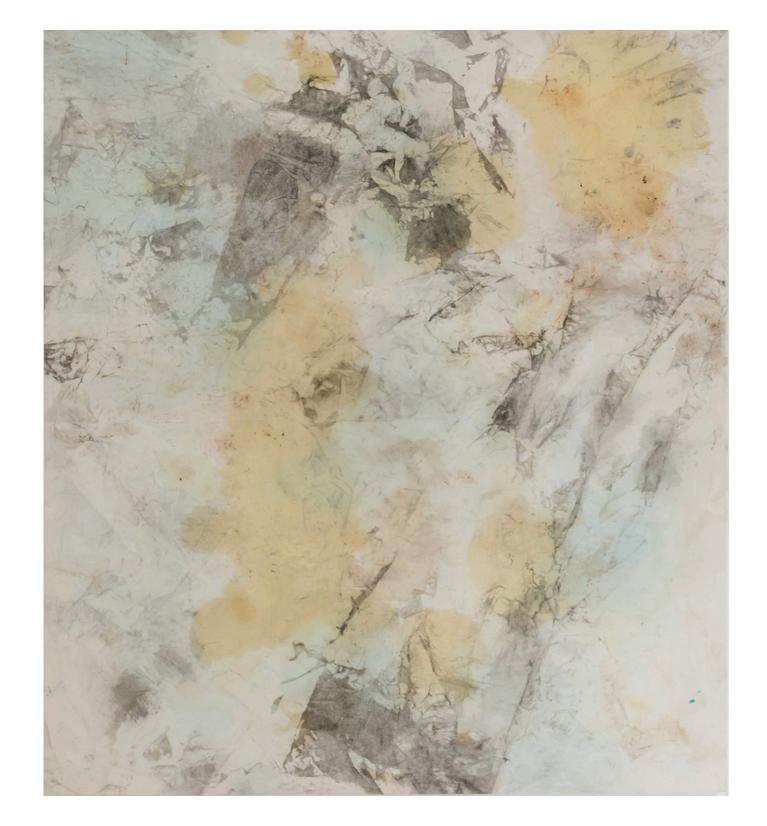
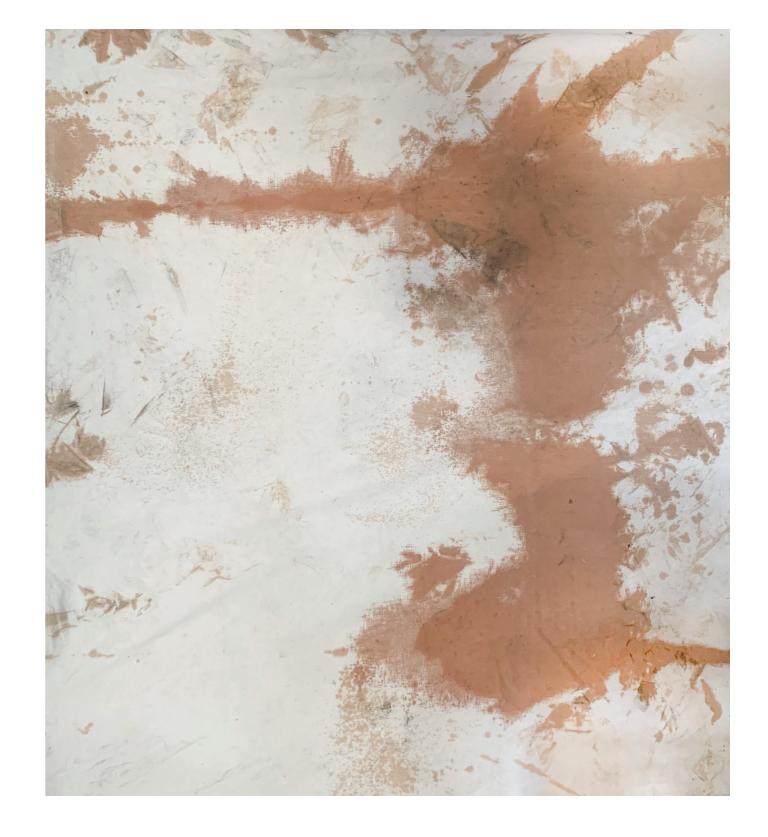
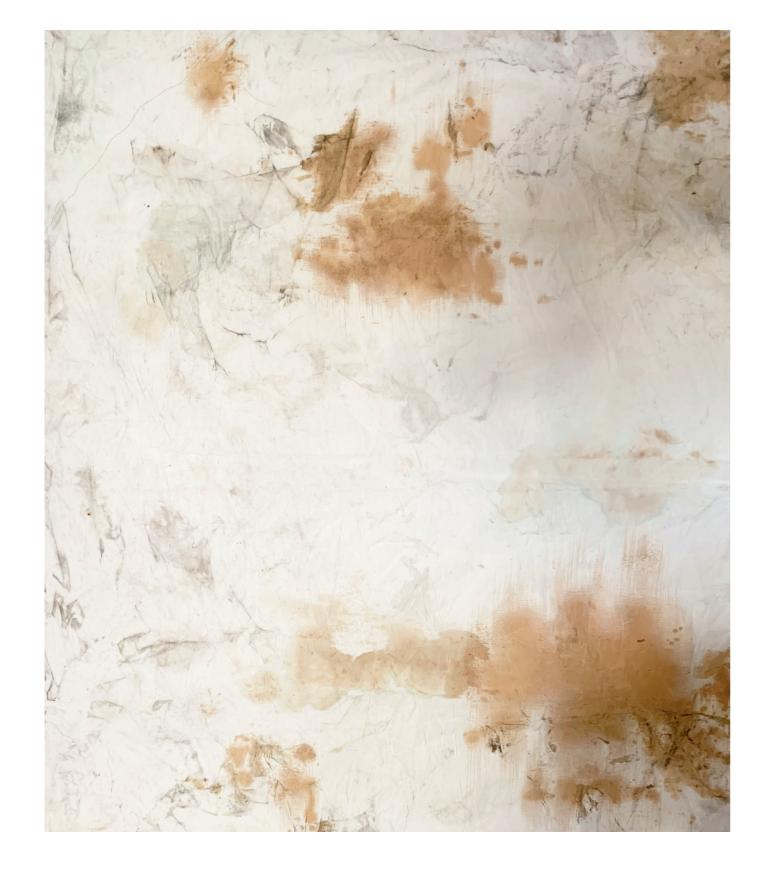
Nadia Lichtig Blank Spots

