speech. (*PI* §317, 318, 319) But it is only in the interpretive attitude in problematic linguistic contexts that the full machinery of *Vorstellung* in the process of meaning making reveals itself. The social exercise of this faculty *par excellence* is the reading of poetry, where the prominence of *Vorstellung* would appear to be self-evident, though its workings cannot be publicly demonstrated.

An intriguing and fertile example of the use of *Vorstellung* by Wittgenstein can be found in his discussion of interpretive, modal variation in the viewing of a picture. “I see a picture which represents a smiling face. What do I do if I take the smile now as a kind one, now as malicious? ... Thus I might supply the picture with the *Vorstellung* that the smiler was smiling down on a child at play, or again on the suffering of an enemy.” (*PI* §539) Applied to language, deictic variations of propositional content are a vital ingredient of the process of meaning constitution, especially when we are dealing with contexts requiring the construction of *implied* or *cultural deixis*, the imposition of deixis, as in the nonverbal semiosis imagined here by Wittgenstein. Indeed, in natural language, deictic modification typically overrides propositional content. (Ruthrof 1992: 4f.) If so, then his advice to “Let the use *teach* you the meaning” (*PI*, p.181) has now acquired a broader definitional scope. Without *Vorstellung* none of Wittgenstein’s interpretive moves could have taken place, while at the same time, none of them are open to public scrutiny. And yet we are justified in employing modal and deictic *Vorstellungsspiele* because they are part and parcel of community practice or *sufficient semiosis*. They are ‘indirectly’ public.

If meaning is use and *Vorstellung* looms as large as it does in the *PI* and other manuscripts of Wittgenstein, then the use he makes of *Vorstellung* is not only a *Vorstellungs-game* but also an important language-game in itself with a special relationship to meaning. What are the “assertability conditions” of Wittgenstein’s use of the *Vorstellungs-game*? What gives him the confidence that when he writes “Imagine a picture representing a boxer in a particular stance” that the reader will be able to apply the kind of community sanctioned rules in her *Vorstellung* that would guarantee Wittgenstein’s pedagogic intention to be carried out? (*PI* §22, footnote)

He must assume that all his readers will be able to *imagine* in typical enough a fashion to produce *sufficiently* similar *Vorstellungen*. Or, to take another example, “The likeness makes a striking impression on me; then the impression fades. It only struck me for a few minutes, and then it no longer did. What happened here?” (*PI*: p.181) Wittgenstein must assume that in response to his sentences his readers will all more or less be able to construct mental representations sufficiently similar to share at least roughly the same

Vorstellung of him performing a *Gedankenexperiment*. But how could this be asserted? Only on the assumption that *Vorstellung*, no matter at what level and in what manner of schematization, is rule governed and therefore not private. And since *Vorstellung* is neither objectively public nor private, our best predicate is that it is *intersubjective*. This allows us to distinguish the objectively public features of language, such as the signifiers in a dictionary or in a public speech, from such *intersubjectively* shared and so *indirectly* public instantiation of the connections we have been trained to perform between language and *Vorstellungswelt* as *meanings*.

8. Conclusion

Any theory of natural language that does not include, or at least allow for, an evolutionary perspective should be regarded as suspect. After all, language, like anything else to do with human biology, including culture, has an evolutionary trajectory, a trajectory along with which *Vorstellung*, as the sum of mental acts, has evolved into the most powerful component of the human organism. To eliminate it therefore from our dominant system of representation and communication, natural language, does not look promising. Without taking cognizance of this trajectory, even if so far such cognizance is bound to be highly speculative, we cannot but misrepresent the deep relations responsible for the “naturalness” of natural language. The “rear view mirror” approach via mathematization tends to distort and take our eye off what is still essential in natural language. Contrary to formal systems, descriptions of natural language semantics via *intensions* are doomed from the start. We must be able to address its *extensional* features, but in an appropriate way

In the *PI* Wittgenstein was intent on avoiding the path of mathematization which he had attempted in a radical fashion in the *Tractatus*. Instead, he now identifies what actually goes on when language is employed in its ordinary manner as an exercise of multiply overlapping language-games. At the same time he remained committed to the scientific and behaviorist ideal of publicly available evidence, as well as to frequent analogies between formal signification and language. In the process of his analysis, however, he found that he had to rely heavily on *Vorstellung* to which however, in keeping with his scientific method, he felt he could grant only an auxiliary role in relation to understanding and meaning. As a result, his definition of meaning captures only part of what is going on in the pragmatic employment of language and the tension between his definition of meaning as use and his ubiquitous use of *Vorstellung* remains unresolved.

By way of conclusion, I offer a tentative solution to Wittgenstein’s dilemma in a number of distinct steps. (1) It is useful to distinguish sharply between habitual and interpretive language use in that the former suggests to the

observer that natural language works like chess. Indeed, it does so as far as its syntactic relations are concerned, which is all that happens in the chess game. On the other hand, the search for meaning in interpretive use of language turns out to be a search for what language is *about*, or its extensional connection. What is at stake in defining meaning as “use” is the process between language and its *aboutness*. (2) The description of a community sanctioned use of language therefore needs the following set of rules: rules governing well-formed linguistic expressions; rules for a well-formed domain that can function as the goal of linguistic “aboutness;” and rules for combining the right clusters from both domains. Furthermore, even if the first set of rules has been applied in a flawed manner, meaning is more often than not secured as a result of negotiation and imaginative reconstruction. (3) What is so negotiated is not only the appropriate sentence structure. Indeed, the appropriate string of signifiers is often the result of a re-negotiated agreement in the kind of domain the sentence is about. I leave out linguistic self-referentiality as an added bonus. (4) As linguistic practice shows, and as Wittgenstein’s own continuous invocation of *Vorstellung* in the *PI* demonstrates, the bulk of ordinary language use cannot do without *Vorstellung*. “I’ll see you tomorrow then, at the clock tower at 7pm.” “See you there.” We do not understand the sentence because we have “assertability conditions” ready at hand. Our domain of “aboutness,” though ultimately the real, perceptual world, is in the first instance and essentially our shared *Vorstellungswelt*. The scenario evoked has not yet occurred. A bit of mental time and space travel is unavoidable. If the sentence is reasonably well formed and if the two speakers are able to form a schematic *Vorstellung* of what the sentence guides them to project, and if they can reach sufficient agreement in their mutual assumptions of the relevant *aboutness*, then the process of linguistic meaning is likely to succeed. If it does, it will have been successful because the speakers involved have observed three types of rules: syntactic; nonverbal, mental schematic; and mental, pragmatic combinatory. (5) Wittgenstein’s definition of meaning as use covers the syntactic side of language, in which I include everything that belongs to ordered strings of signifiers. The *PI* also covers part of the pragmatic, combinatory side of language, but only when we are dealing with language gearing visibly into our perceptual world, that is, language use that we can check in actuality. Yet even when perceptual evidence is available as referential background, *Vorstellung* as mental *replication* can still be shown to play a significant part. The bulk of language use though is not of this form. The much greater portion of language is either about *Vorstellung* of the actual world or about *Vorstellung* as perceptual modification and fantasy distortion. In short, in language as in human life in general, the *Wahrnehmungswelt* is not only well covered but also dwarfed by the *Vorstellungswelt*. Because we live in a technological world we tend to forget this vital ratio. And this is what an appropriate theorization of natural

language must be able to account for. Putnam is only partly right when he quips that meanings “just ain’t in the head.” (Putnam 1979: 227) For without heads there wouldn’t be any meanings at all. Meaning needs to be seen as an event that partakes of both public and intersubjective or indirectly public processes involving *Vorstellung*.

In light of these remarks I propose the following redefinition of Wittgenstein’s description of meaning as “use.” *Linguistic meaning as use is the activation under community rules of arbitrary, empty signifiers, ordered into language-games, by nonverbal, iconic mental materials in and as Vorstellung, regulated by concepts in terms of directionality, kind, quantity, and degree as well as manner of schematization.*

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HOW THE METAPHYSICAL NEED ("METAPHYSISCHES BEDÜRFNIS") OUTLASTED REDUCTIONISM

•

ON A METHODICAL CONTROVERSY BETWEEN LIFE PHILOSOPHY ("LEBENSPHILOSOPHIE") AND LIFE SCIENCES IN 19TH CENTURY GERMANY

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ABSTRACT. The paper analyzes how the evolution of the 19th century life sciences was adopted and reflected by the contemporary philosophy. As the paper shows, there have been manifold (and nowadays very little known) connections between life sciences and philosophy. In the spotlight of this very controversial argument stood the concept of life. Whereas the life sciences (cell theory, materialism debate, and Darwinism) attempted to grasp this concept in a strictly reductive manner, the German life-philosophy ("Lebensphilosophie") established an integral and often highly metaphysical view of man and culture that was in many cases based on the concepts of 19th century life sciences. The paper shows how the concept of life put forward by the life sciences was criticized by Friedrich Nietzsche and Georg Simmel who thus formulated a metaphysical but yet *non-transcendental* concept of life and culture.

Keywords: 19th century, life sciences, Nietzsche, Simmel

1. The Metaphysical Need: Kant's and Schopenhauer's Definitions

The history of the evolving life sciences in the 19th century Germany shows an intense theoretical controversy between Kant's and Schopenhauer's concept of "metaphysical need" on the one hand and the search for a valid theoretical framework for the empirical life sciences on the other hand.

In his *Prolegomena*, first published in 1783,¹ Kant claimed that the quest for metaphysical knowledge is just as human as any other natural body function like breathing: "That the human spirit might once give up metaphysical enquiries once and for all, is just as unlikely as that we would once give up

breathing just because we are afraid to gain bad air.”² Subsequently, Kant concluded that there will be always metaphysical reflection in the world, “which, in lack of a public standard yardstick, everybody will tailor for himself in his own way.”

And Schopenhauer, being one of the most profound and yet one of the most critical of Kant’s recipients, hereafter coined the often cited phrase “metaphysical need” (“*metaphysisches Bedürfnis*”). For Schopenhauer, the metaphysical need arises from man’s amazement over his existence, particularly over his moribundity. Schopenhauer defines metaphysics generally as “every knowledge which transcends the possibility of experience, i.e. the nature, or the given appearance of things, to shed light on this, by what these [experience, nature, and appearance, D.S.] are determined; or, speaking in a popular way, what is behind the nature, making it possible.”³

From a historical point of view, three points seem to be remarkable at these statements:

By analogizing the “metaphysical need” with a vital body function, Kant and Schopenhauer defined the metaphysical need as an inevitable but yet almost involuntary function of the human mind. This means that every time either an individual person or a philosophical movement attempts to eliminate metaphysical questions (like the quest for personal identity, the question of the immortality of the soul, and the boundaries of human knowledge) from the world view, metaphysical questions would almost automatically pop up in mind.

On the other hand, Kant and Schopenhauer have peremptorily criticized what Kant called the dogmatists’ point of view. For Kant and Schopenhauer, therefore, the metaphysical need necessarily implies the criticism of both the practical and the pure reason. For Kant, the main function of metaphysics is to analyze the ambit of reason. Hence, metaphysics is “a philosophy on the first foundations of our knowledge.”⁴ Furthermore, Kant speaks of the speculative cognition of reason (“*speculative Vernunftkenntnis*”) which altogether soars above the empirical experience, “namely by means of pure concepts.”⁵

Considering the evolution of the so called “life sciences” in 19th century Germany, this thesis has proven remarkably right, almost clairvoyant. Even though there have been very strong intentions to eliminate any metaphysical speculation from the more and more empirically oriented research programs and due to the *methodical* necessity of the early life sciences to build a empirical framework without speculative elements, the metaphysical need has outlasted every intention to eliminate speculative elements from the philosophical world view.

The struggling between the quest for a valid framework in the life sciences thus competed with the *individual* need of a meaningful world view. Yet, as fruitful as the 19th century reductionism (often referred to as materialism) has proven in the evolution of the life sciences, it has by no means ceased

the metaphysical need. More than this – their scientific results have on the contrary arisen new metaphysical questions as it can be made clear in three historical stages of the evolution of the 19th century life sciences: the *cell theory*, the *materialism debate* and the reception of *Darwinism*.

2. Reductionism and the Evolution of the Life Sciences in the 19th Century: Three Stages of a Track Record

Cell Theory

At the beginning of the 19th century, the methodical framework the life sciences was still dominated by the so called “idealistic” philosophy (Hegel and Schelling). Their “philosophy of nature” (“Naturphilosophie”) not only dealt with the results of the contemporary life sciences but also asked for a transcendental reason for each and every natural phenomenon. Hence, every empirical phenomenon was interpreted as the objective appearance of an *idea*. From this point of view, true knowledge could not be gained by empirical enquiry but only by metaphysical speculation which transcends the empirical realm.

As prodigious as this claim may sound from a today’s point of view, Hegel’s and Schelling’s positions have influenced the evolution of the life sciences well into the early 1840s. The first historical movement that explicitly broke with this claim was the development of the cell theory by Schwann and Schleiden. By his botanical researches,⁶ Schleiden succeeded in adding plausibility to the assumption that the cell was the material carrier of the Life – at least as long as the botanical definition of life was concerned.

Although Schleiden always avoided drawing a materialistic conclusion from his results, the materialistic-reductionistic implications of his research work were obvious: By highlighting the role of the cell for the inner organization of Life, the material organization of the body seemed to be the one and only reason for the manifold life processes.

The zoologist Theodor Schwann finally transferred Schleiden’s results to the vital organization of animals. It was already 1839, only one year after the sensational work of Schleiden, that Schwann’s “Microscopic researches” appeared in print.⁷ Regardless of all differences between botanical and animal life, Schwann yet succeeded in emphasizing the role of the cell as the basic module of every life. Still standing in the teleomechanistic research tradition⁸ prepared by Kant’s concept of teleology, Schwann formulated his cell theory as a research program in which “Life” could be reduced to the specific and characteristic arrangement of material parts. Hence, the reason for the purposive Organization was given in the arrangement of independent parts and not in

the existence of a vital force (“Lebenskraft”) which was still supported by prominent researchers like von Baer.

The so-called “core corpus” (“Kernkörperchen”) within the cell did firstly not principally differ from non-organic elements, and therefore they were, secondly, empirically analyzable.⁹ The exploration of the cell Life by Schleiden und Schwann thus suggested that the reason for individual organic evolution was located within the core of the cell which brought up the question for the mechanistic explanation of those evolutionary processes.¹⁰

In continuation of this research program by Carl Vogt and Rudolph Virchow (who transferred this approach into a scientifically valid theory of diseases), the singular cells in their characteristic arrangement were more and more interpreted as the objective medium of the life process. “Life is essentially cell activity”, as Virchow put it 1845.¹¹

From a methodical point of view, this gave a competitive edge: the problematic concept “life” was now accessible to a direct empirical observation, it became observable, quantifiable. And: theories on the concept of life had to be empirically reviewed and had to be, at least principally, falsifiable.

Virchow’s research work on cellular pathology thus prepares a prospect on the concept of life which puts the cell as autonomous life. This concept had enormous impact on the philosophical discussions after 1840, it especially inspired Nietzsche’s concept of the body (“Leib”) in the 1880s:¹² By defining the life process as the interaction of many autonomous elements, Nietzsche evolved his concept of the body as a “great reason” (“große Vernunft”) and thus anticipated modern concepts like the understanding of the body as a “molecular democracy.”¹³

Although Virchow himself was always careful not to draw metaphysical consequences from his concept of the cell, this very concept has proved to be extremely important for the evolution of the concept of life in Germany’s 19th century philosophy and life sciences – at least in two regards: on the one hand, it inspired contemporary metaphysical concepts of life such as Nietzsche’s. On the other hand, it has proven to be highly important for the evolution of the life sciences. In thus emphasizing the empirical method of the life sciences, the cell theory was the spearhead of a scientific revolution which proved to be decisive for the further evolution of these sciences. As different as their research work was – Schleiden, Schwann and Virchow agreed in this one crucial point that empirical knowledge (and not philosophical speculation) was the one and only source of knowledge.

This suggested the further conclusion that all factors of organic life could be reduced to chemical and / or physical causes. For the evolution of the empirical life sciences, this reductionism (often referred to as “materialism”) proved to be a highly stimulating methodical framework.

On the other hand, the metaphysical question for the integrity of life was factored out of the researcher’s considerations. It was also in the early 40s

that the so called “world-view philosophies” (“Weltanschauungsphilosophien”) arose. These philosophies, often written by well-known empirical researchers, tried to compensate this lack. Between 1840 and 1914, many periodicals¹⁴ were founded devoted to the on and only purpose of popularizing current results from contemporary sciences. Numerous popular lectures of highly acknowledged scientists such as Hermann Helmholtz, Justus von Liebig, Emil du Bois-Reymond, Arnold Dodel-Port and many others served the very same purpose.¹⁵

Obviously, the empirical search for the reason of life did no longer satisfy the metaphysical need.

Materialism Debate

The struggling between materialism and metaphysical need peaked in the materialism debate which started 1854. In this year, the zoologist Karl Vogt fiercely attacked the famous physiologist Rudolf Wagner on a public meeting of the “natural scientists” (“Naturforscher”). In his earlier lecture,¹⁶ Wagner had claimed that the newest scientific results were without any doubt reconcilable with the biblical history of creation. It was probably his basing on the authority of his (as he put it) “simple charburner’s belief” (sic!) that especially provoked Vogt’s protest. The debate led to a public commotion in which not only Vogt himself but also his fellow materialists Ludwig (Louis) Büchner¹⁷ and Jakob Moleschott¹⁸ persisted in their radical materialistic point of view which culminated in Vogt’s famous statement that “the thoughts stand in the same relation to the brain like the bile to the liver or the urine to the kidneys.”¹⁹ In other words, Vogt defined the brain as the expulsion organ of the thoughts. Invoking the results of the contemporary brain research, Büchner quoted many “evidences” for the “identity of brain and soul” by putting down different mental defects to brain deformations, and defended Moleschotts notorious (yet often quoted) sentence “No thought without phosphor!”²⁰

This reduction of thoughts on the material constitution of the brain finally caused a framework in which “reality” is completely reducible to empirical enquiry. On the other hand, every metaphysical concept was banned from this framework: “Everything that transcends the sensuous world is a hypothesis and nothing else”, as Büchner wrote.²¹

In their continuing publications, Büchner and Moleschott tried to relativize this very polemic statement, yet they held on to Vogt’s main thought that the brain is only the “carrier (sic!) of the mind / of the spirit” (“Träger des Geistes”). Büchner criticized in Vogts statement the analogy of the brain with an expulsion organ but otherwise held on to his radical-materialistic point of view.²² Moleschott defended Vogt’s statement by defining thoughts “as a motion, a conversion of the brain material.”²³ In his later publications, Vogt did not get back to his earlier text passage, yet he repeated his main thesis

“that the activities of the soul are only functions of the brain; that there is no independent soul.”²⁴ The reductionist point of view had reached its peak and had become a world-view relevant element which served as a basic for criticism of both the academic and the political establishment.

Darwinism

The third station in the struggling between the life sciences and metaphysical positions was the primarily critical reception of Darwinism starting in the late 60's in Germany. Of course, the greatest criticism was brought forward by the theology. Eduard von Hartmann, being one of the most profound connoisseurs of the philosophical aspects of Darwinism, stated in 1875 that ironically, nothing has been more helpful for the rise of Darwinism than the opposition of the theology of all confessions.²⁵

Indeed, the Darwinism has ever since maintained being one of the most central challenges for philosophical thinking and contemporary world view philosophies in Germany, and not only churches or religiously oriented authors have well into the 1880s seen Darwinism as an attack on central paradigms such as creation and order.

Darwinism was broadly viewed as a variant of materialism and has therefore often been criticized for his reductionist world view. Although Darwin himself has always been very careful not to draw any theological or anti-clergy conclusions from his theory, the Darwinism of the late 19th century has shortly after the first appearance of Darwin's *Origin of Species* in Germany taken a plainly materialist turn. The reception of Darwinism continued the materialism debate in its essential points, and therefore it does not astonish that the proximity to mechanist or materialist positions remained one of the most disputed points in the discussion of Darwinism in Germany. Contemporary philosophers evolved at least three strategies to handle the Darwinist challenge.

(1) The first one was to put Darwin into one line with philosophers like Hegel by highlighting the contribution to a *philosophy of becoming* (rather than being) made by Darwinism.

(2) At the same time, Darwin's theory turned out to be a highly, maybe the most provocative one for contemporary philosophers. The fact that in Darwin's theory, the impulse for evolution did not come from the individual creature itself but resulted from the *struggle for life* seemed to be highly unacceptable for the most contemporary philosophers. Most of them saw individual spontaneity at risk and therefore adduced the (long forgotten) theory of Lamarck against Darwin. Lamarck had claimed in his *Philosophie zoologique* (1809) that each and every evolution in nature resulted from the “principle of use and misuse of the organs.” Roughly spoken, this principle indicated that every individual acquires certain characteristic attributes (“char-

acters”) during his life (one of the most frequently quoted examples in the contemporary was the long neck of the giraffe evolved from stretching for leaves) and the heredity transmission of these attributes to his offspring. The claimed “inheritance of acquired characters” has remained being one of the most disputed principles of evolutionary biology far into the 20th century. Yet, for the philosophical discussion of Darwinism, another point turned out to be important: By playing off Lamarck against Darwin, many philosophers (like Nietzsche, Eduard von Hartmann, and Ludwig Klages) were trying to argue against a mechanistic analysis of evolution inspired by Darwin. Evolution, in this view, should be the fruit of spontaneously generated changes of the individual characters rather than the mechanistic result of the contention in the Darwinist *struggle for life*.

(3) The world-view inspired by Darwinism gained, at least in the version of many contemporary philosophers, yet another, namely a socio-political meaning which was strongly rejected. If Darwin’s *struggle for life* resulted in higher-evolved creatures and thus in the evolution of the genus, then two aspects followed from this conclusion: firstly, the present-day’s creatures and entities (not only biological but only political ones) are more perfect than the former ones. And secondly: every “fitter” organization has or gains *automatically* the power to prevail over the other ones. *Natural evolution thus gained in the philosophical discourse the meaning of an evolution to higher perfectibility including the moral in blank-justification for elimination of every governmental or political organization in the struggle for life.*

In post-revolutionary Germany, this latter conclusion (often referred to as “pan-utilitarianism”²⁶) was a very sensible one because it seemed to implicate that every existing *political* organization (like the Prussian State) was automatically more reasonable and prudential than the former one and therefore *per se* justified. The historical optimism once inspired by Hegel’s famous (or better: notorious) sentence “What is reasonable, that is real; and what is real, that is reasonable”²⁷ seemed to be reissued by this conclusion.

It was, again, not Darwin who drew this conclusion but Ernst Haeckel. Haeckel, one of the most influential popular authors of the late 19th century, managed to form Darwinism into a world-view. Haeckel’s name for this specific world-view was *Monism*. Monism was to serve as a “Link between religion and science”, as Haeckel himself put it in his book title from 1893.²⁸ Monism, in Haeckel’s version, meant the “all-embracing outlook of the ensemble of the world which we gained from the highest clambered standpoint of the monistic knowledge of nature.”²⁹

Darwinism thus not only monopolized the evolution of the life sciences in the late 19th century but also, in the name of the extremely popular Monism represented by Ernst Haeckel, the world-view of contemporary scientists and, partly, also of numerous popular philosophers. Or, as Eduard von Hartmann put it in his *Philosophy of the unconscious*: (“Philosophie des Unbewussten”):

“The pure monistic world-view is on its own capable to build the metaphysical fundament of an ethic which is not subject to individual arbitrariness (see Schopenhauer).”³⁰

Even though Hartmann’s concept of Monism was by no means identical with Haeckel’s, it is obvious that the longing for an integrative world-view was especially in the late 19th century a constitutive element of contemporary philosophy. Monism in the one sense or the other served as a science-based substitute for religion.

3. The Third Way: The German *Life-philosophy* (“*Lebensphilosophie*”)

In all of the before mentioned disputes, the tensions between the search for a reductionistic (materialistic) framework in the life sciences on the one hand and for a metaphysical world outlook on the other were under intense consideration.

It was not before the late 70s that a new discipline in philosophy was trying to compensate this lack: the so called “*Lebensphilosophie*” (“Life-philosophy”) attempted to arrange these obviously divergent tendencies. Often inspired by and based on results of the empirical life sciences, the main representatives of the Life-philosophy attempted to establish an integral and often highly metaphysical view of man and culture. Philosophers like Friedrich Nietzsche, Wilhelm Dilthey, Georg Simmel, Ludwig Klages, Karl Joël, Theodor Lessing, and Oswald Spengler have pointed out the necessity to complete the often reductionist theory of man evolved in the 19th century life sciences by a philosophical theory of culture, and Albert Schweitzer’s ethical concept of the “awe for life” has just as much availed of the impulses given by Life-philosophy as the early Martin Heidegger’s lectures. Life-philosophy is therefore mainly a philosophical theory of *culture*. And the “Philosophical Anthropology” (of Scheler, Plessner, and Gehlen) has in continuation of the Life-philosophy asked for the relation of man to nature, for the position of man in nature, and for the relation of man and other living creatures such as animals and plants.

