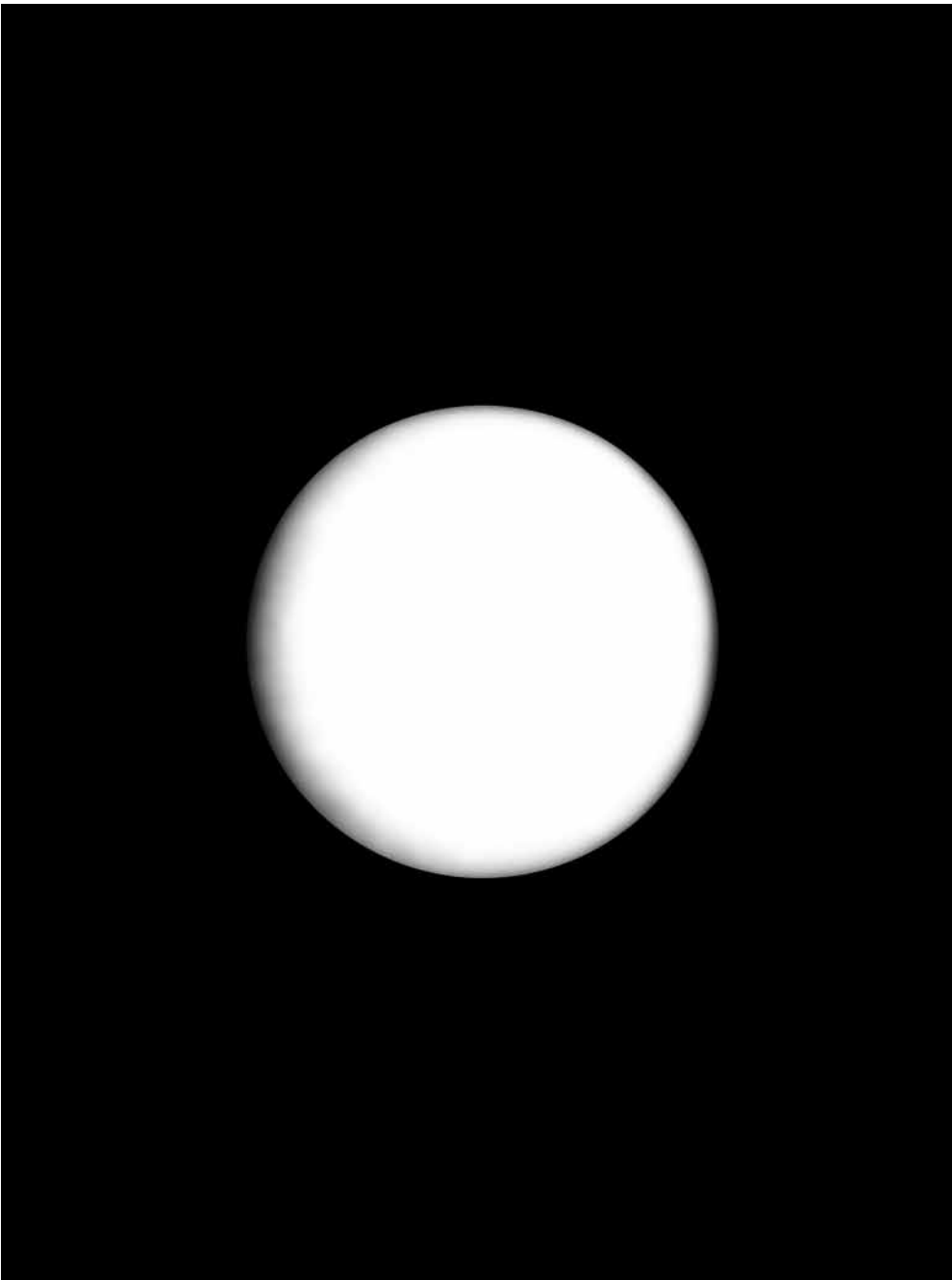






La coquetterie  
René Magritte  
Paris, Le Jardin des Plantes, 1928





**Truckee**, 9 June 1962, ten miles south of Christmas Island, Truckee's debris cloud seen from Christmas Island catching the first rays of sun at dawn. Image by the US Air Force 1352<sup>nd</sup> Photographic Group.





*The spiral track made by an electron as it loses energy in the magnetic field of a bubble chamber*

László Moholy-Nagy, *Fotogramm*, c. 1925/30.