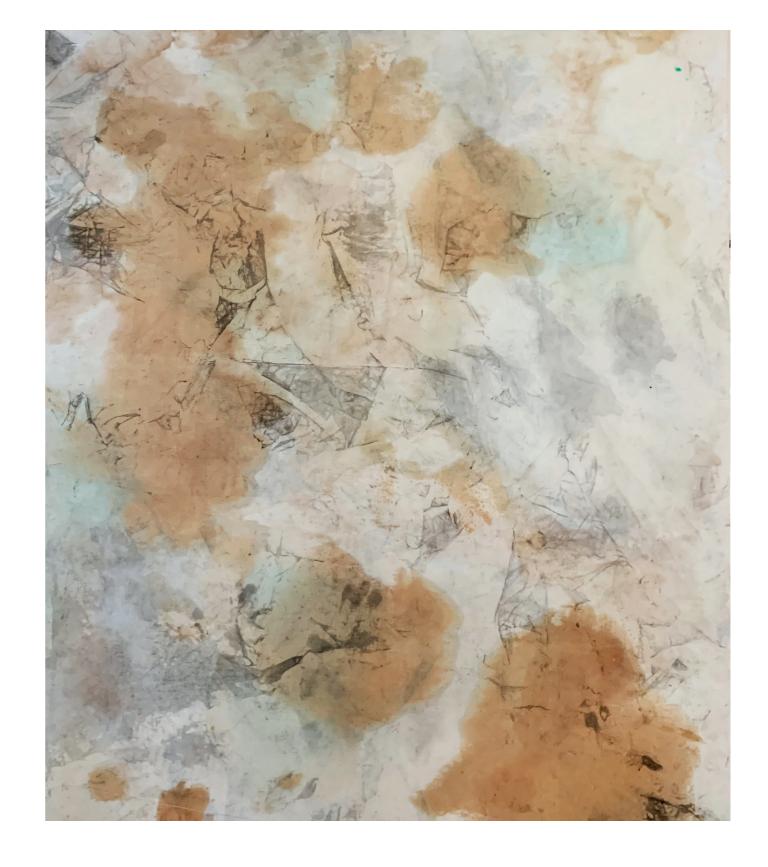
Blank Spots (Reichsbahnbunker) is a series associated with events from German history and national trauma. They are frottages of street adresses in Berlin city around the Reichsbahnbunker, which was built in 1942 by war prisonners. The frottages have been made in two different manners: cleaning the surfaces of these grounds with cleaning liquids on canvas; by imprinting the structures of these grounds on site with graphite on canvas. I consider the frottages as cartographies that, as precisely as these events are historically rooted, concentrate the dust on the surface of this trauma, burried in the ground.