It is not possible at this point to give a comprehensive picture of the Life-philosophy that has been the most popular philosophical movement between 1870 and 1914.³¹ Yet, considering the fact that the Life-philosophy, due to its popularity in the 19th and beginning 20th century, has been almost forgotten in the philosophy of the later 20th century and is gaining new popularity in the ‘new life-philosophy’ since the 1990s,³² it might be helpful to sketch out some of the crucial points of this movement.

Although the above-mentioned positions of the life sciences were reflected by the authors of Life-philosophy, the materialistic and positivistic implications of Darwinism were strongly rejected. Nietzsche called the Darwinism a phi-

losophy for “butcher’s fellows”³³ and at the same time emphatically affirmed the concept of evolution and progression inspired by Darwin. Nietzsche, as numerous contemporary philosophers, also tried to relativize the importance of Darwin’s discovery by putting him in line with previous philosophers of becoming such as Heraklit and Hegel. At the same time, Nietzsche valued Lamarck’s approach higher than Darwin’s because Lamarck’s “philosophie zoologique” seemed to be based on the assumption that evolution results from spontaneous, endogenous impulses rather than from an exogenous “struggle for life”.

However, Nietzsche’s reception of Darwin is in still another aspect characteristic for the reception of the subsequent Life-philosophy:

Let us assume this fight [Darwin’s *struggle for life*, D. S.] really exists – and indeed, it can be found –, then it turns out differently from what Darwin’s movement wishes [...] namely to the disadvantage of the strong ones, of the privileged ones, of the fortunate exceptions. The genuses do not grow in perfection, the weaker ones repeatedly prevail over the stronger ones – because they are the greater number, they are also smarter... Darwin has forgotten about the spirit [“Geist”, D. S.] (– that is English!), the weak ones have more spirit”³⁴

“Spirit” (“Geist”), in Nietzsche’s interpretation, is defined as a compensating function for existential, practical weakness (albeit an extremely helpful one!), even more: it is interpreted as a disease of the body. By determining the body (“Leib”) as the “great reason” compared to the “little reason” of the mind, Nietzsche redefines the correlations between body and mind. Body (understood as “Leib”, e.g. not as biological system – “Körper” in German – but as integral organizational entity) constitutes the mind in his various aspects. It is a highly provocative philosophy of knowledge that Nietzsche educes from his theory of the body. One could even call Nietzsche’s theory of mind a “philosophy of superficiality” because the mind remains the secondary instance compared to the underlying body (understood as “Leib”).³⁵ Moreover, if Nietzsche defines the body as the “will to power” (“Wille zur Macht,” he refers to central results of Schwann’s and Schleiden’s cell theory: just as they defined life as the interaction of autonomous living agents (the cells), Nietzsche defines life as will to power. The often misinterpreted concept of “will to power” means, at least in Nietzsche’s concept of the body, merely an organizational order of competing vital entities expressing itself in language, culture, and aesthetics (“physiology of art”).

The underlying intention of Nietzsche’s concept of the body as will to power is, of course, a highly critical, one could without exaggeration say: a *subversive* one. Nietzsche’s re-formulation of the connection between body and mind is in line with both earlier and subsequent concepts of rationality

and its criticism formulated by Schopenhauer, Simmel, Klages, Th. Lessing, and even Hegel. Although inspired by earlier scientific results, it is by no means a materialistic, naturalistic or a reductionistic one. Yet, it does serve the very similar purpose as the former materialist's conceptions: a fundamental subversion of the contemporary concept of rationality, the "free will," and metaphysics.

It is especially the last point that brings together Nietzsche and the subsequent representatives of the Life-philosophy. Even though the Life-philosopher's relation to metaphysics was by no means an easy and non-ambiguous one, they share some points on affirmation and criticism of metaphysics.

For Nietzsche, metaphysics is primarily meant in a very critical way because it refers to any view of man, culture and rationality in which a transcendent concept is the essential one instead of their immanent being. Dilthey followed this anti-metaphysical concept by developing a heuristic concept of culture in which every thing of objective culture is reduced to the question for *understanding*. Dilthey's theory of culture goes back to the question, how and on which (historical, psychological) conditions it is possible to understand this objective culture as the expression of a foreign individuality under certain historical and methodical conditions. Dilthey undoubtedly saw that the monistic Systems of the philosophy of nature ("Naturphilosophie") are also highly metaphysical. "But the focal point of the great multitude of the philosophy of nature lies closer to those daunting speculations which do not only transcend the experience but also adopt a realm of intellectual and essences distinguished from every sensual experience. These speculations glance at something hidden behind the realm of sensuality [...]: a second world."³⁶

The anti-metaphysical impetus in Dilthey's philosophy of culture is thus primarily meant as an argument for an immanent, a fact-based and methodically valid philosophy of culture as it already underlied the concept of an "inductive metaphysics" (Lotze, Fechner, E. v. Hartmann). The later approaches towards a historical philosophy of culture evolved by Oswald Spengler ("Der Untergang des Abendlandes") and Theodor Lessing ("Geschichte als Sinngebung des Sinnlosen") followed this anti-reductionistic concept.

It was Georg Simmel who saw that an immanent philosophy of culture is incomplete without an inner relation to transcendence. For Simmel, the radically immanent concept of culture (as originally initiated by the enlightenment) is, although extremely important, merely a *transitional* one. In his last book, Simmel pointed out that the "transcendence of life"³⁷ as he called it is just as important as empirical studies.

In Simmel's interpretation, this transcendence is surely not a theological or deistic one. However, Simmel marks the purely immanent, one could be tempted to say: reductionist explanation of the world as incomplete because

it ignores the cognizing subject. Simmel holds that every science originally emerges from a vital impetus. Yet, this vital impetus does not become a science unless it excludes certain questions from its field. It is only by the *exclusion of the cause*³⁸ that an autonomous science is constituted. If the same science acts as a moral authority or as an authority in world-view relevant questions, it simply exceeds its ambit.

The importance of transcendence in Simmel's work derives from his determination of human existence and scientific progress. For Simmel, every success in knowledge results in the permanent transgression of given limits. Just as the invention of microscopes and telescopes has made new worlds accessible for scientists, every progress in science and knowledge results in a transgression of limits given to the popular world-view. The transgression of limits is thus a permanent dialectical process in which the determination *that there is a limit for my positive freedom* is itself an act of this very freedom. The consciousness knows itself as limited, it knows this limitation as the positive precondition of its own practical existence, and in this knowledge it proves to have outgrown this concrete limit: "Only he, who stands, in some meaning, with some function, *beyond* the limit, knows that he stands *inside* the limit, knows it *as* a limit."³⁹ This process of permanent transgression of limits is *principally* not to be finalized because it is only the concrete limit, not the fact of being limited itself that is overcome. This fact of limitation is the form-giving element of life, by which life outgrows its empty formality and becomes a concrete, individual life. Limitation is thus not only a barrier of practical actions. Rather, it potentiates the horizon in which human actions are only possible. But this permanent transgression of limits is only made possible by the realm of transcendence provided by metaphysical speculations. Simmel's philosophical theory of life and culture is thus a strong argument for the indispensability of metaphysics, and the renaissance of the life-philosophy, at least in Germany, seems to certify Simmel's point.

4. General Conclusion

Although the empirical life sciences have taken a tremendous evolution since their beginning in the early 1840's, the quest for a metaphysical view of man and culture has not ceased yet. As the inquiry of the historical evolution of the life sciences shows, their results have on the contrary been used as a basis for a more metaphysical point of view. Therefore, one the greatest challenge of philosophy is to define the conditions on which such a transfer of concepts is admissible.

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1. Complete title: “Prolegomena to any Future Metaphysic that can Present itself as a Science” (*Prolegomena zu einer jeden künftigen Metaphysik, die als Wissenschaft wird auftreten können*).
2. Kant, *Prolegomena zu einer jeden künftigen Metaphysik*, 207 (Immanuel Kant: Werke in zwölf Bänden. ed. Wilhelm Weischedel. Frankfurt am Main, 1977, Vol. 5, 245): “Daß der Geist des Menschen metaphysische Untersuchungen einmal gänzlich aufgeben werde, ist eben so wenig zu erwarten, als daß wir, um nicht immer unreine Luft zu schöpfen, das Atemholen einmal lieber ganz und gar einstellen würden. Es wird also in der Welt jederzeit, und, was noch mehr, bei jedem, vornehmlich dem nachdenkenden Menschen Metaphysik sein, die, in Ermangelung eines öffentlichen Richtmaßes, jeder sich nach seiner Art zuschneiden wird” (all quotations are given in own translation).
3. Schopenhauer, *Die Welt als Wille und Vorstellung*. Schopenhauer-ZA, Vol. 3, 191: “Unter Metaphysik verstehe ich jede angebliche Erkenntniß, welche über die Möglichkeit der Erfahrung, also über die Natur, oder die gegebene Erscheinung der Dinge, hinausgeht, um Aufschluß zu ertheilen über Das, wodurch jene, in einem oder dem andern Sinne, bedingt wäre; oder, populär zu reden, über Das, was hinter der Natur steckt und sie möglich macht.”
4. “In so ferne ist die Metaphysik eine Wissenschaft von den Grenzen der menschlichen Vernunft.” Kant: *Träume eines Geistersehers, erläutert durch Träume der Metaphysik*. Kant Werke, Vol. 2, 983.
5. Kant speaks of the “ganz isolierten speculativen Vernunftkenntnis, die sich gänzlich über Erfahrungsbelehrung erhebt, und zwar durch bloße Begriffe” (Krit. d. r. Vern., Vorr. II, 16).
6. Matthias Schleiden: “Beiträge zur Phytogenesis” (1838).
7. Theodor Schwann: “Mikroskopische Untersuchungen über die Übereinstimmung in der Struktur und dem Wachstum der Thiere und Pflanzen.”
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9. Schwann, T. (1839), *Mikroskopische Untersuchungen über die Übereinstimmung in der Struktur und dem Wachstume der Thiere und Pflanzen*, Berlin, S. 229.
10. Lenoir (1982), 114.
11. Virchow, Rudolf (1845), “Über das Bedürfnis und die Richtigkeit einer Medizin vom mechanischen Standpunkt,” in *Virchows Archiv für pathologische Anatomie und Physiologie und für klinische Medizin* 188 (1907), Heft 1, 8: “Leben ist seinem Wesen nach Zellentätigkeit.”
12. See the work on the “philosophical discovery of the body” by Grätzel, Stephan (1989), *Die philosophische Entdeckung des Leibes*, Stuttgart.
13. Kacser, H.R. and Burns, J.A. (1979), “Molecular Democracy. Who Shares the Control?” *Biochemical Society Transactions* 7: 1149–1160.
14. Like “Kosmos,” “Gaeae,” “Himmel und Erde,” “Der Naturfreund,” “Neue Weltanschauung,” etc. – cp. the synopsis in Daum, A.W. (1998), *Wissenschafts-popularisierung im 19. Jahrhundert. Bürgerliche Kultur, naturwissenschaftliche Bildung und die deutsche Öffentlichkeit, 1848–1914*. München, 343.
15. Daum (1998), 385–390.

16. Wagner, R. (1854), “Menschenschöpfung und Seelensubstanz. Ein öffentlicher Vortrag, gehalten in der ersten öffentl. Vers. deutscher Naturforscher und Ärzte zu Göttingen am 18,” September 1854, Göttingen.

17. Büchner, Ludwig (= Louis) (1855), *Kraft und Stoff. Empirisch-naturphilosophische Studien in allgemein-verständlicher Darstellung*, Frankfurt a. M. [cit. aft. the reprint in: Wittich, D. (1971) (ed.), *Vogt, Moleschott, Büchner. Schriften zum kleinbürgerlichen Materialismus in Deutschland* (2 Vols.), Berlin, Vol. 2, 343–516.

18. Moleschott, J. (1852), *Der Kreislauf des Lebens. Physiologische Antworten auf Liebig's Chemische Briefe*, Mainz [cit. aft. the reprint in: Wittich (1971), Vol. 1, 25–322].

19. Cp. the complete quotation: “Ein jeder Naturwissenschaftler wird wohl, denke ich, bei einigermaßen folgerechtem denken auf die Ansicht kommen, daß alle jene Fähigkeiten, die wir unter dem Namen der Seelentätigkeit begreifen, nur Funktionen der Gehirnssubstanz sind; oder, um mich einigermaßen grob hier auszudrücken, daß die Gedanken in demselben Verhältnis etwa zu dem Gehirne stehen wie die Galle zu der Leber oder der Urin zu den Nieren. Eine Seele anzunehmen, die sich des Gehirnes wie eines Instrumentes bedient, mit dem sie arbeiten kann, ist reiner Unsinn.” Vogt, K. (1847), “Physiologische Briefe für Gebildete aller Stände,” Stuttgart-Tübingen [cit. aft. the reprint Wittich (1971), 338, Anm. 305. repr. *ibid.*, 17f.].

20. Büchner (1855), 437.

21. Büchner (1855), 511: “Alles, was über die sinnliche Welt [...] hinausliegt, ist Hypothese und auch nichts weiter als Hypothese.”

22. Büchner (1855): 444.

23. Moleschott (1852): 285.

24. Vogt, Karl (=Carl) (1855), “Köhlerglaube und Wissenschaft. Eine Streitschrift gegen Hofrat Rudolph Wagner in Göttingen, Gießen” [cit. after the reprint in: Wittich (1971), Vol. 2, 551].

25. Hartmann, E. v. (1875), *Wahrheit und Irrthum des Darwinismus. Eine kritische Darstellung der organischen Entwicklungslehre*, Berlin, 1: “vielleicht hat nichts so sehr zum raschen Aufschwung des Darwinismus beigetragen, als der Eifer, mit welchem die Theologie aller Confessionen im Bunde mit der Professorenphilosophie denselben zu bekämpfen sich beeilte.”

26. Moore, J.R. (1979), *The Post-Darwinian Controversies. A Study of the Protestant Struggle to Come to Terms with Darwin in Great Britain and America 1870–1900*, Cambridge-New York: Cambridge University Press, 181. Moore points out that this conclusion is not made by Darwin but by his successor Wallace. Also, Dennett, D. (1995), *Darwin's Dangerous Idea: Evolution and the Meanings of Life*. New York: Simon and Schuster.

27. Hegel, G.W.F., *Grundlinien der Philosophie des Rechts, Theorie Werkausgabe*, Vol. 7, 24: “Was vernünftig ist, das ist wirklich; und was wirklich ist, das ist vernünftig.”

28. Original german title: “Der Monismus als Band zwischen Religion und Wissenschaft.”

29. Haeckel speaks of the “umfassende Anschauung des Weltganzen, welche wir vom höchsten erklommenen Standpunkt der monistischen Naturerkenntnis gewonnen haben” (Haeckel: “Die Welträtsel,” in *Gemeinverständliche Werke*, Schmidt-Jena, H. (ed.), Leipzig-Berlin, Vol. 3, 18).

30. “Die rein monistische Weltanschauung ist auch allein im Stande, das metaphysische Fundament zu einer dem Einspruch jeder souveränen individuellen Willkür enthobenen Ethik zu legen (vgl. Schopenhauer).” Hartmann, E., *Philosophie des Unbewussten. Zehnte erweiterte Auflage in drei Theilen*, Leipzig, o. J., Vol. 2, 196.

31. A *comprehensive* historical picture of German Life-philosophy in the 19th and beginning 20th century is the subject of my habilitation project at the Johannes Gutenberg University, Mainz: “How Philosophy Came to Life. The Concept of Life in the Philosophical Discourse of the 19th century” (forthcoming).

32. In his historical review of the Life-philosophy, Robert Kozljanic instances the work of Stephan Graetzel, Ferdinand Fellmann, Gernot Boehme, and others: Kozljanic, R. (2004), *Lebensphilosophie. Eine Einführung*, Stuttgart, 246–247.

33. Nietzsche, Fr., “Nachgelassene Fragmente,” in *Kritische Studienausgabe* (= KSA), Colli, G. and Montinari, M. (eds.), Berlin-New York, 1908, Vol. 8, 259: *Philosophie für Fleischerburschen*.

34. Nietzsche, KSA, Vol. 6, 120: “Gesetzt aber, es gibt diesen Kampf – und in der Tat, er kommt vor –, so läuft er leider umgekehrt aus, als die Schule Darwins wünscht, als man vielleicht mit ihr wünschen dürfte: nämlich zu Ungunsten der Starken, der Bevorrechtigten, der glücklichen Ausnahmen. Die Gattungen wachsen nicht in der Vollkommenheit: die Schwachen werden immer wieder über die Starken Herr – das macht, sie sind die große Zahl, sie sind auch klüger... Darwin hat den Geist vergessen (– das ist englisch!), die Schwachen haben mehr Geist...”

35. In this point, Nietzsche’s theory of body and mind strongly relates to Schopenhauer’s doctrine of the body as developed in his book *The World as Will and Imagination* (“Die Welt als Wille und Vorstellung”).

36. Dilthey, “Einleitung in die Geisteswissenschaften,” in Dilthey, *Gesammelte Werke*, Vol. 1, 132: “Wohl sind auch die monistischen Systeme der Naturphilosophie Metaphysik. Aber der Schwerpunkt der großen geschichtlichen Masse von Metaphysik liegt den gewaltigen Spekulationen näher, welche nicht nur die Erfahrung überschreiten, sondern ein von allem Sinnfälligen unterschiedenes Reich von geistigen Wesenheiten annehmen. Diese Spekulationen blicken also in ein hinter der Sinnenwelt Verborgenes, Wesenhaftes: eine zweite Welt.”

37. First chapter of G. Simmel (1918), *Lebensanschauung. Vier metaphysische Kapitel*, 2nd ed., München and Leipzig, 1922.

38. Solies, D. (1998), *Natur in der Distanz. zur Bedeutung von Georg Simmels Kulturphilosophie für die Landschaftsästhetik*, St. Augustin, 84–90.

39. Simmel (1918: 3): “Denn nur, wer in irgendeinem Sinn, mit irgendeiner Funktion außerhalb der Grenze steht, weiß, daß er innerhalb ihrer steht, weiß sie überhaupt als Grenze.”

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A TOKEN-BASED SEMANTIC ANALYSIS OF MCTAGGART'S PARADOX

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ABSTRACT. In his famous argument for the unreality of time, McTaggart claims that i) being past, being present, and being future are incompatible properties of an event, yet ii) every event admits all these three properties. In this paper, I examine two key concepts involved in the formulation of i) and ii), namely that of “validity” and that of “contradiction”, and for each concept I distinguish a static version and a dynamic version of it. I then arrive at three different ways of formulating McTaggart’s claims that avoid the notorious McTaggart’s Paradox. So long as we demand that McTaggart make clear use/mention and token/type distinctions in his claims, we shall find that it is indeed very difficult for him to get a genuine contradiction from i) and ii).

Keywords: McTaggart’s Paradox, Incompatibility Thesis, All-inclusive Thesis, static contradiction, dynamic contradiction

1. Introduction

According to an untold story of Humpty Dumpty, in addition to claiming that he can make a word mean whatever he wants it to mean, Humpty Dumpty once remarks that a contradiction is the cheapest thing that one can ever get. “See, I now sit on the wall, and I now have a great fall, oops, a contradiction right away!” As can be expected, no one pays much attention to his remark. This “cheap contradiction” conjoins two token-sentences that report about different stages of a person, thus does not amount to a “contradiction” in the first place. Being amused by Humpty Dumpty’s innocent remark, we are confident that we know what a “genuine” contradiction is and can spot a fake one when we encounter it.

However, in 1908, when McTaggart came up with his argument for the unreality of time, we were caught stunned. Presumably, McTaggart’s contradiction was on the same footing as that of Humpty Dumpty’s, yet we found

that it could not be disposed of as easily as we had expected. McTaggart's Paradox (MP) has taught us a lesson that when it comes to the question of whether some sentence is a contradiction, intuition is not something we can count on. Rather, we need to have a well-defined notion of contradiction to prevent us from accidentally buying a cheap contradiction home.

In Section 2, I sketch a semantic framework for tensed sentences upon which our notions of validity and contradiction will be built. As a methodological principle, I shall consider only concrete entities such as *type-sentences* or *token-sentences* that can be explicitly described or uttered in certain contexts, and leave abstract entities, such as *propositions*, out of the picture entirely. More specifically, given a conjunctive type-sentence, I will distinguish a static truth-condition from a dynamic truth-condition, and, based on this distinction, I will prescribe two notions of validity and two notion of contradiction. Finally, in Section 3, I introduce three possible solutions to MP.

As was remarked in Christensen (1974), "...so many philosophers are not sure that it [MP] has ever really been given a proper burial, and so from time to time someone digs it up all over again in order to pronounce it really dead". In a sense, what I shall be doing here is to give MP a belated semantic postmortem examination.

2. Token-Based Semantics for Tensed Sentences

Given a linguistic expression e , we can, borrowing Frege's terms, associate with it a sense $s(e)$, and associate with each of its tokens a referent $r_w(e_t)$, where e_t stands for a token of e and the w stands for the world in which the token is uttered. Both the senses $s(e)$'s and the referents $r_w(e_t)$'s can be specified in terms of the truth conditions of token-sentences, and they are related by $r_w(e_t) = s(e)(t, w)$.¹ In other words, the sense of an expression can be identified with something that, given a world, allows us to find out what the referent for each of its possible tokens is.

2.1 The Truth-condition of an Atomic Tensed Sentence

To describe the truth-condition for a *type-sentence*² is to specify the truth-values for all of its possible tokens in all possible worlds. More specifically, following the spirit of Frege and adopting Kaplan's terms, we can say that the *character* of a type-sentence is a function from its possible tokens to functions that map possible worlds to truth-values, and the *content* of one of its possible tokens is just the latter function that maps possible worlds to truth-values. The character of a type-sentence gives us a (pt, pw) -truth-condition, where the "*pt*" and "*pw*" here stand for "possible token" and "pos-

sible world” respectively; while the content of a token-sentence gives us a plain pw -truth-condition.

Let e be an event. The (pt, pw) -truth-conditions for type-sentences “ e is past”, “ e is now” and “ e is future” can be described as follows:

(pt, pw) -truth-conditions for atomic tensed sentences³

A token u of “ e is past” uttered in a world w is true iff e is earlier than u in w .

A token u of “ e is now” uttered in a world w is true iff e is simultaneous with u in w .

A token u of “ e is future” uttered in a world w is true iff e is later than u in w .

One should bear in mind that the u and w here are, in a sense, independent of each other, that is, the token u tells us nothing about the world⁴ just as the world w does not presuppose the existence and the whereabouts of u . Note also that what really concerns us here is the semantics of type-sentences, while the possible tokens of a type-sentence are only introduced as a means to help us grasp the sense of the type.

2.2 Two Versions of Truth-condition for a Conjunction

Having prescribed what the character of an atomic tensed type-sentence is, I now turn to the prescription of the character of a conjunctive type-sentence. A conjunctive type-sentence is the conjunction of two type-sentences by the type-connective “and”, and a token of the conjunctive type-sentence is the conjunction of two token-sentences with a token “and”.

Now I outline two versions of truth-condition for the type-sentence “ A and B ”:

Static Truth-condition for a Conjunction:

A point-token u of the type-sentence “ A and B ” uttered in a world w is true iff both the point-token u_a of A and the point-token u_b of B are true in w .

Here, by a “point-token” I mean some idealized token that can be uttered at a single space-time point. The role such a token plays is similar to that of a point-like test-particle in physics. In particular, the spatial-temporal locations of u_a , u_b and u are taken to be the same.

Dynamic Truth-condition for a Conjunction:

A physical token u of the type-sentence “ A and B ” uttered in a world w is true iff both the sub-token u_a of A and the sub-token u_b of B are true in w .

The tokens under consideration here are possible physical tokens that take space and time to utter. Typical examples of these tokens include Humpty Dumpty's utterance of "I now sit on a wall and I now have a great fall", and a token-sentence painted on a long wall stating "the exit is to the right and the exit is to the left", the truth of which depends on where those words are situated. Note that the spatial-temporal locations of u_a and u_b are usually different and the token u is taken to be composed of the pair (u_a, u_b) .

2.3 Static versus Dynamic Notions of Validity

A type-argument⁵ consists of a collection of type-sentences, one of them being the conclusion, and a token-argument consists of a collection of token-sentences, one of them being the conclusion. Evidently, the "validity" for a type-argument demands more than the validity of a token-argument as, in addition to quantification over possible worlds, it involves quantification over possible tokens. Hereafter, unless stated otherwise, when I say "arguments", I mean type-arguments. We have two notions of validity for type arguments.

Static Notion of Validity for an Argument:

An argument $A_1, \dots, A_n \therefore B$ is valid⁶ iff for every world w and for every point-token $u = (u_1, \dots, u_n, u_b)$ of the argument in w , whenever all the point-tokens u_i of A_i are true in w , the point-token u_b of B is true in w .