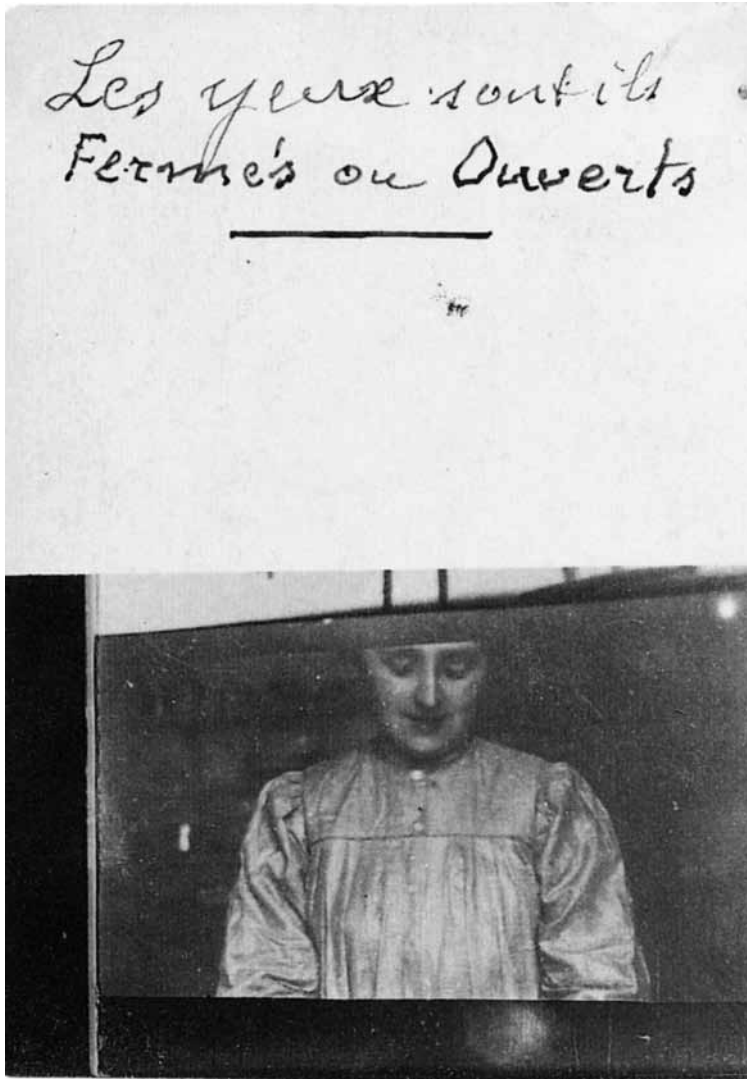








Louis Draget (Fotografie beschriftet von Louis Draget), c. 1900.



The sea of my memory is white.  
It will be blue if I want,  
with words joining in dreams  
and in the violence of waves swelled and beaten down  
by fever.

Secret fauna and flora  
which the reverberations  
of the page had hidden, now,  
at the end of the day,  
I watch them evolve as one might dive with eyes wide open  
to explore the deep waters.

—Edmond Jabès

# THE SPIRIT OF THE NONPLACE

I go to meet my words and feel I bring them back to the surface, unaware that I lead them to their death.

But this is an illusion.

The surface of the sea is a mirror one breaks in turning the page.  
All the azure of my pen and my death which I importune.

I have the algae for living companions.

And Yukel said:

“I will tell you of separation.”

(“My soul,” wrote Reb Jordano, “you entered my body through my mouth and I yield to the order of your words.”

And Reb Sorano: “The soul is in man’s speech as in the muteness of beasts. The soul rests in plants.”

“And stone?” asked Reb Edji. “Is it deprived of the soul’s visit?”

“In stone,” replied Reb Sorano, “the soul is wrapped in oblivion.”)

Yukel, tell us of body and soul, of man and God whom we cannot imagine one without the other—which makes us think that they exist through one another, that they are in turn the break of day and its end, that they are and are not: are so that what is should be, are not so that what is not could be.

Yukel, tell us of our good and bad luck so tied together that we seem to hold a coin blackened both from too much circulation and from having remained in our clumsy hands.

Yukel, tell us of your weeping for the fate of Sarah and Yukel as we weep for the first well—so much that their fate has by and by fused with that of our race, has become its simple, overwhelming image where the word leans on the word. The image of this fate and the weight of this word which you show us as our most precious possessions because they hold our present tears and the future of our weeping, this heavy heritage for which we have fought over the centuries, which we reject in revolt and claim in humility and penitence, this is what God inherited from God when He leaned down to our people to be its Witness. Through us, God was separated from God, separated from the universe which we rejoin in God. Through the Lord, man was separated from man in order to rise to Him in the exalted word.

As long as we are not chased from our words we have nothing to fear. As long as our utterances keep their sound we have a voice. As long as our words keep their sense we have a soul.

And Yukel said:

“I will tell you of separation in love so that you will hear louder and louder from bank to bank, from mountain to mountain the call of the lover.”

“To his lament, to his scream, to his solitary hymn I sacrifice God.”

“You sacrifice the Lord to the Lord. For God is the surprising encounter of two echoes of flesh.”

(“One is a figure for man, and for God a number.”

—Reb Seha

“Being Unity and Number, God is a multiple of the number One through which man approaches Unity.”

—Reb Leva )

“Blessed be the river which flows through my life,” said Reb Kedar. “It makes flower the word of the two banks.”

And Reb Eyoum: “Words which once upon a time were tears (as the tears of the newborn remind us) gather to form the monologue of the dark as it turns toward morning.

And the asides add to their value.”

And Yukel said again:

“I will tell you of separation in words and in silence, so that the desire of words for words, and of silence for silence, will inspire your own as being and world disintegrate, so that your desire for proud alliance will comfort you in the hours of misery when, with the zeal to live burnt out, our useless gestures yield to the wise resignation of the poor and the ascetic.”

“Yukel, tell us of the passage of the Jewish people from the original to the common suffering.”