Blank Spots Score is a musical partition with indications drawn from the frottages. The texts are collected notes, reflexions on dust, breath, stars, science, memory and oblivion. The score is interpreted as a choral performance for one or more voices.



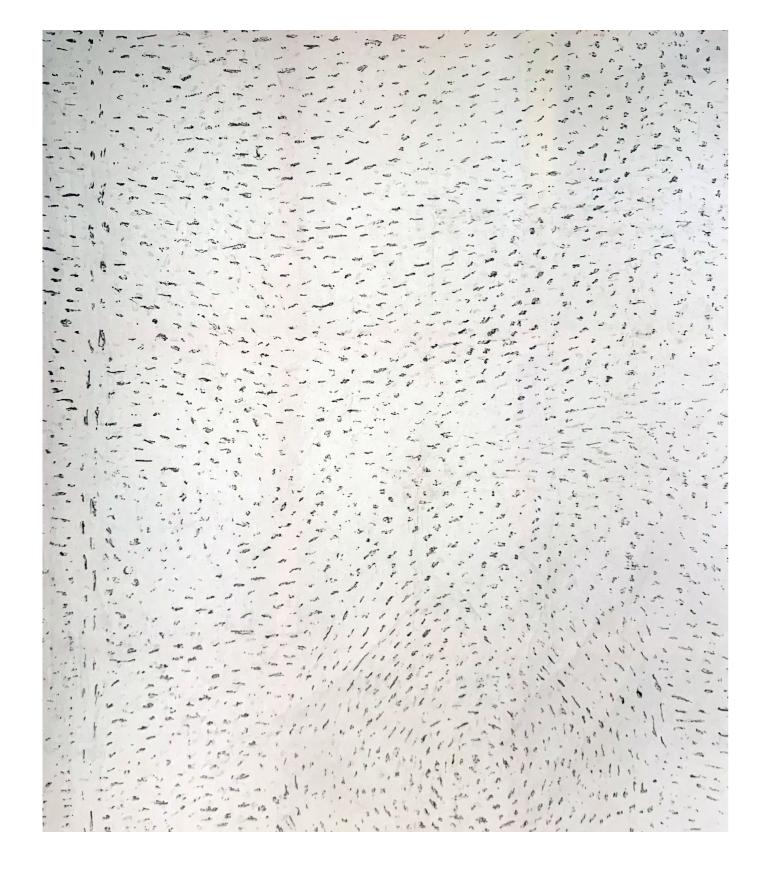






Blank Spots (Reinhardtstraße 23, Berlin), graphite on canvas, 160 × 170 cm, 2021

Blank Spots (Schumannstrasse 8, Berlin) #2, graphite on canvas, 160 × 170 cm, 2021



