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The Social as the Medium: A Review of Johanna Drucker's *The General Theory of Social Relativity*

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Between the manifesto and the treatise, the text and the paratext, the theoretical and the poetic, the aphoristic and the systematic: Manuel Portela situates the “expressive richness” of Johanna Drucker’s “General Theory,” and its critique of present social and political formations.

“If the aspiration of the avant-garde was to integrate art into life, it has succeeded only in the most insidious way, by becoming the means through which the world is manipulated as a medium and events are produced to create the real.” (7)

The General Theory of Social Relativity (GTSR) raises many questions: questions about the nature of the social and about the epistemologies that have provided our empiricist and rationalist theories of the social; questions about the complicity of artistic practices with current forms of political manipulation; questions about its own status as a text that combines the analytic, the theoretical, the poetic, and the parodic. At once philosophical treatise, social theory and literary nonfiction, *GTSR* could be described as a manifesto for a new poetics of the social. Its analysis of current forms of complicity between political manipulation and aesthetic practice as expression of the collective unconscious – conceptualized as *the phantasmatic* (pp.4-6) – provide the initial evidence for the non-linear, non-local and relativist features of the social. *GTSR*’s description of social mediation is so inventive that almost any sentence can be quoted either as an example of its arguments or an axiomatic proposition for generating further networks of speculative thoughts. They open up an entire conceptual landscape in a declarative writing

experiment that recalls the axiomatic intensity of other texts, such as *Minima Moralia* (1951) by Theodor Adorno, or *La Société du Spectacle* (1967) by Guy Debord, for instance.

The use of quotations from each of the sections as both subtitle and summary signals the tensions in the work's discourse fields between the manifesto and the treatise, the text and the paratext, the theoretical and the poetic, the aphoristic and the systematic. Although those "headline sentences" may be taken to highlight a key proposition or a central idea, it is also clear that, within each section, several other equally powerful sentences could have been selected. Given its expressive richness, further emphases and modulations of its own energy field can be imagined: "We are trying to engage the non-linear character of new tactics of aestheticized politics" (p. 27); "The medium of the social is constituted with the same complexity as the elements of other systems" (p.29); "Now we function through our shared addiction to a symbolism that is all surface symptoms" (p.80). Thus self-quotations function also as a running commentary through which the text frames a possible reading of itself. Those textual fulcrums may be said to synthesize both the political and aesthetic diagnosis of the present (first part, pp. 1-27), and the principles for a non-linear description of the social as the medium in and through which all our actions and practices come into being (second part, pp. 28-79).

The critique of present political formations focuses on the *phantasmatic* as an exponential form of the spectacle: "the condition of affective engagement with consensual delusion" (4). In non-linear politics, action and rhetoric do not correlate either with partisan identity or any specific agenda: "The denial of structural racism, negligent genocide, and climate change on the one hand, and endorsement of human rights, social justice, and civil liberties, on the other are promoted with the same rhetorical force and using the same systems, networks, screens, and phantasmatic projections." (17) The historical analysis of oppositional aesthetic practices in twentieth-century art reveals a similar non-linear dynamics and a deep entanglement of aesthetics and politics. Structural complicity and co-optation of avant-garde practices for the actualization of phantasmatic artifacts define the current situation: "The avant-garde has paved the way through its enabling of events, and via its contributions to the storehouse of techniques, stagings, darings, its willingness to innovate without regard for consequences beyond effect." (25) Non-linearity in politics and in aesthetics thus lay out the ground for a full-fledged theory of the social beyond current empiricist and rationalist models:

Likewise, many phenomena of the social can't be explained in the common understanding of cause and effect, even in specialized languages of social sciences and their corollary terms and fields. We cannot—do not—see processes that occur in other dimensions or are brought about through the non-mechanical forces of social relativity. This does not mean they do not exist. The impacts and effects are often dramatically visible. Our explanations have been inadequate to account for the complexity of the phenomena to which we are constantly subjected and whose effects work through us constantly. Just as surely as ultraviolet waves, magnetism, neutrinos, particles, and phenomena are actively present without our attention to their effects, so are the processes of social relativity at work in the medium of social relations. (40-41)