Here, again, by a point-token, I mean some token that is localized at a space-time point. In particular, the spatial-temporal locations of $u_1, \dots, u_n, u_b$ and u itself are taken to be the same, and this is the notion of validity we are familiar with. Next, consider the following.⁷

Dynamic Notion of Validity for an Argument:

The argument $A_1, \dots, A_n \therefore B$ is valid iff for every world w and for every possible token $u = (u_1, \dots, u_n, u_b)$ of the argument in w , whenever all the sub-tokens u_i of A_i are true in w , the sub-token u_b of B is true in w .

The tokens in question are possible physical tokens that take space and time to utter. A typical token-argument u is a sequence of token-sentences $(u_1, \dots, u_n, u_b)$ uttered in this particular order in time.

To my knowledge this dynamic notion of validity has not been much discussed in the literature and I think it deserves more attention from the theorists of time. Consider the following arguments (α) and (β):

- (α) The event e is now. $\therefore$ The event e is now.
- (β) The event e is now. $\therefore$ The event e is past.

According to the static notion of validity, the argument (α) is valid and (β) is invalid, which is expected when we assume that every pair of token-sentences of (β) are uttered simultaneously. However, according to the dynamic notion of validity, the argument (α) is invalid and (β) is valid. When it comes to the resolution of McTaggart's alleged paradox, this distinction helps us to have a better grasp of what a contradiction really is.

2.4 Static versus Dynamic Notions of Contradiction

Now, consider the notion of contradiction for tensed conjunctive sentences. First, we need to bear in mind that we are not interested in the truth of a particular token, but are concerned with the truth-values of all possible tokens of a type-sentence in all possible worlds. Second, we should remember to distinguish the two kinds of tokening of the type "*A and B*" that I mentioned before. I obtain the following two versions of contradiction.

Static Notion of Contradiction:

"*A and B*" is a (*static-*) *contradiction* if none of its point-tokens can ever be true in any possible world.

Dynamic Notion of Contradiction:

"*A and B*" is a (*dynamic-*) *contradiction* if none of its physical tokens (u_a , u_b) can ever be true in any possible world.

Thus, we have that "The event e is now and the event e is past" is a contradiction in the static sense, while "The event e is now and the event e is now" is a contradiction in the dynamic sense.⁸

3. Static and Dynamic Solutions to McTaggart's Paradox

Based on the two notions of contradiction described in the last section, I now proceed to analyze MP and provide three solutions (two static and one dynamic) for it.

3.1 McTaggart's Paradox Recast

McTaggart famously distinguishes two characterizations of time, see McTaggart (1927) for instance: A-series refers to "that series of positions which runs from the far past through the near past to the present, and then from the present through the near future to the far future, or conversely"; and B-series refers to "the series of positions which runs from earlier to later or conversely." The properties *being past*, *being present* and *being future* are

often called “A-properties”, and the relations *being earlier than*, *being later than*, and *being simultaneous with* are called “B-relations”. According to McTaggart, B-series cannot be a characterization of time, as time necessarily involves change, yet B-series does not account for change – “if N is ever earlier than O and later than M, it will always be, and has always been, earlier than O and later than M, since the relations of earlier and later are permanent”. (McTaggart 1908) But A-series would lead to the following inconsistent results, hence time is unreal.

(*) *Past, present, and future are incompatible determinations.* Every event must be one or the other, but no event can be more than one. This is essential to the meaning of the terms... The characteristics, therefore, are incompatible. (italic mine)

And

(#) *But every event has them all.* If M is past, it has been present and future. If it is future, it will be present and past. If it is present, it has been future and will be past. Thus all the three incompatible terms are predicable of each event which is obviously inconsistent with their being incompatible, and inconsistent with their producing change. (italic mine)

In the literature, to demonstrate the inconsistency, the above two theses are often analyzed in symbolic forms. Mellor’s treatment in *Real Time II* is a typical example.⁹

Let *P*, *N* and *F* be respectively the A-times past, present (now) and future, and let *e* be any event. Then *e*’s being past, present and future I write respectively as “*Pe*”, “*Ne*” and “*Fe*” “~”, “&” and “⊢” mean respectively “not”, “and” and “entails”.

Then McTaggart’s basic argument is that while the three times *P*, *N* and *F* are mutually incompatible, so that

(5) $Pe \not\vdash \sim Ne$; $Ne \not\vdash \sim Fe$; $Fe \not\vdash \sim Pe$; etc.,

the flow of time requires every event to have all three of them, i.e.

(6) $Pe \ \& \ Ne \ \& \ Fe$.

But (5) and (6) cannot both be true; since if (6) is true, two of the entailments in (5) fail, making (5) false. But our A-concept of time commits us to both (5) and (6); so it entails a contradiction and cannot apply to reality.

One natural reaction to Mellor’s (6) would be to reject it, as apparently there is no way that we can utter a true token of “*e* is past, *e* is present and *e* is future”. Thus, the alleged MP could not take off in the first instance. However,

as McTaggart's seemingly acceptable (#) indicates, we normally would not mind accepting some thing like "*e will be past, is present and has been future*", which in Mellor's terminology can be written as "*FPe & NNe & PFe*". But, then the contradiction between (5) and (6) disappears. Anticipating this reaction, McTaggart claims that even if this iterated interpretation is granted, the event will still admit all of the nine second level determinations, namely, *PP, PN, PF, NP, NN, NF, FP, FN* and *FF*, and at least some of them are incompatible.¹⁰ So the contradiction remains. Introducing a further level of tensed predicate only pushes the contradiction to a higher level.

I shall now adopt the machinery that we have developed in the last section to examine what is going on in these discussions. In particular, we shall ask: "What do we mean by 'incompatibility'?" "Are *PN, FP* etc. well-defined predicates of events?" and "How should we symbolize (*) and (#) properly?"

We are in a far better position than McTaggart in 1908 to tackle these problems, as we have a hundred more years of experience with analytic philosophy. We know better how to achieve clarity and precision in our use of terms, we know how to distinguish tokens from types and distinguish referents from senses, furthermore, we are more at home with using a formal logical language to formulate an argument than ever before. This is definitely to our advantage. Nevertheless, we need also to remember that this advantage can easily be misused by us to *explain the MP away* at the very beginning by simply "translating" the paradox into something non-paradoxical.

To avoid this, we should ask ourselves from time to time "Are the translation faithful to the original argument?" In other words, "Is a philosopher as clever as McTaggart likely to have asserted that translated version of his claim?" For example, the above two passages (*) and (#) quoted from McTaggart (1908) can be naïvely translated into

$$\begin{array}{l} Pe \models \sim Ne \wedge \sim Fe; \\ Ne \models \sim Fe \wedge \sim Pe; \\ Fe \models \sim Ne \wedge \sim Pe; \end{array}$$

and

$$(Pe \rightarrow (PNe \wedge PFe)) \wedge (Fe \rightarrow (FNe \wedge FPe)) \wedge (Ne \rightarrow (PFe \wedge FPe)),$$

respectively, where *e* is an event and "*P*", "*N*" and "*F*" stand for predicates *being past*, *being present*, and *being future* respectively, to avoid the inconsistency. But this seems to do no justice to McTaggart, as it is very likely that he himself would *not* admit that the latter stands for his (#). He could, as Lowe did in Lowe (1987), ask "What do these iterated tenses, such as *PF* mean?" and insist that he would only accept non-iterated determinations of an event, and hence Mellor's (6) "*Pe & Ne & Fe*" suits him better; or he

could, as he did in McTaggart (1908), claim that even if the iterated determinations make sense, an event exhibits all nine secondary determinations and they, when taken together, still form an incompatible set of determinations. In other words, he can stress that what he has in mind is a conjunction of predications – be it first order or second order – rather than the three *ad hoc* conditionals in sight here.

I shall now present three interpretations of MP, two in terms of the static notion of contradiction and one in terms of the dynamic notion of contradiction, so that both the following two theses, namely

Incompatibility Thesis

I *Past, present, and future are incompatible determinations,*

and

All-inclusive Thesis

A *Every event has them all,*

are correctly translated, i.e. true to the spirit of McTaggart, yet the two theses are consistent with each other.

3.2 Two Static Solutions

The DNF¹¹ Formulation

What do we mean by “past, present, and future are *incompatible* determinations”? This statement needs to be spelled out in concrete terms. To begin with, I can describe it in terms of the (static-) validity of an argument, as follows: for any e , $\alpha \models \sim\beta \wedge \sim\gamma$, where α, β, γ are any permutation of “*Fe*”, “*Ne*”, “*Pe*”; and “*P*”, “*N*” and “*F*” stand for “being past”, “being present” and “being future” respectively. However, for simplicity in analysis, I shall demand the minimal incompatibility $\alpha \models \sim\beta \vee \sim\gamma$ only. In other words, the incompatibility here applies to the collection of predicates $\{F, N, P\}$ as a whole, rather than to any pair of them. Furthermore, for simplicity of notion, we would write this Incompatibility Thesis in terms of “contradictions” rather than in terms of “ $\models$ ” (i.e. validity), as follows:

Static-I For any event e , ‘ $Pe \wedge Ne \wedge Fe$ ’ is a (static-) contradiction.

Note that this thesis is expressed as a sentence in the *meta-language*,¹² in the sense that the “*Pe*”, “*Ne*” and “*Fe*” here are not “used” but only “mentioned.” This thesis affirms something about the truth of all possible point-tokens of a particular conjunctive type-sentence, namely “ $Pe \wedge Ne \wedge Fe$ ”, claiming that no such token can ever be true. Note also that the truth of the statement **Static-I** itself is independent of the space-time location at which

it is tokened – for instance, whether as a printed sentence on this paper or as a token-sentence spoken by someone.

Next, for the All-inclusive Thesis, we recall McTaggart’s own remark first: “If M is past, it has been present and future. If it is future, it will be present and past. If it is present, it has been future and will be past. Thus all the three incompatible terms are predicable of each event”. (McTaggart 1908)

Observe that: 1) the three “If”’s employed by McTaggart here are only to itemize three mutually exclusive cases rather than to convey three conditionals; 2) despite that here he has employed phrases such as “has been present” and “will be past” that have the flavor of a secondary iterated predicate, when it comes to the All-inclusive part, he seems to be still concerned only with the three primary first-order predicates “*being past*”, “*being present*” and “*being future*”; 3) while “ Pe ” is an unproblematic tensed sentence, “ PNe ” may not make any sense. As has been criticized by Lowe, due to indexical fallacy, “ PN ” fails to be a proper predicate for an event e , just as “*here over there*” is not a proper predicate for an object.¹³ Furthermore, “ P ” is not a predicate for “ Ne ”, as the latter is a sentence rather than an event. We need to find a suitable symbolization for the seemingly unproblematic sentence “ e has been present”.

I shall understand it as the statement that there exists a time in the past so that a possible token of “ Ne ” uttered at that time would have the truth-value T , and then symbolize the statement as “ $P[Ne]$ ”. In other words, the “ Ne ” here is not “used” but only “mentioned”, and “ $P[Ne]$ ” says something about possible true tokens of Ne in the past.¹⁴ Similarly, for a type-sentence α , the type-sentences “ $N[\alpha]$ ” and “ $F[\alpha]$ ” assert the existence of possible true tokens of α in the present and in the future respectively.¹⁵

We can then, based on McTaggart’s remark (#) quoted earlier, rephrase the All-inclusive Thesis as,

Static-A (DNF) For any event e , $((Pe \wedge P[Ne] \wedge P[Fe]) \vee (Fe \wedge F[Ne] \wedge F[Pe]) \vee (Ne \wedge P[Fe] \wedge F[Pe]))$.¹⁶

Note that the “ P ”, “ N ” and “ F ” are used in two ways here – as predicates for events and as predicates for type-sentences.

Would McTaggart assert this version of the All-inclusive Thesis? As this formulation is based on his own remark, and the problem of iterated tense has been avoided, McTaggart seems to have no reason not to do so. Now, clearly **Static-A** (DNF) is consistent with **Static-I**. But if it is really so, then why did McTaggart claim that **(A)** was inconsistent with **(I)**? One possible answer is this: in **Static-I**, it is claimed that for any event e , whenever the type-sentence “ $Pe \wedge Ne \wedge Fe$ ” is *used* (i.e. *tokened* at a specific space-time point), the token is false. Yet, being fooled by the appearance of all the three incompatible *expressions*, namely the “ Pe ”, “ Ne ” and “ Fe ” in each of the

disjuncts of **Static-A** (DNF), namely in “ $Pe \wedge P[Ne] \wedge P[Fe]$, $Fe \wedge F[Ne] \wedge F[Pe]$ and $Ne \wedge P[Fe] \wedge F[Pe]$ ”, McTaggart fails to notice that in each of these disjuncts, only one of “ Pe ”, “ Ne ” and “ Fe ” is actually *used*, while the other two are merely *mentioned*. Thus no inconsistency arises here. In other words, McTaggart himself was a victim of the notorious “use-mention trap”. This is our first static solution to MP.

The CNF¹⁷ Formulation

Some might object to the previous solution by insisting that McTaggart makes the remark “if M is past, it has been present and future...” only *reluctantly* – all he wants is to convince us that his original All-inclusive Thesis really is acceptable. According to them, we should aim at directly translating McTaggart’s original claim that every event has all the three tensed properties rather than translating his remark. In particular, for any event e , we should have a “conjunction” instead of a disjunction. Now, a statement of the form that

- (1) For any event e , $Pe \wedge Ne \wedge Fe$

is no doubt a good candidate for a “literal” translation of his original All-inclusive thesis. However, as I have mentioned earlier, our immediate reaction to this proposal would be to ask, so far as the All-inclusive thesis is concerned, “Did McTaggart really want to see the ‘ $Pe \wedge Ne \wedge Fe$ ’ in (1) uttered as a point-token in space-time?” and the answer is surely a “No!” – every point-token of “ $Pe \wedge Ne \wedge Fe$ ” is evidently false as has been asserted by the Incompatibility Thesis. We can safely say that what McTaggart had in mind was definitely something more believable than (1). As admitted by McTaggart himself,

It is never true, and the answer will run, that M is present, past and future. It is present, *will be* past, and *has been* future. Or it *is* past, and *has been* future and present, or again *is* future and *will be* present and past. The characteristics are only incompatible when they are simultaneous, and there is no contradiction to this in the fact that each term has all of them successively.¹⁸

What he says here is consistent with his earlier remark in (#) that “If M is past, it has been present and future. If it is future, ...” and can be precisely captured by our non-contradictory **Static-A** (DNF), and a conjunction is to be found *within* each of the three disjuncts. Furthermore, in each conjunction, the three conjuncts generally involve different tenses, that is, the characteristics *present*, *past* and *future* are to be applied at different times.

However, when we read on to his next sentence, “But this explanation involves a vicious circle.....” we find that what McTaggart wants from (#) is presumably still a *conjunction* that, on the face of it, is acceptable, yet

after some specification, turns out to be inconsistent with (*). In sum, to make his original *conjunctive* (#) acceptable for the reader, McTaggart introduces tenses (or second order temporal predicates) to explain how the three characteristics can indeed be applied to an event at different times, thus turning (#) into a *disjunctive* normal form. However, after the reader has accepted his DNF explanation, he generalizes (#) to be the *conjunctive* claim that, again, all the nine secondary predicates are applicable to an event. As (*) can be similarly generalized to be the claim that the nine characteristics are not compatible, the generalized (*) and the generalized (#) are still inconsistent.

To be more precise, concerning the interpretation of (#), McTaggart has shifted his position from (i)~(iii) to (i)'~(iii)'.

- (i) the existence of a true " $Pe \wedge Ne \wedge Fe$ ",
- (ii) the existence of true " Pe ", " Ne " and " Fe ",
- (iii) the existence of a true " $N[Pe] \wedge P[Ne] \wedge P[Fe]$ ", " $F[Pe] \wedge N[Ne] \wedge P[Fe]$ ", or " $F[Pe] \wedge F[Ne] \wedge N[Fe]$ ",
- (i)' the existence of a true " $P[Pe] \wedge P[Ne] \wedge P[Fe] \wedge N[Pe] \wedge N[Ne] \wedge N[Fe] \wedge F[Pe] \wedge F[Ne] \wedge F[Fe]$ ",
- (ii)' the existence of true " $P[Pe]$ ", " $P[Ne]$ ", " $P[Fe]$ ", " $N[Pe]$ ", " $N[Ne]$ ", " $N[Fe]$ ", " $F[Pe]$ ", " $F[Ne]$ " and " $F[Fe]$ ",
- (iii)' the existence of a true " $(N[P[Pe]] \wedge N[P[Ne]] \wedge N[P[Fe]] \wedge N[N[Pe]] \wedge P[N[Ne]] \wedge P[N[Fe]] \wedge P[F[Pe]] \wedge P[F[Ne]] \wedge P[F[Fe]])$ ", " $(F[P[Pe]] \wedge F[P[Ne]] \wedge F[P[Fe]] \wedge F[N[Pe]] \wedge N[M[Ne]] \wedge P[M[Fe]] \wedge P[F[Pe]] \wedge P[F[Ne]] \wedge P[F[Fe]])$ ", or " $(F[P[Pe]] \wedge F[P[Ne]] \wedge F[P[Fe]] \wedge F[N[Pe]] \wedge F[N[Ne]] \wedge N[M[Fe]] \wedge N[F[Pe]] \wedge N[F[Ne]] \wedge N[F[Fe]])$ ",

while his (*) shifts from (i)* to (i)'*

- (i)* the *non*-existence of a true " $Pe \wedge Ne \wedge Fe$ ",
- (i)*' the *non*-existence of a true " $P[Pe] \wedge P[Ne] \wedge P[Fe] \wedge N[Pe] \wedge N[Ne] \wedge N[Fe] \wedge F[Pe] \wedge F[Ne] \wedge F[Fe]$ ".

Now, (i) and (i)' are essentially Mellor's understanding of McTaggart's All-inclusive statement, and they are apparently inconsistent with (i)* and (i)*', hence cannot be correct translations of the statement.¹⁹ Next, (iii) and (iii)' resemble our **Static-A** (DNF) approach described earlier. Note that the All-inclusive statement that all the three primary (or the nine secondary) predicates are applicable to every event is supposed to be *token-independently true*. However, although the truth of the disjunction in **Static-A** (DNF) is token-independent, the truth of each of its disjuncts is *token-dependent* and, for any token of the disjunction, only *one* of the disjuncts is true. Therefore, if we want to stress that " Pe ", " Ne " and " Fe " (or the nine secondary ones) can all be truly tokened, as claimed by the statements (ii) (or (ii)'), and express it in

a conjunctive form, then we need to think more about the truth of these type-sentences.

The specification of when those tokens are to be located is as follows: if Pe then $A[Pe] \wedge P[Ne] \wedge P[Fe]$; if Ne then $F[Pe] \wedge N[Ne] \wedge P[Fe]$; if Fe then $F[Pe] \wedge F[Ne] \wedge A[Fe]$, where “ A ” is a derived predicate, and “ $A[\alpha]$ ” means that there exist possible past, present and future true tokens of α . What is important here is not the technique of finding a suitable space-time region for each of the tensed sentences to be truly uttered, but the fact that all such possible true tokens *exist* – as a consequence of the real line topology of time. And, on the one hand, this assertion of the existence of true tokens grants McTaggart the token-independence needed of his statement, and, on the other, it generates a *prima facie* inconsistency that “all these incompatible characterizations can be truly tokened”.

Now, to say that there exists a true token of “ Pe ”, proceed as follows. At any context, a token $u = (u_p, u_n, u_f)$ of “ $Pe \vee Ne \vee Fe$ ” is true. No matter which of u_p, u_n and u_f is true, a token of “ $F[Pe]$ ” is true. Secondly, for a true token of “ Ne ”, if the sub-token u_n is true, then we have “ $N[Ne]$ ”; if u_n is not true, then either u_p or u_f is true, and for the former, we can write “ $P[Ne]$ ” and for the latter “ $F[Ne]$ ”. This case can then be summed up as “ $P[Ne] \vee N[Ne] \vee F[Ne]$ ”. Lastly, for the case of a true token of “ Fe ”, a token of “ $P[Fe]$ ” is always true. In this way, the Thesis (A) can be written as “for any event e , $F[Pe] \wedge (P[Ne] \vee N[Ne] \vee F[Ne]) \wedge P[Fe]$ ”, which in the real life is often phrased as “every event *will be* past, and every event *was, is, or will be* present, and every event *has been* in the future”.

Taking the real line topology of time into consideration, we observe that $F[Pe]$ statically implies $P[Pe] \vee N[Pe] \vee F[Pe]$ and vice versa,²⁰ while $P[Fe]$ is statically equivalent to $P[Fe] \vee N[Fe] \vee F[Fe]$. As a consequence, we arrive at a simpler way of specifying the Thesis (A):²¹

Static-A (CNF) For any event e , $(P[Pe] \vee N[Pe] \vee F[Pe]) \wedge (P[Ne] \vee N[Ne] \vee F[Ne]) \wedge (P[Fe] \vee N[Fe] \vee F[Fe])$,²²

and this is similar to Lowe’s solution to MP outlined in Lowe (1992) and Lowe (1993).²³

Let “ $E[\alpha]$ ” be a shorthand for “ $P[\alpha] \vee N[\alpha] \vee F[\alpha]$ ”, which says that there exists a possible past, present or future true token of α , then **Static-A** (CNF) can be simplified to be “for any event e , $E[Pe] \wedge E[Ne] \wedge E[Fe]$ ”, and it is evidently compatible with **Static-I**, which says that for any event e , “ $Pe \wedge Ne \wedge Fe$ ” is a contradiction. Thus, in terms of “ $E[\alpha]$ ”, we have

Static-I For any event e , $\sim E[Pe \wedge Ne \wedge Fe]$,

Static-A (CNF) For any event e , $E[Pe] \wedge E[Ne] \wedge E[Fe]$.

It is easy to generalize this to higher order predicates. When McTaggart claims that while the nine secondary predications are incompatible, e has all nine of them, what he really asserts is

I₉ For any event e , $\sim E[\alpha_1 \wedge \alpha_2 \wedge \alpha_3 \wedge \alpha_4 \wedge \alpha_5 \wedge \alpha_6 \wedge \alpha_7 \wedge \alpha_8 \wedge \alpha_9]$

A₉ For any event e , $E[\alpha_1] \wedge E[\alpha_2] \wedge E[\alpha_3] \wedge E[\alpha_4] \wedge E[\alpha_5] \wedge E[\alpha_6] \wedge E[\alpha_7] \wedge E[\alpha_8] \wedge E[\alpha_9]$

here $\alpha_1, \alpha_2, \alpha_3, \alpha_4, \alpha_5, \alpha_6, \alpha_7, \alpha_8$ and α_9 stand for “ $P[Pe]$ ”, “ $P[Ne]$ ”, “ $P[Fe]$ ”, “ $N[Pe]$ ”, “ $N[Ne]$ ”, “ $N[Fe]$ ”, “ $F[Pe]$ ”, “ $F[Ne]$ ” and “ $F[Fe]$ ” respectively. Apparently, there is no incompatibility between **I₉** and **A₉**.

3.3 A Dynamic Solution: The Token-in-Time Formulation

In this subsection we shall look at one further attack from Le Poidevin and Mellor (1987), which claims that Lowe’s thesis fails to capture the passage of time. Lowe’s position is that he acknowledges this accusation, but he has no intention to get into it. He stresses that “defending the reality of the A-series and developing an account of passage in A-series terms are two quite different projects”, and admits that “it is the A-series that I seek to defend against McTaggart’s attack on it, not the account of passage in A-series terms which he proposes, and whose demonstrable incoherence McTaggart illegitimately (in my view) projects on to the A-series itself”.²⁴ However, I think we can do better than that.

The two solutions of MP that I describe in subsection 3.2 are both static in the sense described in Section 2. Now we turn to the dynamic aspect of the paradox. We have seen earlier that with a static interpretation, there is no chance for a point-token of the type-sentence “ $Pe \wedge Ne \wedge Fe$ ” to be true. This holds for the type-sentence “ $Fe \wedge Ne \wedge Pe$ ” as well. However, so far as a dynamic interpretation of contradiction is concerned, there is no point in accepting this. It is indeed very easy to find a true token of “ $Fe \wedge Ne \wedge Pe$ ”. For instance, my token of “I am about to utter the sixteenth word of this sentence, I am now uttering it, and I have uttered it” is undoubtedly true. The sub-tokens u_f , u_n and u_p of a real world conjunction $u = (u_f, u_n, u_p)$ can be uttered at different times so that all of them are true at their respective times of utterance.

Under this interpretation, McTaggart’s Incompatibility Thesis fails, because as we utter the conjuncts of a conjunction, or the premises and conclusion of an argument, time flows – we are *not* considering point-tokens that are all uttered at the same point-like moment of time, but rather are considering real world tokens that take space and time to utter. It is therefore not obvious at all why the predicates F , N and P should be *incompatible*. On the other hand, the All-inclusive Thesis now has a new way out: for any event e , the

sentence type “ $Fe \wedge Ne \wedge Pe$ ” is assertible, since there exists a possible physical token of it that lasts for a period of time so that the three conjuncts are all true at their respective times of utterance.