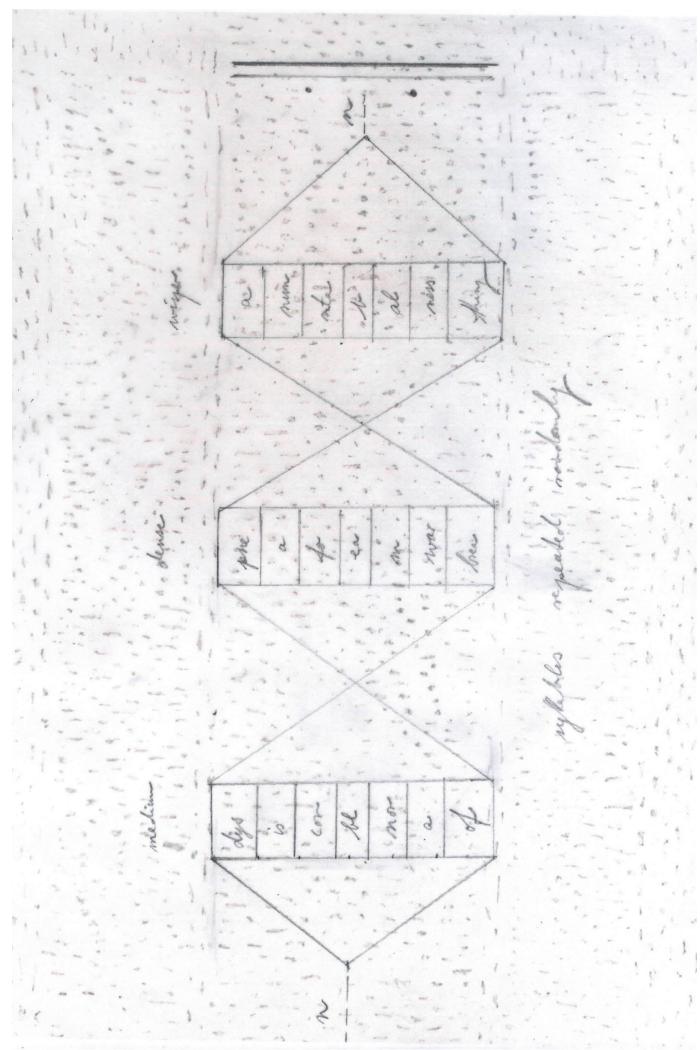


Blank Spots (am Circus, Berlin #1, Dyspnea is an uncomfortable abnormal awareness of breathing) graphite on canvas, 160×170 cm, 2021



Blank Spots
Six theatre lights, two directional speakers and a programm lighten each of the six canvases in different in intensities, following the sound: at times, different forms of breathing appear, spaced with silences.

Morris and Helen Belkin Gallery, Vancouver, 2021



Nadia Lichtig, Blank Spots Score, Dyspnea is an uncomfortable abnormal awareness of breathing, drawing on paper, recto, 2021

Dyspnea is an uncomfortable abnormal awareness of breathing. A number of different sensations experienced by patients are probably included in this category. Dyspnea is the most common cause of respiratory limitation of activity in patients with pulmonary disease.

Dyspnea is a subjective symptom reported by patients. It is always a sensation expressed by the patient and should not be confused with rapid breathing (tachypnea), excessive breathing (hyperpnea), or hyperventilation. Dyspnea is most frequently described as shortness of breath, inability to take a deep breath, or chest tightness.

The quantification of dyspnea is also important in judging the severity and prognosis of the underlying disease. Dyspnea may be the limiting symptom and may be responsible for economic and social disabilities. Because dyspnea, like pain, is a subjective symptom, it is frequently influenced by the state of mind of the patient. In spite of this, in most patients a very good association exists between the severity of the underlying disease and the complaint expressed by the patient.

Although no physical findings directly relate to the complaint of dyspnea, several things may be seen in dyspneic patients. Dyspneic patients frequently breathe rapidly and shallowly. The accessory muscles of respiration may be used, and supraclavicular and intercostal retractions may be seen. Cardiac, pulmonary, and neuromuscular examinations should receive particular attention in patients with dyspnea.

A chest radiograph is frequently helpful in evaluating patients with dyspnea. Characteristic roentgenographic findings occur in patients with congestive heart failure, pneumonia, and pulmonary fibrosis. The chest radiograph may also be abnormal in patients with obstructive pulmonary disease, but the chest film is neither sensitive nor specific for the detection of airflow obstruction; major abnormalities on the chest film are seen only in patients with far advanced obstructive pulmonary disease.