Here, as elsewhere in Drucker's work on interpretation and aesthetic experience, the crucial notion is the notion of quantum co-dependence and constitutive relationalities. Interactions (or transactions) bring social fields into existence and this means that subjects and social formations are unbounded manifestations of the social medium itself, they are not entities or objects but mediators of mediations. Drucker's dynamic imagination of the social as the medium of media offers a counterpoint to theories of media that tend to reify technical mediality as the determinant content of processes of mediation – including Marshall McLuhan's understanding of media as extensions of human senses and human consciousness, Bolter and Grusin's reconceptualization of mediation as remediation, Friedrich Kittler's emphasis on the autonomy of media as techno-scientific systems, or Lev Manovich's notion of cultural transcoding driven by the softwarization of media¹. If technical media already are social mediations then the media-society equation may need a more inflected and nuanced recalibration.

Her emphasis on the universality of mediation and on the social as a medium is closer to other philosophical approaches to mediation, such as Bernard Stiegler's analysis of technology as *pharmakon* and his critique of the Anthropocene², Gilles Deleuze and Félix Guattari's notion of *assemblage* as theorized and expanded by Manuel DeLanda³, and, in general, to new materialist approaches to mediality such as Boris Groys' notion of the submedial subject⁴, Richard Grusin's radical mediation⁵ or Jussi Parikka's geological analysis of media archaeology⁶, for instance. Most of all, Drucker's philosophical approach seems closer to current forms of Speculative Realism⁷.

As a poetical investigation based on concepts from physics it also resonates with other theorists of post-humanism – such as Donna Haraway, N. Katherine Hayles, Cary Wolfe or Bruce Clarke, who have offered social and media theories informed by concepts adopted from the life sciences and the engineering sciences –, but its set of concepts and metaphors move away from the preoccupation with human-machine and natural-artificial interactions which are central to those discourse fields. For instance, the notion of “cognitive assemblage” developed by N. Katherine Hayles⁸ for describing the entangled mediated cognition of computational-assisted human processes and human-assisted computational processes could be re-described in terms of concepts

¹ Marshall McLuhan, *Understanding Media: The Extensions of Man* [1964], Cambridge, MA: The MIT Press, 1994; Jay David Bolter and Richard Grusin, *Remediation: Understanding New Media*, Cambridge, MA: The MIT Press, 1998; Friedrich Kittler, *Optical Media: Berlin Lectures*, Cambridge: Polity Press, 2010, transl. Anthony Enns [*Optische Medien*, 1999]; Lev Manovich, *Software Takes Command*, London: Bloomsbury, 2013.

² Bernard Stiegler, *The Neganthropocene*, London: Open Humanities Press, 2018. Edited and translated by Daniel Ross. <http://www.openhumanitiespress.org/books/titles/the-neganthropocene/>

³ Manuel DeLanda, *Assemblage Theory*, Edinburgh: Edinburgh University Press, 2016.

⁴ Boris Groys, *Under Suspicion: A Phenomenology of Media*, New York: Columbia University Press, 2012. Translated by Carsten Strathausen. [Original German edition: *Unter Verdacht: Eine Phänomenologie der Medien*, 2000].

⁵ Richard Grusin, “Radical Mediation,” *Critical Inquiry* 42 (2015): 124-148.

⁶ Jussi Parikka, *A Geology of Media*, Minneapolis, MN: University of Minnesota Press, 2015.

⁷ Cf. Levi Bryant, Nick Srnicek, and Graham Harman, eds., *The Speculative Turn: Continental Materialism and Realism*, Melbourne: re.press, 2011. https://www.re-press.org/book-files/OA_Version_Speculative_Turn_9780980668346.pdf

⁸ N. Katherine Hayles, “Literary Texts as Cognitive Assemblages: The Case of Electronic Literature”, Aug 5, 2018, <http://electronicbookreview.com/essay/literary-texts-as-cognitive-assemblages-the-case-of-electronic-literature/> See also her earlier books, particularly *Unthought: The Power of the Cognitive Nonconscious*, Chicago University Press, 2018; and *How We Think: Digital Media and Contemporary Technogenesis*, Chicago University Press, 2012.

from *GTSR* but only as an instance of a much more general field of entangled relations which would bring about the “human”, the “computational”, and the “cognitive” as observable entities constitutive of the social field itself.

