

The Field Concept in Psychology, Gestalt Theory, Physics, and Epic Theatre – Brecht’s Adaptations of Kurt Lewin

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Abstract

In the first half of the 20th century, the field concept was part of theoretical and methodological innovations in physics, gestalt theory as well as epic theatre as introduced by Bertolt Brecht. Another reference is the psychology of Kurt Lewin. In what ways Brecht took notice of Lewin’s research, especially his demand of a transition from Aristotelian to Galileian thought is reconstructed within the context of paradigm shifts fostered by logical empiricism, gestalt theory and physics. Lewin’s argumentation of an advanced understanding of the lawfulness of societal and psychological processes is placed in the center and traced back as an inspiration to Brecht’s writings. Vice versa, the article investigates in what ways Brecht’s theoretical writings and adaptations of Lewin’s approach can be reconsidered as a source for psychological theorizing.

Keywords: Field theory, conceptual modelling, procedural thinking, dialectics, paradigm shift

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Introduction

It is well known that Bertolt Brecht pronounced the contrast between the old and the new theatre he created. At the turn of 1930/31, he remarked that “dialectic drama” would function “without psychology”, “without the individual” and would “resolve states into processes in an emphatically epic way”.^{1, 2} Artistic representations like the attempts by early sculptors to design “the essential,” “the eternal,” “the final,” in summary, “the soul of their models,”³ in Brecht’s opinion are among the “stage’s false representations of social life”.^{4, 5} In contradistinction, the

experimental, critical, examining approach in the natural sciences becomes his ideal. On stage, “experimental theatre” should capture societal conditions in such a way that they turned into recognisable and modifiable things, like objects of research. The anti-psychologism as propagated in the initial quotations appears as a logical step in this approach. Yet still, Brecht is involved in psychological issues in an effort to evoke in his spectator “a kind of scientific attitude”.⁶ He tries this not by decomposing psychology completely in the process but also by rethinking it as shown, for instance, by the following note in this journal of April 21, 1941:

“The crisis of drama is profound. It is a matter of creating rich, complex, developing figures – without introspective psychology.”^{7, 8}

Progress is not in dissolution, but in complexity and in understanding more precisely developmental rela-

¹ Bertolt Brecht, *Brecht on Theatre*, 3rd edition (edited by Marc Silberman, Steve Giles and Tom Kuhn, translations by Jack Davis, Romy Fursland, Steve Giles, Victoria Hill, Kristopher Imbrigotta, Marc Silberman and John Willett). London 2015, 57.

² Bertolt Brecht, *Große kommentierte Berliner und Frankfurter Ausgabe*, Berlin–Weimar–Frankfurt/M 1989ff. (quoted as BFA) 21, 439.

³ BFA 22.1 (see note 2), 573.

⁴ Brecht, London (see note 1), 229.

⁵ Bertolt Brecht, *Gesammelte Werke* (quoted as GW), Frankfurt/M 1967, 661.

⁶ Brecht, London (see note 1), 58; BFA 21 (see note 2), 440.

⁷ Bertolt Brecht, *Bertolt Brecht Journals* (translated by Hugh Rorrison, ed. by John Willett), New York 1993, 143.

⁸ BFA 26 (see note 2), 476.

tions. What appears as a problem is then not psychology *per se*, but *introspective* psychology.

Although some comments, like those quoted above, might suggest it, we do not find in Brecht a proponent of objectivist psychology. In the same way in which he rejects the psychological method of empathy, he criticises behaviorism, reading it as a symptom of capitalist conditions:

“the normal behaviouristic images are very flat and blurred (if they do not have the clarity of scheme f). even when they include not only biological but also social reflexes, concrete figures seldom emerge. In the same way as c[apitalism] brings about the collectivisation of man though deprivation and disindividualisation, and as at first a kind of ‘common ownership of nothing’ is brought into being by c[apitalism], so behaviourist psychology in the first instance reflects only society’s indifference to the individual, since the individual is a mere object.”⁹

Thus, Brecht in no way advocates dissolution of the individual in processes. His psychologically important problem is the individual in his or her relation to the mass as shown by the type of “collectivisation,” as “depravation” and “dis-individualisation” in capitalism. It touches upon the processes of expropriation of common property and the loss of individuality of people dependent on their wages. In this way, he raises the question of what would be the psychological base of a different kind of sociality of human beings. The character of an individual as an object arising under capitalist conditions, as far as Brecht is concerned, oscillates between societal indifference and an importance in which – as he puts it in a different context – “capitalism [...] invested all diligence, all ingenuity, all planning, all cruelty, all competence into the production of mire.”¹⁰ The object status referred to is a status in which subjectivity is not removed but instrumentalised and employed productively.

Brecht thus recognises the dominating functionality of psychology. However, as expressed above, he confronts this science not only with a destructive type of criticism. It is the psychology of his contemporary, Kurt Lewin (1890–1947), among others which he uses constructively in the 1930s. Its importance to dialectic drama seems to be marginal because it is hardly referred to in Brecht’s writings. Yet, it can be shown that overlaps of Lewinian and Brechtian thought are not immaterial; the psychological concept of a field as developed by Lewin refers to the problem, also for Brecht, “to create im-

proved representations of societal life of the people” and a new understanding of the “non-Aristotelian” causality expressed in it.¹¹

It is not possible, however, to detect precisely the influence of Lewin’s psychological ideas and science theory, as is evident from the very fact of their reception. There is only one case proving that Brecht was familiar with a treatise by Lewin. At the time of Brecht’s trip to New York in 1937 he made a reference, ‘Die Auswahl der einzelnen Elemente’,¹² to the early article of 1917 titled ‘Kriegslandschaft’ [‘Landscape of War’]. In that article, Lewin reflects upon his experience as a field artillery lieutenant – he had volunteered in 1914.¹³ His initially phenomenological description of the battle ground becomes a cornerstone of the psychology he develops in Berlin in the 1920s and early ‘30s. In his description of the 1917 war scenery, the interpretation of the situation at the front in the light of perceptual psychology becomes important:

“It [the scenery, I.L.] is relatively independent of the visibility conditions caused by the special shape of the terrain, extending far beyond the space which, in accordance with optical laws, the retina would be able to reflect even successively. What is important for the scenery of peace is that this extension uniformly stretches into infinity in all directions [...]. The scenery is round, without a front or a rear side.” – “However, as you approach the front zone, extension into infinity is no longer true in the same sense. Towards the front, the scenery seems to end somewhere; the scenery is bounded. When marching towards the front, this boundedness of the scenery is apparent a considerable time before the front line becomes visible.”¹⁴

Lewin describes the landscape in the sense of the phenomenological approach of his teacher, Carl Stumpf,¹⁵ and, at the same time, introduces a number of ideas which become significant for his field theory.

¹¹ BFA 22 (see note 2), 387.

¹² BFA 22 (see note 2), 251-254.

¹³ Kurt Lewin (1890-1947) studied philosophy (with Alois Riehl and Ernst Cassirer) in Berlin from 1910 and, later, psychology. He obtained his Ph.D. under Carl Stumpf. In 1921, he was appointed Assistant Lecturer, then Privatdozent and, 1927, Professor at the Psychological Institute in Berlin. Between 1926 and ‘34, actions and affects are the objects of Lewin’s studies. Having accepted a guest professorship in the USA as early as in 1932, he sought to find further employment at U.S. universities as a migrant in 1933. Groups and group dynamics became the central research topic in the period of emigration. It is only at this point that Lewin explicitly refers to his theory as field theory.

¹⁴ Kurt Lewin, *The Landscape of War*, Art in Translation, Vol. 1, 2, 2009, 199-209, here 201 (original work *Kriegslandschaft* published 1917).

¹⁵ Helmut E. Lück, Einführung, in: Kurt Lewin. *Schriften zur angewandten Psychologie: Aufsätze, Vorträge, Rezensionen*, in H. E. Lück (Ed.). Wien 2009, 7-26, here 9.

⁹ Ibid.

¹⁰ BFA 22 (see note 2), 536.



As he later argues, a psychological situation was always characterised by boundaries, positions, and movements in the field. Studying these would mean understanding how very specific tensions arise in the scenery which made people act in specific ways.¹⁶ A generalising explanation of human behaviour thus is found already in the *war scenery*. The battlefield becomes the model of a psychological field concept which is supplemented later by concepts borrowed from magnetism and the topological vector space in mathematics, but is sharply separated from a kind of physicalism.

In 1937, Brecht notes about Lewin's early treatise:

"Psychology tells us that, depending on the use people make of a place, a different appearance is created."¹⁷

He establishes this proof (without exactly indicating the reference) in a handwritten footnote, probably when combining the different typed sections.