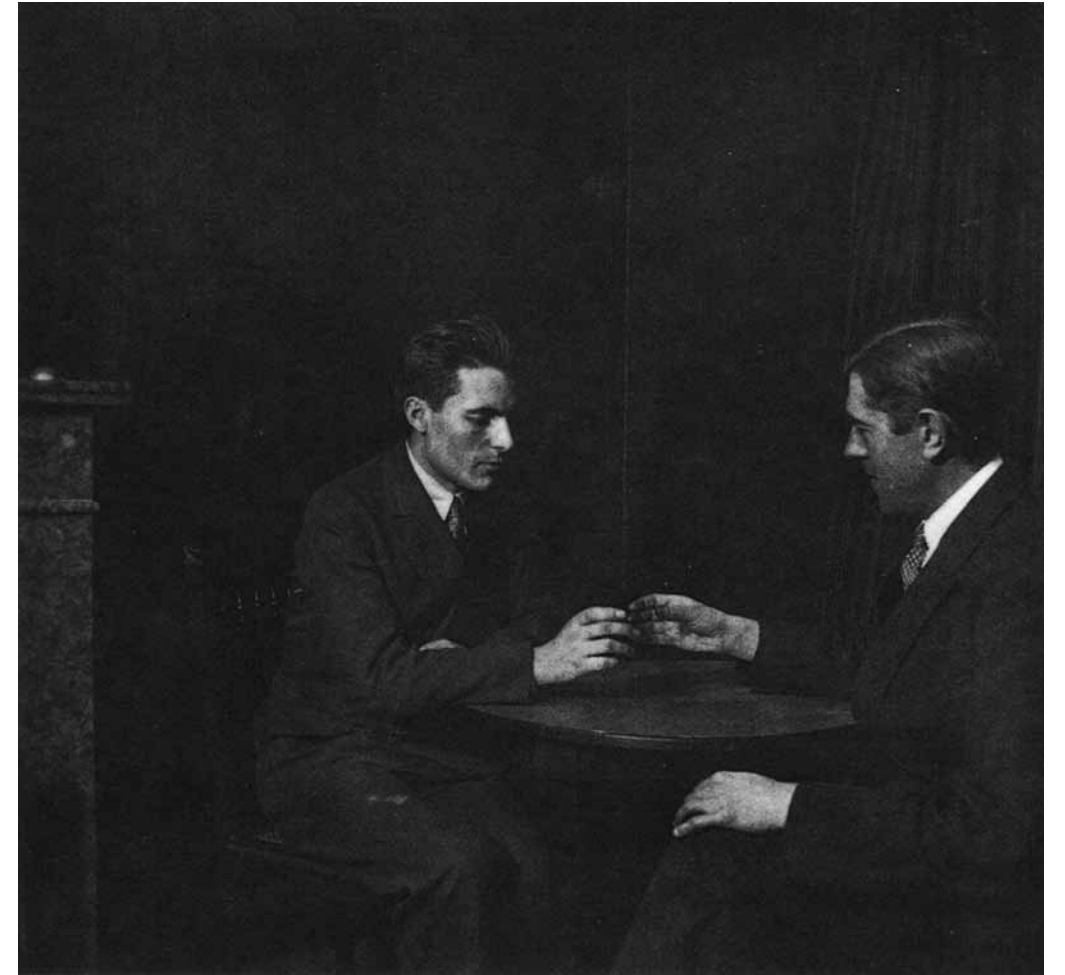
“I will tell you of the minute which harbors all the light and dark of the first day.”