GTSR's definition of the social as both medium and quantum field is meant to overcome the reification of technical mediation and social events as bounded entities. Field theories in sociology and psychology (including Gestalt theory)⁹ – through their emphasis on the relations involving individuals, environments, behaviors and structures – have provided dynamic accounts of social structure and subject formation, but the bounded and positivist conception remains dominant in mainstream social and political theory, whose focus is placed on relations of cause and effect involving social objects and social structures as self-contained entities rather than enabling and constraining mediators for the constitution of actions, selves, situations, and formations. The concept of unboundedness is thus central for understanding the social as a medium, including its constitutive function in the production of the mediality of technical media, the subjectivity of social agents, and the configuration of social fields.

Towards the end of her poetics of the social as medium, Drucker writes on the real limits of agency and underlines the need for an understanding of the relativity of the social for producing the collective agency required for the survival of humanity:

The limits of agency are far more real than we imagine, and human survival depends in part on the realization that the collective field has more power, and works through us more effectively, than we have admitted. To change its polarity, direction, orientation, or transformative motion requires alignments and aggregations to produce collective agency. The social field must make up its mind in us, through us, if we are to survive and evolve. (79)

In a post-national globalized and googlized world, dominated by the atomization and control of attention through individual media bubbles and surveillance algorithms, and by the normalization of political lies and mass manipulation, the social has become the medium of social fragmentation, proxy wars and ecological disaster which no political program or international institution seems capable of counteracting. Despite the pessimistic lyricism of its double melancholic coda (“Cultural Melancholy”, 80-83, and “After Speaking in Tongues”, 84-86), *GTSR* is also an attempt to produce a non-schematic understanding of the social as the condition required for political agency in the phantasmatic present.

Even if its dilution of social structures, institutions and processes in the entangled relationality of the social as a self-organizing medium may be a further symptom of the problem the theory is trying to address, that is, the ongoing substitution of classical forms of social and political agency – such as political parties and trade unions – by

⁹ See, for example, Wolfgang Köhler, *Gestalt Psychology*, New York: Liveright, 1947; and Kurt Lewin, *Field Theory in Social Science*, New York: Harper, 1951. For a discussion of these early forms of field theory see John Levi Martin, *The Explanation of Social Action*, Oxford: Oxford University Press, 2011. The most significant non-Cartesian approach to social space as a relational space is Pierre Bourdieu's theory of social fields: “It is the structure of the relations constitutive of the space of the field which determines the forms that can be assumed by the visible relations of interaction and the very content of the experience that agents may have of them.” Pierre Bourdieu, “A Lecture on the Lecture”, *In Other Words: Essays towards a Reflexive Sociology*, Stanford: Stanford University Press, 1990, p. 192. [French original edition: *Leçon sur la leçon*, Paris: Editions de Minuit, 1982].

formless digital crowds, instant online communities and mega-corporations. Ongoing processes of automation of symbolic production and cultural exchange, as well as the capturing and scripting of social action through social media, internet searches and permanent self-archiving suggest that new forms of psychic and social energy are transforming the social field beyond the scope of institutionally organized collective action. The surplus data generated by analyzing click-through behavior is the basis of targeted advertising, which Shoshana Zuboff¹⁰ has recently described as “surveillance capitalism”, a new stage in the commodification of human experience based on large-scale online surveillance enabled by the assemblage of material infrastructure, computational power, automated platforms, and algorithmic systems.

GTSR can be read as an epitome of Drucker’s lifelong theoretical work and poetical investigations of the signifying spaces of writing. As an experiment in writing it is yet another unique actualization of the potentiality of the thinkable and the sayable. The theoretical and the poetical are deeply entangled in this experiment, perhaps because the strangeness of relativity and quantum dynamics in social interactions (like the counterintuitive non-linearity of the quantum world of atoms and particles) can only be expressed metaphorically: “We must be clear that, when it comes to atoms, language can be used only as in poetry. The poet, too, is not nearly so concerned with describing facts as with creating images and establishing mental connections.”¹¹