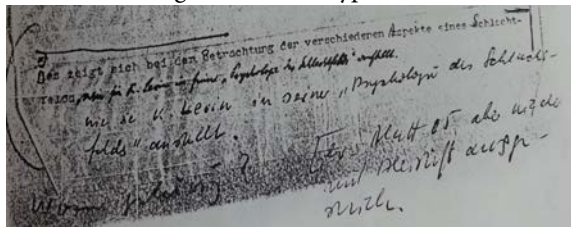


Figure 1. Fig. 1: Brecht's handwriting can be seen underneath the typewritten line (author's photograph).¹⁸

Brecht's footnote is indicative of a reflection in perceptual psychology exceeding Lewin's description. It contains the practical philosophical idea to read thinking "as social behavior," i.e. referring to

¹⁶ In his essay, "Der Übergang von der aristotelischen zur galileischen Denkweise in Biologie und Psychologie" (KLW 1, 269) he borrows concepts of painting in order to explain the concept of situation: "The rôle of the situation in all these concepts may perhaps be best exhibited by references to certain changes in painting. In mediaeval painting at first there was, in general, no environment, but only an empty (often a golden) background. Even when gradually an 'environment' did appear it usually consisted in nothing more than presenting, beside the one person, other persons and objects. Thus the picture was at best an assembling of separate persons in which each had really a separate existence. Only later did the space itself exist in the painting: it became a whole situation. At the same time this situation as a whole became dominant, and each separate part, so far indeed as separate parts still remain, is what it is, for example, in such an extreme as Rembrandt, only in and through the whole situation." (English: Lewin 1931, 173).

¹⁷ BFA 22 (see note 2), 251.

¹⁸ I am grateful to Jan Knopf for the permission to see the Brecht Archive "Arbeitsstelle Bertolt Brecht" in Karlsruhe.

the "purpose it fulfills for the person thinking and for the person for whom thinking is done".¹⁹

Ulrich Sautter presumes the reception of another reference, the essay titled "Der Übergang von der aristotelischen zur galileischen Denkweise in Biologie und Psychologie"²⁰ [translated as The Conflict between Aristotelian and Galileian Modes of Thought in Contemporary Psychology] published in the first issue of the journal "Die Erkenntnis" (edited since 1930 by Rudolf Carnap and Hans Reichenbach):²¹ "That Brecht took cognizance of Lewin's ideas hardly seems to be doubtful."²² However, this is not certain, as that issue of the publication is not contained in the Brecht Archive, only Issues 2-4 (in one volume) with pages 80 to 339 being available.²³ An announcement of the article can be seen on one side of the jacket of a copy from the estate. At least the title is likely to have aroused Brecht's attention.

Both, Brecht and Lewin, are interested in the situative way of perception as a critical relation of a thinking and acting person to the world and to themselves. Both take up the problems of science theory of the time, which had become virulent against the backdrop of technically refined methods and new objects of perception in physics. Especially in treatises like 'Gesetz und Experiment in der Psychologie' (1927) and in the essay referred to above, 'Der Übergang von der aristotelischen zur galileischen Denkweise in Biologie und Psychologie' (1930/31),²⁴ Lewin sets the course for a paradigm shift in his discipline in order to understand afresh laws governing human behavior and overcome the strict separation of science into natural science and humanities. Among other things, he introduces the event type concept looking for a link between a phenomenological and a mathematical approach.

¹⁹ BFA 21 (see note 2), 424.

²⁰ The text was written on the basis of a lecture by Lewin in Berlin on February 4, 1930.

²¹ Rudolf Carnap/Hans Reichenbach (eds.), Die Erkenntnis, vol. 1, also "Annalen der Philosophie", vol. 9, 1930/31.

²² Ulrich Sautter, Brechts logischer Empirismus, in: Deutsche Zeitschrift für Philosophie 45, 4, 1995, 687-709, here 701.

²³ I am grateful to Helgrid Streit of the Brecht Archive for the information and to Robert Cohen for the reference.

²⁴ Kurt Lewin, Der Übergang von der aristotelischen zur galileischen Denkweise in Biologie und Psychologie [The transition from Aristotelian to Galilean thinking in biology and psychology], in: Carl-Friedrich Graumann (Series Ed.)/Alexandre Métraux (Vol. Ed.), Kurt Lewin Werkausgabe: Wissenschaftstheorie, Stuttgart, Germany 1981, 233-278 (Original work published 1930/31).

Roughly at the same time, Brecht takes up problems of modern physics to articulate problems of the theatre: Societal processes and contradictions, mass movements, the behavior of the atomised individuals and their relations under capitalist conditions of production and ownership were to be made objects of experience and study although they defy immediate descriptiveness and illustration.²⁵ It is true that the “theatre for the scientific age”²⁶ is to illustrate not the laws, but the historically important aspects of an event.²⁷ However, like physics in quantum mechanics, Brecht makes an effort to stage the social situation as a model or theory, respectively, because the capitalist production conditions would have caused a type of “injustice” which “had vanished entirely from the *field of vision*,”²⁸ thus making it inaccessible to personal experience. The models are to challenge the spectator to think independently and, at the same time, arrive at new, critical, experimental ways of appropriation.²⁹ Brecht seeks a type of perception which goes beyond mere empiricism; hence the instruction by the philosopher to the actors: “By the time you are through the audience ought to have seen even more than an eyewitness of the original incident.”³⁰ And: “When you show that this is the

way it is, show it in such a way that the audience will say: Is it really like that?”³¹ In the same way in which a natural scientist sees more after an experiment than before, for instance, by recognising a problem in a more defined or differentiated way, also the theater, as a place of *experiments* [dt. “Versuche” = attempts; experiments],³² is to change the perception first of the actors and then of the audience. In ‚Messingkauf‘ [‚buying brass‘; ‚The Messingkauf Dialogues‘], the philosopher accordingly explains:

“Science scans every field for openings for experiments and plastic representations of problems. They make models showing the movements of the planets; they make ingenious apparatuses to demonstrate how gases behave. They also experiment on people. But in this case the possibilities of demonstrating anything are extremely limited. So it stuck me that your art might serve to imitate people for the purpose of such demonstration. Incidents from people’s social life, demanding an explanation, could be imitated in such a way as to confront one with plastic representations whose lessons could be partially applied.”³³

The perception and recognition in which Brecht is interested thus resembles research in being mainly preliminary, in a state of development. This is the very fact which makes it useful because it stimulates to think in more experiments beyond what is existing and make predictions as in science. Thus, the philosopher in ‚Messingkauf‘ explains:

“I ought to tell you that I have an insatiable curiosity about people; it’s impossible for me to see and hear enough of them. [...] I always want to know why they embark on their undertakings, and my aim is to distinguish certain laws that would allow me to make predictions.”³⁴

In 1931, Brecht planned to set up a “Marxist club” for “Marxist studies.” Whether the club ever met is not known.³⁵ Kurt Lewin probably was among those who were to be invited into that group. Brecht composed a handwritten list on which the name can be found, although it is not quite legible. A different document shows the typed name of “Karl Lewin”.³⁶ Titles of presentations included ‚Das Weltbild der bürgerlichen Physik‘ [‚The conception of the world of bourgeois physics‘] and ‚Behaviorismus (Psychologie)‘.³⁷

²⁵ Jan Knopf, *Bild des gesellschaftlich Verborgenen in den Dramen Brechts*, in: Jan Knopf (ed.), *Brecht-Journal*. Frankfurt/M. 1983.

²⁶ Brecht, London (see note 1), 229; GW 16 (see note 5), 662.

²⁷ Cf.: “All characters I create are collectives. It is not for nothing that I instinctively think that it is necessary to look at all their situations from a historical point of view. I place the numbers of years even in the headlines above contemporary events. So, I fix the time in which this character appears. I thus reveal the situations unless they are created by that character. I think what he says is historical.” (BFA 22 (see note 2), 54).

²⁸ Brecht, London (see note 1), 55; BFA 21 (see note 2), 437.

²⁹ Cf.: The philosopher in *Messingkauf*: “It is not only problems that have been solved which the theater presents to its spectator, but it is also unsolved ones. By opposing a confusion of description one does not argue against a description of confusion.” (BFA 22 (see note 2), 721, not translated in: Bertolt Brecht, *The Messingkauf Dialogues*. Translated by John Willett. Reading: Methuen Drama (imprint of Reed Consumer Books) London 1994) Cf.: “Modern spectators, it was assumed, do not want so meekly succumb to a kind of hypnotic suggestion or to forfeit their reason by getting sucked into all sorts of emotional states. They do not want to be dictated to and violated – they just want to be presented with human material, and to be allowed to organize it themselves. For this reason they also like to see human beings in situations that are not clear from the outset, and for the same reason they do not need logical reasoning or psychological motivations like those of the old theatre.” (Brecht 2015 (see note 1), 58; BFA 21 (see note 2), 440).

³⁰ Brecht, London (see note 29), 55; GW 16 (see note 5), 582.