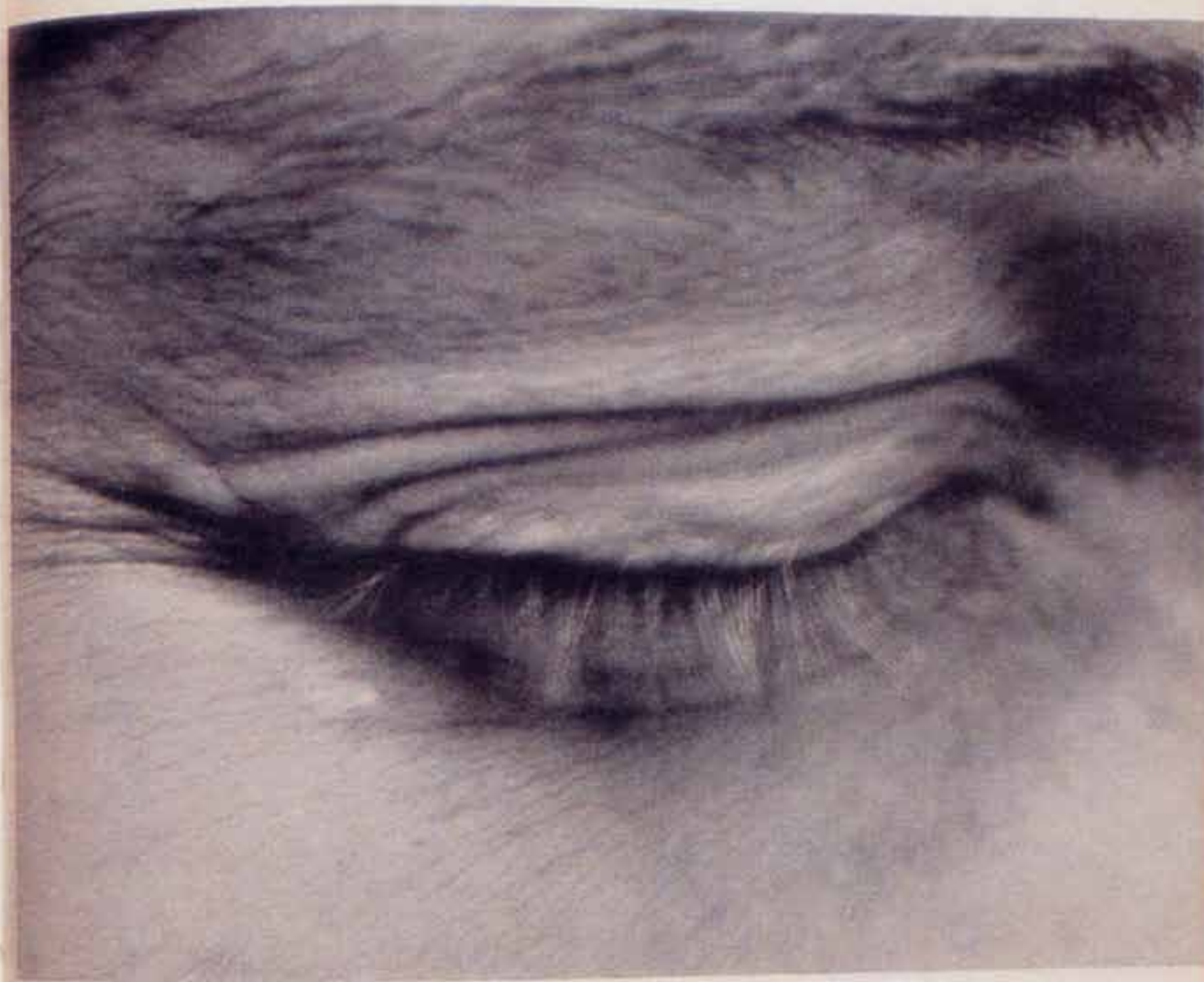
(“You are at the door of love. You see and, at the same time, lose your sight.”

—Reb Kaire

“This place is love.  
It is absence of place.”

—Reb Zack)





# THE SILENCE OF THE SIRENS

Proof that inadequate, even childish measures may serve to rescue one from peril:

To protect himself from the Sirens Ulysses stopped his ears with wax and had himself bound to the mast of his ship. Naturally any and every traveler before him could have done the same, except those whom the Sirens allured even from a great distance; but it was known to all the world that such things were of no help whatever. The song of the Sirens could pierce through everything, and the longing of those they seduced would have broken far stronger bonds than chains and masts. But Ulysses did not think of that, although he had probably heard of it. He trusted absolutely to his handful of wax and his fathom of chain, and in innocent elation over his little stratagem sailed out to meet the Sirens.

Now the Sirens have a still more fatal weapon than their song, namely their silence. And though admittedly such a thing has never happened, still it is conceivable that someone might possibly have escaped from their singing; but from their silence certainly never. Against the feeling of having triumphed over them by one's own strength, and the consequent exaltation that bears down everything before it, no earthly powers can resist.

And when Ulysses approached them the potent songstresses actually did not sing, whether because they thought that this enemy could be vanquished only by their silence, or because the look of bliss on the face of Ulysses, who was thinking of nothing but his wax and his chains, made them forget their singing.

But Ulysses, if one may so express it, did not hear their silence; he thought they were singing and that he alone did not hear them. For a fleeting moment he saw their throats rising and falling, their breasts lifting, their eyes filled with tears, their lips half-parted, but believed that these were accompaniments to the airs which died unheard around him. Soon, however, all this faded from his sight as he fixed his gaze on the distance, the Sirens literally vanished before his resolution, and at the very moment when they were nearest to him he knew of them no longer.

But they—lovelier than ever—stretched their necks and turned, let their awesome hair flutter free in the wind, and freely stretched their claws on the rocks. They no longer had any desire to allure; all that they wanted was to hold as long as they could the radiance that fell from Ulysses' great eyes.

Translated by Willa and Edwin Muir



Johannes Brus, Don Genaro, 1976.



Phill Niblock, A Trombone Piece, Partitur, 1977.

Handwritten musical score for "A Trombone Piece" by James Fulkerson, transcribed by Phill Niblock, Jan. 1977. The score is written on ten staves, each labeled with a letter (L, R, F, B, A, L, R, F, L, R) and a number (1, 2, 3, 4, 5, 6, 7, 8, 9, 10). The notation includes various musical symbols such as notes, rests, and dynamic markings, along with handwritten time signatures and tempo markings. The score is written in a cursive, handwritten style.

**A TROMBONE PIECE** James Fulkerson,  
transcribed  
Phill Niblock Jan. 1977

Partitur 1977

## IN THE STREAM OF CONSCIOUSNESS

O'Shaughnessy's\* approach to perceptual consciousness\*\* is distinctive in being simultaneously physical and phenomenological. He takes us and other animals to be physical beings—parts of the physical world—each of which has a perspective on that world and an inner life of some kind. An inquiry into conscious experience cannot be based merely on the observation of external behavior; but it also cannot be carried out in abstraction from our physical nature. The understanding of the inner life of the person who is conscious must include the physical body from the start. In his new book O'Shaughnessy develops an account of human consciousness as a continual process by which we come to know the vast physical world around us through awareness of what is going on in a small part of it, namely our own body.