The laboratory is of no use in the detection of dyspnea, but may be of great value in the differential diagnosis and in quantifying the severity of the underlying disorder. Pulmonary function tests are useful in the detection of obstructive and restrictive diseases of the lung and chest wall. The vital capacity and forced expiratory volume in 1 second (FEV1) obtained from simple spirometry usually correlate well with the sensation of dyspnea in most patients with lung disease. More sophisticated and expensive tests are frequently unnecessary. Arterial blood gas studies are generally performed in dyspneic patients, but are of limited usefulness in evaluating dyspnea. There is not

a good correlation between the severity of hypoxemia and the severity of dyspnea. Arterial blood gases are therefore, most useful for quantifying the severity of gas exchange abnormalities in patients with established pulmonary dysfunction.

Depending on the findings obtained during the history and physical examination, laboratory testing of cardiac function and neuromuscular function may be useful in making a diagnosis. Occasionally patients require more sophisticated testing, including exercise testing with gas exchange measurements, measurements of pulmonary compliance, and measurements of respiratory muscle strength and respiratory neurologic drive. None of these measurements actually aids in the detection of dyspnea, but may be of some value in explaining or quantifying dyspnea in a patient.

Clinical Methods: The History, Physical, and Laboratory Examinations. 3rd edition, Walker HK, Hall WD, Hurst JW, editors. Boston: Butterworths; 1990.

Dyspnea is an uncomfortable abnormal awareness of breathing.

dys / pne / a / is / a / nun / con / fo / rta / bl / ea / b / nor / m / al / a / war / ness / of / brea / thing

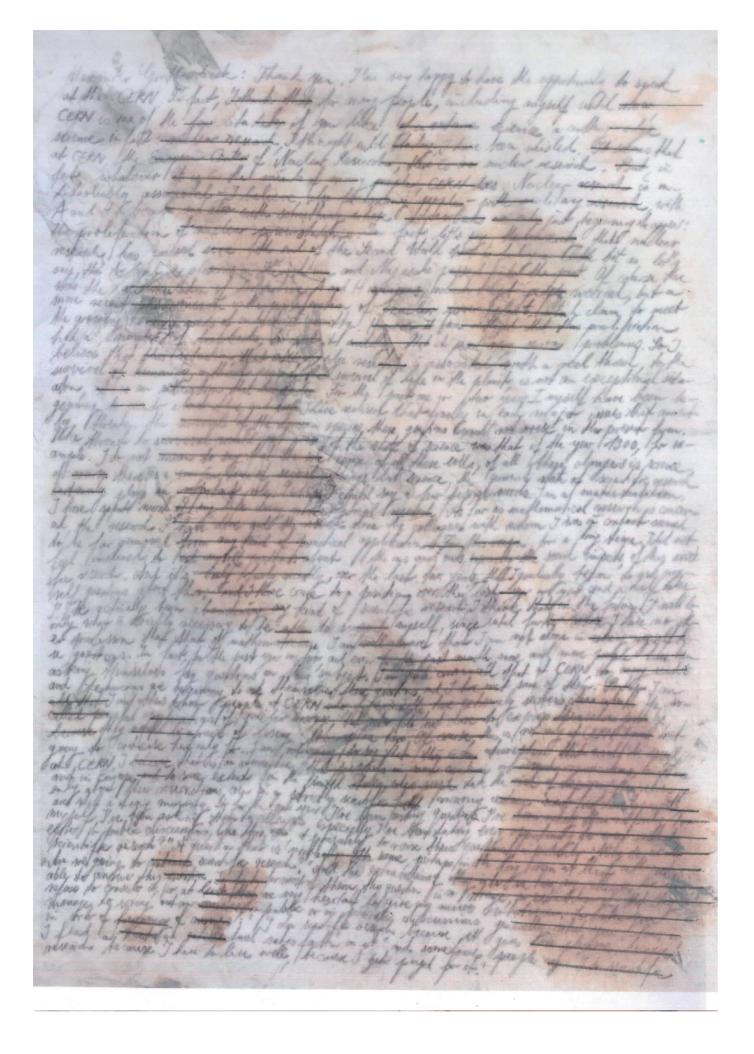
repeat syllables randomly, walking all over the place

alternating:

- medium density
- very dense pronounciation
- whispering

to be repeated n times

Nadia Lichtig, Blank Spots Score, *Dyspnea is an uncomfortable abnormal awareness of breathing*, digital print on paper, verso, 2021