³¹ BFA 21 (see note 2), 390.

³² Cf. Jan Knopf, Bertolt Brecht, Leipzig 2000.

³³ Brecht, London (see note 29), 35; BFA 22 (see note 2), 715.

³⁴ Brecht, London (see note 1), 17; BFA 22 (see note 2), 780.

³⁵ Erdmut Wizisla, Benjamin und Brecht. *Die Geschichte einer Freundschaft*, Frankfurt/M. 2004, 81.

³⁶ Wizisla, Frankfurt/M. (see note 35), 325-6.

³⁷ Wizisla, Frankfurt/M. (see note 35), 327.



It is most likely that Brecht and Lewin met personally only as emigrants. In New York, in the spring of 1943, Brecht writes in an ironic, slightly deprecating tone: “a new acquaintance, Kurt Lewin who is working in Iowa, teaching ‘leadership’ to scouts and workers, and invites me to visit him, interested in ‘baal the evil and asocial.’”³⁸ This is an incomplete project of a *Lehrstück*, a didactic play. However, both men had been friends of Karl Korsch back in Berlin.³⁹ Lewin has known him since his student days.^{40, 41}

Brecht and Lewin used the field concept to work on a similar problem, though in rather different areas. To what extent discussions in contemporary physics and philosophy influenced them can be seen in the next section. It will be shown whether Lewin’s psychological field concept has a different meaning to Brecht than that of physics. Moreover, traces will be followed which indicate that Brecht also knew Lewin’s treatise about the ‘Übergang der aristotelischen zur galileischen Denkweise in Biologie und Psychologie’. This will also highlight ideas leading beyond Lewin which, transgressing the “individual psyche,” paved the way of a psychology of collective processes of learning and change.

The Context of the 1930s

The positivist tendencies in Logical Empiricism (Hans Reichenbach, Rudolf Carnap, Otto Neurath et al.) are important points of reference for both Brecht^{42, 43, 44} and Lewin^{45, 46}. A point of special importance to Lewin is the idea of one uniform science,

³⁸ Brecht, New York (see note 7), 278.

³⁹ Sautter (see note 22), 701.

⁴⁰ Lewin and Karl Korsch together write the paper, “Mathematic Construct in Psychology and Sociology” for the 5th International Congress of Uniform Science, published 1939. (BFA 27 (see note 2), 456).

⁴¹ Cf. Karl Korsch, Gesamtausgabe: Briefe 1908-1939 (Vol. 8). Ed. by Michael Buckmiller/G. Langkau, Amsterdam 2001, 365. Unlike the Korsch edition, BFA indicates that Lewin “was close to the Berlin group of the Society of Empirical Philosophy where he had met Karl Korsch in 1930,” (BFA 27 (see note 2), 456).

⁴² Cf. Werner Hecht (ed.), Brecht 73, Berlin/DDR 1973.

⁴³ Sautter (see note 22).

⁴⁴ Kamil Uludag, Brechts Übertragungen aus den physikalischen Theorien, in: Institut für kritische Theorie (ed.), Brecht – Eisler – Marcuse. 100 Jahre. Hamburg 1999, 21-32.

⁴⁵ Kurt Lewin, Kurt Lewin Werke (quoted as K LW), Stuttgart 1981ff.

⁴⁶ Cf. Notes partly by Lewin, partly by the editor, Alexandre Métraux, in Der Übergang von der aristotelischen zur galileischen Denkweise in Biologie und Psychologie in the complete edition about science theory, (K LW 1 (see note 45), 273-8).

i.e. bridging the “radical dichotomy of natural sciences and humanities.”⁴⁷ In addition, the school of gestalt theory (Wolfgang Köhler, Max Wertheimer et al.) influences his work. Lewin’s work is partly attributed to that school although it by far transcends the framework of gestalt law studies.

Common points of reference to Brecht and Lewin in physics around 1930 are the discovery of quantum mechanics (Max Planck, Werner Heisenberg, Niels Bohr et al.) and the theory of relativity (Albert Einstein).

Max Planck in 1900 published the research paper postulating that the energy of electromagnetic radiation is not released or absorbed by atoms in a uniform way but in leaps (quanta), the Planck Quantum named after him. Consequently a physical system, in a given harmonic oscillation, can accept or release energy only in discrete amounts, in integer multiples of the oscillation quantum. The concept of quantum object combines properties which previously were mutually exclusive in the paradigms of physics. The concept thus violates the fundamental principle of matter in classical physics.

The atom, once indivisible, becomes divisible. In 1913, Niels Bohr develops his atomic model in which electrons orbit around the atomic nucleus in shells. New equipment allows electrons to be observed. In 1927, the famous double slit experiment is performed in which interference patterns in need of explanation are produced because something can be either only particle or only wave, but not both at the same time. Quantum theory becomes the catalyst of a philosophical turn.

However, even at an earlier point in time the field concept in physics cast doubt upon mechanical explanations based on material properties. Michael Faraday in 1845 made observations of polarized light under magnetic influence which he described by the term of “magnetic field.” In 1852, in the essay ‘On the Physical Character of the Lines of Magnetic Force’⁴⁸, he describes the way in which the magnetic field, unlike the gravitation field, had lines of force which could be enlarged, reduced and deflected as a function of the respective medium. He concluded that there had to be causes *outside* the material properties of the object under study. For an ex-

⁴⁷ K LW 1 (see note 45), 272.

⁴⁸ Michael Faraday, On the Physical Character of the Lines of Magnetic Force, in: Philosophical Magazine and Journal of Science vol. 3, No. 20, 1852, 401-427.



planation one would have to study electromagnetic effects also in a perfect vacuum. As he did not have the possibilities to do so, he concluded that modifiable properties of “ether” determined the behavior of beams of light. In this way, his ether theory still falls back upon mechanical properties of a medium as the cause. In this way, the field concept can hardly be distinguished from the link between ether and space. It is only in Planck’s studies about heat radiation that the field concept came close to the modern systems concept.⁴⁹

Einstein’s General Theory of Relativity achieved the breakthrough, imagining space as a function of the movement of matter. The assumption of field properties resulting from the relation among field elements supports the development of concepts of systems theory. Consequently, the field concept stands for a higher order to be determined theoretically by specific relations, no longer solely by the elements and their inherent characteristics.

Werner Heisenberg’s Uncertainty Relation (1927) expresses the insight that simultaneous exact measurements of position and momentum of an electron are mutually exclusive. According to Heisenberg, this relation can be explained on the basis of the properties of a quantum or, to put it differently, from the problem that the position in space of an electron can be measured only by exposing it to light, i.e. by influencing the oscillation of the electron. As the position of the electron can be determined the more accurately the shorter the wavelength of light, he concludes, any measurement affected the movement of the electron. Heisenberg assumes that the uncertainty of the measurement was unavoidable because shorter light waves also enhanced the recoil by which a deflected photon acted on the electron. Consequently, higher precision of the determination of position at the same time reduced in the determination of velocity. However, from a present-day vantage point, the assumption of a direct relation between the measurement process and uncertainty is doubtful.⁵⁰ The indirect way of

discovery, which must fall back on technical equipment and theoretical thinking because of the type of research object, again is seen as a problem of unattainable independence of the measurement procedure and the system to be measured.

Adaptations in Brecht

Uncertainty, i.e. that “the process of observation has altered what is being observed”⁵¹ is interpreted by Brecht not as a shortcoming of science or of methodology but turned around as confirmation of the philosophical insight that “things can be recognized by changing them.”⁵² The Uncertainty Relation becomes a formula for the relation in development of practical and mental action. It is a pattern of thought repeatedly occurring in Brecht’s writings. Thus, the philosopher in ‚Messingkauf‘ asks:

“The physicists tell us that in studying the smallest particles of matter they suddenly had suspected that the materials studied had been changed by the study. Besides the motions they observe under their microscopes there are motions caused by the microscopes. On the other hand, also the instruments probably are altered by the objects on which they are focused. This happens when instruments observe; what will happen once people observe?”⁵³

Concentrating on the subjects’ ability to learn and act, Brecht alludes to Heisenberg also in defining “intervening thinking.” Preference should be given to “those definitions which allow the defined field to be handled.” “The determining factors always include the behavior of the defining party.”⁵⁴ In this way Brecht, like Lewin’s phenomenological reflection on the *war scenery*, emphasizes the dependence on the subject and on practice of the respective field concept. Brecht also takes up the ideas of a physical field or space which is no longer absolute but exists in relation to the elements it incorporated:

“The physicists working on relativity make the qualities of space depend on the distribution of matter. I am incapable of reading sentences like these without thinking of something like ‘social space’.”⁵⁵

⁴⁹ <http://www.physikdidaktik.uni-karlsruhe.de/altlast/14.pdf>.