GTSR is better understood as a series of images for describing the social medium based upon a series of images for describing the atomic medium. Its intellectual energy comes from this double metaphoric displacement and how it opens up a new imagination of the social. Building upon her earlier work with Jerome McGann at the University of Virginia in the early 2000s, when quantum theory concepts were applied to issues of interpretation and textual criticism¹², Drucker extends those speculative metaphors to a non-linear description of social processes. As she acknowledges on pages 91-92, *The General Theory of Social Relativity* mostly relates to four earlier works – *SpecLab* (2009), *Subjective Metereology* (2010), *Stochastic Poetics* (2012), and *What Is?* (2013)¹³ – and also to current non-correlationist approaches of speculative realism and speculative materialism, which deal with the agency of matter and the perspective of objects and non-human material systems.

One way of coming to terms with the inventiveness of the specifics of the *GTSR* – conceptualized in systematic and playful detail on pages 28-79, and summed up in the three equations in the appendix (pp. 87-90) – is by way of exemplification. Drucker suggests that social quantum principles have been explored by “novelists, dramatists, poets, and some sociologists and biologists” (35). Perhaps a painting could also contain

¹⁰ Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*, New York: PublicAffairs, 2019.

¹¹ Quote attributed to Niels Bohr in a conversation with Werner Heisenberg. Werner Heisenberg, *Physics and Beyond: Encounters and Conversations*, New York: Harper & Row, 1971, p. 41.

¹² For example: Jerome McGann, “Marking Texts of Many Dimensions,” *A Companion to Digital Humanities*, eds. Susan Schreibman, Ray Siemens, John Unsworth, Oxford: Blackwell, 2004, 198-217.

¹³ *SpecLab: Digital Aesthetics and Projects in Speculative Computing*, The University of Chicago Press, 2009; *Subjective Metereology*, Druckwerks, 2010; *Stochastic Poetics*, Druckwerks, 2012; *What Is? Nine Epistemological Essays*, Cuneiform Press, 2013. The fact that this list – as always in Drucker’s extraordinary body of work – includes poetical and theoretical artifacts shows how the feedback between her material investigations and her thought experiments is intrinsic to her working method as artist and thinker.

an implicit articulation of what she theorizes as *events, forces, attributes, and metrics* of quantum social systems. In my own attempt to make sense of Drucker’s speculative theory of the social, I will use a painting by Charles Meere, *Australian Beach Pattern* (1940). This painting will be read as a visualization of the forces in the social atmosphere but also as a sort of diagram for the entire theory.



Figure 1: Charles Meere, *Australian Beach Pattern* (1940). © Art Gallery of New South Wales, Sydney.

How can we read *Australian Beach Pattern* through the concepts of the GTSR? “The first principle of the GTSR is the recognition that not only are all media social, but the social itself is a medium” (36). The compositional constructed-ness of the painting is foregrounded by its focus on the abstract relations of polygonal forms, colors and textures, as if it were an exercise in three-dimensional figuration. We could say that figures and background are mutually constitutive in the medium of painting, which we could then describe as an analogue for the materiality of the social within which a field of relations emerges according to a probabilistic distribution. On another level, the painting itself as a historical object partakes of other specific social processes. Art-historical readings of this painting have emphasized the “Australian-ness” of its representation of human subjects as godlike athletic creatures. This level of interpretative mediation captures the social semiotics of a particular ethos of the painting, and – when we consider its framing within institutional discourses on national art – captures part of the social medium through which viewers and painting are relationally constituted when they look at the painting in the context of the Art Gallery of New South Wales and its institutional discourse.

What happens if, instead of reading the painting as a medium for the national discourse on Australian modern art, we read the GTSR's conceptual framework into the painting's diagrammatic patterns of relations? This would be like inhabiting the visual space that produces the visual perception of its objects as a function of their abstract relations. A patterned representation of social interactions at the beach, presented as a snapshot of the relative positions and movements of individuals and groups, becomes a schematic visualization of a social field. The beach patterns come into being as a function of *among-ness* and *within-ness* rather than alterity and pre-constituted difference: bodies (and selves) emerge from within the materiality of the medium. One can imagine the typology of GTSR event types in their relational constitution: *transactions*, *occurrences*, *incidents*, *originating charges*, *configuration*. Or one can also imagine the whole range of forces in "the system of social physics" as variations on the basic forces of *inertia* and *affective dynamics*.