One might object that this “dynamic stuff” is surely not the mode of paradox that McTaggart has in mind, because if it is, then instead of embracing $Ne \models \sim Pe$, he would have embraced $Ne \models Pe$, but there is simply no sign that McTaggart has ever taken this position. Indeed, even if we manage to find a convincing dynamic thesis such as

Given an event e , there exist *no* possible true tokens of “ $Ne \wedge Ne$ ” or any conjunction of “ Pe ”, “ Ne ” and “ Fe ” in this order,

it is clearly *not* the Incompatibility Thesis that McTaggart had in mind. These worries are all very true. However, we should note that these worries are all centered around the Incompatibility Thesis rather than the All-inclusive Thesis. In other words, we are still left with the following fallback position: McTaggart has mistakenly adopted two different notions of semantics in his presentation of the Incompatibility Thesis and the All-inclusive Thesis – a static one for the former and a dynamic one for the latter. As the static Incompatibility Thesis has been described in subsection 3.2, here we only need to be concerned with the formulation of a dynamic All-inclusive Thesis.

According to the dynamic notion of contradiction, the truth of a conjunction is dependent of the ordering of its conjuncts. For example, for any e , “ $Fe \wedge Ne \wedge Pe$ ” is possibly true, but there won’t be any true token of “ $Pe \wedge Ne \wedge Fe$ ”. Is this an unsatisfactory feature of the new framework? In a sense, yes, because it deviates from our standard conception of conjunction. But in order to make sense of tensed sentences, aren’t we supposed to take the feature of this world, at least that of time itself, into account? Perhaps it is precisely the passage of time that we should incorporate into our semantics of tensed sentences so as to resolve MP successfully.

Based on the notions introduced in Section 2, we can formulate the dynamic All-inclusive Thesis as follows.

Dynamic-A Given an event e , there exists a possible true token of “ $Fe \wedge Ne \wedge Pe$ ”.²⁵

This amounts to a demonstration of how time “moves”, via the employment of token-sentences in time. I might as well put it:

The passage of time *manifests* itself through the functioning of a language. Therefore, doing “logical” analysis on type-sentences without referring to how they are to be actually tokened in the space-time is a fatal mistake.

Recall that the two solutions discussed in the preceding subsection both interpret McTaggart's All-inclusive statement as an objective statement about the world – asserting the existence of true tokens of “*Pe*”, “*Ne*” and “*Fe*” respectively in the space-time – and the truth of the statement itself is independent of when or where it is to be tokened.²⁶ However, one might suspect that this is not what McTaggart has in mind, because in stating his All-inclusive thesis he seemingly intends to *use* the type “*e* is future, *e* is present and *e* is past” as a whole, rather than merely to *mention* the three of its components and assert that they can each be truly tokened.

This objection in effect casts doubts on our first two solutions of MP and, on the face of it, makes MP a genuine threat to the A-theory. We can, of course, refuse to read McTaggart's All-inclusive thesis this way and decide to stick to the two original solutions that we have. However, the interesting thing here is that even if we take up the challenge of the objector,²⁷ things are still to our advantage. The objector's version of MP not only poses no threat to the A-theory, but also becomes a strong *supporting evidence* for the A-theory – MP is solvable only if we adopt a dynamic viewpoint of time. While McTaggart's Incompatibility Thesis is established through the employment of “point-tokens”, the modified All-inclusive Thesis, i.e. the existence of possible true tokens of “ $Fe \wedge Ne \wedge Pe$ ”, can be established only if we take into account the passage of time when we utter a “real world token”. The two *prima facie* inconsistent theses now pose us no threat, because the notions of “tokens” involved in them are of completely different nature, one being a point-token while the other being a possible-physical-token, furthermore they are governed by static and dynamic truth conditions respectively.

3.4 Summary

McTaggart's alleged paradox consists of two theses, the Incompatibility Thesis and the All-inclusive Thesis, and the two theses seem inconsistent. In order to analyze these theses, we have defined the notions of “validity” and “contradiction” in two ways – statically and dynamically. For the former, there are two options for us to (statically) resolve MP. Both of them assert the Incompatibility Thesis, while explaining away the “inconsistent” All-inclusive Thesis by suitably re-interpreting the iterated tensed sentences and stressing the use-mention distinction of sentence tokens and types. For the latter, we find that the All-inclusive Thesis can be dynamically interpreted, and as a result the alleged MP fails to generate the inconsistency that it claims to have generated.

The static interpretation guarantees that an A-theorist located in space-time has a way to describe the temporal feature of the world consistently. The dynamic interpretation, on the other hand, maintains that even if an A-theorist is concerned only with the actual uttering of tensed tokens, there is

no contradiction involved in his or her conception of time. Moreover, the latter resolution of MP captures the essence of the passage of time, which in turn is closely related to *change* – the most important feature of time. However, a full-blown formal semantics of tensed sentences in the dynamic vein awaits further exploration.

NOTES

1. Here we assume that the sense of an expression is exhausted by its referential properties.

2. Many authors talk about truth-conditions for token-sentences. See, for example, Torre (2009), where Steve Torre distinguishes the truth-condition for a type-sentence from that for a token-sentence.

3. Note that on the right-hand side, we use B-relations exclusively. But this does not imply that we have adopted the B-theory. We did it this way only to make the truth-condition look simpler. In fact, one can try defining those B-relations in terms of A-properties alone. However, we shall not get into the details here.

4. If, on the other hand, one takes the realistic position that the uttering of a token fixes the world that is concerned then we can simply drop the phrases about the world w in the three truth-conditions above, and obtain the following three *pt*-truth-conditions,

***pt*-truth-conditions for atomic tensed sentences:**

A token u of “ e is past” is true iff e is earlier than u .

A token u of “ e is now” is true iff e is simultaneous with u .

A token u of “ e is future” is true iff e is later than u .

5. It is not to be confused with an “argument form”. The word “type” here only indicates that the argument is composed of type-sentences.

6. It can also be written as $\{A_1, \dots, A_n\} \models B$.

7. Note that we have to distinguish this notion of validity from the validity for a token-argument. An actual *token* of a type-argument is said to be *valid* iff for all possible worlds such that the premise tokens are true, the conclusion token is true. But, for simplicity, we shall not consider the latter notion of validity in this paper.

8. Note that we shall not consider possible worlds whose space-time structures are so different from ours that the “past”, “present” and “future” have lost their usual meanings.

9. See 73–74.

10. For instance, *PP*, *NN* and *FF*.

11. Here DNF stands for Disjunctive Normal Form.

12. That is, English plus the language of first order logic.

13. See Lowe (1987, 1987a, 1992, 1993).

14. Therefore, predicate “ P ” can take up two kinds of arguments: events and type-sentences. For an event e , the sentence “ Pe ” is true if e is past; while for a type-sentence, “ Ne ” say, “ $P[Ne]$ ” is true if there is a space-time location in the past where a token of “ Ne ” there would have been true.

15. Recall how Le Poidevin has elaborated for McTaggart on the iterated tense issue. According to Le Poidevin (1993), even if we grant Lowe that sentences involving iterated tenses, such as “*FPe*”, do not make sense in the first place, MP still holds, as one can, instead of writing “*FPe*”, just write “*FT ‘Pe’*” meaning that it will be true that *Pe*, and then mimic McTaggart’s original argument to arrive at a contradictory “*NT ‘Ne’* $\wedge$ *PT ‘Ne’* $\wedge$ *FT ‘Ne’*”, which is as contradictory as before.

Lowe maintains that “*FT ‘Pe’*” is dubious, and I totally agree with him, as, after all, according to Le Poidevin’s interpretation, “*Pe*” inherits a strong flavor of a “proposition”, while we have not admitted propositions into our ontology. In contrast, in my “*F[Pe]*”, the “*Pe*” is just a type-sentence, having nothing to do with a proposition at all

16. Note the three disjuncts happen to correspond to the three properties of *being past*, *being future* and *being present* of the Incompatibility Thesis. The reader is advised to compare it with Lowe’s account sketched in Le Poidevin and Mellor (1987) and Le Poidevin (1993).

17. Here CNF stands for Conjunctive Normal Form.

18. McTaggart (1908). Note that the truth of the sentences “it is present, *will be* past, and *has been* future”, “it is past, and *has been* future and present”, and “it is future and *will be* present and past” are all token-*dependent*!

19. McTaggart’s All-inclusive statement is supposed to be true – otherwise why would he expect other people to accept it in the first place.

20. Both $P[Pe]$ and $N[Pe]$ statically entail $F[Pe]$.

21. See Lowe (1998) and Savatt (2001) also for similar but different ways of interpreting (#).

22. Note that CNF thesis is weaker than the DNF thesis.

23. The reader is, however, reminded that it differs from Lowe’s solution in a significant way: the “*Pe*”, “*Ne*” and “*Fe*” inside the brackets [...] here are “type-sentences” instead of “propositions”.

24. See Lowe (1993), 171–173.

25. We have taken advantage of the order-insensitivity of McTaggart’s thesis “*But every event has them all*” to choose an ordering of “*Fe*”, “*Ne*” and “*Pe*” to our favor. Note also that we do not expect to see the actual uttering of such tokens. What’s important is that we can conceive of the possibility of such an in-time long-lasting token.

26. To be more precise, the truth of “There exist true tokens of ‘*e* is future,’ ‘*e* is present’ and ‘*e* is past’” is independent of its time of tokening.

27. That is, assuming that McTaggart indeed wants to *use* the type-sentence “*e* is future, *e* is present and *e* is past”.

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LESZEK NOWAK AND THE IDEALIZATIONAL APPROACH TO SCIENCE

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ABSTRACT. There's an essential methodological and theoretical difference between abstraction and idealization hardly remarked by the main founder of the so-called Poznań School, that's to say the Polish philosopher Leszek Nowak (1943–2009). Nonetheless, Idealizational theory of science has never been considered the way it deserves, although a lot of philosophers of science nowadays are taking into account this original scientific approach. The aim of this paper is to give a presentation of Idealizational theory of science in order to put in evidence the mistakes of the Popperian interpretation of Marxian philosophy and of the classic Hempelian approach based on the famous D-N model.

Keywords: abstraction, D-N Model, Hempel, Idealization, Nowak, Popper

“All science would be superfluous if the outward appearance and the essence of things directly coincided.”
Karl Marx

1. Abstraction or Idealization?

In general, especially in the epistemological and philosophical fields, abstraction has been considered the main theoretical practice of science; but in reality scientists use the method of Idealization. The philosophers of science and epistemologists who put in evidence systematically for the first time this theoretical practice were the main members of the so-called Poznań School. The method of Idealization is maybe the main contribute to science given by the Poznań School and by its founder, that's to say, Leszek Nowak (but it's possible to find some anticipations of this method in the most important works of the Lvov-Warsaw School members¹).

The epistemological meditations of the Poznań School philosophers renewed the scientific debate concerning not only the Marxism (from one side petrified by the soviet dogmatism and from the other side “humanized” by the

western Marxists), but even the modern epistemology. In fact, the modern epistemology was living a period of crisis if we turn our look to the Received View² and to the Popperian program.

The consequence of this situation was, especially for the philosophers of science, to find different ways, rethinking the traditional image of science and its main theoretical statements, accepted both from Popperism and from its most radical enemies.³ By the way, after this period of crisis the Poznań School's meditations came out with all its originality and logic-formal power, so that we can call this period a real epistemological revolution.⁴

The starting point of the Poznań School's meditations is both simple and innovative; there's a big difference between abstraction and idealization, in fact is the last to be the core of the scientific method and not the former. In summary, there is a substantial difference between abstraction and idealization that Nowak finds in Marx's *Capital*; in effect, Marx in his works used the term "abstraction", but not in the classic meaning, but in the Nowak's meaning. In this case, Nowak interprets the Marxian abstraction as an Idealizational approach to science, in order to distinguish it from the classic empiricist way of using abstraction.

This difference is explained by Nowak in the following way:

A scientific law is basically a deformation of phenomena. It resembles much more the logical structure of a caricature than that of the generalization of facts. The crucial point for a proper understanding of the Idealizational procedure is that it differs fundamentally from that of abstraction [...]. Abstraction, i.e. the omitting of properties, leads from individuals to sets of individuals (and from sets of individuals to families of sets, etc.). Idealization does not do this. Omission of the dimensions of physical bodies does not yield any set of physical bodies but the mass-point. Abstraction is generalization. Idealization is not.⁵

But what is the role of Idealization in the scientific practice? Its role consists in separating the essence from the appearance of the phenomenon. Nowak, in this case, talks about five paradigms of idealization:

1. The neo-Duhemian paradigm. "Idealization is basically a method of transforming raw data;"

2. The neo-Weberian paradigm. "Idealization is basically a method of constructing scientific notions. Having a certain typology in mind, one may identify its extreme member. If the member is an empty set, it is termed an ideal type and the notion attached to it is labelled idealization. It is particular notions, or their definitions, that exemplify idealizations in science;"

3. The neo-Leibnizian paradigm. "Idealization is a deliberate falsity which never attempts to be more than truthlike. An Idealizational statement is a

special type of counterfactual which has to do with what goes on at possible worlds given by antecedent of that statement. The smallest is the distance between the intended possible world of the kind and the actual world, the truer the counterfactual is;”

4. The neo-Millian paradigm. “No mathematical structure fits any piece of reality with full precision, there is always discrepancy between a mathematical formalism and reality we want to describe with the theory. Idealization is a means to fill the gap;”

5. The neo-Hegelian paradigm. It consists in “focusing on what is essential in a phenomenon and in separating the essence from the appearance of the phenomenon.”⁶

Let’s try to analyze, for instance, the law of free fall presented by Galileo that way:

The spaces described by a body falling from the rest with a uniformly accelerated motion are to each other as the squares of the time-intervals employed in traversing these distances.⁷

So, Galilei states, a “motion is said to be [...] uniformly accelerated when, starting from the rest, its momentum receives equal increments in equal times.”⁸

In this case the formula is the following:

$$S = gt^2/2$$

where s equals to the distance covered by a falling body, g it’s the earth’s gravitation (that’s to say $9,80 \text{ m/s}^2$) and t instead is the time of free fall. This law, obviously, doesn’t describe a real motion, but an *ideal* one, obtained by operating counterfactual statements on some factors that have real influences on bodies. So, we can formulate the formula this way:

$$\text{if } R(x) = 0 \text{ and } g = \text{const}, \rightarrow S = gt^2/2$$

In this transcription of the law we can notice how the resistance of the air on body x , $R(x)$, equals to zero and the earth’s gravitation is constant, where we know that in reality things are different. Even though these two conditions are implicitly given, it means that to state this law Galileo had to ignore one aspect of reality and later he equalled it to zero. So, Galileo substituted, to the real situation, an *ideal* situation obtained through an aware *deformation* of what is effectively given. That’s the reason why every law introduces counterfactual statements to describe, that way, not reality in its phenomenal manifestation, but how it should be if some of its real conditions were ignored.

To explain that, Leszek Nowak applies an efficacious comparison between science and caricature, because, according to him, both science and arts use the same procedure of *deformation* in order to catch the essential aspects of reality:

Let us see what a cartoonist does: he leaves out some details of the person presented, thus stressing what he considers important. That is, he employs the method of exaggeration: he does not present everything but distorts a person or a situation by neglecting some features he thinks minor ones. Science, as we have seen, in fact does the same. When a physicist constructs the concept of a material point, he does not present physical objects but distorts them – he assumes that they have zero dimensions and focuses on other properties of these bodies (e.g. mass) which he considers more essential for physical magnitudes he investigates. In short: science consists in the same method we find in caricature. There is, obviously, some difference: caricature does not apply concretization; it does not cover the distance between the prolonged nose of a man, through a middle sized one, to the portrait with an ordinary nose in the centre of the man's face. Nevertheless, it is a deviation from the same standard: in order to say the truth about a fact it should not be presented as common-sense used to say, but distorted. And doing this, both science and caricature achieve, or at least are able to achieve, the truth. The problem arises as to what kind of truth is arrived at by them.⁹

So, arts and science apply to reality the same procedure of deformation in order to catch what is more essential in a given phenomena, *ergo* the truth of an artistic work doesn't consist in a faithful representation but in a proper deformation and scientific truth does the same.¹⁰

But idealization needs another fundamental procedure that Nowak calls *concretization*, but before to explain this procedure it's necessary to understand what is an idealizing assumption; it consists in the following propositional function:

$$[1] p(x) = 0$$

If and only if 0 denotes the minimum value of magnitude p and it holds for any real object x , $(R)x$.

Thus, an Idealizational statement will be a general proposition with the following form:

$$[2] (T^k) G(x) \wedge p_1(x) = 0 \wedge \dots \wedge p_{k-1}(x) = 0 \wedge p_k(x) = 0 \rightarrow f(x) = f(H(x))$$

Where $G(x)$ is a realistic statement, while $p_i(x) = 0$ is a generic idealizing condition. In this case, (T^k) determines how a given magnitude depends on

another one in idealizing conditions in which the given idealizing conditions are satisfied: we have examples of idealizing assumptions in Marx's *Capital*, where Marx used to talk about a society characterized by only two social classes (capitalists and workers), while we know (and Marx too) these are not the only existing classes.

Even though an Idealizational statement describes an ideal state and not a real one, it's possible anyway to pass from idealized conditions to less idealized conditions, closer to reality through the procedure of concretization. According to Nowak, to do that we must delete the assumption $p_k(x) = 0$, introducing the realistic condition $p_k(x) \neq 0$. That way, we can concretize the formula [2] and its result is what Nowak calls concretization¹¹ of the statement (T^k):

$$[3] (T^{k-1}) G(x) \wedge p_1(x) = 0 \wedge \dots \wedge p_{k-1}(x) = 0 \wedge p_k(x) \neq 0 \rightarrow F(x) = \\ = f_{k-1}(H(x), p_k(x)) = G[f_k(H(x)), h(p_k(x))]$$

Obviously, we can concretize further this formula until we obtain, at limit, a factual statement, that's to say, a statement containing no idealizing assumptions:

$$[4] (T^{k-2}) G(x) \wedge p_1(x) \neq 0 \wedge \dots \wedge p_{k-1}(x) \neq 0 \wedge p_k(x) \neq 0 \rightarrow F(x) = \\ = f_{k-2}(H(x), p_k(x), p_{k-1}(x)) = n[f_{k-1}(H(x), p_k(x)), m(p_{k-1})(x)]$$

$$[5] (T^0) G(x) \wedge p_1(x) \neq 0 \wedge \dots \wedge p_k(x) \neq 0 \rightarrow F(x) = \\ = f_0(H(x), p_k(x), p_1(x)) = s[f_1(H(x), p_2(x)), t(p_1)(x)]$$

Nowak, basing his analysis on [4] and [5], states that Marxian methodology consists in the following passages:

- He introduces idealizing conditions;
- He states idealizing laws;
- He gradually concretizes and approximates these laws.

So, the Marxian procedure of *Capital* falls under the general scheme of the method of idealization and concretization. Anyway, Marx was not the only one who applied the Idealizational approach to science, because it has been applied by empirical sciences since its origins, even if not always with the necessary methodological awareness.

2. From Archimedes to Galileo:

Examples of Idealization in Natural Sciences

As Jan Such stated, "Archimedes was probably the first scientist who was aware of applying the Idealizational method in the natural sciences."¹² That's

why Jan Such considers Archimedes the real pioneer of contemporary science instead of Aristotle. In effect, his physics was based on common experience while Archimedes understood perfectly the contradiction existing between “common experience” and “idealizing assumptions.”

Jan Such considers the second outstanding representative of Idealizational approach to science the astronomer Eratosthenes:

He [Eratosthenes] was the first to correctly calculate the Earth's circumference. As the basis, he assumed the angular difference in the angles under which the sun rays fall on the Earth's surface in Alexandria and Syene and he accepted an idealizing assumption that the sun rays falling on different spots of the Earth's surface (their latitude notwithstanding) were perfectly parallel to each other. Thus, physics (statics) and astronomy were the first natural sciences in which the Ancient scientists successfully applied the method of idealization.¹³

As we can see, physics and astronomy were the first natural sciences to which the ancient scientists like Archimedes and Eratosthenes applied successfully the method of idealization.¹⁴

But it's thanks to Galileo that idealization has been applied with a more mature methodological awareness. In fact in this case Nowak applies a differentiation between the period of immature science and the period of theoretical science. In the first period science applies the induction as the fundamental scientific practice, while in the second period science applies the method of idealization. Further, Nowak states that three stages can be distinguished in the development of knowledge:

1. the pre-scientific stage, in which there exists no epistemological principle of a transformation of earlier theories into later one;
2. the stage of immature science with the principle of dialectical refutation;
3. the stage of mature science with the principle of dialectical correspondence.¹⁵

There's a kind of dichotomist image of the historical development of scientific method, divided into the Empirical period and the Idealizational period; between the two we have a kind of methodological breakdown, like the ones operated by Galileo in physics, by Marx in political economy and by Darwin in biology.

Our senses reveal us the false image of the world, because the phenomenon we see are the result of both what is essential and what is less essential; the aim of science is to reveal how these phenomena depend on the most important factors. That's what Galileo did when he tried to explain the nature

of motion opposed to the Aristotelian theory of motion. In fact, Aristotle used to state that we have two types of motion: natural and forced.

So, according to the common observation of the moving objects, there are two factors that influence movement of bodies, that's to say, external forces and resistance of the environment. But, Nowak says, "the question of how objects behave when there is no resistance was never answered by Aristotle, for 'first it should be made clear what a vacuum between the moving bodies is. Since for that matter it has never been noticed within this world' (Aristotle, *Phys.*, 216b)."¹⁶

Instead, Galileo knew very well that the vacuum cannot be perceived, but nonetheless he asked himself a question which was senseless in Aristotle's physics:

how will 'the perfect round ball move on the plane which is smoothly levelled in order to eliminate all external and accidental obstacles' upon an assumption that the "resistance arising when the ball makes its way and all other obstacles that could arise' are not considered at all?"¹⁷

Galileo answered to this apparently senseless question postulating that:

1. the rolling ball is perfectly round;
2. the plane is ideally smooth;
3. the plane is perfectly spherical;
4. the resistance of the environment = 0.

Thanks to these idealizing assumptions, Galileo formulated his famous law of inertia, applied to an obvious ideal case that doesn't exist in reality but idealization, I said previously, differs from abstraction just because the former refers to ideal terms that allowed us to overcome the abyss existing between essence and appearance.

So, according to Nowak,

The Galilean breakthrough consisted then in system of systematically imagining what a given phenomenon would be like if the factors considered to be secondary did not act upon this phenomenon at all. And that is what was typical for the innovation Galileo brought into the body of methods applied in the natural sciences. Galileo systematically applied the method of idealization. And that was the real meaning of the revolution in the natural sciences which was named after him.¹⁸

That's the reason why Galileo turned his look to the great Aristotle's antagonist, that's to say Plato. At the base of this Galilean choice there was the impossibility, postulated by Aristotle, of applying geometry to physics,

while Galileo wrote that nature is written just in a mathematical language.¹⁹ But why Plato then? Because according to the platonic point of view, geometry is a science of ideal models and that's why Galileo applied to his method the platonic point of view.²⁰

Anyway, in history of science there are cases of scientists and philosophers who applied idealization without a mature methodological awareness, sometimes because of the Aristotelian legacy or because of a wrong use of abstraction. In effect, some members of the Poznań School demonstrated how idealization has been applied in linguistic by Noam Chomsky²¹ and by Darwin in biology.²²

Even though Idealizational laws, and its concretizations, are so common in physics, anyway they can be found also in economy²³ (see the methodological reconstruction of Marx's ideas made by Nowak), in psychology,²⁴ sociology,²⁵ history of arts, methodology, pedagogy, law²⁶ and so on. It's easy, that way, to realize that Idealizational laws are the fundamental types of law formulated in physics and Nowak, in order to demonstrate that, makes some examples of Idealizational laws of physics like the law of inertia, the law of free fall, Boyle-Mariotte and Gay-Lussac's laws (for perfect gases), the Ostrogradski-Gauss's formula, Ohm's law and so on.

Let's see, for instance, the Clapeyron's law:

$$[6] \quad pv=NT$$

where p stands for the pressure of a portion of a gas, v stands for its volume, T for the temperature and N for the gas constant. In this case the full formulation is the following:

$$[7] \quad (x) \quad (p(x)v(x)=NT(x)).$$

The statement [7] it's valid only for *ideal gases* not for real ones just because ideal gases are characterized by these two properties: "their particles are material points, and there are no interactions between those particles, so that the inner pressure of those gases equals zero."²⁷

That's the reason why physicists in this case apply two idealizing assumptions:

$$[8] \quad \begin{array}{l} p1: \quad pw(x) = 0 \\ p2: \quad vw(x) = 0 \end{array}$$

The first idealizing assumption states that the inner pressure of gas particles $x = 0$ and the second one that the proper volume of gas particles $x = 0$; so, Clapeyron's law is an idealizing law.

Unfortunately, a lot of scientists and philosophers of science cannot catch the Idealizational nature of scientific theories, because of a wrong conception of abstraction or because of an indifference towards idealization. This fallacy

existing, for instance, in the neo-positivism, has been explained by Nowak comparing idealization with the main epistemological trends like neo-positivism.