⁵⁰ In the meantime, the Uncertainty Relation has been interpreted differently in physics. Experiments allowing the inexactness in measurement to be calculated from the difference between a weak and a normal measurement have shown uncertainty to occur not in the way assumed by Heisenberg. Uncertainty is preserved as a fact, but is no longer attributed primarily to the disturbance of the electron by a photon arbitrarily directed at it. (Scharf, 2012). In: Rainer Scharf, *Der große Heisenberg irrte*, in: Frankfurter

Allgemeine Zeitung, Beilage: Naturwissenschaft, November 17, 2012. Available online: <http://www.faz.net/aktuell/wissen/physik-chemie/quantenphysik-der-grosse-heisenberg-irrt-11959435.html>.

⁵¹ Brecht, London (see note 29), 50; BFA 22.2 (see note 2), 730.

⁵² BFA 21 (see note 2), 425.

⁵³ Brecht, London (see note 29), 50; BFA 22.2 (see note 2), 730.

⁵⁴ Transl. by RF; GW 20 (see note 5), 168.

⁵⁵ Brecht, New York (see note 7), 188; Jan. 7, 1942, BFA 27 (see note 2), 45.



The problem of uncertainty, insurmountable by method or technology, at that time also gave rise to thinking in science theory about handling studies involving many laws acting at the same time. In view of these laws of nature superimposed upon each other in a complex pattern, which do not allow to be found out in detail what was the cause and what was the effect, the solution of a linear, absolute idea of cause and effect is given up in favor of a structural, statistical solution. Brecht's *Me-Ti* discusses this question, moving indetermination of quantum physics experiments into the vicinity of stubbornness in human behavior:

"Physics just now is finding out that the smallest bodies are incalculable, their movements unpredictable. They seem to be individuals endowed with a free will of their own. Their movements, therefore, are difficult or impossible to predict because there are too many determinations for us, not none at all."⁵⁶

Brecht recognizes that the field concept is relevant in solving this problem. However, the discovery of a field is not an end in itself. It becomes important because familiarity with properties of the field allows individual cases to be explained as well. However, the explanation remains vague, within the framework or 'statistical causality':⁵⁷

"The world has been fully determined' is a sentence devoid of meaning as it does not apply to human beings." – "The question of *determinism or indeterminism* is completely hopeless. If everything which happens is predetermined, then the chains of determination are infinite, and we cannot have an overview of endless chains. Total determination is impossible."⁵⁸

In a way, Brecht follows the "scandal of quantum mechanics" that "although the system is fully known, only probabilities can be predicted,"⁵⁹ emphasizing:

"At any rate, the probability causality of physicists allows some statements to be made even about irregular and complex events."⁶⁰

Brecht is inspired by the reference to probabilities because he thinks they may be useful in his dramas. In this way, the tendency of everyday reasoning and pseudo-scientific thinking to explain visible behavior of persons in a way duplicating it from their respective assumed inner characters, is to be irritated and overcome. Brecht hopes to arouse an awareness in

the mind of his audience of the fact that "not only the relations between persons" became processes, but also "persons themselves."⁶¹ At the same time, however, he turns against the affirmation of this dissolution of people in processes, demonstrating the incompetence of psychology by this very fact:

"That which had been indivisible – the individual – disintegrated into its component parts, and this produced the psychology that examined the parts but naturally failed to put them back together again to make an individual."⁶²

However, this criticism does not apply to Kurt Lewin's psychology. How it may have inspired Brecht in a demonstrable way, therefore, merits closer examination.

The Field Concept – Its Importance in Lewin's Psychology and in Brecht's Theater

References to Gestalt Theory in Lewin

In Wertheimer,⁶³ the field concept includes structures of the field of vision. "A homogeneous field," for instance, appeared like a white surface, "a whole field resisting 'division,' 'disruption,' 'interruption.'" Only the discontinuity of a figure-ground relation aroused attention to something:

"Dissemination of attention, fixation etc., under natural conditions are caused *secondarily* by the constellations in the whole, [...] again primarily as a function of the 'main distribution'. Any artificial shift in the range of attention may give rise to different, new field conditions."⁶⁴

In this way, the field concept can be used for generalized studies of arrangements of elements to see whether they result in the perception of a shape or gestalt.

Lewin handles similar problems of perceptive psychology, e.g., when referring to things with "the character of an invitation" ("Aufforderungscharakter") or, in a stronger expression, to "imperative environmental facts".⁶⁵ This means that things in a person's field of vision are rarely seen as neutral, but sometimes as interesting, sometimes as repulsive to somebody. So, the concept is both phenomenological, in the sense of a specific descriptive category of experience, and theoretical by referring to the rela-

⁵⁶ Transl. by RF; GW 12 (see note 5), 568.

⁵⁷ Cf. Wolfgang Fritz Haug, *Philosophieren mit Brecht und Gramsci*, Hamburg 1996, 54.

⁵⁸ Brecht, New York (see note 7), 211; March 23, 1942; BFA 27 (see note 2), 71-2.

⁵⁹ Uludag, Hamburg (see note 44), 28.

⁶⁰ Brecht, New York (see note 7), 211; *ibid.*

⁶¹ Transl. by RF; BFA 21 (see note 2), 320.

⁶² Brecht, London (see note 1), 54; BFA 21 (see note 2), 435.

⁶³ Max Wertheimer, *Untersuchungen zur Lehre von der Gestalt*, in: *Psychologische Forschung*, 4, 1. 1923, 301-50, here 347-9.

⁶⁴ *Ibid.*

⁶⁵ Kurt Lewin, *A Dynamical Theory of Personality*, New York 1935, 77.



tion between usefulness perceived in a situation and attractiveness of an object. Lewin interprets this relation in terms not just of perceptual psychology but also of behavioral psychology as a specific relation between a person and the environment. The change in behavior and the switch into an action initially appearing attractive up to the point of saturation and oversaturation, after which an action is interrupted or even stopped entirely, is a typical example of his research in the late 1920s. He will later construe his field concept with a view to these spontaneous patterns of evaluation and prove these by concepts of physics, vectors and valences. In this case, they are in the service of the “principle of specific causes,” i.e. that “only existing facts can influence behavior.” This rejects concepts of the “older association theory,” which frequently responds to “the question: ‘Why does a person behave in this or that way?’ by referring to a similar kind of behavior in the ontogenetic or phylogenetic past of that person.”⁶⁶ Lewin in this way seeks to emphasize a strict separation between historical and topological explanations, defining the latter by the postulate that “only the present state of a person influences the present behavior of that person” and, consequently, only exact investigation of the “specific dynamic properties of the then present living space” allowed conclusions to any laws to be drawn.⁶⁷ He finally transfers ideas of this kind to the psychological field of group dynamics.

A letter written by Korsch in 1937 advises Lewin against using theorems of gestalt theory when analyzing dynamic units, i.e. the dynamic relations in groups. He draws his attention to inaccuracies in his line of arguments by pointing out that Lewin, on the one hand, referred to “dynamic units of various degrees” as “gestalten of greater or less unity,” but then failed to take into account more accurately the differences in degree as a function of the type of communication: “The type of communicating process not only defines the degree but also the existence of communication.”^{68, 69} This shows the basic problem in systems theory whether the unit or the

structure of a whole produced out of elements can be derived in a dominant way either as a structure (gestalt / system) or as a process (communication). Korsch draws attention to the interaction between the two. Only when, seen structurally, two elements are coupled to each other, degrees of uniformity of a whole may differ. This is important in a theory of social conflicts.

Korsch also argues that “your ‘gestalten of greater or less unity’ [...] no longer were covered in any way by the definition that ‘a change of one part results in a change in *all* other parts.’” This ‘all’, he criticizes, had a “non-verifiable, mystic” effect, contradicting its “distinction of degrees of dynamic unity.”⁷⁰ So there seems to be a conflict between two perspectives of insight in the gestalt concept. On the one hand, there are dynamic changes explaining how a unit as a gestalt (as a whole) is formed but can also be dissolved again (partly) (perspective of emergence); on the other hand, the unit is to explain the strength of dependencies or relations in a field and the resultant consecutive processes (perspective of systemic consequences). The ‘unverifiable’ thus would be the attempt to ascribe to the structure of a field as a whole a power which is determining compared to all the elements contained in it (structural determinism). The idea of a fully determined system is contained in this argument. It contradicts the insight that dynamics also can destroy and surpass a specific system on which they are based.

In Lewin’s essay on the “Übergang von der aristotelischen zu galileischen Denkweise in Biologie und Psychologie” the problem emphasized by Korsch does not yet appear. It deals with the problem of cause and effect from a psychological point of view, initially paving the way for a non-Aristotelian understanding of causality. If Brecht learned about Lewin’s contribution through Korsch or through the ad on the back of a journal, it is most likely to have aroused his interest.