It could hardly be otherwise, since all information about the rest of the world reaches us through our bodies. But when I gaze out my window toward the Hudson River and watch the planes coming down to land at Newark Airport, and see the stars emerge in the sky as night falls, the complexity and radical indirectness of the process is completely hidden from me. I seem just to see these things directly, and of course I do not. A full account of what actually happens would be extremely intricate, and we have only part of it. Since Plato and Aristotle began to worry about the question a great deal has been learned about what takes place between the stars and the retina, and much is currently being learned about the physical effects of retinal stimuli on the brain; but what goes on in the mind remains very difficult to describe, even though it is in a sense closer to us than anything else could be.

\* Brian O'Shaughnessy's philosophical career has been occupied with our most basic relations to the world. Twenty years ago he published another enormous book called *The Will*, about how we connect to the world in the outward direction, when we act. His new book, going in the other direction, examines the world's impact on us through perception—though he emphasizes that we are anything but passive when we perceive the world around us; that, too, involves the will.

\*\* Human consciousness, which is at the core of everything we do and think, is one of the principal targets of such philosophical understanding. In our time the advance of physical and biological science makes possible the search for some of its physiological conditions, but there is a more basic understanding of consciousness that remains a philosophical task, and that is surprisingly undeveloped—an understanding that we can pursue only from within. It has occupied phenomenologists like Husserl and Sartre, and empiricists like Hume and Russell. Even if empirical science starts from the evidence provided by conscious experience, understanding the nature of that starting point is still mainly the concern of philosophers.

To his credit O'Shaughnessy, unlike most contemporary philosophers, uses the term "consciousness" in its correct English sense, to mean a state of awareness of the world around us—roughly, the state of being awake. For some reason the term is commonly used more broadly in philosophical discourse to refer to any psychological state that has a subjective, experienced character. For this latter category O'Shaughnessy uses the term "experience," which is more accurate. Dreams, for example, are experiences we have when we are not conscious. (Other psychological states, like knowing, believing, and intending, need not be immediately experienced to exist; nor are they usually present in consciousness, though they can have large conscious effects, as when my long familiarity with the Beatles causes me instantly to recognize the melody of "Yesterday.")

The stream of consciousness is what we all live in. That expression is now associated with a literary form in which a character's inner monologue of thoughts and associations is presented accurately and is very different from the orderly outward forms of his life in the world. . . . Unlike the experience in dreams or imaginings, the experience of consciousness is subject to a ceaseless rational control that tries to make sense of the surrounding world and our place in it: it is shaped by the requirement of reality—of placing ourselves as physical beings in a physically real world. It is necessarily aimed at the truth.

Even when its contents do not change, consciousness is never static but always proceeding in time, so that it apprehends both change and changelessness. Whether you are crossing a street, reading a letter, making a phone call, or merely staring at the ceiling, your experience includes at every point the sense of what is immediately past and the readiness for what may come next; consciousness prepares us to act in the light of what is happening and about to happen. It gives us our only acquaintance with time and, through changes in the relation between ourselves and other things over time, our knowledge of space as well, by tracking our movements and the change in how things look and feel as we move

around them. In all this, our unformulated sense of the location, posture, and boundaries of our own body plays an essential part. . . .

Without sensation we would not see, but it is another important feature of O'Shaughnessy's view that there is vastly more in the visual field, and in our other sensory data, than reaches our attention—and that even when we are not aware of these sensations, they exist. The attention has a severely limited capacity at any moment, and it must select first of all from the plethora of content in our own minds.

(...)

So O'Shaughnessy has introduced a threefold distinction among phenomena to which many people have indiscriminately applied the term "consciousness": sensations (which need not be experienced), experience (which need not be conscious), and consciousness. In the case of vision, he believes the selectivity of awareness with respect to sensation is extreme, because of the richness of the sense data. When you see a field of daffodils, each daffodil registers its contribution to your visual field through direct action on the retina, but you can't possibly attend to all of them. What your attention grasps is the whole field, and that is the content of your conscious experience. . . .

The selectivity and limited capacity of attention is a pervasive fact of life. But do these auditory, visual, and tactile sensations that fall outside the scope of our limited attention at any time have real psychological existence. . . ? Does attention have the effect of making sensations spring into existence that weren't there until you looked or listened for them?

O'Shaughnessy wants to "prize apart two closely intertwined psychological items: the visual field, and our awareness of it. The independent psychological reality of the visual field is the existence of visual sensations or visual sense data"—sensations of which we are often not aware. What is the importance of this issue? It is that O'Shaughnessy is resisting

the overintellectualization of the mind. He wants to establish that the higher mental functions rest on a brute foundation that is meaningless, uninterpreted, and directly linked to the physical body and the direct impact on the body of the rest of the physical world. (In his earlier book on the will, he argued persuasively for a similar basis of action that was below the level of intention, which he calls subintentional action.) The first stage in perception is the direct physical causation of a wealth of sensations, imprinting the world in our mental flesh, so to speak. Only when the attention focuses on and makes sense of some of this material does experience arise—experience that can be the subject of introspection. And then, from experience, beliefs and knowledge can arise, along with the awareness of the world that makes intentional action possible.