3. Idealization vs. Contemporary Epistemology

Idealizational Theory of Science has never been considered by contemporary epistemology even though, recently, important philosophers of science like Nancy Cartwright take into account this new approach both for its originality and important epistemological status.²⁸

First of all, Nowak criticizes neo-positivism just because it has never taken into account idealization not allowing, that way, «the procedure which is basic for empirical sciences in the Marxian model of science».²⁹

The most representative example of this neo-positivist aspect can be found in Carnap's *extreme positivism*,³⁰ that "was originally linked to subjectivism conceiving of observational sentences to which all the other statements are to be reduced as sentences about sense data",³¹ but this kind of reductionism is not able to explain ideal concepts. Nevertheless Carnap applies Idealizational laws directly to real objects and we know, if Nowak's interpretation is correct, that we cannot apply Idealizational statements to reality without the procedure of concretization. In fact, according to the neo-positivists there's no Idealizational law in science but only factual statements, mortifying, that way, the necessity of theoretical terms; in effect, Nowak demonstrated that it's impossible to justify the postulations of classic mechanics or the statements of thermodynamics through the inductive generalization. So, what's the difference between theoretical terms and observational terms? Hempel, for instance, tried to face this problem with a formulation known as the "theoretician's dilemma". According to Hempel, the aim of a scientific theory is to "systematize the experience data, i.e. finding out the relations of consequences between observational sentences";³² but, that way, we need necessarily the theoretical terms because in order to do that we must refer to non-observational objects.

Hempel was aware of that but he was sure, nonetheless, that the theoretical terms are unnecessary (and Craig too).³³ In short, there's no place for the Idealizational approach to science in the positivist model, even if we have to say that Hempel distinguished two kinds of idealization, the intuitive one and the theoretical one (without explaining, anyway, the concept of idealization in itself). According to Nowak the first one is legitimate from a cognitive point of view (especially for human sciences) while the theoretical ones, Hempel states, are *ex definitione*:

particular cases of the theorems which are described as factual ones.
This condition allows us to assume that "theoretical idealizations"
meet the conditions imposed by the positivist philosophy of

science as well as all the other types of theorem. Although they are not directly confirmable on the basis of experience, as logical consequences of the theorems which are, they (indirectly) are, also, empirically confirmable.³⁴

But theoretical idealization doesn't correspond to Nowak's idealizations for two reasons: Hempel's idealization is not an Idealizational law, but the consequent of an Idealizational law, just because theoretical idealization doesn't have the conditional form.

Let's see the law for perfect gases:

$$\text{if } o_w(x)=0 \wedge p_w(x)=0 \rightarrow [T(x)=cost \rightarrow p(x)v(x) = cost]$$

where o_w , p_w , T , p , v are the proper volume of the molecules (portion of a gas), the internal pressure, the temperature and the volume of a portion of gas.

The form of this law is doubly conditional in which the first premise is characterized by two idealizing assumptions; instead, in Hempel's view, the law assumes the following form:

$$T(x)=cost \rightarrow p(x)v(x) = cost.$$

The consequence of this difference is that Idealizational laws, according to Hempel, are analytical statements while in Nowak's view they are synthetic; so, the Idealizational law and the theoretical law are not equivalent and that's the second reason why theoretical idealization doesn't correspond to Nowak's idealization.

Through Idealizational theory of science Nowak criticizes the almost universally accepted model of explanation, that's to say the Hempel-Oppenheim's D-N model of explanation.³⁵ Before to do that, I think it's better to explain the D-N model and after that compare it with the Marxian model of explanation (accepted by Nowak in the light of the idealizational approach to science).

Let's analyze this scheme:

$$\begin{array}{l} L_1, L_2, \dots, L_r \\ C_1, C_2, \dots, C_k \end{array}$$

E

In this scheme the premises $L_1, L_2, \dots, L_r$ are general laws, while $C_1, C_2, \dots, C_k$ are statements which describes the initial conditions of the general laws ($L_1, L_2, \dots, L_r$ together with $C_1, C_2, \dots, C_k$ is the *Explanans*). In this model *E*, the *explanandum*, is the statement that must be explained and it follows logically from the premises (that have to be true). Nowak, comparing the D-

N model with the Marxian one, finds the first fallacy living inside the D-N model, the fallacy deriving by the use of factual laws (it's easy to understand Hempel's reasons if we turn back our look to his position towards Idealizational laws). Nowak explains the D-N model that way:

[...] the laws which occur in it are not idealizing laws [in Nowak's view], and moreover they are not "theoretical idealizations" as understood by Hempel. For should a "theoretical idealization" I imply any statement E , that fact could be accepted as an explanation of E only on the condition that also accepted is a factual statement F of which the statement I is a special case.³⁶

In these given conditions, E follows from the factual statement F , so the explanation scheme should have the following form:

$F \rightarrow E$.

But that way, idealizations cannot play any role in the explanation and they are "superfluous from the point of view of the explanation procedure, and hence are superfluous in science."³⁷

Nowak puts in evidence the sterility of the D-N model analyzing the Gay-Lussac's law.

In the handbooks of physics, in general, we can find this law in the following form:

$$p = cost \rightarrow v_t = v_0 (1 + \gamma t),$$

where p is the pressure of a given amount of a gas, v_t is the volume of that amount of the gas at the moment t , v_0 is its volume with a temperature = 0 and γ is a constant.

The physicians state that this law is satisfied only by perfect gases, and that's why Nowak writes the formula that way:

$$v_w(x) = 0 \wedge p_w(x) = 0 \rightarrow [p(x) = cost \rightarrow v_t(x) = v_0(x) (1 + \gamma t(x))]$$

where v_w is the volume of the particles of the amount of the gas while p_w is its inner pressure. This law satisfies both the two conditions that we have in the antecedent, that's to say perfect gases, but in this case the law doesn't satisfy the Hempel's view of law of science. So, this Idealizational law cannot explain the behaviour of real gases just because, as we have seen, Idealizational laws cannot directly explain the behaviour of real objects. Now, if we apply D-N model to the explanation of particular facts we obtain the following scheme:

- (1) $(x) A(x) \rightarrow B(x)$
 (2) $A(a)$
-

(3) $B(a)$

In the light of the Idealizational theory of science “premise (2) in the *explanans* would always, i.e., for any real object *a* be false. Hence Idealizational laws cannot in fact explain actual phenomena in Hempel’s sense of explanation.”³⁸ Anyway, the epistemological conception of the *Received View* is characterized by an instrumentalist point of view just because, according to it, scientific theories have no cognitive status while in the realist conception of science things are different:

[...] for someone who thinks scientific theories have different aims, especially for someone who would like to see a scientific theory as a somehow independent source of information about objective regularities, there does not arise a theoretician’s dilemma at all, the theoretician’s dilemma is formulated with an assumption of an instrumentalist concept of scientific theory; for a realist in treating a cognitive status of scientific theories there is here no dilemma.³⁹

4. Popper – An Unconscious Marxist?

As we have seen, Idealizational theory of science has never been taken into account by Neopositivism, especially for its instrumental conception of science. Anyway, and this is in a class by itself, even one of the most deadly enemies of Neopositivism,⁴⁰ that’s to say Popper, about idealization expressed some thoughts about this approach very similar to the positivist ones. In fact, Popper never talked about idealization and when he has to do with idealization he managed its statements as they were factual ones.⁴¹ But sometimes Popper, especially when he talks about social sciences, refers to the idealizing assumption that “men” act “rationally.” This principle of rationality is called by Popper “logic of situation;” according to him this principle can have an approximate value, but it’s very far from any scientific strictness (and it can be used only in social sciences).⁴²

These Popperian scientific deficiencies, especially regarding the scarce and non-existing role of idealization in science, has been summarized by Nowak that way:

[...] even if the interpretation of the humanities is ascribed to Popper according to which its methodological peculiarity consists of the employment of idealization – conceived of as the assumption of rationality, for Popper does not mention another kind of

idealization in the humanities – we have to say that this has not been made comparable with the whole Popperian model of science. For instance the author fails to explain in what sense the assumption of rationality can be falsified. Thus one fails to decide such an elementary – from the viewpoint of the author of *The Logic of Scientific Discovery* – question as the one about the assumption of rationality: does it belong to science as a valid component, or is it a metaphysical insertion?⁴³

Otherwise, Popper doesn't realize that the Keplerian law he refers about in his *Logic*,⁴⁴ is an Idealizational one. But this confusion, in my opinion, drives from the Popperian statement according to which “*all universals are dispositional*,”⁴⁵ but dispositional terms exclude Idealizational concepts just because “no Idealizational term is dispositional, then Idealizational terms and laws are inadmissible in the Popperian model of empirical sciences” (Nowak, 1980, p. 73).

Anyway, the inauspicious consequences of the Popperian misunderstanding of idealization will bring Popper to a systematic incomprehension of both essentialism and Marxism, but in reality, from a particular point of view, Popper was an unconscious Marxist.

The Popperian critiques to the Marxian historicism, according to him deriving from Hegel, are based on the tacit assumption according to which *historicism* wants to provide a complete explanation of history in causal terms. To historicism is linked even Max Weber's position, who applied idealization extending it from natural sciences (as Galileo did) to social sciences. But Popper rejects every attempt of causal historical explanation in causal terms because, according to him, history lacks the essential requirement of science *tout court*, that's to say the existence of universal laws. In fact, according to Popper an historian doesn't aim to the discovery of universal laws, at the opposite historians base their analysis on inductive generalizations. Such a generalization erects these unrepeatable facts to objective laws and this is, in Popper's view, false and outlawed.

Nevertheless, Popper makes a lot of systematic mistakes concerning the understanding of Marxism, first of all because he assimilated Marxism, considered a kind of fatalism, to completely different conceptions like the ones of Turgot, Spencer, Condorcet, Comte, and so on;⁴⁶ secondly because through his critiques to essentialism he finished to consider Marxism a teleological thought, misunderstanding completely, that way, the Marxian methodology of *Capital*.

Popper's reflections about historicism can be found in his *Poverty of Historicism*, a set of articles appeared on the journal *Economica* between 1944 and 1945, and later published as a volume.⁴⁷ Popper criticizes essentialism (an important component of the Poznań School) because it aims to an ultimate explanation that doesn't admit any further explanation (things are different

with the Popperian's *modified essentialism*). That's why Popper considers essentialism unacceptable:

Essentialism is, I believe, untenable. It implies the idea of an *ultimate* explanation, for an essentialist explanation is neither in need of, nor capable of, further explanation. (If it is in the nature of a body to attract others, then there is no need to ask for an explanation of this fact, and no possibility of finding such an explanation) Yet we know, at least since Einstein, that explanation may be pushed, unexpectedly, further and further.⁴⁸

That's why Popper denies every epistemological value to essentialism; anyway, he's wrong in two points: the first consists in the absoluteness of his judgment, because the essentialism he criticizes is not the only one (as we will see); secondly he's wrong when he attributes to Marx the essentialism by him criticized.

In fact, Marxian idealization requires essentialist assumptions about the world, but Marx doesn't mean that these assumptions want to reach the *ultimate* essence not furthermore extendable. A famous Marxian claim is the following: "all *science would be* superfluous if the outward appearance and the essence of things directly coincided."⁴⁹ This Marxian claim, according to Popper, is nothing but "pure essentialism."⁵⁰ But it couldn't be different if we turn our look to the Popperian views on essentialism.

But Marxian essentialism really corresponds to the Popperian one? The answer, obviously, is not affirmative just because Marxian essentialism is based on idealizing assumption that Popper can't understand. In fact, idealization "makes possible the discovery the essence of facts of a given type, i. e., revealing the influence principal factors have upon the magnitude under investigation" (Nowak 1980, p. 102). But to clarify how is that possible, we must introduce the notions of ontological perspective, image of the essential structure, essential structure and levels of significance. In doing that we must come back to the difference between abstraction and idealization, specifying that "abstraction leaves unchanged the discourse the scientific theory refers to, classifying only the individuals by procedures of linguistic type."⁵¹ So, individuals are "given with all their properties: we have only, by the method of comparison and inductive generalization, to classify them in homogeneous sets including identical properties present in more individuals or, at limit, in everyone."⁵² About idealization, things are different, in fact thanks to this approach we can restructure not only the universe's individuals, but we have even their "ontological transformation and the building of an ontological different universe diverse from the one we started from."⁵³

Let us suppose that an ideal researcher is making use of idealization; once he determined the type of domain he's interested to, he aims to discover what factors are essential for a given magnitude. He will take into account the

type of magnitudes that, in principle, can influence the one he's interested to. To this regard, we will consider all the factors that influence a given magnitude F and that are necessary for its explanation.

After doing so, we have to arrange this set, called by Nowak, "space of the essential magnitudes" for F , depending on the capacity their elements have to influence the magnitude F .

Let us suppose that this set "is composed by $k+1$ elements: $H, \dots, p_k, \dots, p_1$, where H is the main factor for F and the others, called collateral factors, are less essential." So, now we have an *essential structure* of the factor F of the following form:

$$\begin{array}{ll}
 S_F: & (k) \quad H \\
 & (k-1) \quad H, p_k \\
 & \dots \\
 & (1) \quad H, p_k, \dots, p_2 \\
 & (0) \quad H, p_k, \dots, p_2, p_1
 \end{array}$$

In this case factor F depends, in some way, on each sequence of the mentioned factors to $k, k-1, \dots, 0$ level of essence of this structure. The dependence f_k of the magnitude F from the main factor H , is an internal dependence or, in other terms, a *regularity*. So, the dependence f_{k-1} is the first form of manifestation of a regularity f by the functions g, h , when we have $(H, p_k) = g[f_k(H), h(p_k)]$.

As we can see, there's a big difference between Popperian essentialism and the one postulated by the Poznań School. In fact, from one side we have the scientist's hypothesis, with which he can ideate an image of the essential structure; further, he will try, by the procedures of approximation and concretization, to see to what extent this image corresponds to the effective essential structure.

This is a clear case of realism hidden to Popper. He criticized the methodological assumption of Marxian *Capital* considering them false because based of ideal assumptions. For instance, Popper interpreted Marxian theory of value – considered by Nowak a paradigmatic example of Idealizational approach to science – as an essentialist or metaphysical one,⁵⁴ and according to him this law "shows clearly enough the influence of Platonic Idealism with its distinction between a hidden essential or true reality, and an accidental or delusive appearance."⁵⁵

What Popper doesn't catch, is the ideal model present in Marxian *Capital*, and this is true not only regarding the theory of value, for the perfect concurrency, and so on; these are theories all based on idealizing assumptions and on the necessary procedure of concretization (as widely demonstrated by the Poznań School literature).

This Popperian incapacity to understand the peculiarity of Marxian method, will bring Popper to interpret Marxian theories with the pejorative name of “prophecy;” that way, Popper made a confusion between ideal models and factual situations.

So, the mortification of idealization made by Popper doesn’t help him to comprehend the real nature of the Idealizational approach used by Marx in his *Capital*; that’s why Popper stated that Marxian philosophy “was influenced by ancient distinction between ‘reality’ and ‘appearance’, and by the corresponding distinction between what is ‘essential’ and what is ‘accidental.’”⁵⁶

An example of the non-scientific value attributed by Popper to idealization can be found in that Popperian quotation:

The opposition between legal and the social system is most clearly developed in *Capital*. In one of its theoretical parts [...] Marx approaches the analysis of the capitalist economic system by using the simplifying and idealizing assumption that the legal system is perfect in every respect. Freedom, equality before the law, justice, are all assumed to be guaranteed to everybody.⁵⁷

Obviously, Popper considers this Marxian analysis false just because referred to an ideal situation; that’s why Popper stated, also, that the Marxian idea “of a free market is paradoxical.”⁵⁸

Well, the weaker aspect of Popperian reflections about Marxism consists on the repudiation of idealization, considered by Popper non-scientific. But why, then, Nowak appreciated Popperian hypotheticism claiming the debt that idealization has toward it? The reason is too simple: Nowak evaluates positively the coherent Popperian anti-inductivism:

Experience does not constitute the issue of the theory, but its criterion of the choice among theoretical proposals our imagination is able to create. In this the Idealizational theory of science is indebted to Popper’s hypotheticism, differing from it in the definition of the aim of science (reconstruct the essence of phenomena) and of the main means to employ (the deformation through idealizing them).⁵⁹

In fact, Popper, coherently with his hypotheticism, used to admit the existence of the objective knowledge, but avoiding to postulate a kind of absolute knowledge of the laws of nature by the man; just because “we search for truth, but we may not know when we have found it [...] and that, though there are no general criteria by which we can recognize truth [...] there are criteria of progress towards the truth.”⁶⁰

Though Nowak clarified the difference between Popperian hypotheticism and Idealizational theory of science, we must claim the almost perfect con-

cordance between this particular Popperian epistemological aspect and the Engelsian and Leninian ones.

Let us see what Lenin wrote in his *Materialism and Empiriocriticism*:

Human thought then by its nature is capable of giving, and does give, absolute truth, which is compounded of a sum-total of relative truths. Each step in the development of science adds new grains to the sum of absolute truth, but the limits of the truth of each scientific proposition are relative, now expanding, now shrinking with the growth of knowledge. [...] From the standpoint of modern materialism i.e., Marxism, the *limits* of approximation of our knowledge to objective, absolute truth are historically conditional, but the existence of such truth is *unconditional*, and the fact that we are approaching nearer to it is also unconditional. The contours of the picture are historically conditional, but the fact that this picture depicts an objectively existing model is unconditional. When and under what circumstances we reached, in our knowledge of the essential nature of things, the discovery of alizarin in coal tar or the discovery of electrons in the atom is historically conditional; but that every such discovery is an advance of 'absolutely objective knowledge' is unconditional. In a word, every ideology is historically conditional, but it is unconditionally true that to every scientific ideology (as distinct, for instance, from religious ideology), there corresponds an objective truth, absolute nature. [...] The materialist dialectics of Marx and Engels certainly does contain relativism, but is not reducible to relativism, that is, it recognizes the relativity of all our knowledge, not in the sense of denying objective truth, but in the sense that the limits of approximation of our knowledge to this truth are historically conditional.⁶¹

But the epistemological analogies between Popper and Marxism are not present only in Lenin's works. If we go backwards, we can find some anticipations of the Popperian hypotheticism in Engels' *Dialectics of Nature*:

The form of development of natural science, in so far as it thinks, is the *hypothesis*. A new fact is observed which makes impossible the previous method of explaining the facts belonging to the same group. From this moment onwards new methods of explanation are required – at first based on only a limited number of facts and observations. Further observational material weeds out these hypotheses, doing away with some and correcting others, until finally the law is established in a pure form. If one should wait until the material for a law was *in a pure form*, it would mean suspending the process of thought in investigation until then and, if only for this, reason, the law would never come into being.⁶²

Comparing Lenin's and Engels' quotations with the Popperian ones, we can notice that the first two used to claim, from an epistemological point of view, a materialistic-dialectical gnoseology in substance congruent with the Popperian one: this gnoseology doesn't restrict itself to state that "every our knowledge – in particular the scientific one – is relative and then perpetually changeable," because next to this thesis there's another one assuming that "our knowledge gives us the chance to reach reality effectively, even if without knowing it absolutely, so that it makes sense talking about knowledges 'more true' than other ones."⁶³

These epistemological aspects, reclaimed and defended strenuously by Popper, are present in the Marxian thought and they were claimed much before the Popperian hypotheticism; so it's very weird that Popper used to consider Marxism as a metaphysic and non-scientific theory just because not subjected to falsificationism⁶⁴!

5. Conclusions

As we have seen, Idealizational approach to science developed by Nowak corresponds to the real way science works. Fortunately, neo-positivism is dead but some of its fallacies still continue to remain in scientific research and science debates, like the reductionist approach. Reductionism contains some limitations that science nowadays must overcome, if it wishes to conform to a holistic and Idealizational approach to science. Another fallacy is the perfect ideal of absolute objectivity. This image of science, obviously, has never corresponded to the real science because, as I said previously, science is an idealization of reality; when a scientist tries to investigate a phenomenon, he applies *idealizations* that simplify reality. Thanks to this methodology we can face the complexity of phenomenon and of reality. This idea of science, states Coniglione (2009: 32): "inevitably impoverishes reality, but [...] it gives us the chance to work with choice criteria consciously placed within some limits of approximation and of accuracy that every scientific theory – not a mere prophecy or mystic knowledge – is aware that it possesses." Thanks to this Idealizational approach, science loses the dogma of objectivity, because we are aware that scientists do not aim so much to give us a representation of what the world is, but rather as approximate an image of it as possible. As the great physicist Feynman (2002: 153) stated: "The scientist lives with ignorance, doubt, and uncertainty everyday and this is, in my opinion, a fundamental experience. [...] Scientific knowledge is a set of statements with a variable degree of certainty; we are not completely sure of some of them, other statements are almost certain but none of them is *absolutely* certain."

NOTES

1. About this “School” see Woleński (1989); Coniglione (1993, 2005, 2007); Jadacki (1994); Szaniawski (1989) and Rieser (1960).
2. This term has been introduced by Hilary Putnam in (1962). For a critique of the Received View analyzed in the light of the Idealizational approach to science see Suppe (1972).
3. See Coniglione (2004b).
4. See Harré (1970)
5. Nowak (1992), 10–11.
6. Nowak (2000d), 109–110.
7. Galilei (1963), 167.
8. *Ibid.*, 162.
9. Nowak (1980), 134. About the analogy between science and caricature postulated by Nowak see also I. Nowakowa-L. Nowak (200), 9–14.
10. See I. Nowakowa-L. Nowak, (1978), 211.
11. About the procedures of idealization and concretization see: Nowak (1972), 533–548; Nowak (1975b), Nowak (1990), Nowak (1975a), 23–26. About this topic see also: Tuchańska (1977), 213–234; Palubicka (1976), 89–100; Batóg (1976), 101–106; Zielińska (1976), 108–114; Patryas (1975), 83–85; Nowakowa (1975), 75–80; Brzeziński (1975), 43–58; Kmita (1991), 147–161; Klawiter (1975), 13–28; Krajewski (1977), 323–339 and Brzechczyn (2009), 137–157.
12. Such (2004), 11.
13. *Ibid.*, 12.
14. For an analysis of idealization in physics and in science in general see Barr (1974, 1971); Lind (1993); Schwartz (1978) and Jones-Cartwright (2005).
15. See Nowak (2000c), 425.
16. Nowak (2000b), 18.
17. Galilei (1962), 155.
18. Nowak (2000b), 21.
19. “La Filosofia è scritta in questo grandissimo libro, che continuamente ci sta aperto innanzi agli occhi (io dico l’Universo) ma non si può intendere, se prima non s’impara a intender la lingua, e conoscer i caratteri, ne’ quali è scritto. Esso è scritto in lingua matematica [...]” (Galilei (1811), 229). [Philosophy is written in this gigantic book [...] I mean the Universe, but we cannot comprehend it if before we don’t learn its language [...]. The Universe is written in a mathematical language].
20. About the Galilean Platonism see F. Coniglione (2004a).
21. See Nowak (2000a, 2004).
22. About this aspect of Darwin’s biology see Łastowski (1977, 1982).
23. On Idealizational procedures applied in economy see Hamminga-De Marchi (1994); Nowak (1988) and Hunt (2001).
24. See Brzeziński (1976, 1997).
25. See Tuchańska (1975).
26. See Nowak (1969, 1973b).
27. Nowak (1972), 536–537.
28. About the study of idealization in important philosophers of science see: Cartwright (1983, 1989); Cohen (1991); Dilworth (1990); Hamminga (1989); Laymon

- (1982, 1985); Ludwig (1981); Niiniluoto (1986); Suppe (1989); Liu (1999, 2004a, 2004b); Adams (1982); Niaz (1999).
29. Nowak (1980), 56.
 30. See Carnap (1968).
 31. Nowak (1980), 54.
 32. *Ibid.*, 63.
 33. Craig (1953), 30–32.
 34. Hempel (1952), 81.
 35. See Hempel-Oppenheim (1958), 135–175.
 36. Nowak (1974b), 17.
 37. *Ibidem*.
 38. Nowak (1980), 69.
 39. *Ibid.*, 63.
 40. About anti-positivism in contemporary philosophy see Giedymin (1975), 275–301.
 41. See Coniglione (1981), 40–41.
 42. See Popper (1975), 121–122.
 43. Nowak (1980), 73. About Popper as a critic of historicism see Nowak (1974a), 43–47.
 44. See Popper (1970), 131.
 45. Popper (1972b), 204.
 46. About the Popperian misunderstanding of Marxian historicism see Topolski (1975), 211–217.
 47. See Popper (1944a, 1944b, 1945).
 48. Popper (1972a), 299.
 49. Marx (1973), 228.
 50. Popper (1962), 347.
 51. Coniglione (2002), 264.
 52. *Ibid.*, 264–265.
 53. *Ibid.*, 265.
 54. Popper (1962), 174.
 55. *Ibid.*, 177.
 56. *Ibid.*, 107.
 57. *Ibid.*, 123.
 58. *Ibid.*, 348.
 59. Nowak (1983), 10.
 60. Popper (1972c), 387–388.
 61. Lenin (2004), 149–151.
 62. Engels (1974), 522.
 63. Geymonat (1972), 33–34.
 64. About the “poverty” of the Popperian falsificationism see Barbagallo (1995), 55–60.