The First Volume of “Die Erkenntnis“ and Lewin’s Contribution

The journal ‘Annalen der Philosophie’ was published 1930/31 under the new title ‘Die Erkenntnis’: In this first issue, Reichenbach emphasizes that it was the duty of science, philosophy in particular, to “combine in a uniform view of the world scientific

⁶⁶ Kurt Lewin, Psychoanalyse und Topologische Psychologie, in: Kurt Lewin, Schriften zur Angewandten Psychologie, Aufsätze, Vorträge, Rezensionen, 121-130. In Helmut Lück (Ed.). Wien 2009 (Original work published 1936), here 123-4.

⁶⁷ Lewin, Wien (see note 66), 125.

⁶⁸ Korsch, Amsterdam (see note 41), 633.

⁶⁹ The letter to Kurt and Gertrud Lewin was written in Seattle and dated May 3, 1937.

⁷⁰ Korsch, Amsterdam (see note 41), 633.



discoveries and the world of daily life.”^{71, 72} For, “when philosophers mentioned discoveries like the relativistic theory of time, non-Euclidean shapes of space, quantum mechanical bounding of the causality principle, referring to them as working hypotheses or fiction, they drew [a] line,” attributing to “science a special status.”⁷³ Empiricism and development of a theory was separated by the philosophical task of establishing links which were not purely speculative in nature. Against this backdrop, Carnap explained the need for a uniform science.

“This is [...] the source of [an] unfortunate schism, and anybody not trained in scientific thought will not be able to overcome it, despite all his brave need to learn, unless philosophy has first shown the way towards unity.”⁷⁴

In ‚Wege der wissenschaftlichen Weltauffassung‘,⁷⁵ Otto Neurath defined as one of its “fundamental insights” that “there are only practical boundaries, not those of principle, between the different areas of science.”⁷⁶ In the words of Hahn, Carnap, and Neurath, logical empiricism rejects the “dark distances and unfathomable depths” of the metaphysical definition of life.⁷⁷ Carnap, in his contribution ‚Die alte und die neue Logik‘ (old and new logic) wants to extend “predicate logic” into a “logic of relations,” because the former was able to indicate only one cause.^{78, 79}

⁷¹ Carnap/Reichenbach (see note 21), 50.

⁷² Reichenbach writes about the program of the journal: “This journal is not interested in learned opinions, theoretical systems, concepts, but only Erkenntnis (insight). ‘Erkenntnis’ is a journal of scientific philosophy. It is not restricted to the methods of one philosophical system, it does not see philosophy based on an individual right of reason which, independent of specific scientific branches, could erect findings of a generally binding nature, but intends to conduct philosophy in accordance with the methods of individual sciences, without any prejudice of an overarching insight but, a priori, only on the basis of the issues posed by specific problems. The format of this journal is the given expression of this philosophy in which individual problems must be solved irrespective of the framework posed by a system, and in which insights gained by many authors will be combined to erect an overall science, which is interested in ‘insights’ in the same sense as any other specific science” (Carnap/Reichenbach (see note 21), 50).

⁷³ Ibid.

⁷⁴ Ibid., 50-51.

⁷⁵ The copy left by Brecht contains parts underlined and commented on by Brecht in the article by Neurath.

⁷⁶ Otto Neurath, *Wege der wissenschaftlichen Weltauffassung*, 1930/31 (see note 21), 313-4.

⁷⁷ Hans Hahn/Otto Neurath/Rudolf Carnap, *Wissenschaftliche Weltauffassung: Der Wiener Kreis*, Vienna 1929, 15.

⁷⁸ Rudolf Carnap, *Die alte und die neue Logik*, 1930/31 (see note 21), 18, cited from Sautter (see note 22), 698-9.

Lewin addresses the same problem in psychology. Alexandre Métraux, editor of the first volume of Kurt Lewin’s works remarks: The uniform science concept meant more to Lewin [...] than the, certainly correct, assertion that all sciences in the same way consist of ‘conceptual’ material;” instead, the “radical dichotomy of natural sciences and humanities was to be abolished.”⁸⁰

For this purpose, Lewin concentrates on “*problems of dynamics*” which allow the “ponderable differences in the modes of thought” in the physics of Galileo and Aristotle to emerge.⁸¹ To him, the deficiency in Aristotelian physics lies in it attributing to an object a character by classification, in this way, “explaining its behavior in positive and negative respects”.⁸² Aristotelian “classification often took the form of paired opposites, such as cold and warm, dry and moist, and compared with present-day classification had a rigid, absolute character”.⁸³ His concepts were “anthropomorphic,” “inexact” illustrations.⁸⁴ Aristotelian physics thus “occup[ies] a place between valuative and nonvaluative concepts: the highest forms of motions are circular and rectilinear, and they occur only in heavenly movements, those of the stars; the earthly sublunar world is endowed with motion of inferior types.”⁸⁵

Instead of absolute opposites, Lewin finds in modern physics fluid transitions because “‘concepts of substance’ have been replaced by ‘concepts of function.’”⁸⁶ Aristotelian concepts of substance performed an abstraction of the type when generalization at the same time implied leaving out particular differences. In contradistinction to this, “with [...] ‘functional concepts’ it is possible to go from the particular to the general *without losing the particular in the general* and thereby making impossible

⁷⁹ Carnap’s interest corresponds to Lewin’s demand for functional concepts and to Brecht’s interest in overcoming a one-dimensional causality idea – described in predicate logics as follows: “If each sentence ascribes one predicate to one subject, there can basically only be one subject, namely the absolute subject, and every situation must see to it that the absolute is assigned a specific predicate.” (Carnap 1930/31 (see note 21/78), 18, cited from Sautter (see note 22), 698-9).

⁸⁰ K LW 1 (see note 45), 272, fn. 3.

⁸¹ Lewin 1931 (see note 24), 141; K LW 1 (see note 45), 234.

⁸² Lewin 1931 (see note 24), 144; K LW 1 (see note 45), 236.

⁸³ Ibid.

⁸⁴ Lewin 1931 (see note 24), 142.

⁸⁵ Lewin 1931 (see note 24), 142; Lewin, New York (see note 65), 3; K LW 1 (see note 45), 235-6.

⁸⁶ Lewin 1931 (see note 24), 144.



the return from the general to the particular”.⁸⁷ In the Aristotelian mode of thought, to rise to generality one was compelled to “either limit oneself to a narrow object range or, when *expanding the range*, more and more to *dilute* the concepts.”⁸⁸ In this way, Aristotle can only encompass “as laws” and [...] concepts “what happens *without exception*” and, moreover, what “occurs *frequently*,” the criterion of a law is “frequency” and “regularity,” “with which *identical* events occur in nature”.⁸⁹ “Lawfulness” as equivalent to “the highest degree of generality”, was interpreted “as the extreme case of regularity”.⁹⁰ Thus, “excluded from the class of the conceptually intelligible” were “those things which occur only *once*, individual events as such”.^{91, 92} Consequently, the “single event becomes [...] unlawful in principle because there is no way of investigating its dynamics.”⁹³

While the concepts in Aristotelian physics were in their “original connection,” referring to ‘reality’ “in the special sense of the given historic-geographic circumstances”,⁹⁴ new physics altered this concept of empiricism: “The same law governs the courses of the stars, the falling of stones, and the flight of birds.”⁹⁵ A “functional way of thinking” superseded the conceptual grid of Aristotelian classes, instead operating with “*conditional-genetic* concepts”.⁹⁶

To	Aristotle	Galileo
1. The regular is the frequent the individual	} } the law } random	} } the law }
2. Criteria of a law are	regularity frequency	There is no need for special criteria
3. Historico-geographic cases have in common	an expression of the essence of a cause	‘accident’ (caused only historically)

Figure 2. Table 1⁹⁷

With Aristotle, conceptualization did not meet the problems of a complex dynamic occurrence.

“A leading characteristic of Aristotelian dynamics is the fact that events are explained by means of concepts which we today perceive to be specifically ‘biological’ or psychological: *every object tends, so far as not prevented by other objects, toward perfection, toward the realization of its own nature.* This nature is for Aristotle [...] that which is common to the class of the object. So it comes about that the class for him is at the same time the concept and the goal (telos) of an object.”⁹⁸

As a consequence, Aristotelian concepts described relations merely in such a way that

“quite generally, the *cause* of a physical event is akin to psychological ‘drives’: the object strives toward a certain goal; so far as movement is concerned, it tends toward the place appropriate to its nature. Thus, heavy objects strive downward, the heavier the more strongly, while light objects strive upward.”⁹⁹

In this case, the dynamics of events can be represented only by a single vector while modern physics studies the “*coexistence of several physical facts*,” i.e. “*the relation of an object to its environment*.”¹⁰⁰ The method of discovery must no longer search for lawfulness “characterized by the idea of always eternal”¹⁰¹ and exclude the influences of the “*situation*” in which the object is found but must describe it in precise conceptual terms. “It refers to the overall situation in its full, concrete individuality, i.e. the existence of the situation *at every moment in time*.”¹⁰² For this reason, experiments had to meet a very dif-

⁸⁷ Lewin 1931 (see note 24), 169; Lewin, New York (see note 65), 35.