Let's explore *transaction* as an example: "Every exchange of information, communication, energy, material, chemistry, emotion, force, or any other substance or essence between or among human beings is a transaction" (47). Many transactions occur in the social space of the beach. Many of those exchanges (positive or negative) are part of the usual configurations of the social groups and their networks of relations – families, friends, co-workers, neighbors. Other configurations will emerge from *occurrences*, *incidents* or *originating charges* during the stay on the beach. Two children meet for the first time and start talking and playing together, triggering a pattern of exchanges between their hitherto strange families. From the initial polite interaction, an extended conversation among members of the two families begins and evolves into future meetings and social interactions in various other contexts. Two co-workers are sitting under the parasol, a casual remark is made that brings to the surface a long-held resentment. The discussion quickly escalates and their relation is utterly transformed. "We live from incident to incident, and are ourselves features of and participants in the production of incidents" (50). Many other instances of the various event types could be imagined.

Another concept in the GTSR is the concept of *configuration*, which is defined as "an effect or by-product of configuring, which is a state-change" (52). The composition of elements in the painting can be read as a diagrammatic instantiation of a configuration, that is, a particular relation of unbounded entities to each other. The relationality that sustains the particular spatial configuration in the painting becomes a schematic abstraction of the constant flow of actions of human beings on the beach: walking, running, swimming, diving, sunbathing on the sand, laying in the shade, sitting on a rock, talking, laughing, walking into the water, coming out of the sea, playing with a ball, floating a toy boat, playing in the sand, assembling in groups, disassembling, talking, laughing. Placed across the three-dimensional plane of the beach as the aggregate perceived stretch of sand by the water, the waves roll over the sand, people enter the water at different angles and positions, moving their bodies with their particular choreographic signatures. Each moment by moment state-change would be the visual representation of the relative intensities of quantized energy states, as if the whole picture illustrated the complementary relationship between each social particle's wave function and the social particle itself. As a visualization of the affective dynamics that entangles the psychic energy of social interactions in a non-linear social system, the painting could be read as a model for the "social medium as a quantum field" (34-37).

Developed during the first three decades of the twentieth century, quantum mechanics was the result of a series of theoretical explanations for experimental observations that could not be accounted for by classical physics and which produced a new model of the atom and its elements and forces. Experiments such as the black-body radiation (explained by Max Planck¹⁴), the photoelectric effect (explained by Albert Einstein¹⁵) and the bright line light spectra (explained by Niels Bohr¹⁶) contributed to the emergence of this new model of the relation between light and energy inside the atom. The mathematical description of electrons and photons as both wave and particle, put forward by Louis de Broglie in 1924¹⁷, was followed by further breakthroughs by Werner Heisenberg¹⁸, Erwin Schrödinger¹⁹, Max Born²⁰ and Paul Dirac²¹ who, in 1925-26, formalized the major principles and equations of quantum mechanics. Heisenberg's matrix methods (connecting the quantum numbers and energy states in an atom with the experimentally determined frequencies and intensities of the light spectra), Schrödinger's solution for the wave equation (an infinite series representing the wave functions of the individual states, which are natural harmonics of each other), Born's notion of quantum mechanical probability (the probability of the existence of a state is given by the square of the normalized amplitude of the individual wave function), and Dirac's equation for the dual nature of light as both particles and waves completed the quantum framework. Additionally, Einstein's general theory of relativity (developed between 1907 and 1915)²², which relates the curvature of spacetime to the energy and momentum of matter and radiation, had brought together those fundamental concepts in a geometric theory of gravitation. Relativist cosmology and quantum theory became the most powerful theoretical constructs of twentieth-century physics.

Two major concepts of quantum theory, often appropriated and re-signified in other knowledge domains, are Born's probabilistic interpretation of the atomic system and Heisenberg's uncertainty principle²³: until a measurement is made, an atomic system has only the potentiality of certain values with certain probabilities, and it is impossible to determine both the position and motion of a particle at any time. Quantum mechanics undermined the deterministic view of physical phenomena and made room for a

¹⁴ Max Planck, "Über das Gesetz der Energieverteilung im Normalspektrum," *Annalen der Physik*, 4.3 (1901): 553-563 ["On the Law of Distribution of Energy in the Normal Spectrum"].