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THE MODES OF RELIGIOUS EDUCATION: CHRISTIANITY'S CONTEMPORARY STATUS

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ABSTRACT. The purpose of this article is to gain a deeper understanding of the nature of Christianity as a missionary religion, the practices of the Christian community, and the substance of Christian ideology. The literature on Christian understanding of Jesus' death and resurrection, the process of assimilation and accommodation in Christian learning, the norms for education in a Christian context, and mediation of religious traditions and practices is relevant to this discussion.

Keywords: Christianity, religious education, faith, ordered learning

1. Introduction

The purpose of this study is to examine the interface of Christian religious education and psychology, the dimension of Christian community, and the formation of Christian identity. We are specifically interested in how previous research investigated the extension of the faith and Christian culture, the missionary character of Christianity, the formation of Christian tradition, and the presence of ordered learning in early Christianity.

2. The Formation of Christian Identity

Dirks emphasizes that Christianity has never been monolithic. A Christian religious education leaves out the accurate and realistic historical context *needed to understand ancient Church history and Biblical stories and teachings*.¹ Prabhakar says that one plurality that stands out in India is the religious-cultural plurality. Indian religiosity is *a multifarious web of interlocking*

layers and strands, and education theories must strive to address the reality of religious plurality. Christian education is faith-formation, and the primary task of religious education in India is to develop an attitude *of appreciation of the good and beautiful in other religions*. “Christian education needs to be a ‘spiritual’ process that motivates the learners to build a new ethos of mutual trust, mutual respect and mutual learning, and thereby moves towards a holistic spirituality.”² Lundby asserts that the mediation technology may influence the religious education. The digital meeting places *are spaces for circulation of symbolic material*. Symbols and expressions of spirituality *are arenas of interactivity and active interpretation of symbols*. “The capacity and competence of children and young people as participants in their contemporary digital environments must be taken seriously in the performance of the reform on faith-based education in Norway. Their digital environments make a symbolic and social context that the adults who try to pass on the spiritual tradition will have to relate to.”³

3. The Effectiveness of Christian Religious Education

Farley holds that the Christian faith restrict the relating of faith to reality, world, knowledge, and learning *to its ordained leadership and to withhold it from the laity*, that education in the congregation and for the believer has little to do with the disciplines and rigors of ordered learning, and that *theological education defines something needed by Christian clergy but never by Christian laity*. “In the face of the modern democratization of education and learning, [...] the church continues to settle for the pre-modern pattern of educated clergy and uneducated laity and for the almost uncrossable gulf between theological (clergy) education and church education.”⁴ Farley claims that the self-conscious transmission of the tradition by teachers *is a deeper and older part of the Christian heritage*. The ordered learning (education) occurring in congregations should be theological education. Faith is a response to grace and redemption. “Anyone who participates in a living community is constantly formed by its inherited imagery and shaped by its normative events.”⁵ Farley insists that human existence in the world is a linguistic and interpretive existence. Existence in the world before God requires a wisdom (theology) which is a self-conscious interpretative response. Reality places demands on human response and interpretation. Wisdom as reality-related involves ordered learning. “‘Ordered learning’ refers to the institutions or processes of culture which communicate to its members the products and methods of interpreting that culture’s version of reality in its various dimensions.”⁶ Farley posits that “ordered learning” has *the specific connotation of the Enlightenment cognitive posture*. The majority of Christian believers remain largely unexposed to Christian learning. The gulf between theological education

as ordered learning and “education” in the church *is part of the deep structures of the church’s self-understanding*. Farley holds that the churches offer an “education” which fails to be ordered learning. Clergy education and theology become correlative. Church education must discover some other meaning of education *than education which is theological*.

Education in the church as non-theological education must formulate itself in some other way than ordered learning. Further, because education in the church must differentiate itself from theological education, and therefore from theology, it is unable to appropriate the original meaning of theology as wisdom, discipline, and interpretation of tradition, truth, and situation. It is thus unable to appropriate the ordered learning which theology as wisdom requires. Church education must carve out some niche for itself separated from wisdom and the need for ordered learning.⁷

Farley writes that ordered learning is needed by the ordained leadership in its special role. Faith as existence in the world before God does entail theology or wisdom. According to Farley, Homiletic is inadequate *as a comprehensive paradigm of the way the believer’s existence in the world before God is effected and disciplined*. The believer’s wisdom does not have the character of a disciplined reflection *in constant struggle with tradition, truth, and situation*. What is mediated to the believer is the tradition of piety or morality. “There are elements in the church’s institutional life which seem to have to do with ordered learning. Modern churches are unambiguously committed to buildings, educational spaces, advanced degrees, teachers, directors, and curricula. Because of these elements, the churches offer what appears on the surface to be a genuine educational undertaking.”⁸

4. The Theology of Christian Experience

Miedema claims that Hull changed religious education in theory and practice *in the direction of inter-religious education and learning*: religious education should be *part and parcel* of every public school’s curriculum. Religious education should focus on the student’s own religious autonomy and identity. The students can develop *clarity* and *insight* about their own religious or world view identity. Christian religious educators need to contribute to religious education in state schools. “Hull has convincingly shown that the situation of religious plurality that we can meet locally, regionally and globally is an inevitable item on the agenda of everyone who attaches great importance to the relationship between education and religion. During a long period of time he deliberately chose to participate in church committees, religious education

committees and in governmental advisory boards in order to have influence here and to stimulate the reception of his ideas.”⁹

According to Heywood, Christian education is the educational activity which takes place within the sphere of Christian commitment, but currently faces something of a crisis of identity. Christian learning constitutes the subjective dimension of revelation. The goal of Christian education is individual and corporate conformity to Christ.

What is important here is that the aims and methods of Christian education *are based on a theological understanding of the learner*. The content of revelation is Jesus Christ, *through whom the image of God is revealed in the course of a human history*. Heywood demonstrates “the close connection between Christian learning and the modes of learning commonly employed as a feature of the ordinary processes of growth and development,” and examines “the relationship between Christian learning and the ‘subjective dimension’ or mode of reception of revelation.”¹⁰ In Heywood’s view, Jesus Christ is the content of revelation, *the exemplar for human identity*. The new identity given in revelation is appropriated step by step in the course of Christian learning (Christian learning takes place within the sphere of revelation).

Brackney posits that *process thought* has opened new bridges between Christians and other world religions. For Christians, Jesus’ life is the core of their understanding of God, while Jesus’ death is a sacrifice to provide for their salvation (gathering for worship and learning is vital to their experience). The heart of Christian organization and community is the *ecclesia*. Christian thinkers and the community have produced a coherent set of values. “Uniquely, Christians have an orientation to the world, a lifestyle, and set of standards and expectations about how Christians ought to live and what the world should look like if significantly influenced by their values. This last aspect has become a field of inquiry and comment in itself, namely Christian ethics.”¹¹ Brackney claims that modern Christianity *is a self-critical religious tradition*. Jesus possesses the fullness of God from eternity past. “Unique to a Christian view of God is that God is self-giving and takes the initiative in relating to human beings by communicating through prophets and scriptures, appearing in human form in Jesus of Nazareth, and providing deliverance from the human predicament as a gift of grace.”¹² Brackney asserts that humans were given the possibility of being reconciled to their Creator *through an elaborate system of sacrifices that mitigated their sin*. The sacrificial system in Ancient Israel prefigured the work of Christ as a redeemer. Christian theology claims that humanity was created in God’s image. Ethics is the application of the doctrines of Christianity to practical life situations. “In recent years Christians have reached consensus on ethical concerns such as the dignity of all persons created in the image of God, religious freedom without qualification, the right to food, shelter, and education, a universal support for justice, and

nonviolence in arbitrating disputes.”¹³ Brackney emphasizes that God superintends what happens in all of God’s domain. Christians share with other religious traditions *the value of prayer as communication or supplication of the supernatural*. Charismatic worship is a *joyous and dynamic* form of Christian spiritual expression. *Christianity seeks to offer an answer to the great religious questions*. “The understanding of God, the inherent value of humankind, the need for restoration of the world, and the universal desire for justice are driving impulses in Christian thinking.”¹⁴

The basic idea here is that judgment in Christian schemata precedes the reward of the eternal life: eternal life is a gift of God through the resurrection of Jesus Christ. Brackney reasons that Christians affirm both the Divine gift of a corporeal body and an immortal soul. The great religious quests of humanity are fulfilled in the message of Jesus. The new life in Christianity has come from converts *who claim to have experienced Jesus in a way that has transformed their lives*. At the heart of the Christian witness is persuasion.

Ryan and Switzer explore the limits of Christian conservative power in America’s political culture. Conservative religious language pervades a broad spectrum of Christianity. Christianity must be interpreted through the lens of orthodox Christian doctrine. Ryan and Switzer note that most Christians do not base their lives on adherence to doctrines and creeds. Christian conservatives demonstrate *the most rigid support of the orthodox belief system* (they retain an exclusivist vision of how God is revealed in the world). Christian conservative orthodoxy has generated tensions within conservative coalition politics. Human beings have “transcendent worth” (they were made in God’s image). Ryan and Switzer explore the media’s role in representing Christian conservatives in America’s political culture: traditional Christian messages have been *reshaped, refined, repeated, and redirected* to new audiences. “Christians of all theological leanings [...] have long used and even depended on mainstream news media (a) to communicate their messages to larger, secular audiences and (b) to portray Christian values and norms positively and in what activists perceive as appropriate contexts.”¹⁵

5. Conclusions

The results of the current study converge with prior research on the traditional Christian understanding of Jesus’ life, the development of Christian faith, and the effectiveness of Christian education. The paper generates insights about the Christian understanding of the meaning of life, the effectiveness of Christian religious education, the growth of the Christian community, and the theology of Christian experience.

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WITTGENSTEIN'S ATTITUDE TOWARD LANGUAGE AS MUSIC

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ABSTRACT. The purpose of this paper will be to supply a brief overview of Wittgenstein's philosophical views on music. The theory that we shall seek to elaborate here puts considerable emphasis on the concept of musical expression, and on music as a means of emphasizing the role of 'feeling' in proper understanding.

Keywords: Wittgenstein, language, musical expression, meaning, philosophy

1. Introduction

The aim of the present study is to examine and evaluate the mark of musical meaning and the meaning of a musical gesture. This paper presents the results of a survey illustrating the understanding of Wittgenstein's musical theme or phrase, and the entanglement of music and philosophy.

2. Wittgenstein's Philosophical Views on Music

Kanterian says that the Wittgensteins were known as patrons of music, and Ludwig Wittgenstein was musically gifted and *could whistle whole scores with great accuracy*. As Kanterian puts it, Wittgenstein "detested contemporary music:" Gustav Mahler was *too modern and corrupted for him*. Wittgenstein was interested in experiments involving *the role of rhythm in the appreciation of music at the psychological laboratory: under certain conditions subjects are prone to hear a rhythm in a sequence of beats that is not really there*.¹ Guter frames Schoenberg's method of composing with twelve tones in the context of Wittgenstein's philosophical views on music: the most plausible sense in which Schoenberg's 12-tone system *can be rendered a serviceable image for Wittgenstein's view of language* is by way of contrast. For Wittgenstein, there is an intimate link between artistic experience of art and *Menschenkenntnis* (our knowledge of human nature). According to Guter,

Wittgenstein holds that triadic tonality is the focal point for comparing musical instances, and that various musical instances may bear more or less family resemblance to one another, *to the extent of the exclusion of certain instances*. Our intercourse with music exemplifies a special kind of grammatical complexity, while the relation between the musical gesture and the thing expressed is internal (musical meaning is an internal relation in which music and language are in reciprocal action). Guter emphasizes that musical gesture is fundamentally nonmechanical: it introduces indefiniteness into our musical understanding that is constitutive in a logical sense. The concept of musical expression is diametrically opposed to the concept of a mechanism, and musical gesture admits “imponderable evidence.” Musical meaning is an internal relation *adjoining musical gesture and the life of mankind*. What we call “music” is already given to us with a familiar physiognomy. Guter writes that music opens up a realm of *Menschenkenntnis* for us to partake, and *Harmonielehre* (the systematic representation of the rules of tonal effect) is grammar. The right way to combine a musical tone with other tones is already built into the tone itself. Tonal relationships, represented by *Harmonielehre*, are internal, while tonality is effected by the way we recognize and describe things, and sets limits to what makes (musical) sense. What a musical gesture means is determined by its “vertical axis.”

Wittgenstein’s somewhat cryptic way of defining musical gesture as “stages along a path” that adjoins what is *not yet* music with what is *no more* music, betokens of an internal relation, which, as I have suggested, is the mark of musical meaning. Hence, for Wittgenstein, looking at the meaning of a musical gesture amounts to looking at the actual language game in which it is embedded, and its vertical relation to a range of other language games.²

Guter asserts that, according to Wittgenstein, the transparency of a musical gesture resides in the vacuity of the “rules of transparency” (it is already given to us with a familiar physiognomy). Understanding a sentence is comparable with understanding a piece of music, and understanding music *is an avowal of the human life that shows itself in the grammar of our language*.

3. The Question of Musical Understanding

Scruton points out that Wittgenstein focused on *the question of musical understanding* and connected this with *the nature of the first-person case*, and *the understanding of facial expressions*: Wittgenstein emphasizes the role of performance in the understanding of music, and introduces an “intransitive” concept of expression. You understand a piece of music only if you imaginatively grasp the state of mind expressed by it.³ Zangwill posits that Scruton’s

acceptance of Wittgenstein makes sense of his overlooking the realist option in the philosophy of music: Wittgenstein makes a non-realist view of music more or less compulsory. Zangwill notes that, on Scruton's reading, musical experience is a kind of "aspect" experience (it is an imaginative experience of ordinary properties). Metaphors enter into our experience of music.⁴ Ahonen maintains that by applying Wittgenstein's later account of language to music a version of musical formalism follows: the meaning of music is constituted by the rules of a given system of music, and the understanding of music is the ability to follow these rules.⁵

Szabados observes that the attribution of musical formalism obscures the role that music played in the development of Wittgenstein's philosophy of language. "Wittgenstein wants to hold fast to the truths musical theories such as formalism and expressivism "contain" or build on, as well as the truths they are forgetful of. The theories themselves, however, are to be jettisoned, since they distort our appreciation."⁶ Appelqvist argues that the formalistic notion of music Wittgenstein expresses in the *Notebooks* serves as an example of what it means to grasp the meaning of an expression when the meaning is the rule-guided use of that expression in the context of the relevant medium. Appelqvist holds that Wittgenstein compares musical themes with tautologies which just show their own logical form. We do not attribute musical understanding to listeners independently of their mastery of the rules of our musical system. Musical understanding involves the ability to follow the rules of a musical system. Certain types of aesthetic judgments are part of the circumstances under which *somebody is musical and understands music*. Appelqvist asserts that one's ability to explain aesthetic judgments by appealing to the rules of music shows that one understands. The possibility of appreciating music rests on the ability to follow music in the first place. The analogy between a musical theme and a sentence serves as an example of what it means for a word or a sentence to have a meaning as use in a context.⁷

Worth remarks that Wittgenstein compares understanding a musical theme to understanding a sentence: music is *not* a language because we still cannot *communicate* through music as we can through language (understanding music *is more a pure process* than coming to understand language).

Wittgenstein takes the way we understand music to be less complicated than understanding language perhaps because there is no 'formal content' or outside referents for music, whereas there are with language. We easily become diverted and preoccupied with identification of references when dealing with meaning in language, and therefore music is a better paradigm to use for an explanation of understanding. Music is often seen as being problematic because of its lack of detectable meaning, but this is precisely why Wittgenstein thinks it has an advantage. The necessarily abstract quality of music allows us to avoid being

absorbed merely with the quest for referential meaning. [...] What sounds ‘right’ is determined by its creator, and confirmed and recognized by the understanding listener. Wittgenstein says that there is no paradigm apart from the theme, but separately from that there are also the rhythms of our language (of music) and of our thinking and feeling. All of these have to be present for the composer and they are simultaneously separate from the music and intimately related to produce a work that sounds coherent.⁸

4. The Rhythms and Intonations of Language as Paradigms for Progressions in Music

Bowie insists that Wittgenstein invokes music as a means of showing something that cannot be said, and that Wittgenstein ponders the idea of music as a means for articulating something which could not be described. Wittgenstein means the establishing of different contexts in which we may grasp something of how the music might be understood. “The understanding of Wittgenstein’s musical theme or phrase is both particular to the individual in question and yet is occasioned by something in the external world.”⁹ The entanglement of music and philosophy is a resource for exploring the nature of language and the world. Bowie claims that Wittgenstein adumbrates the possibility that *music may address things which philosophy fails to address*. Music is something which is intelligible in ways that cannot be verbally articulated. Bowie says that when Wittgenstein uses music as an example to indicate the role of logical form he employs the word “language” (*neither language nor music need be thought of as primarily having the function of explaining or representing, while in music the expressive quality which language and physical gesture can lose by repetition is retained*). Music is a means of emphasizing the role of “feeling” in proper understanding. The concern with hearing and the avoidance of objectification are easily related to music.

The differing ways in which a score and a record encode the physical components of music, from frequencies to durations, can be given a scientific explanation. The fact that what is encoded is then manifested as frequencies and durations by sound waves is also explicable, as it is in written and mechanically recorded verbal language: the use of computers in the manipulation of music and language makes this obvious. It might therefore sound as though ‘logical form’ were just a way of talking about what we now think of in relation to digitization. Two things are, however, not explicable in this manner. (1) Why are there such correspondences between differing means of encoding sound that make possible the realization of the same music? (2) Why is the result of this something which we understand as music or language,

which is not just a physical phenomenon to be explained in empirical propositions?¹⁰

Maconie argues that, for Wittgenstein, music means a certain kind of perception of the structure of civilized life *as inclusive, dynamic, and ultimately harmonious*, drawing on the musical aspect of his cultural background *in a desire to be totally succinct, transparent, and noncontroversial*.

Wittgenstein begins with a global perception, just as if one were listening to a performance of music one would start with a global perception of (say) its key. But there is a paradox in Wittgenstein that is also found in a musical context. A listener perceives that a music has harmony or loudness or rhythm without necessarily recognizing that the harmony or loudness or rhythm are identifiable with particular elements, either individually or as a totality. It is plausible in a visual context to say that a still life is a beautiful work of art, and to go on from there to say that its beauty resides in the artist's treatment of particular images within the composition: a bowl, a bottle, a loaf, a piece of fruit, a tablecloth, etc. These are images from everyone's experience. With a musical experience this is not necessarily the case. How many listeners can identify a harmonious effect as a particular type of chord, or a particular combination of instruments? And what would it mean if they were able to do so? It is much less plausible to try to argue that an impression of harmony in music resides in the artist's treatment of a particular combination of pitches and tone qualities.¹¹

McFee holds that, according to Wittgenstein, understanding music is like doing something else while listening to the music. There is not an understanding which accompanies the hearing or playing of the music. Wittgenstein treats listening with understanding *in parallel with performing with understanding*.¹² Understanding music can provide an analogy with the way we understand sentences.¹³ Hanfling contends that, in Wittgenstein's view, there is a strong verbal element in music (the "understanding" of a piece of music can be described in terms of linguistic episodes). The rhythms and intonations of language are paradigms for progressions in music.¹⁴

5. Conclusions

This study is grounded in the considerable body of scholarship examining the transparency of a musical gesture and the role of performance in the understanding of music. The implications of the developments outlined in the preceding sections of this paper suggest a growing need for a research agenda on the role that music played in the development of Wittgenstein's

philosophy of language, and the rhythms and intonations of language are paradigms for progressions in music.

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THE LANGUAGE OF JOURNALISM ETHICS

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ABSTRACT. In the present paper, I focus on participation in global ethics discourses, ethical claims of the mainstream media, today's portable communication technology, journalism codes of ethics, and ethical differences between print and broadcast media. The goal of the present study is to determine if there are relationships between the scope of media ethics, the ethics of communication, the media's ability to affect the thinking and reasoning of the audience, the mediation of social relations by information and communication technologies, and the moral consequences of electronic mediation.

Keywords: practice of media ethics, mainstream media, Web-based journalism

1. Introduction

This paper seeks to fill a gap in the current literature by examining different aspects of the conventional framing of media ethics, the ethical reasoning of journalists, the value of news in society, the media's vast power to influence audiences, and the responsibility of the media. The purpose of this article is to gain a deeper understanding of the ethics of practice in journalism, the complexities of the new circumstances facing journalism, the emergence of Web-based journalism and citizen journalism, and the growth of a globalized infotainment media.

2. Ethical Claims of the Mainstream Media

O'Neill holds that a right of self-expression does not secure a right to communicate. Freedom of expression cannot be stretched into a right to communicate with some or many audiences. Freedom of expression for the media can be

harmful to the less powerful. Media freedom is better justified by appealing to the needs of democracy. O'Neill asserts that freedom of expression can provide only part of a convincing account of the ethics of communication, and dismisses any requirement to attempt *effective, accurate, or ethically acceptable* communication. A focus on speech acts is relevant to the communicative acts of organisations. As O'Neill puts it, press freedom for powerful organizations cannot be modelled on individual self-expression. Transparency is a requirement on information handling. Transparency prohibits certain sorts of secrecy *without setting standards for communicating*. Informational privacy is better protected by requirements on communicative action. *Freedom of expression, transparency and data protection* set important standards for information handling. Accessibility is *the most elementary standard* that communicative acts must seek to meet. On O'Neill's reading, freedom of expression is *an incomplete approach* to ethical requirements on speech acts. Mediated speech acts are *assembled, edited, transformed and transmitted* by complex processes and institutions.¹

Silverstone points out that the overcoming of distance requires proximity. Closeness can invite either blank resistance, or incorporation. The broadcast media have fulfilled the function of creating some sense of proper distance. Both the cognitive and aesthetic spacing in our relationships to strangers produces ambivalence. Silverstone contends that moral responsibility cannot be delegated to the media machine. An ethics for cyberspace must be able to encompass distance as a crucial component of the moral life.²

Berry remarks that news in relation to journalistic activity is a central concern to a discourse in media ethics (defining journalism is a central concern of media ethics). Ethics in journalism is based on both methods of newsgathering and the way in which news is framed for consumption. Both objectivity and truth are fundamental issues within the field of media ethics. "One interesting aspect regarding ethics is that it always insists on discussing the *ought* factor in journalism; it stresses the normative perspective against the brutal realities of the multi-media revolution or the commercial-industrial journalism with its emphasis on getting the story necessary for the continuation of commodity production or other purposes."³ Media ethics is concerned with the negative role and influence an unfettered commercial market has on the press. News has negative effects on the "good" of society. "A discourse on ethics in relation to media activity is a debate on how the individual *ought* to act based on a privileged position in society; the dispute doesn't concern the viability of abstract notions, but rather *who* can apply them."⁴ Berry claims that media ethics is about *enlightenment journalism*, while commercialism is responsible *for the slow and steady decline into the moral abyss*: ethics is faced with the harsh realities of the commercial world in which the press operate. "Use-value" signifies the social benefits of ethical journalism for society. The concerns within media ethics relate to news, its

meaning and purpose in society. Media ethics is concerned with *the function of journalism* and *the purpose of news*. Truth seeking is a central feature in discussions on media ethics, while to be objective is *to recognize the "other" and acknowledge their thoughts in the process of mediation*.

3. The Practice of Media Ethics in a Media-connected World

According to Keeble, there is an ethical commitment among many journalists towards *accuracy* and *truthfulness* in their reporting: *media self regulation is built around the promotion of ethical codes*.⁵ Probyn and Lumby hold that the relationship between the media and ethics has to be understood as dynamic: ethics emerge from encounters between *the media text, the practitioner, the producer* and *the consumer*. "Too often, pronouncements are made about the ethics of a particular media product or event without any consideration of how a genre is organized, who consumes it and in what context."⁶

Spence and Quinn provide an argument for a universal ethic for the dissemination of information in new media journalism. New media offer many nontraditional ways of gathering and publishing news: getting the news first has become worrisome given the real-time speed of Web publishing. Citizen journalists can pose a substantial threat to the credibility of journalism and its intended effects. In Spence and Quinn's view, information rationally commits its disseminators of information to both epistemological and ethical standards that are globally prescriptive (the disseminators of information are committed to *certain widely recognized and accepted epistemological criteria*). Truthfulness is a foundational moral value for journalists.