⁸⁸ K LW 1 (see note 45), 236; not translated in the English article.

⁸⁹ Lewin 1931 (see note 24), 145; K LW 1 (see note 45), 237.

⁹⁰ Lewin 1931 (see note 24), 146; K LW 1 (see note 45), 238.

⁹¹ Lewin 1931 (see note 24), 144; K LW 1 (see note 45), 237.

⁹² Cf. Aristoteles, Poetik, griechisch/deutsch, übersetzt von Manfred Fuhrmann, Leipzig 1994, 28-30.

⁹³ Lewin 1931 (see note 24), 164; K LW 1 (see note 45), 261.

⁹⁴ Lewin 1931 (see note 24), 147; K LW 1 (see note 45), 239.

⁹⁵ Lewin 1931 (see note 24), 148; Lewin, New York (see note 65), 10; K LW 1 (see note 45), 243.

⁹⁶ Lewin 1931 (see note 24), 149; Lewin, New York (see note 65), 11; K LW 1 (see note 45), 241.

⁹⁷ Lewin 1931 (see note 24); K LW 1 (see note 45), 278.

⁹⁸ Lewin 1931 (see note 24), 163; K LW 1 (see note 45), 258.

⁹⁹ Lewin 1931 (see note 24), 163; K LW 1 (see note 45), 258.

¹⁰⁰ Lewin 1931 (see note 24), 164; K LW 1 (see note 45), 259.

¹⁰¹ Lewin 1931 (see note 24), 147; K LW 1 (see note 45), 240.

¹⁰² Lewin 1931 (see note 24), 168; K LW 1 (see note 45), 264.



ferent objective. In the interest of theory development, they no longer should try to reproduce only identical processes. Mere reproduction, Lewin states, can neither confirm nor contradict a theory. Instead, experiments had to produce a “pure’ [...] type of process” in order to be able to “reconstruct” laws conceptually.¹⁰³ In this context, it was “important to construct such situations as will actually yield this ‘pure’ event” or in which it can be reconstructed conceptually from actual events.¹⁰⁴ The empirical frequency or regularity of an event as well as the “average’ situation” are irrelevant to this issue.¹⁰⁵ Laws can only be described by conditional-genetic concepts. Historico-geographic concepts should be added in order to elucidate an event above and beyond its conditions not constituting a law. This is the “transition from an abstract classificatory procedure to an essentially concrete constructive method”.¹⁰⁶

Consequently, psychological research becomes able to study human actions only in relation to the context of a situation. In other words, the “*dynamics of the process is always to be derived from the relation of the concrete individual to the concrete situation*, and, as far as internal forces are concerned, from the mutual relations of the various functional systems that make up the individual.”¹⁰⁷ All forces (vectors) and “process differentials”¹⁰⁸ acting in these concepts were important to the generation of a theory. After all, it was not only the forces within a situation which changed but, “*the whole situation changed with the process*, thus changing also the vectors that at each moment determine the dynamics, in both their strength and direction”.¹⁰⁹ In this reference (not only to physics but also) to gestalt psychology, Lewin refrains from wanting to explain persons by means of a “law of average behavior” or referring to them as determined by their environment.¹¹⁰ The psychological concept of law must be anchored in the concept of a type of event. For this purpose, Lewin proposes to repeat experiments and, in order to determine the type of event, *vary them systematically* and focus on the “process

differentials”.¹¹¹ As he writes in ‘Gesetz und Experiment in der Psychologie’, it was not *identical* events which were important, but *different* cases because

“the determination of an empirical type, especially if it involves a conditional-genetic type of an object or event, cannot be achieved by intuition of its essence (*Wesensschau*) (nor can it be done by direct perception). Rather, such a determination can only come about by investigating the *dynamic* constitutive factors, an investigation that can be accomplished only by changing real events.”^{112, 113}

In this way, the concept of law incorporates the *conditional-genetic* conditions, i.e. causality as a matter of necessary consequences, while the “historico-geographic sphere” only elucidate why, e.g., a particular kind of event is frequent or rare in specific situations, i.e. the probability of phenomena.¹¹⁴ Lewin, in this conclusion, separates levels in a similar way in which contemporary physics does.

As there are limits to the controllability of physical systems in experimental situations, science must find a way beyond direct perception. Empirical work must be conducted indirectly and theoretically, respectively, by contrasting planned interventions into a complex system with an outcome. Yet, “events that are phenotypically *very similar* can be very *different* in terms of their conditional-genetic type. Vice versa, identical or highly similar events with respect to their conditional-genetic type can belong to different phenotypes.”¹¹⁵ The relation between the theoretical level and the evidence level is less natural requiring, as it does, an independent philosophical frame of thought. In an essay published posthumously about Ernst Cassirer’s contribution to science philosophy, Lewin again focuses on this problem: “In physics, a corresponding change occurs on the basis of an increasingly closer interdependence of fact findings and theory.”¹¹⁶ Recurring again to Cassirer’s treatise about *Substanzbegriff und Funktionsbegriff* published in 1910, he draws attention to the need for a reflected connection of theoretical work and indirect method:

“No physicist in actual fact experiments and measures with the individual instrument he has in front of his eyes but, in his mind, bases it on an ideal tool in which all random defects necessarily attached to a special tool are excluded. If, for instance, we measure

¹⁰³ Lewin 1931 (see note 24), 169; K LW 1 (see note 45), 264.

¹⁰⁴ Ibid.

¹⁰⁵ Lewin 1931 (see note 24), 172; 175; K LW 1 (see note 45), 268.

¹⁰⁶ Lewin 1931 (see note 24), 175; K LW 1 (see note 45), 271.

¹⁰⁷ Lewin 1931 (see note 24), 174; K LW 1 (see note 45), 270.

¹⁰⁸ Lewin 1931 (see note 24), 167; K LW 1 (see note 45), 262.

¹⁰⁹ Lewin 1931 (see note 24), 167; K LW 1 (see note 45), 263.

¹¹⁰ not translated in the English article, K LW 1 (see note 45), 268.

¹¹¹ Lewin 1931 (see note 24), 167; K LW 1 (see note 45), 264-5.

¹¹² Kurt Lewin, *Gesetz und Experiment in der Psychologie*, 1992, 395.

¹¹³ K LW 1 (see note 45), 291.

¹¹⁴ Lewin 1992 (see note 112), 392; K LW 1 (see note 45), 288.

¹¹⁵ Lewin 1992 (see note 112), 400; K LW 1 (see note 45), 297.

¹¹⁶ Transl. by RF; K LW 1 (see note 45), 353.



the intensity of an electric current by means of the tangent galvanometer method, the observations we initially make with one specific apparatus must be related and transferred to a general geometric model before they can be used physically.”¹¹⁷

Consequently, it would be necessary “to develop better concepts and theories at higher levels”.¹¹⁸ Finally, Lewin once again summarizes the parallels between his psychological approach and 20th-century physics, in this way clearly revealing not only the influence of Cassirer but also that of gestalt theory:

“Logically speaking, there is no reason to distinguish between the reality of a molecule, an atom or an ion or, more generally, between the reality of a whole or that of its parts. [...] Both in the social and the physics areas, the structural properties of a dynamic whole differ from the structural properties of the parts. Both sets of properties must be investigated. When one is important and when the other, depends on the question to be answered. However, there is no difference in terms of reality between the two.”¹¹⁹

To Lewin, this methodological insight establishes the unity of sciences. He interprets the validity of theoretico-conceptual insights in a similar way in which Brecht defines it praxeologically, i.e. as a practical relation to the world, which ultimately constitutes the basis of the respective problems of insight: “The reality of what the concept refers to is given by the fact that you use it to do something with it, and not by the fact that you just look at it.”¹²⁰

Hints to the Use of Lewin’s Contributions by Brecht

Although it is uncertain whether Brecht read ‚Die Erkenntnis‘ from the very first issue, it can be assumed that he learned about Lewin’s arguments and studies in discussions with Korsch. There are some references in Brecht’s theoretical writings, such as “The Causality of Non-Aristotelian Drama,” which seem to relate to Lewin’s contribution.