¹⁵ Albert Einstein, "Über einen die Erzeugung und Verwandlung des Lichtes betreffenden heuristischen Gesichtspunkt," *Annalen der Physik*, 17.6 (1905): 132-148 ["On a Heuristic Point of View about the Creation and Conversion of Light"].

¹⁶ Niels Bohr, "On the Constitution of Atoms and Molecules," *The London, Edinburgh, and Dublin Philosophical Magazine and Journal of Science*, 26 (151) (1913): 1-25.

¹⁷ Louis de Broglie, *Recherches sur la théorie des quanta*, Paris: Université Paris IV-Sorbonne, 1924 [PhD. Dissertation] ["Investigations on Quantum Theory"].

¹⁸ Werner Heisenberg, "Über quantentheoretische Umdeutung kinematischer und mechanischer Beziehungen," *Zeitschrift für Physik*, 33 (1925): 879-893 ["Quantum-Theoretical Re-interpretation of Kinematic and Mechanical Relations"].

¹⁹ Erwin Schrödinger, "Quantisierung als Eigenwertproblem," *Annalen der Physik*, 384.4 (1926): 273-376 ["Quantization as an Eigenvalue Problem"].

²⁰ Max Born, "Zur Quantenmechanik der Stoßvorgänge," *Zeitschrift für Physik*, 37.12 (1926): 863-867 ["On the Quantum Mechanics of Impact Processes"].

²¹ Paul Dirac, "On the Theory of Quantum Mechanics," *Proceedings of the Royal Society A*, 112 (762) (1926): 661-77.

²² Albert Einstein, "Die Feldgleichungen der Gravitation," *Sitzungsberichte der Preussischen Akademie der Wissenschaften zu Berlin* (1915): 844-847 ["The Field Equations of Gravitation"].

²³ Werner Heisenberg, "Über den anschaulichen Inhalt der quantentheoretischen Kinematik und Mechanik," *Zeitschrift für Physik* 43.3-4 (1927): 172-198 ["On the Descriptive Content of Quantum Kinematics and Mechanics"].

complex non-linear view of the atomic world through the wave/particle duality, highlighting the codependence between observing apparatus and observed object. The notions of probability, quantum codependence, quantum entanglement and general relativity provide the fundamental analogies and metaphors for extrapolating from nuclear physics and astrophysics into the social field.

Drucker's appropriation of notions from the general theory of relativity and from quantum mechanics to describe the social medium can be summarized in two formulations: a) social spacetime ("social atmosphere" is the concept used in the *GTSR*) is relationally constituted as a field of interactions whose agents are brought into being by the field itself, that is, by the social as a medium; b) the relationality that constitutes events, forces and systems is itself probabilistic and expresses a certain potentiality inherent in the social field, as it acts through us according to a non-linear affective dynamics. If, like an atomic system, the social has no local conditions, then interactions do not diminish with distance, they act instantaneously and they link up locations without crossing space. Furthermore, media technologies are particular instantiations of the social as a medium.

The hard final question – raised by Drucker's opening contextualization of social non-linearity and the *GTSR* within the post-Trump phantasmatic politics, on the one hand, and within the coopted twentieth-century avant-garde aesthetics, on the other – is precisely *what kind of political action and aesthetic critique can we perform when cause and effect are perceived as decoupled by the non-linear entanglements of the affective dynamics of the social medium* (particularly at the historical moment when the large-scale effects of human action have brought the reality of the Anthropocene to human consciousness)? This question may simply reflect our nostalgic desire for explanation and agency (p. 21), an initial gloomy prospect that recurs as we come to the end of the text and its double coda reaffirms that *we* have already become irrelevant: "Humanity has become a surplus that adds no value to the various systems of which it used to seem to be a crucial part" (81); "A helicopter overhead beats with its wings and praises its own song" (86). As much as a theory of the social and a critical provocation, *GTSR* is an assemblage of writing as a thought experiment. Its conceptual and metaphorical energy can be measured by the generative effect of each and every sentence, and how their semantic radiation shifts the conditions for an understanding of our present moment and of our mechanistic models of the social.

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