Alexander Grothendieck: Thank you. I am very happy to have the opportunity to speak at CERN. In fact, **H** think that for many people, including myself until **now**, CERN is one of the **few** cita**dels**, if you like, **of a** certain science, a cutting-edge science in fact: nuclear research, I thought until today. I have been misled. It seems that at CERN, the European Centre for Nuclear Research, there is no nuclear research. But in fact, whatever it is in the minds of many people, CERN does. Nuclear **research** is indissolubly **associated** – Helieve, also for many people - with military research, with A and H bombs, and also with something whose drawbacks are only just beginning to appear: the proliferation of nuclear power stations. In fact, let's say, the anxiety that nuclear research has caused since the end of the Second World War is fading a little bit as, let's say, the A-bomb explosions in Hiroshima and Nagasaki passed into the past. Of course there was the accumulation of destructive A and H weapons, which kept people-worried, but a more recent phenomenon is the proliferation of nuclear power plants, which claim to meet the growing energy needs of industrial society. However, it was realised that this proliferation had a number of drawbacks, to put it mildly, that it posed very serious problems. So I believe that this situation, that cutting edge research is associated with a real threat, to the survival of humanity, a threat even to the survival of life on the planet, is not an exceptional situation, it is a situation that has rules. For the past one or two years I myself have been beginning to wonder about this, and well I have realised that finally in each of the major issues that currently threaten the survival of the human species, these questions would not arise in their present form. The threat to **survival would not arise** if the state of science was that of the year 1900, for example. I do not mean to say that the sole cause of all these evils, of all these dangers is science, of course-there is a conjunction of several things but science, the current state of scientific research certainly plays an important role.

Perhaps I could say a few personal words. I am a mathematician. I have spent most of my life doing mathematical research. As far as mathematical research is concerned, the research I have done and the research done by the colleagues with whom I was in contact seemed to be far removed from any kind of practical application. For this reason, for a long time I did not feel inclined to ask myself questions about the ins and outs, especially the social impacts, of this scientific research. And it's only fairly recently, over the last two years, that I gradually began to ask myself questions about this; and I've come to a position over the last year or year and a half where I've actually been abandoning any kind of scientific research.

I think **that in** the future I will only do what is strictly necessary to be **able** to **support** myself, since until fur**ther notice** I have no other profession than that of mathem**atician**. I am **well aware** that I am not alone

in asking myself these kinds of questions. In fact, for the past year or two, and even for the past month, more and more people have been asking themselves key questions on this subject. **I am quite convinced** that at CERN, too, many scientists and technicians are beginning to ask themselves these questions, and I have met some of them. Perhaps I can add that I and others know people at CERN who, for example, have **extreme**ly serious **ideas about** the so-**called pea**ceful applications of nuclear energy, but who do not dare to express them publicly, because they would be afraid of losing their place here. Of course, this is not the case only at CERN, I am not going to criticise here only for ... I am not going to say that this is an atmosphere that would be special at CERN I believe that it is an atmosphere that prevails in most academic or research organisations, in France and in Europe and to some extent in the United States, where people who take the risk of expressing themselves openly about their reservations, even in a strictly scientific field concerning certain scientific developments, are still a tiny minority.

So for the last year or two I've been asking questions. I've been asking them not only to myself, I've been asking them to colleagues, especially for several months, maybe six months, I've been taking every opportunity to meet scientists either in public discussions, like this one, or privately, to raise these questions, in particular: "Why do we do scientific research? A question that is virtually the same, perhaps in the long run at least, as the question: "Are we going to continue scientific research?" And the extraordinary thing is to see how my colleagues **are un**able to answer this question. In fact, for most of them, this question is so strange, so extraordinary that they even refuse to consider it, or at least they are very hesitant to give any answer whatsoever. So when you manage to wring out an answer, in public or private discussions, generally what you hear is, in order of **frequency** of **answers**: "I do scientific research because it gives me pleasure, because I find a certain intellectual satisfaction in it", and sometimes people say: "I do scientific research because I have to live well, because I get paid for it."

http://www.fabriquedesens.net/Allons-nous-continuer-la-recherche, consulted on January 30th 2021

Alexander Grothendieck: Thank you.

all words crossed out: mouthed (no sound) standing at one spot, gazing into the distance