“The celestial orbits, as we are told, do not constitute the most perfect circles or ellipses. The true mode of motion of celestial bodies is approached most closely by imagining them as creeping within huge tubes, these tubes being mathematical figures, while the stars enjoy a lot of freedom within them, and they use it.”¹²¹

Brecht in this case not only alludes to statistical causality but possibly also to the unscientific conclusion of Aristotelian physics, criticized by Lewin, that celestial bodies – unlike terrestrial ones – had to

move in “perfect circles or ellipses”. In the same writing, Brecht potentially takes up another argument by Lewin relating to universal causality in relation to single events as a matter of recognizing higher scientific standards (‘intensified claims’). Like Lewin, he rejects ‘average behavior’ and a superficial assessment of the mass influencing the individual, thus clarifying the aim to make the audience able to perceive both, the influence of the environment and the striving of a particular individual:

“We would be missing something [of the individual, I.L.], something individual, if it followed the laws of motion of the mass too smoothly which, to him, would be the special case. Does this mean that we no longer want to deal with the individual, become resigned, no more define or want to ascertain any causality with it? Not at all. We merely intensified our claims. [...] In specific situations, we must expect more than one response, reaction, mode of action, a ‘Yes’ and a ‘No’; both must appear to be based on motives. The attention, the causal interest, of the spectator must be attuned to the laws inherent in the movements of masses of individuals. The spectator must see such masses behind the individuals, individuals being considered as mass particles in a mass-like reaction, action, development.”¹²²

Another reference makes Brecht’s criticism of the average concept even clearer; at the same time, however, it is supported by a criticism of generalizations which use “larger units, such as classes” for causality relations, thus merely duplicating by affirmation the lack of power of the individual. This is reminiscent of Lewin’s rejection of classifications which, for instance, seek to explain individual behavior as “being determined by the environment,” while they are merely abstracting from a special situation. This is where Brecht’s criticism of affirmative psychology comes in:

“The disparity between the quantity of influences and the small size of the human beings adapting to them, which is expressed in the uncertainty and lack of importance of the consequences of human actions, is excessive. [...] The ‘average’ in reality is only a theoretical line and, consequently, no single individual is really an average person. The utter lifelessness of the type, its cheapness, wrongness, lack of life is notorious.”¹²³

Certainly, none of this is a reliable reference allowing one to assume that Brecht had been familiar with Lewin’s contribution to ‚Die Erkenntnis‘. There is however another hint with greater impact where he proposes that “we should refer to the individual case occurring in a drama as such” (as a singular event) and “again and again indicate its deviations from the ‘lawful’.”¹²⁴ Having read Lewin, we recognize here a

¹¹⁷ Transl. by RF; *ibid.*

¹¹⁸ K LW 1 (see note 45), 354.

¹¹⁹ K LW 1 (see note 45), 356.

¹²⁰ K LW 1 (see note 45), 358.

¹²¹ BFA 22 (see note 2), 395.

¹²² BFA 22 (see note 2), 396.

¹²³ BFA 22 (see note 2), 692.

¹²⁴ BFA 22 (see note 2), 388.



key principle of his psychology to derive insights not from confirmation by frequencies but from the ‘*process differentials*’ of systematically varied situations.

Field Theory with Lewin

A “basic characteristics of field theory in psychology” was incorporated in “the demand [... to describe] the field which influences an individual [...] not in ‘objective physicalistic’ terms, but in the way in which it exists for that person at that time”.¹²⁵ We see here that even in later years Lewin does not disregard phenomenological concepts of experience but tries to integrate them in his field theory. That theory is in the service of his demand for insight into laws, which is why he feels that he can obtain a “system of deduction” from the empirical examination of field conditions relative to the psychological situation (which, e.g., would include the needs and plans of an individual).¹²⁶ However, it would not be concrete patterns of behavior of people that could be deduced in this way, but merely “a coherent system of ‘possible’ events that are in their totality an expression of the particular characteristics of this situation”.¹²⁷ However, this is a bold assumption, as Lewin himself acknowledges how quickly, in a moment, the importance of an activity can change subjectively,¹²⁸ which at the same time provokes a tremendous change in a situation in the psychological sense. Lewin oscillates between such phenomenological accentuations of subjective meanings as decisive reconstructions of a situation, and systems theory ideas deriving their explanatory power partly from everyday insights, e.g. that a river represents a geographical boundary to a non-swimmer, necessarily interrupting his locomotion. In the indirect sense, boundaries are to act also as psychological resistances. Thus, he talks about weakening boundaries between “regions” in the *living space* of a person, which is why he makes dependence and independence of such regions an object of research. In the sense of macro-micro-dynamics, Lewin thus re-

¹²⁵ Kurt Lewin, *Field Theory and Learning*, in: Kurt Lewin, *Resolving social conflicts & field theory in social sciences*. Washington, DC 1997, 212-230, here 213; German: Kurt Lewin, *Feldtheorie und Lernen* (1942), in: Kurt Lewin, *Feldtheorie in den Sozialwissenschaften*. Ausgewählte theoretische Schriften, 102-125, in H. Lück (Ed.). Bern 2012, here 103-4.

¹²⁶ Kurt Lewin, *Principles of Topological Psychology*, New-York-London 2013 (original work published 1936), 16.

¹²⁷ Ibid.

¹²⁸ Lewin, Washington, DC (see note 125), 226.

duces the relation between historico-societal changes and historico-geographic conditions, respectively, to individual behavior and differences in the behavior observed:

„There is no doubt that a weakening or loss of the boundaries between the different regions of the environment can lead to a marked fluidity of the whole field. This can be observed in the social field in revolutionary times when the barriers between groups or barriers established by prohibitions break down; or when a child has been brought up in strict obedience [and] is suddenly placed in a field in which barriers of prohibition are not clearly evident. The individual differences in such cases show that in addition to the solidity of special boundaries one always has to deal with the general stability of the particular life space.”¹²⁹

This translation of historico-societal conditions and subjective changes of modes of perception and action into a language partly of systems theory, as handled by Lewin, remains precarious. Field theory is bound to level out differences between societal and subjective borders so that specific historical mediation processes between society and the individual move out of focus. On the whole, they are neglected in favor of research looking for purely causal relations.

The Field Concept with Brecht

Brecht updates and interprets the field concept in many ways:

- 1. The field is used for the place where societal conditions are updated, but which the thinking person (also the viewer) does not regard in a neutral way. He does not remain outside the field, but must always include himself as part of the conditions. Brecht, with his field concept, creates a changed awareness of the subject-object problem.¹³⁰
- 2. It follows from (1) that the field must be considered a constellation of relations of forces and dynamics. The persons thinking should see themselves and the alterability of the field as parts of this constellation. This makes the field the object of “intervening thinking.”
- 3. Phenomenologically, the field is interpreted for the scenic representation of social situations as a “dual aspect” of locations, referring to their

¹²⁹ Lewin, New York-London (see note 126), 161.

¹³⁰ At this point, David Robert must be contradicted who said that Brecht, by equating scientific nature and societal experiment, ran the risk of uncritically assuming the separation between subject and object (Robert 1987, p. 58). In: Robert, D. (1987) *Brecht and the idea of a scientific theatre*, *Brecht Performance*, 13, pp. 41-60.



use for social purposes. This opens up the historical problem of capitalist practice of exploitation and antagonistic conditions.

The aspects referred to here should be explained in greater detail. They all revolve around Brecht's approach that a finding *about* social matters should not simply be represented on stage but, via the relations among actors and the relations among actors and the audience, respectively, *thinking should be made practical*. This relation is no longer epistemological,¹³¹ but mainly of a pedagogic and political kind. Consequently, it is not only the content of thinking (a different truth instead of those 'false images,' see above) but the relation of thinking and acting in general which must be reformed. The idealistic subject-object relation which assumes a certain sovereignty and power of the former over the latter, is transformed into a field-person relation in which 'subjective activity' (cf. Marx' 1st thesis on Feuerbach)¹³² matters:

"It is not behavior emanating from perception but the other way around. Consequently, perception is to emanate from behavior."¹³³

Making oneself able to act under the conditions in which one participates has become essential for changes in thought and, in general, growing of one's personality. This is the background of Brecht's reflection "about the person."

"I am not a person. I originate any moment, do not remain any other. I originate in the shape of an answer. I incorporate permanently what responds to what remains permanently. [...] I could be the self-control of matter."¹³⁴

Consequently, Brecht's philosophy of practice summarizes "under thinking not the activity which excludes all other activities, something which philosophers usually refer to as pure thinking,"¹³⁵ but subjective activity in the world. In this world, Brecht reads how even "pure thought" in idealistic philosophy actually appears in history as something practical, for instance, when Kant refers to the "thing-in-itself:"

"The question about the thing-in-itself is being raised at a time when, because of economic and social developments, the

utilization of all things is being addressed. However, the question was not only directed at finding new uses for things, but also referred to the opposition to a way of looking at things only in the light of their usefulness [...]. The viewer thus was shown things which, in actual fact, were conditions, and the relations between people or things assumed the character of things. [...] Things-in-themselves cannot be seen because they cannot exist in themselves."¹³⁶

The field concept therefore is required for questioning the socio-structural relations in human practice, which generate the "things," in their assumed pure object status. The criticism in practical philosophy of the object form does not deny things the "status of things," but historicizes the process of producing things as the effect of field forces by reconstructing the occurrence of things in a field.