What is important here is that journalists must be *accurate* and *truthful* in their recounting of facts, and they must be *sincere* in their intentions. Spence and Quinn assert that there must be justificatory criteria for publishing information *based on whether it is worth believing*. The necessity of justice is a central good for new media journalists (it promotes fairness as a crucial component of *journalistic conscientiousness*). The necessary features of action of freedom and well-being extend to communicative action. "Journalistic knowledge is often no more than a justified belief because of difficulties in proving journalistic information as true in the absolute sense. Instead, journalistic information is justified by standards of sincerity and accuracy, which are used to measure informational truthfulness from common sources of data such as documents and personal testimony."⁷

Brey evaluates the implications of contemporary information and communication media for the quality of life. Information consists of quantifiable, consumable units such as sentences and visual images. Most media are acquired for their entertainment function and for their information and communication

functions. The availability of the media facilitates mobility and flexibility. The *cultural* and *psychological* consequences of new media are *threats to the quality of the lifeworld of the modern individual*.⁸

Borden points out that *journalism as practice* has the potential to provide journalists with a robust group identity. Those blogs that perform recognized journalistic functions may represent an expansion of the alternative press. Journalism has to have a distinct identity *if journalists are to clearly understand what they are and what they are not*. The requirement of cooperation is a key difference between journalism and personal publishing activities. "Journalism's mission is undermined when newspapers write off entire segments of their coverage area (the unprofitable ones) and cater news content, instead, to the tastes of a (profitable) few. [...] The tendency of media corporations and news organizations to warp journalism's goals suggests [...] a formal organization that can effectively push back institutional corruption."⁹ Borden posits that *the enduring ideas that have informed reporting* can serve as the basis for a theory of journalism with a suitable *telos*. Journalism relies for *excellence on a set of skills, a vocational aspect, and certain institutional resources*. Epistemic responsibility highlights the moral significance of the investigative processes journalists and citizens use to make sense of the world. "Journalists are called by their practice's *telos* to consistently address all the overlapping communities of the public sphere with the common good for all in mind."¹⁰ Objectivity is journalism's effort *to develop a procedure for producing reliable knowledge*. "To produce authoritative knowledge, journalists ideally check details for accuracy, corroborate information as a way to determine its veracity, establish meaningful context to make the news intelligible and relevant to civic life, subject copy to moral scrutiny to ensure that it is not causing unjustified harm, and exercise transparency about the reliability of their motives, sources, and methods."¹¹ On Borden's reading, epistemic responsibility in journalism does not require us to give up on all factuality. Trustworthiness is a virtue characterizing the relationship between journalists and citizens. Non-journalistic sources of social knowledge *do not necessarily inspire confidence or deliver reliability*. A good record of journalistic performance gives citizens reason to expect good performance again in the future. Transparency may reduce citizens' vulnerability and demonstrate journalists' good will. "Journalism requires higher standards of intellectual reliability to shore up its credibility and to compensate for organizational pressures to dilute its standards."¹² Borden insists on the practice's function as a source of moral identity for journalists. Journalists should engage in a discipline of confirmation that involves non-journalists in a cooperative process *to confirm or modify knowledge claims presented as news*. *Journalists are primarily responsible for the integrity of their practice*.

4. Media Effects in the Context of Ethics

According to Cenite and Zhang, ethics grounded in discourse builds upon existing practice and experience, and *is potentially local and contingent*. Ethics emerging from discourse is grounded *in existing institutions and social movements*. Journalists should develop policies about online accountability tools, and decide how to respond to comments in ways that fulfill their journalistic obligations.¹³ Whitehouse writes that the nature and purpose of blogs are ever-evolving, but ethics codes should clarify what constitutes the ethically private in them. “Citizen journalists, bloggers, and even those making comments on mainstream news pages do not have the same expectation to follow journalism ethics codes. However, if these standards can be imbedded into journalism practice, then expectations about privacy and nonmainstream digital forums might be strengthened.”¹⁴

Ward and Wasserman argue that citizen participation in media is transforming the ethics of journalism: global online media are developing an open ethics. An open approach to journalism ethics regards the code of ethics as intended *for professionals and for anyone who uses media to do journalism*. The evaluation of an open ethics is based on who participates and on the quality and meaningfulness of that participation. New forms of communication are encouraging open media ethics, while *citizen-based new media are reshaping media ethics*.

With respect to intended users, the fact that citizens now act, at least some of the time, as journalists means the intended users of ethics broadens to all users of media insofar as their tweets, blog comments, and social media sites affect others. No longer is ethics just about the behavior of ‘them’ journalists inside newsrooms. [...] New media communication alters notions of meaningful participation and content control. In a global media world, citizens do not need an invitation to discuss media ethics, to critique journalism practice, or to suggest revisions and new norms. Discussing media normatively is a natural part of producing media. Ethical questions arise irresistibly when media activity is weaved into almost every aspect of one’s life. Moreover, the culture of new media favors transparency and interactivity. This culture expects the editorial process of mainstream and nonmainstream media to be open to public scrutiny.¹⁵

Ward and Wasserman insist that new media allow citizens to engage in ethics discourse on all levels, and the rise of citizen journalism has blurred the line between *producers* and *consumers* of media. Ethics discourse about journalism has become a topic of debate on interconnected global networks. The potential of a collective viral response against unethical conduct *may in the long run alter newsroom cultures*. Online media may allow citizens and mainstream

journalists to collaborate in support of ethical aims. “In the online media environment, the primary relationship is no longer the vertical one of professional journalists to their audiences. Communication takes place along a rhizomatic network of professional journalists, responsive audiences, and citizen journalists, where ethical self-regulation takes place outside the professional realm between citizen journalists themselves.”¹⁶ Ward and Wasserman argue that the Internet has *vastly* increased the reach of media representations, while new media technologies may bring more diverse, global perspectives to bear on media ethics. Online forums may create a sense of media citizenship among participants *who feel excluded from mainstream media ethics discourse*. “We should construct an open media ethics based on the idea of meaningful participation as hospitable, sincere and truth-seeking; global, and accessible across material, social and national borders; and tolerant, respectful and self-reflective. Only when online interaction is infused with these principles, can a true, open ethics emerge.”¹⁷

5. Conclusions

The current study has extended past research by elucidating media effects in the context of ethics, modes of discourse in mainstream media, moral commitments in information and new media reporting, and differences and similarities in media habits. This paper has provided a literature review on the practice of media ethics in a media-connected world, the moral responsibilities of journalists, the responsibility of media corporations to sustain good journalism, the role of the mass media in society, and the normative requirements for communication.

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SENSUALITY, SPIRITUALITY, AND *THE DA VINCI CODE*

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ABSTRACT. The mainstay of the paper is formed by an analysis of Brown's claims about early Christian documents, Jesus's divine nature, and the core of Christian ethics. These findings highlight the importance of examining the historical truth about Jesus.

Keywords: *The Da Vinci Code*, early Christian documents, Jesus' life

1. Introduction

We are specifically interested in how previous research investigated the plot of *The Da Vinci Code*, the canon of the New Testament, the historical facts of Jesus' life, and the role of the feminine in Christianity.

2. Factual Errors in *The Da Vinci Code*

Cobley holds that *The Da Vinci Code* is a narrative revolved around a closed society: the plot is a potpourri of conspiracy theories. Cobley points out that the premise of the novel is based on an *essence* of woman embodied in a goddess, and that that "sacred" essence *is cheapened by its own epiphenomenon*. The prominence of the "feminine" is *cheap and essentialist*. "It is a complacent means to critique Christianity and to garner favor with one section of the reading public who have had a momentary lapse of thought. It is a little like that brand of work-shy 'feminism' which is used in a casual way to criticize thinkers like Freud ('he was a chauvinist') or even that brand found in statements such as 'all men are bastards.'"¹ Cobley maintains that the issue of the codes runs into that of the novel's "intelligence." *The Da Vinci Code* has generated a *tacky phenomenon* and set a *bandwagon in motion*.

Davis asserts that Brown's fiction-making is *perversely correct* in describing the doctrine of the sacred feminine *in the terminology of a heresy*. As Davis puts it, "Brown makes much of classical Gnosticism as a primary source for the maintenance through history of a cryptic and counter-Christian devotion to the sacred feminine."² Brown's intuitions guide him "towards a basically valid perception of the doctrinal struggles reflected in the construction of both the Old and the New Testaments."³ Consolidation of the canon of the New Testament involves *two related forms of exclusion or redaction*.

The first is the familiar one of Goddess apologetics: that the development of the dogmatic coherence of the New Testament repeated and intensified the patriarchal Judaic elimination of the Goddess from all understanding and experience of the sacred. The second is much more unusual: that the developing story of the one of the key actors in the New Testament drama – Mary Magdalene – is profoundly interwoven with the same process by which the sacred feminine was erased from the historical memory of the Christian faith.⁴

Davis remarks that Brown links "the revaluation of the role of Mary Magdalene in the events of the New Testament" to that of "the feminine principle in the overall apprehension of religious truth."⁵ *The Da Vinci Code* is a *relentlessly syncretic venture*, "a text obsessed with symbolism and devoted in large measure to the interpretation of a colossal array of signs, symbols and cryptograms in which are encoded a tremendous religious secret."⁶

Bock writes:

Uncertainty applies to the text from *Philip* 63. We do not know the exact relationship or to whom Mary Magdalene was being related at the start of this passage, although it is likely she is said to be Jesus' companion. We also do not know where she was kissed, although it might have been on the mouth. If a kiss on the mouth is described, something unusual is indicated. The kiss does point to a level of intimacy between Jesus and Mary, but it probably represents a spiritual closeness as spiritual counterparts in the birth of creation that is associated with wisdom. It is far less likely that something sexual is in view or that their marital status is being addressed. It probably is symbolic of the passing on of secret knowledge.⁷

Pettibone holds that Brown is mistaken "in citing the Dead Sea Scrolls and the Gnostic gospels as evidence that early Christians believed that Jesus was a mere mortal."⁸ Ehrman says that, according to *The Da Vinci Code*, the lost Gospels portray the historical truth about Jesus.⁹ Most early Christians understood Jesus in both ways, as human and divine. The living Jesus transcends death (the spirit of Jesus is beyond pain and death).

I am not objecting to Dan Brown's inventing claims about early Christian documents as part of his fictional narrative; the problem is that he indicates that his accounting of early Christian documents is historically accurate, and readers who don't know the history of early Christianity will naturally take him at his word. But there is more fiction than fact, not just in the plot of *The Da Vinci Code* but also in its discussion of the early documentary record about Jesus.¹⁰

Ehrman insists that anyone who says anything about Jesus has to have a source of information. People cannot know *anything* about Jesus unless they have learned it from a source (most people do not have ancient historical sources for their claims about Jesus). All the stories about Jesus ultimately go back to one source or another. The best sources we have for knowing about the life of Jesus are the four Gospels of the New Testament. Among our pagan sources *there is nothing that can help us know what Jesus said and did*. "The Gospels are inaccurate, of course. They could have been written later, by non-eyewitnesses, and still preserved the historical facts of Jesus' life. But there are solid reasons for thinking that in addition to giving some historical facts, these books also alter the facts in order to make important religious claims about Jesus."¹¹ Ehrman notes that the Gospels are rooted in oral traditions about Jesus' life (our only recourse for knowing something about Jesus is to consider our sources of information). The stories about Jesus were changed as they were told and retold over time. Knowing about Jesus is a matter of looking at our sources *with a critical eye* to determine what happened in his life. The historical Jesus talked about the coming kingdom of God (he is talking about an actual physical presence of God here on earth). Thus, God was going to extend his rule from the heavenly realm down here to earth. The coming kingdom would involve a massive judgment on the earth (God would rule his people through human mediators). Jesus urged his followers to devote themselves to lives of service for others. A day of judgment was coming with the appearance of the Son of Man (the coming of God's kingdom was imminent, and God was going to intervene in history and bring about a reversal of fortunes). The vast majority of the stories about Jesus concern his interaction with men (women are not prominently featured in the stories of Jesus in comparison with men).

3. Jesus's Divine Nature

Swinburne argues that Jesus's divine nature is an essential nature, and Jesus rising into the sky symbolizes a return to God. God becomes incarnate and lives a perfect human life in Jesus. The New Testament is a basically reliable source of information about the life of Jesus. Jesus rose from the dead and

proclaimed his divinity more openly after his Resurrection. Jesus claimed divinity by his actions and by his words during his earthly life. Jesus assumed that God was the all-powerful, all-knowing creator of the world. There is significant detailed historical evidence of the Resurrection of Jesus. Swinburne reasons that on the evidence of the life of Jesus, if it is already *moderately probable* that there is a God, it is *very probable* that Jesus was God Incarnate: the books of the New Testament are reliable accounts of the teaching of Jesus and of the Apostolic Church about him. Jesus founded a Church with the task of interpreting doctrines for new generations. The Gospels include a few sayings of Jesus which provided the later Church with material to develop that doctrine. Swinburne contends that God provides the Church with guidance *to ensure that what it teaches as central doctrine over many centuries is true.*

It is very probable that God became incarnate in Jesus, who led a perfect life, suffered, was crucified, and buried; and that he rose from the dead, made atonement for our sins, and founded a Church. Given that Jesus was God Incarnate, it follows that (given the initial plausibility of this teaching) what he taught about God and morality is true: it would have been wrong to teach false doctrines on these matters and God would have become incarnate in such a way as not to allow him to do wrong. It is not open to serious dispute that Jesus taught that God would at some future time bring this world order to an end, and permanently separate the good and bad in the afterlife. Nor is it open to serious dispute that he (or the Apostolic Church which expounded his teaching) gave much of the moral teaching. So the historical evidence already makes all of these doctrines not merely plausible but probable.¹²

4. The Teaching of Jesus and of the Apostolic Church

Swinburne argues that that the Resurrection of Jesus provides God's signature on the teaching of Jesus and the Church which he founded. "any reason for supposing that the teaching of Jesus or of the Church was false, or that the Church did not derive its teaching from the teaching of Jesus in the proper way, would be evidence against God having put his signature on the teaching of Jesus, and so evidence against the occurrence of the Resurrection."¹³ Swinburne posits that there is good reason to believe that the life of Jesus was culminated by his Resurrection from the dead: there is no good reason for doubting the general reliability of the New Testament accounts of the actions and teaching of Jesus. "If Jesus allowed himself to be crucified at Passover time after instituting the eucharist, he inevitably proclaimed in the contemporary culture an understanding of it of this kind."¹⁴ Swinburne emphasizes that Jesus intended his church to continue after his crucifixion and

after his Resurrection. In all Gospels there is a guarantee of continued guidance of the Church by Jesus by the Spirit, while Jesus's institution of the eucharist *implied his belief in a continuing church organization after his death*. The Church saw itself as commissioned by Jesus to convert and then baptize all humans. There are plenty of echoes in the apostolic writings of the teaching of Jesus about love and forgiveness. "Even if we had a verbatim record of Jesus's teaching shown to be such beyond reasonable doubt, we would still need a miraculous confirmation of the authority of the Church in order to authenticate the application by it of Jesus's teaching to new situations and its expression in new categories."¹⁵ Swinburne insists that Jesus taught that he was God Incarnate and was making atonement for our sins, and founded a church. The teaching of Jesus and the apostles about the church and our future is plausible. Jesus may be regarded as the fulfilment of Old Testament prophecies in all the ways which the New Testament claims. Jesus founded a church to interpret his revelation to all cultures and centuries. "God's signature in the form of the Resurrection on the teaching of Jesus (including the teaching that God would guide that church) implies that we must take what it claimed to have been the content of that revelation to be indeed the content thereof. This content is called 'the deposit of faith.'"¹⁶

Swinburne claims that Jesus taught that he was divine, and that he gave some teaching *implying that there was a Holy Spirit who was also divine*. Jesus claimed to be providing an atonement. "Right at the centre of Christian doctrines which force metaphorical interpretations on the Old Testament are the moral doctrines taught by Jesus, especially in the Sermon on the Mount, about what is the right way to treat other humans."¹⁷ Swinburne says that some New Testament passages say or imply that Jesus Christ was God and had existed from all eternity (the major part of the Church's teaching is that Jesus was God Incarnate). The most general claims of Christian morality are contained in the most general teaching of Jesus recorded in the Gospels. The core of Christian ethics is the general teaching of Jesus reported in the Gospels and other New Testament books. The teaching of Jesus and the later church implies that doing some of the latter actions is obligatory for all humans. There is much in the teaching of Jesus as recorded in the Gospels *about our duty to show love and compassion for others*. The "greatness" of a person is not a matter of his or her being a leader. "It is natural to suppose that Jesus would not distinguish between Israelite and foreign slaves, in view of his teaching in the parable of the Good Samaritan that how we should treat each other was independent of our race. So it is plausible to suppose that Jesus would have condemned any lifelong slavery."¹⁸ Swinburne maintains that Jesus taught that the present world-order would come to an end with the Parousia.

5. Conclusions

This paper has provided a literature review on factual errors in *The Da Vinci Code*, oral traditions about Jesus' life, and the teaching of Jesus and of the Apostolic Church.

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LANGUAGE AS A SOCIAL ENTITY

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ABSTRACT. The purpose of this paper will be to supply a brief overview of the function of the majority of conventional language forms, the meaningfulness of human behavior, the content of an Intentional state, and the successful performance of an intentional action. The mainstay of the paper is formed by an analysis of the relationship between meaning and truth, the essential informativeness of language, the manipulation of mental symbols, and the functions of language conventions.

Keywords: language conventions, human behavior, mental state

1. Introduction

The goal of the present study is to determine if there are relationships between the the content of the experience, the meaning of a linguistic expression, the phenomenon of public language, and the Intentionality of a mental state. In the present paper, I focus on the powers of semantics of language, the Intentionality of a mental state, the representational properties of a mental state, and the relation of meaning to the world.

2. The Phenomenon of Public Language

Searle maintains that language is the product of collective intentionality, and that institutional facts are language-dependent facts.¹ Smith points out that, according to Searle, speech acts are acts characteristically performed by uttering expressions in accordance with certain constitutive rules. Searle distinguishes between conditions on the performance of a speech act and conditions on its satisfaction.² Hershfield points out that Searle favors an Austinian approach: the speech act as the basic unit of meaning and communication, and speaking a language is engaging in a rule-governed form of behavior. Searle posits the *Background*, comprised of nonintentional (nonrepresentational) mental phenomena.³

Searle maintains that we need to think of language as a manifestation and extension of more biologically primitive forms of intentionality, while the use of language *enables us to create desire-independent reasons for action*. One cannot have a language and intentionality without having rational constraints as constitutive of the phenomena in question. Language is required for the existence of other social institutions, and linguistic elements are *self-identifying as linguistic*. Language is partly constitutive of all institutional reality.⁴ Searle contends that language gives human beings the capacity to *represent*. The powers of semantics of language do not require any further representation beyond the literal meaning of the sentences themselves. Language is not tied to the immediate perceptual impact of states of affairs on our perceptual apparatus.⁵ Searle holds that humans possess the capacity

to impose functions on objects and people where the objects and the people cannot perform the functions solely in virtue of their physical structure. The performance of the function requires that there be a collectively recognized status that the person or object has, and it is only in virtue of that status that the person or object can perform the function in question.⁶

Larson and Segal maintain that the relationship between meaning and truth *is a complex and intimate one*. Meaning is responsible for the essential informativeness of language, and is connected with world-oriented notions like truth and reference, and also with speaker-oriented notions. Knowledge of meaning is knowledge of a body of rules and principles. Larson and Segal claim that the meaning of sentences is crucial to the communicative activities of speakers. An individual's meanings are not entirely fixed by their own internal states (they depend partly on external things).⁷ Riemer argues that meaning is what language is *for*. The meaningfulness of language is a subset of the meaningfulness of human behavior. A fully articulated sentence is not always necessary to communicate an intended meaning. To describe meaning fully, we have to make reference to *language*, *the world*, and *the human mind*. Riemer notes that linguistic expressions can be identical in reference but different in meaning. Thinking and expressing meaning should be understood as the manipulation of mental symbols. Meanings have a property which prevents them from being completely identified with brain states. There is room for *both* intentional meanings *and* non-intentional brain states in our explanations of language. As Riemer puts it, meanings are *unavoidable* as part of the explanation of utterances. Meanings guide us through the variety and confusion of brain states and input–output sequences.⁸

3. The Functions of Language Conventions

Garrett Millikan claims that the central norms applying to language are nonevaluative. Language is characterized by biological norms that concern

satisfaction-conditions and function. A primary function of the human language faculty is to support linguistic conventions. Learning language is essentially coming to know various *public* conventions. A pivotal job of the language faculty is to make language conventions possible. Garrett Millikan contends that the function of the majority of conventional language forms *is to enable various kinds of communication*. A central function of the language faculty is to make language conventions possible. The web of conventions that forms the public language is a concrete set of speaker–hearer interactions. The phenomenon of public language emerges *as a real sort of stuff in the real world*. Garrett Millikan writes that the functions of language conventions are primarily coordinating functions. The functions of language forms are not the same as the uses to which they are usually put. Language survives when it serves cooperative functions often enough. We acquire the vast majority of our concepts through the medium of public language. Linguistic meanings are the proper functions of various language forms. On Garrett Millikan’s reading, language is a standard medium through which natural information is transmitted. Uses of public-language forms are conventional moves having conventional outcomes.⁹

Searle posits that when ordinary people pray it is because they think there is a God up there listening. “But whether or not there is a God listening to their prayer isn’t itself part of the language game. The reason people play the language game of religion is because they think there is something outside the language game that gives it a point.”¹⁰ As Fogelin puts it, Searle maintains that giving a correct account of the way proper names function *is part of a general project of providing a theory of meaning for natural languages*.¹¹ Searle asserts that the symbol or word or sentence (or the token of the symbol or word or sentence) is not the unit of linguistic communication: it is the *production* of the token in the performance of the speech-act *that constitutes the basic unit of linguistic communication*.¹² Jacqueline claims that Searle is an advocate of *the intrinsic intentionality and ontic subjectivity of thought: property dualism is a manifestation of the misconceived mutually exclusive mental-physical dichotomy of conceptual dualism* (the mind has intentional properties *that cannot be causally reduced to microphysical materialist neurophysiology*). “Searle holds that the logic of reductionism predetermines the irreducibility of psychological states to behavior, disposition, matter, or function in such a way as to have no interesting implications for the metaphysics of body and mind.”¹³

Searle points out that the claim that the Intentionality of vision *is characteristically realized in visual experiences which are conscious mental events* contrasts with the claim that beliefs and desires contain propositions as Intentional content.

The claim that there are visual experiences really adds something to the claim that there are visual perceptions, since it tells us how the content of those perceptions is realized in our conscious life. Someone who claimed that there was a class of beings capable of perceiving optically, that is, beings capable of visual perception but who did not have visual experiences, would be making a genuine empirical claim. But if someone claimed that there was a class of beings who literally had hopes, fears, and beliefs, and who made statements, assertions, and commands, all with their various logical features, but who did not have propositional content, then such a person doesn't know what he's talking about or else is simply refusing to adopt a notation, for the claim that there are propositional contents isn't in any way an additional empirical claim. It is rather the adoption of a certain notational device for representing common logical features of hopes, fears, beliefs, statements, etc.¹⁴

4. The Notion of Intentional Content

According to Bach, Searle contends that in visual (and tactual) perception we are aware of particular things in the world. A *de re* belief or a visual experience for that matter can be fully characterized in terms of its content, while the content of an Intentional state determines its conditions of satisfaction. An experience must represent its object as standing in a certain causal relation, and the content of the experience determines its condition of satisfaction.¹⁵ Searle writes that the set of identifying descriptions is formed from the descriptions users of the name give of what they refer to.¹⁶ Lycan argues that, for Searle, if proper names are equivalent to descriptions, *then for each name there must be some particular description that it is equivalent to*. A name is associated with a vague cluster of descriptions. An utterance's indirect force can be predicted using *just general principles of speech-act theory*.¹⁷

Vanderveken claims that Searle has the merit of discovering the proper nature of the rules (*constitutive*) that speakers follow in their performance of illocutionary acts. Elementary illocutionary acts are composed of an illocutionary force together with a propositional content. Speakers are always in principle able to say what they mean by the use of language. Every attempt of performance of an illocutionary act can be more or less felicitous. Vanderveken observes that Searle's classification of illocutionary acts can be justified in terms of direction of fit: illocutionary acts with the world-to-words direction of fit have self referential conditions of satisfaction. Every meaningful utterance is intrinsically intentional. We can only determine truth and satisfaction conditions of illocutions on the basis of the background. In performing elementary illocutions speakers express attitudes with the same content. The

successful performance of an intentional action requires more than *the existence of the fact that the agent attempts to bring about*. Speakers must follow certain rules in order to pursue with success various types of discourse.¹⁸

McIntyre points out that Searle sees a close connection between philosophy of language and philosophy of mind: Intentional mental states and speech acts share certain central features by virtue of which both are Intentional. A proper account of Intentionality constitutes the very framework required for developing a theory of mind. The Intentionality of a mental state is a property it has inherently, *by virtue of its own internal character and its relationships to other mental states*. “Searle hopes to illuminate the notion of Intentional content by appeal to speech-act theory. To specify which speech act a person has performed one must, in paradigmatic cases at any rate, specify two things: what Searle calls its ‘illocutionary force’ and its ‘propositional content.’ Illocutionary force varies with the kind of speech act performed: asserting, promising, ordering, etc. And propositional content varies with just what it is that one asserts, promises, orders, etc.”¹⁹

Based on the considerations above, it is not difficult to show that the propositional content of a speech act determines its “conditions of satisfaction.” McIntyre holds that Searle characterizes an Intentional state as an “Intentional content” occurring in a psychological mode. Propositional contents are not to be construed as entities. The representational properties of a mental state are inherent in the nature of the mental state itself. To explicate the Intentionality of a mental state is to describe its *content*. All mental states represent an object or state of affairs under certain aspects. Mental states are Intentional because they “intrinsically” have representational properties. The analysis of Intentional states need not appeal to what is true of extra-mental reality. “When Searle says a mental state has an Intentional content he is only telling us *that* the mental state is intrinsically Intentional; and when he says Intentional content determines conditions of satisfaction, he is only telling us what Intentionality *consists* in, what kind of ‘relation’ Intentionality is – namely, the relation of ‘representation’”²⁰ McIntyre says that, for Searle, the intention to perform an action is a real (conscious or unconscious) mental state. What counts for Intentionality is causality *as represented* in the conditions of satisfaction of certain kinds of mental states. Mental phenomena are *caused by* and *realized in* the structure of the brain and central nervous system. Our mental states and experiences and their properties are a high-level sort of *biological* phenomenon. Intentionality is a congeries of “logical” or “representational” properties.