This view goes against the widespread current tendency to see all psychological states as pervaded with thought, belief, concepts, and intentions—with meaning of some kind. According to that approach, the sensory qualities of a visual impression are simply identified with its representation of the external properties of objects we perceive— (...) the attention puts together the stream of consciousness from a selected portion of the abundant raw material of sensation, and it shapes that material into experiences and knowledge of the world, to be used in determining at every moment what to expect and what to do next. This is a compelling picture, and seems true to experience.

On reflection, it is hard to deny that the contents of our minds are much larger than our fully conscious selves. The attentive self that is the subject of consciousness is in some sense the inhabitant and explorer of a vast mental territory; and uninterpreted data in our minds form the first boundary between the conscious self and the external world.

What is needed to complete this picture is an understanding of what attention itself is. It can't be depicted as an internal perceiver of the contents of the mind without leading to a regress—since in that case the original sense data would have to cause further sense data of which the

attention became aware, and the same question would arise about how it notices them. O'Shaughnessy's account of attention is not easy to understand. He says that the awareness of an experience simply is the experience itself. But what happens when an unnoticed sensation becomes part of conscious experience by being noticed? O'Shaughnessy says it becomes immediately available for use in rational action and belief, having been picked out by the attention in its constant effort to make sense of the world. The attention, for him, is really a mental manifestation of the will, and consciousness is the product of the constant activity of the mental rational will in maintaining an intelligible and usable version of the world and our place in it.

While this may be a good account of the function of consciousness, it isn't an account of the intrinsic difference between a noticed and an unnoticed sensation. But perhaps there is nothing more to be said about this, and we must be content with O'Shaughnessy's aim of describing how the attention shapes the experiences of the present moment into an intelligible system. (...)

Brian O'Shaughnessy, *Consciousness and the World*, Oxford University Press, London, 2002.



**Le théâtre du son** est une installation silencieuse qui propose un jeu inusité avec le temps, entrecroisant le passé, le présent et le futur au sein d’une collection de disques imaginaires (soit près de 200 boîtiers compacts répartis sur deux étages en 33 séries différentes recoupant la littérature, la danse, les arts visuels, etc.). Tous les personnages impliqués sur ces disques sont bien réels et connus. Ils font partie de l’histoire, du patrimoine collectif, universel. Ils sont tous décédés. Ils sont aussi entrés, pour nous, dans la zone de tous les possibles, de toutes les rencontres, de toutes les expériences concevables. Ils revivent donc autrement ici, d’une certaine façon. Ils sont par ailleurs toujours vivants, aujourd’hui, via leurs œuvres. Présents et absents simultanément.

—Raymond Gervais

## THE AESTHETICS OF SILENCE

Every era has to reinvent the project of “spirituality” for itself. (Spirituality = plans, terminologies, ideas of deportment aimed at resolving the painful structural contradictions inherent in the human situation, at the completion of human consciousness, at transcendence.)

(...)

From the promotion of the arts into “art” comes the leading myth about art, that of the absoluteness of the artist’s activity. In its first, more unreflective version, the myth treated art as an expression of human consciousness, consciousness seeking to know itself. (The evaluative standards generated by this version of the myth were fairly easily arrived at: some expressions were more complete, more ennobling, more informative, richer than others.) The later version of the myth posits a more complex, tragic relation of art to consciousness. Denying that art is mere expression, the later myth rather relates art to the mind’s need or capacity for self-estrangement. Art is no longer understood as consciousness expressing and therefore, implicitly, affirming itself. Art is not consciousness per se, but rather its antidote—evolved from within consciousness itself. (The evaluative standards generated by this version of the myth proved much harder to get at.)

The newer myth, derived from a post-psychological conception of consciousness, installs within the activity of art many of the paradoxes involved in attaining an absolute state of being described by the great religious mystics. As the activity of the mystic must end in a *via negativa*, a theology of God’s absence, a craving for the cloud of unknowing beyond knowledge and for the silence beyond speech, so art must tend toward anti-art, the elimination of the “subject” (the “object,” the “image”), the substitution of chance for intention, and the pursuit of silence.

In the early, linear version of art’s relation to consciousness, a struggle was discerned between the “spiritual” integrity of the creative impulses and the distracting “materiality” of ordinary life, which throws up so many obstacles in the path of authentic sublimation. But the newer version, in which art is part of a dialectical transaction with consciousness, poses a deeper, more frustrating conflict. The “spirit” seeking embodiment in art clashes with the “material” character of art itself. Art is unmasked as gratuitous, and the very concreteness of the artist’s tools (and, particularly in the case of language, their historicity) appears as a trap. Practiced in a world furnished with secondhand perceptions, and specifically confounded by the treachery of words, the artist’s activity is cursed with mediacy. Art becomes the enemy of the artist, for it denies him the realization—the transcendence—he desires.

Therefore, art comes to be considered something to be overthrown. A new element enters the individual artwork and becomes constitutive of it: the appeal (tacit or overt) for its own abolition—and, ultimately, for the abolition of art itself.