For this reason, Brecht concludes that the theoretical activity of "intervening thinking" always had to follow practice: "In practice you need to proceed step by step – theory must encompass the whole journey."¹³⁷ Or in other words, as Brecht could cite Lewin in saying the concepts used for thinking should not be "diluted" in capturing more extensive situations, i.e. they must not remove more and more from the concrete area of practice and instead must be based on properties, on the forces acting in the field.

For this purpose, Brecht also uses the program of a criticism of language falling back on Carnap and Wittgenstein, where the field concept is applied in linguistic philosophy:¹³⁸

About intervening sentences (around 1931):

"(1) The (summarizing) sentences occurring or to be construed must be concentrated where they act as behavior, not in a unilateral way as reflections, expressions, reflexes.

(2) Sentences must be moved from the minds to the black-boards.

(3) On the blackboards, they must be supplemented by other sentences which they need and with which they are combined. The tangents of political sentences must be drawn. This is referred to as 'finding B to A.' What needs to be found are the structures of conglomerates of sentences, entities. This is called 'construing an axiomatic field.'

(4) What must be learned is: When does a sentence intervene?"¹³⁹

Language criticism thus becomes a place of learning which Brecht, again and again, combines with instructions for action, like these:

¹³¹ See also. "How should the fact be understood that everything, truly everything had become a commodity? Concepts themselves had become commodities. The role of language was unbounded, but it became more and more fit for abuse" (BFA 21 (see note 2), 437).

¹³² <https://www.marxists.org/archive/marx/works/1845/theses/theses.htm>.

¹³³ BFA 21 (see note 2), 402.

¹³⁴ Transl. by RF; BFA 21 (see note 2), 404.

¹³⁵ BFA 21 (see note 2), 409-10.

¹³⁶ BFA 21 (see note 2), 412.

¹³⁷ Brecht, London (see note 1), 48; BFA 21 (see note 2), 302.

¹³⁸ Cf. Haug, Hamburg (see note 57).

¹³⁹ BFA 21 (see note 2), 525.



„Find the situations in which the given sentences could appear. From what side could they be spoken and for what purpose?“¹⁴⁰

„What intervenes *where*? Resolution of categories. Destroying the ‘restricted connection.’ Where does this and that lead? [...] Provision of references. Learning to quote. Learning intervening definitions. Balancing interests.

[...]

Operating with inconsistent facts and sentences. (The inconsistency is not to be removed but to be subjected to synthetic concepts of a higher order. Find such concepts.)“¹⁴¹

For, “epistemology above all must be language criticism.”¹⁴² Brecht’s statement about catharsis by theory must be understood in this sense: “it [the whole theory] is merely a matter of practice, its purpose to clean up practice”.¹⁴³

However, in practice, thinkers are never completely outside the field they try to comprehend. “It was relatively easy,” writes Brecht about idealistic philosophy, “to assert the independence of thinking of the way in which people secured their existence together and in opposition to each other, as long as this way was relatively stable, i.e. did not seem to change, resembling something like fate.”¹⁴⁴ Recognizing the dependence on the field and the new field dynamics of society, Brecht was interested above all in the new societal “materials” or “subject matters” (the energy resources: “petroleum” and – expressed in Foucault’s sense – the governmental problems: marriage, disease, money, war, etc.) to which people respond by “new relationships” and new ways of thinking. The “subject matters” are not “things” but societal relations between persons and between collectives. They must appear on stage as “force fields”:

“Petroleum balks at the five-act form, today’s catastrophes do not proceed in a straight line but in cyclical crises, the ‘heroes’ are different according to the different phases, are interchangeable, etc., the graph of human actions is complicated by human *error*, fate is no longer a coherent power, instead we find force fields with opposing currents, and the power blocks themselves show movement not only against one another but within themselves, etc., etc.”¹⁴⁵

The concept of field Brecht learns from Lewin’s treatise ‘Kriegslandschaft’, unlike the same concept in physics, turns out to be amenable to the contradictions of practice. Repeatedly it makes Brecht reflect upon the societal use of a place:

“A hill is seen differently by a soldier than by a farmer. Whether it is sunny or shady is a characteristic disappearing to the soldier whose cover depends on whether he can be seen, and its inclination may be important to both observers, but important in very different ways, for it may not represent a major obstacle to climbing while jeopardizing the crops by the mere ability of water to flow down. A field may be small as long as it is not located within a barrage, a fruit tree may dominate an entire stretch of land by acting as a target etc.”¹⁴⁶

Against this backdrop, Brecht also considers his stage design:

“Stage structures must emphasize the characteristic features and decide which of the two aspects, both of which correspond to observation, is to be taken into account. It may opt for one aspect for a battle scene and the other one for a bucolic scene. But what if a battle scene has not only soldiers but also peasants in this environment, or one such peasant is among the soldiers?”¹⁴⁷

Brecht provides an answer which again recalls the ambivalent quantum object:

“Maybe we need that very twofold aspect.”¹⁴⁸

In another note, he comes back to this insight, emphasizing the difference between societal practices relating to the capitalist way of production:

“The field is a potato field and a battle ground, but not simultaneously. A factory is a place of production and, simultaneously, of exploitation.”¹⁴⁹

The scenic representation, the way in which the intermingled antagonistic types of practice evade simple explanations is emphasized positively in retrospect by the example of the “Mother Courage” in his journal (Jan., 5, 1941):

“going over ‘mother courage’ i am quite pleased to see how war emerges as a vast field akin to the fields of modern physics, in which bodies experience peculiar deviations from their courses. any calculation about the individual based on peacetime experience proves to be unreliable, [...however,] we are left with those same forces that turn peace into war, the ones that can’t be named.”¹⁵⁰

The possibility to observe causes becomes problematic not only as a result of the mix of destruction and production, external and internal determination. It continues to be a problem also of historical processes because the access of society to what used to be determining may be lost.

¹⁴⁰ BFA 21 (see note 2), 523.

¹⁴¹ BFA 21 (see note 2), 537.

¹⁴² BFA 21 (see note 2), 413.

¹⁴³ Brecht, New York (see note 7), 127; BFA 26 (see note 2), 458.

¹⁴⁴ BFA 21 (see note 2), 418.

¹⁴⁵ Brecht, New York (see note 7), 48; BFA 21 (see note 2), 303.

¹⁴⁶ BFA 22 (see note 2), 254.

¹⁴⁷ Ibid.

¹⁴⁸ Ibid.

¹⁴⁹ Ibid.

¹⁵⁰ Brecht, New York (see note 7), 123; BFA 26 (see note 2), 452.



“in the future it will perhaps be difficult to understand the impotence of the peoples in these wars of ours. Their causes are transient.”¹⁵¹

Recognition proper is part of a field and, like the field, is a phenomenon which may disappear in history. What is interesting therefore is the use by Brecht of the field concept in the text following the quotation above. It must be read in this case as an opposite to an ahistoric ‘systemic’ thinking:

“there is the phenomenon that, for lack of a better expression, I call the *field phenomenon*, these problems are always perceived and treated by whole peoples as field problems. ie, they are regarded as being soluble (and amenable to analysis) only in the capitalist field. this brings about an astonishing neutralization of the inner contradictions of the peoples, which do not disappear for a moment, yet ‘have no part to play in this field’. you can also put it this way: at the helm is this or that class, this or that regime, this or that solution is being pressed, this or that particular direction has been taken etc, and until the real and imaginary possibilities of the field have been framed, tried, exhausted and discredited, no other field arises. the field itself may not satisfy reasons (imagination may locate other fields, experience suggest yet others), in the currently functioning field of practice there is still enough reason operating for the purposes of the entire people and for the purposes of justifying what is happening.”¹⁵²

Only when the field concept proper is not equated with the whole (for instance, a system) in which individual forces meet, but merely means a historical place of use where societal conditions are updated, fought for and changed, and if this includes the thought that the subjects seeking knowledge will extend their practices beyond the given framework and use them to open up different fields that bring about alternative forms of collectivization, only then this is useful to Brecht. His questions cannot merely be solved by science, but turn into practical and political issues, questions of hegemony.¹⁵³ A psychology working in the service of this effort still needs to be found.

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¹⁵¹ Brecht, New York (see note 7), 59; BFA 26 (see note 2), 378.

¹⁵² Ibid., 59; BFA 26 (see note 2), 378.

¹⁵³ Cf. the differences in epistemological issues between Lewin and his colleague from Moscow, Lev S. Vygotskij (Langemeyer 2011). In: Ines Langemeyer, Science and Social Practice: Action Research and Activity Theory as Socio-Critical Approaches, in: *Mind, Culture, and Activity*, 18, 2, 2011, 148-160.



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