5. Conclusions

We are specifically interested in how previous research investigated Searle’s classification of illocutionary acts, general principles of speech-act theory,

self referential conditions of satisfaction, the notion of Intentional content, the nature of the mental state, the nature of language functions, and the relationship between language and our perception of reality. This paper seeks to fill a gap in the current literature by examining different aspects of conditions on the performance of a speech act and uses of public-language forms.

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BOOK REVIEWS

Encyclopaedia of the Philosophical Sciences in Basic Outline

G.W.F. Hegel

Klaus Brinkmann (Boston University)

Daniel O. Dahlstrom (Boston University), (editors)

Cambridge: Cambridge University Press, 2010, 358 pp.

Hardback 978-0-521-82914-4

Brinkmann and Dahlstrom hold that Hegel aims to capture all fundamental aspects of reality and *to indicate the basic concepts and principles of each*, considers the unity of the system as a whole and *its logically rigorous internal structure*, and thus his philosophy may be an exhaustive account of the ideal structures underlying all reality. Hegel determines the core or ground of reality to be thinking or reason: reality is organized in terms of intelligible structures that are conceptual or conceptualizable (what is other than thought is conceptualizable). In our ordinary understanding we look at the world as something other than thought, not as the otherness of thought itself. Brinkmann and Dahlstrom argue that Hegel *integrates* this otherness into thought itself by *negating* its otherness. The conceptualized otherness is made part of a system of thought-determinations (it is only a *partial* determination of the system as a whole). Conceptualized and integrated otherness is a determination of reality itself. Thought thinks itself in thinking about the thought-determinations of the real. Philosophy fulfils the reconciliation of reason with the reality we live in. Philosophical thought is self-recognition in the other. Concrete reality has the form of a particularized universality instantiated in individuals. Hegel's idea of logic derives from the ancient Greek word for reason, word or language, *logos* (the ideal structure that makes sensible reality intelligible). *Logos* stands for the conceptual structure that captures the essentialities of things. Brinkmann and Dahlstrom point out that Hegel's logic is a theory of the fundamental concepts of reality. The categorial structures developed in the Logic form the conceptual basis for the Philosophies of Nature and of Spirit. The primary business of philosophy is the translation of representations into thoughts or the reflection on the deeper meaning of our experience *by means of thinking things over*, while philosophy is *the attempt to comprehend things holistically*. The translation of the contents of our experience must ultimately lead to a contemplation of thinking itself. Philosophy is actual knowledge of the truth. Thinking is unable to recognize its own

unalloyed self entirely in the object-world. Substance has to be shown to be subject, *and substance ontology has to be seen ultimately to be subject ontology.*

Encyclopaedia of the Philosophical Sciences in Basic Outline is an outstanding and inspiring guide through Hegel's work. This book is a very valuable resource and will spark an industry of debate and elaboration.

Perception and Knowledge: A Phenomenological Account

Walter Hopp (Boston University)

Cambridge: Cambridge University Press, 2011, 246 pp.

Hardback 978-1-107-00316-3

Hopp offers an account of the nature of perception and its role in the production of knowledge: perceptual experiences do not have conceptual content, and what makes them play a distinctive epistemic role is something *that sets them radically apart*. The reason-giving relation between experiences and beliefs is one of "fulfillment" (Husserl) – we find something to be as we think it to be. Hopp maintains that perceptual experiences have *a fundamentally different sort of content from beliefs*, arguing for a Husserlian theory of mental content that distinguishes mental contents such as *concepts* and *propositions* from their corresponding objects such as *individuals*, *properties*, *events*, *relations*, and *states of affairs*. The difference between perception and thought cannot be explained in terms of differences in their psychological mode. Hopp posits that concepts and conceptual contents are a type of intentional content. *Only experiential conceptualism can account for various phenomenologically discoverable features of perceptual experience*. No perceptual act could possibly have the same content as a conceptual act. Anyone who has mastered a concept can also carry out intentional acts with horizontal contents. Horizontal contents are phenomenologically nothing like judgments or sortal concepts. Hopp contends that perception differs in *phenomenologically obvious* and *epistemically relevant* ways from the entertaining of any conceptual contents. The intentional and epistemic properties of perceptual experiences cannot be explained in terms of whatever conceptual contents they might possess. Sensations are intentional objects of the intuitive acts of sensing in which they are given. The nonconceptual contents constitutive of perceptual experiences *can justify the contents of ordinary beliefs about the extra-mental world*.

Perception and Knowledge: A Phenomenological Account is highly complex, covering a daunting range of topics. It is extremely well organized, and careful conceptual distinctions abound. Hopp has given us an indispensable book.

Plato: Meno and Phaedo

David Sedley (editor)

Alex Long (translator)

Cambridge: Cambridge University Press, 2010, 122 pp.

Hardback 978-0-521-85947-9, Paperback 978-0-521-67677-9

Sedley and Long claim that the immortality of the soul is the central contention of the *Phaedo*, and it also plays a supporting role in the *Meno*, where it is invoked to underpin Plato's theory that *all learning is recollection of truths which our souls learnt before their present incarnation*. A prominent feature of the *Meno* is the use of mathematics as a paradigm of knowledge. His ambition is to make ethics as pure and exact a science as geometry (ethical method can learn from mathematics). By means of the systematic refutation of false beliefs, Socrates has removed prevailing misconceptions to make people's minds ready for the recognition of the truth. Virtue comes from true opinion, which in its turn must be a matter of inspiration. Sedley and Long argue that, in the *Phaedo*, the conversation focuses on the subject of death. Death is the complete separation of soul from body, and the soul can in fact survive the body. Death is the soul's blessed release from bodily confinement *and its continued existence in a new state of purity and fulfilment*. Life is the conjunction of soul and body, death their separation. The soul must have pre-existed the body: it brings to this life concealed knowledge which it can only have acquired beforehand. The soul must continue to exist after leaving the body. A philosopher's soul will, after death, gravitate to its natural environment (*the realm of Forms*).

Plato: Meno and Phaedo will be invaluable to those who are interested in overcoming the truncated versions of Plato that substitute for a careful consideration of his work. Much of the book is not easy to follow unless one is well schooled in the scholarly literature inspired by the work of Plato.

Schopenhauer: A Biography

David E. Cartwright (University of Wisconsin-Whitewater)

Cambridge: Cambridge University Press, 2010, 575 pp.

Hardback 978-0-521-82598-6

Cartwright writes that, for Schopenhauer, there can be no causal relationship between the subject and the object (causality is valid only within the realm

of experiences and is a relationship only between objects). Moral rules serve to specify lines of conduct possessing moral worth. Philosophy should provide a uniform explanation of the totality of all experiences. The subject of experience and the object of experience are necessary correlates which cannot be reduced to one another or judged to be identical. The experience of intuitive representations or “real objects” cannot inform us about a reality beyond consciousness. Causation is a relationship between alterations or states of real objects. The function of reason is *to abstract concepts from intuitive representations, to combine concepts into judgments, and to draw inferences*. Cartwright claims that, in Schopenhauer’s view, failure to reason in a way consistent with the rules of syllogistic reasoning *demonstrates a defect in one’s reason*. Space and time are the *a priori* forms of sensibility: they are *subjectively imposed frameworks* in which we perceive the world. Everything in the world follows from a sufficient ground, *and among different types of beings, different causal relations prevail*. If any truth can be said to be *a priori*, it is that the world is my representation. Philosophy strives to say what the world is and to reproduce it conceptually, while philosophical astonishment arises *from a deeply existential recognition of the vanity and ephemeral nature of existence*. Our normal perceptions of all objects in the world are intuitive representations dependent upon the subject. Besides will and representation absolutely nothing else is known or conceivable to us. Ideas are objects for a subject, reached by pure and disinterested contemplation. Cartwright emphasizes that, on Schopenhauer’s reading, our mundane experiences of things are always interested. Aesthetic experience involves a radical transformation of both the subject and the object of cognition. Will, considered purely in itself, is devoid of consciousness and cognition. Our sufferings and death are fair through the perfectly retributive nature of existence. Compassion leads good characters to treat the suffering of others as if it were their own. Acquiring character is not as significant for ethics proper as it is for life in this world. We have immediate knowledge of the identity of the will and the body but this cannot be proven. Reflection is the means for discovering the key to solving the puzzle of the real and the ideal. Both philosophy and science have to appeal to experience to justify and meaningfully express their claims. Philosophy is concerned with providing an explanation for and the meaning of the totality of experience. Causality is the essence of representations and an *a priori* form of the intellect. Cartwright asserts that, for Schopenhauer, “moral freedom” is the freedom of the will absent motivational constraints. Self-consciousness concerns the entire sphere of a person’s introspective experiences. Objects perceived in the external world are the material and occasion for all acts of will. The data of self-consciousness cannot establish moral freedom. Self-consciousness cannot establish a *liberum arbitrium*. Our intelligible character is outside the scope of the principle of sufficient reason. Our essence or intelligible character is expressed in all of our actions. Freedom

is transcendental and applies to our essence. Compassion is the sole incentive for morally worthwhile actions. Cartwright notes that, as Schopenhauer puts it, the virtues of justice and loving kindness are based on compassion (compassion explains all human behavior possessing positive moral value). The behavior of morally good people toward others expresses a standpoint that is metaphysically justified. Good characters live in tune with the nature of reality and bad characters live a delusion. The will is an object of self-consciousness, conditioned only by the *a priori* form of time. Religion expresses its truth allegorically, whereas philosophy has to present its truths *sensu stricto et proprio*. The moral quality of a person is a function of one's inner disposition.

Schopenhauer: A Biography is sharp in its argumentation, it is well written and clear. The elegance of Cartwright's argument throughout the book makes it difficult to be critical of the work.

Heidegger and Unconcealment: Truth, Language, and History

Mark A. Wrathall (University of California, Riverside)

Cambridge: Cambridge University Press, 2010, 250 pp.

Hardback 978-0-521-51816-1, Paperback 978-0-521-73912-2

Wrathall claims that Heidegger's thought works out the implications of the original understanding of unconcealment. For an entity to be is for it to stand in a context of constitutive relations. Heidegger sees words in their familiar or everyday sense as an ontic use of words, and examines the ontological structure and function of *whatever is picked out by a term in its normal, narrow sense*. As Wrathall puts it, Heidegger takes uncovering to be the ontological function of truth. Preserving and holding things in unconcealment forms the ontological sense of truth. Propositional truth is grounded in truth as world disclosure. The ordinary use of language needs to be understood as based on unconcealment. Linguistic meaning is dependent on a socially disclosed world. Correspondence is the condition of being successfully directed toward the world in a propositional attitude, and exists when our orientation to the world allows what is to show itself in a particular way. The truth of propositions is the starting point for thinking about unconcealment. Correspondence is a characteristic of our orientation to the world. The default state of entities in the world is being covered over. Something can only be uncovered on the basis of our skillful ability to inhabit a world. An understanding of logical form would be bootless *without a prior understanding of the constitution of human existence*. Wrathall insists that Heidegger's interest in propositional truth *is to discover what makes propositional entities capable of being true*

or false. There is a necessary connection between *our understanding of truth* and *the way beings are present to the understanding*. For the content of an assertion to be fixed by things in the world, *those things must be manifest to us*. Heidegger's account of discovery is concerned with fixing the content of our intentional comportment toward objects in the world. We recognize things and practices as either belonging to or foreign to the context in which they appear. The truth of assertions finds the conditions of its possibility in discovery. Propositional content is based in a nonpropositional form of intentional content. Errors and deceptions are particular ways of being out in the world and involved with things. Perceiving wrongly is acting in the world in such a way that the true nature of things is covered up. There is a distinction between a perceptual error and merely failing to see something. The phenomenologically enriched notion of truth has normative implications for the way that we conduct ourselves in the world. Propositional truth must be grounded in the truth or unhiddenness of entities. Words accrue to articulations in a pre-linguistically structured experience of the world. The possibility of apprehending things depends on some kind of prior grasp or understanding of what they are. The possibility of error is attributable to the double structure implied in the idea of a view. Wrathall points out that, according to Heidegger, our activities are heavily constrained by social factors. What others say about us, and what we say about ourselves, depends on our prior meaningful engagement with the world. Conversation articulates meanings which open up a way of acting in the world. Our social interactions tend toward a kind of fallenness. In authentic experience, we are reduced to silence or reticence in the face of the world. Language plays a constitutive role in the organization and articulation of the world, and is dependent on and derivative of the meanings we encounter as we inhabit an intelligible world. Something can perform the discursive function of meaning articulation without also being communicable. Terms are occurrent linguistic forms that are detachable from their meanings. Words are the relational structures that allow there to be entities in the first place. In Wrathall's view, for Heidegger, entities are constituted by the relationships they have to other entities. Nonentities play a role in the disclosure of a world: they shape and structure and open up possibilities for our being in the world. The being of an entity is independent of and prior to the terms we use to talk about it. Historical events are determined by a background understanding that shapes and constitutes foreground activities. Historical thought prepares us for an escape from the metaphysics of our current age. A living God attunes a whole culture to objects in a particular way and as having a transcendent meaning. Receptivity to the sacred is the experience of being beheld. The death of the onto-theological God might allow for fulfilling sense of the divine.

Heidegger and Unconcealment: Truth, Language, and History has made an original contribution to current debates. Even where the reader does not agree with the conclusions defended, he or she should still profit from the challenge of the book's reasoning.

Familiar Objects and their Shadows

Crawford L. Elder (University of Connecticut)

Cambridge: Cambridge University Press, 2011, 210 pp.

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Elder holds that many of the familiar objects that common sense recognizes are mind-independently real, and articulates a realist picture *of our implicit ideas about how kind-sameness are constituted and how persistences are marked out*. The role that our judgements of kind-sameness play in our cognitive economy is to get us to generate and to apply inductive inferences about the members of a kind. Our judgements of kind-sameness and of numerical persistence often succeed in their purposes *because they often are geared to world-given clusterings of properties*. These sameness- judgements serve inductive purposes by virtue of corresponding to world-given clusterings of properties. Elder writes that explosivism and conventionalism ignore something constitutive *of the very nature of our judgements about these two forms of sameness*. The challenges which ontological relativism faces are at least as weighty as the ideas that motivate it. "Ontological relativism" locates its claim of relativism at the level of the world. The function that judgements of numerical persistence serve in our conceptual economy *is to induce us to discover and apply causally underlain patterns of continuity and alteration that span the members of a given kind*. Elder maintains that judgements of numerical persistence are imperatives, *directing us to discover and draw inferences from causal patterns*. The philosophically controversial position on persistence conditions has to be true *in order for realism to be defensible about the existence of material objects*. Elder reasons that sceptical metaphysicians are employing shadows of familiar objects, while denying that the entities which cast those shadows really exist: the shadows are really there, because their sources (familiar objects) are mind-independently real.

Familiar Objects and their Shadows is an exciting and ambitious book, and Elder takes the best current arguments in the field and takes them forwards.

Social Constructionism: Sources and Stirrings in Theory and Practice

Andy Lock (Massey University)

Tom Strong (University of Calgary)

Cambridge: Cambridge University Press, 2010, 383 pp.

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Lock and Strong argue that we are humans who are constructed through our inherent immersion in a shared experiential world with other people: the sensibilities that inform social constructionism provide the necessary perspectives to reveal and clarify a new foundation for inquiring into, and understanding, human “nature.” Lock and Strong contend that subjective experience is where the study of human activity needs to begin, and is central to how professional practice occurs. Meaningful language originates between us. Concrete human development is made possible by a constructional process: it is the negotiation and elaboration of skills that are concrete outcomes of ever-changing possibilities. Lock and Strong put it that what goes on outside our skin becomes a legitimate site for psychological investigation. Language can provide effective ways of relating to reality, depending on our purposes. Language takes on a central role in professional practice, but one cannot speak of language independently of its relational and cultural use. The tactic of externalizing conversations drives a wedge between the person and the problem. Helping is about describing things as they seem to be and as one would like them to be. Lock and Strong argue that Vico suggests varied understandings grounded in human interactions and points to the role that humanly constructed language plays in what passes for knowledge, asking us to embrace the complexities of human meanings and relatedness. Vico contends that our varied use of language is fluid and constructive, and that it is possible for humans to live by radically different codes of values and meaning. Husserl seeks directness and transcendence in accounting for experience, and posits that the mind and the world are a relation that only subsequently, by the reflective exercise of logic, can be constructed as two separate entities. Lock and Strong point out that, according to Merleau-Ponty, the body is the bedrock of consciousness, from which the separation of the mind and the body has been created as a conceptual abstraction (human experience comes as an inseparable whole that simultaneously includes thinking, feeling and acting). Lock and Strong focus on Heidegger’s view that understanding emerges as a response to breakdowns in being: it is a problem requiring apt words that, once used in familiar ways, can serve us in going on where we might otherwise face problems and novelties. Heidegger states that we are engaged in life in ways that require us to be able to act within it resourcefully. Meaning or understanding occur in ways that either are or are not an issue in our ways of being. Our most basic

ways of being are grounded in understandings and actions we generally do not reflect upon. What creates our sense of attunement and oneness are the familiarities we unproblematically share with others. As Lock and Strong put it, Gadamer regards language as the medium through which we understand experience, and are able to communicate our understandings of experience to others. Language we use has an integrity particular to the histories or contexts from which we gain our meanings. Putting language to new experiences is a way for people to signify how they relate to experiences and objects in meaningful, shareable ways (Ricoeur sees in language poetic possibilities for creative transformation, while narration is the means by which we bring our available linguistic resources to imagining – there are many linguistic resources we can use in addressing our concerns and aspirations).

Lock and Strong note that, in Habermas's view, democratic discourse can provide a shared rationality and collective way of being. Democratic argument can develop norms of ethical communication that permit optimal understandings and ways of relating. Habermas offers ideas useful in sustaining cultural conversations for advancing understanding and action. We use our cultural institutions to create a "discourse ethics" that makes possible deliberative excellence. Levinas asserts that language is a human construction that constructs things in particular ways. Ethics begin in our face-to-face encounters. Levinas is interested in how language can bind us to particular descriptions and perceptions of others and experiences. Discourse and meaning are human creations (they should not be placed before or in between humans as the basis for relating). On Lock and Strong's reading, Bakhtin considers what happens to any words or texts as people make their meaningful claims on them. Meaning needs to be understood in terms of the shifting times, places and purposes for its specific use (meaning has to be seen in terms of its occurrence at a particular time and place). Meaning takes on a spiritual dimension in so far as it points to *the unfinalizability of meaning in human relationships* (meaning arises from dialogic interactions). Bakhtin focuses on the creative and ethical possibilities for creating new meanings. We can in agentic ways use language to improve our lives. Lock and Strong claim that Bakhtin reinserts the self into a responsiveness to others that shapes us. Social action is anticipatory, *though not necessarily in a reflected-upon way*. Vygotsky conceives unaided natural abilities as distinct from those that use the resources of cultural items to augment them. Development is taking over the control of something you can already do in concert with somebody else. *Technical tools and psychological tools are mediators* of human actions. Our higher, mediated psychological abilities have their origins in the social relations between people. The meanings of words are found in the uses they acquire in particular relationships. Meanings need to be understood within some relational context, and this is how new meanings are acquired as well. Meaning and action are always contextual in ways particular to our relationships.

Lock and Strong assert that Mead regards mental life as an inherently social phenomenon that arises from acts of communication, asks how humans could construct themselves out of a state of nature, and emphasizes that our individual abilities are constructed as a consequence of our immersion in a social world. Mead contends that social interaction *constructs* objects that otherwise would not exist: these objects have an objective existence only *within* the social relationship that has acted to create them. Self-consciousness is an emergent from the social process. Our very sense that something has happened has its roots in emerging novelty. Perspectives are not variously better or worse approximations of any absolute reality. von Uexküll says that meaning and experience are not easily uncoupled (human meaning is biologically and ecologically grounded).

Lock and Strong point out that, according to the Wittgenstein of *TLP*, the world can be reduced to atomistic facts and from them, in mathematical ways, relationships can be explained. Wittgenstein sees meaning in terms of word-pictures. The view of meaning is of timeless word-pictures that exist apart from humans. Verification is the means by which the truth of any claim could be judged. The post-*TLP* Wittgenstein says that to understand meaning is to understand how utterances and actions are used and appraised in social interactions and circumstances. Wittgenstein's "grammars" are habits of meaning that extend already established customs for keeping meaning and interaction predictably familiar. Wittgenstein recognizes the diverse ways in which meanings are given, used and assented to in different human contexts, and looks at how meaning is developed and sustained through social interactions. We acquire our means for "self-intelligibility" through social experience. We should look inside the rule-like familiarities of our "language games," our varied ways of talking and understanding, for how meaning is to be understood. Language games have their own contextualized "grammars," above and beyond basic rules. The grammars of our language games structure what we come to understand, and speak of, as our "private experience." People become more linguistically adept at recognizing the language games in which they experience problems of understanding or relating to others. Our thoughts come "grammatically packaged" in ways derived from our prior interactions with others. Words need not only refer or describe, but can themselves be acts, or intrinsic to action. What makes a word fit for those who use it are the criteria they bring to bear on it, in their relational circumstances. There is more than one correct way to understand and communicate. Each kind of conversation can develop into recognizable patterned forms of life. Different uses of language constitute qualitatively different forms of life. Wittgenstein's private language argument is built on how people acquire and use language in ways appropriate to their relationships. Evidence is judged using particular methods and criteria unique to those abiding by them. Our words and actions usually bear sufficient "family resemblances" to serve us when trying to understand and influence

others. The “private language” typically used to conceptualize “inner life” originates and is verified in social interaction. We relate to each other on the basis of what is socially observable for us. Because there cannot be any form of a private language, language symbols *are originally grounded in an affective ethology*. Language games, and their associated grammars, are “forms of life.”

Lock and Strong observe that Bateson relates *patterns* to human problems and practices associated with human change, importing biological systems and cybernetic views of relationship (cybernetics epistemologically offers a patterned and process-oriented way to regard human relations). Bateson focuses on the utility of a cybernetic metaphor in understanding the recursiveness of human interaction. The pursuit of power threatens the ecology of patterned relationships. Meanings can occur at, at least, two levels: the informational and the relational. Garfinkel claims that variations on social order and intelligibility are human accomplishments observable as *works in progress*. The social contexts we inhabit are our constructions as much as they shape who we become. Garfinkel is interested in how people sustain social orderliness through interactions they come to share as familiar and anticipatable. Any effort to use language to get to bedrock, universal meaning, or “brute facts” is impossible. The microinteractions that sustain particular social versions of reality *are like walls that hold up buildings*. Goffman focuses on individual behaviour at a micro-social level. Different social circumstances require us to *perform* different selves. Human behaviour is role-defined, with the roles being connected to how interactive contexts are socially defined. How we perform our roles is a measure of our adaptability to a setting. Goffman portrays the individual as an actor working with and within specific societal constraints and resources. We got our sense of self by going beyond what seems expected of us socially. Frames require a combination of shared definition and purpose. Framing is a constitutive act people accomplish through their interaction. Goffman’s frames are products of prior social interactions. People fashion their social circumstances by “reading” the conduct of others and performing appropriately. Giddens sees a rational actor able to influence social structures (humans are able to differently shape the social structures in which they participate). Humans are both socially accountable and capable of being socially transformative. Taylor says that our ways of understanding and articulating our sense of self *constitute our “moral take” on the social worlds we act in*: the possibilities and evaluations for self are negotiated over time and circumstance. Our selves are very much tied up with what we feel to be “good.” Foucault conceptualizes the self as a kind of cultural project dressed up as a personal endeavour. Psychiatric and psychological knowledge and practice becomes intertwined with broader notions of governance. Discourse relates to how people organized their ways of talking in order to pursue particular aims. Hallowsell establishes the parameters that made any form of selfhood possible. It is impossible to live as a human without some grasp of

what it is to be a human. Selves are nurtured within a culture: culture is the responsive backdrop out of which selves develop.

Social Constructionism: Sources and Stirrings in Theory and Practice presents such a wealth of diverse material that any reader will find something new and challenging. One of the book's strengths is its comprehensiveness.

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