### The scene changes to an empty room.

Rimbaud has gone to Abyssinia to make his fortune in the slave trade. Wittgenstein, after a period as a village schoolteacher, has chosen menial work as a hospital orderly. Duchamp has turned to chess. Accompanying these exemplary renunciations of a vocation, each man has declared that he regards his previous achievements in poetry, philosophy, or art as trifling, of no importance.

But the choice of permanent silence doesn’t negate their work. On the contrary, it imparts retroactively an added power and authority to what was broken off—disavowal of the work becoming a new source of its validity, a certificate of unchallengeable seriousness. That seriousness consists in not regarding art (or philosophy practiced as an art form: Wittgenstein) as something whose seriousness lasts forever, an “end,” a permanent vehicle for spiritual ambition. The truly serious attitude is one that regards art as a “means” to something that can perhaps be achieved only by abandoning art; judged more impatiently, art is a false way or (the word of the Dada artist Jacques Vache) a stupidity.

Though no longer a confession, art is more than ever deliverance, an exercise in asceticism. Through it, the artist becomes purified—of himself and, eventually, of his art. The artist (if not art itself) is still engaged in a progress toward “the good.” But whereas formerly the artist’s good was mastery of and fulfillment in his art, now the highest good for the artist is to reach the point where those goals of excellence become insignificant to him, emotionally and ethically, and he is more satisfied by being silent than by finding a voice in art. Silence in this sense, as termination, proposes a mood of ultimacy antithetical to the mood informing the self-conscious artist’s traditional serious use of silence (beautifully described by Valéry and Rilke): as a zone of meditation, preparation for spiritual ripening, an ordeal that ends in gaining the right to speak.

So far as he is serious, the artist is continually tempted to sever the dialogue he has with an audience. Silence is the furthest extension of that reluctance to communicate, that ambivalence about making contact with the audience which is a leading motif of modern art, with its tireless commitment to the “new” and/or the “esoteric.” Silence is the artist’s ultimate otherworldly gesture: by silence, he frees himself from servile bondage to the world, which appears as patron, client, consumer, antagonist, arbiter, and distorter of his work.

(...)

If the power of art is located in its power to negate, the ultimate weapon in the artist's inconsistent war with his audience is to verge closer and closer to silence. The sensory or conceptual gap between the artist and his audience, the space of the missing or ruptured dialogue, can also constitute the grounds for an ascetic affirmation. Beckett speaks of "my dream of an art unresentful of its insuperable indigence and too proud for the farce of giving and receiving." But there is no abolishing a minimal transaction, a minimal exchange of gifts—just as there is no talented and rigorous asceticism that, whatever its intention, doesn't produce a gain (rather than a loss) in the capacity for pleasure.

(...)

How literally does silence figure in art?

Silence exists as a decision—in the exemplary suicide of the artist (Kleist, Lautréamont), who thereby testifies that he has gone "too far," and in the already cited model renunciations by the artist of his vocation.

Silence also exists as a punishment—self-punishment, in the ex-emplary madness of artists (Hölderlin, Artaud) who demonstrate that sanity itself may be the price of trespassing the accepted frontiers of consciousness; and, of course, in penalties (ranging from censorship and physical destruction of artworks to fines, exile, prison for the artist) meted out by "society" for the artist's spiritual nonconformity, or subversion of the group sensibility.

Silence doesn't exist in a literal sense, however, as the experience of an audience. It would mean that the spectator was aware of no stimulus or that he was unable to make a response. But this can't happen; nor can it even be induced programmatically. The non-awareness of any stimulus, the inability to make a response, can result only from a defective presence on the part of the spectator, or a misunderstanding of his own reactions (misled by restrictive ideas about what would be a "relevant" response). As long as audiences, by definition, consist of sentient beings in a "situation," it is impossible for them to have no response at all.

Nor can silence, in its literal state, exist as the property of an art-work—even of works like Duchamp's readymades or Cage's 4'33", in which the artist has ostentatiously done no more to satisfy any established criteria of art than set the object in a gallery or situate the performance on a concert stage. There is no neutral surface, no neutral discourse, no neutral theme, no neutral form. Something is neutral only with respect to something else—like an intention or an expectation. As a property of the work of art itself, silence can exist only in a cooked or non-literal sense. (Put otherwise: if

a work exists at all, its silence is only one element in it.) Instead of raw or achieved silence, one finds various moves in the direction of an ever-receding horizon of silence—moves which, by definition, can never be fully consummated. One result is a type of art that many people characterize pejoratively as dumb, depressed, acquiescent, cold. But these privative qualities exist in a context of the artist's objective intention, which is always discernible. Cultivating the metaphoric silence suggested by conventionally lifeless subjects (as in much of Pop Art) and constructing "minimal" forms that seem to lack emotional resonance are in themselves vigorous, often tonic choices.

And, finally, even without imputing objective intentions to the art-work, there remains the inescapable truth about perception: the positivity of all experience at every moment of it. As Cage has insisted, "There is no such thing as silence. Something is always happening that makes a sound." (Cage has described how, even in a soundless chamber, he still heard two things: his heartbeat and the coursing of the blood in his head.) Similarly, there is no such thing as empty space. As long as a human eye is looking, there is always something to see. To look at something which is "empty" is still to be looking, still to be seeing something—if only the ghosts of one's own expectations. In order to perceive fullness, one must retain an acute sense of the emptiness which marks it off; conversely, in order to perceive emptiness, one must apprehend other zones of the world as full.

(...)

A genuine emptiness, a pure silence are not feasible—either conceptually or in fact. If only because the artwork exists in a world furnished with many other things, the artist who creates silence or emptiness must produce something dialectical: a full void, an enriching emptiness, a resonating or eloquent silence. Silence remains, inescapably, a form of speech (in many instances, of complaint or indictment) and an element in a dialogue.

(...)

The art of our time is noisy with appeals for silence.

(...)

Behind the appeals for silence lies the wish for a perceptual and cultural clean slate. And, in its most hortatory and ambitious version, the advocacy of silence expresses a mythic project of total liberation. What's envisaged is nothing less than the liberation of the artist from himself, of art from the particular artwork, of art from history, of spirit from matter, of the mind from its perceptual and intellectual limitations.



16va

8va

TONE	MATERIAL	STRINGS LEFT TO RIGHT	DISTANCE FROM BRIDGE PERIODS	MATERIAL	STRINGS LEFT TO RIGHT	DISTANCE FROM BRIDGE PERIODS	MATERIAL	STRINGS LEFT TO RIGHT	DISTANCE FROM BRIDGE PERIODS	TONE
				SCREW	2-3	1 1/4				A
				MED. BOLT	2-3	1 3/8				G
				SCREW	2-3	1 3/8				F
				SCREW	2-3	1 3/8				E
				SCREW	2-3	1 3/4				E
				SM. BOLT	2-3	2				D
				SCREW	2-3	1 5/8				C
				FURNITURE BOLT	2-3	2 1/8				C
				SCREW	2-3	2 1/2				B
				SCREW	2-3	1 7/8				B
				MED. BOLT	2-3	2 3/8				A
				SCREW	2-3	2 1/2				A
				SCREW	2-3	3 1/4				G
				SCREW	2-3	2 5/8				F
	SCREW	1-2	3 3/4	FURN. BOLT + 2 NUTS	2-3	2 3/8	SCREW + 2 NUTS	2-3	3 1/4	F
				SCREW	2-3	1 5/8				E
				FURNITURE BOLT	2-3	1 7/8				E
				SCREW	2-3	1 5/8				C
				SCREW	2-3	1 1/8				C
				MED. BOLT	2-3	3 1/2				B
				SCREW	2-3	4 1/8				A
	RUBBER	1-2-3	4 1/2	FURNITURE BOLT	2-3	1 1/4				G
				SCREW	2-3	1 3/4				F
				SCREW	2-3	2 5/8				F
	RUBBER	1-2-3	5 3/4							E
	RUBBER	1-2-3	6 1/2	FURN. BOLT + NUT	2-3	6 7/8				E
				FURNITURE BOLT	2-3	2 1/8				D
	RUBBER	1-2-3	3 5/8							D
				BOLT	2-3	7 1/8				C
				BOLT	2-3	2				B
	SCREW	1-2	10	SCREW	2-3	1	RUBBER	1-2-3	8 1/4	B
	(PLASTIC (over U))	1-2-3	2 5/8				RUBBER	1-2-3	4 1/2	G
	PLASTIC (over U)	1-2-3	2 7/8				RUBBER	1-2-3	10 1/8	G
	(PLASTIC (over D))	1-2-3	4 1/4				RUBBER	1-2-3	5 1/8	F
	PLASTIC (over U - UNDER 2-3)	1-2-3	4 1/8				RUBBER	1-2-3	9 3/4	D
	BOLT	1-2	15 1/2	BOLT	2-3	1 1/8	RUBBER	1-2-3	14 1/8	D
	BOLT	1-2	14 1/2	BOLT	2-3	7/8	RUBBER	1-2-3	6 1/2	C
	BOLT	1-2	14 3/4	BOLT	2-3	9/16	RUBBER	1-2-3	14	B
	RUBBER	1-2-3	4 1/2	MED. BOLT	2-3	10 1/8				B
	SCREW	1-2	5 7/8	LG. BOLT	2-3	5 7/8	SCREW + NUTS	1-2	1	A
	BOLT	1-2	7 1/8	MED. BOLT	2-3	2 1/4	RUBBER	1-2-3	4 1/8	A
	LONG BOLT	1-2	8 3/4	LG. BOLT	2-3	3 1/4				G
				BOLT	2-3	1 1/8				D
	SCREW + RUBBER	1-2	4 7/8							D
	ERASER (over D - UNDER C - E)	1	6 3/4							D

\* MEASURE FROM BRIDGE.

There is no such thing as an empty space or an empty time. There is always something to see, something to hear. In fact, try as we may to make a silence, we cannot. For certain engineering purposes, it is desirable to have as silent a situation as possible. Such a room is called an anechoic chamber, its six walls made of special material, a room without echoes. I entered one at Harvard University several years ago and heard two sounds, one high and one low. When I described them to the engineer in charge, he informed me that the high one was my nervous system in operation, the low one my blood in circulation. Until I die there will be sounds. And they will continue following my death. One need not fear about the future of music.

But this fearlessness only follows if, at the parting of the ways, where it is realized that sounds occur whether intended or not, one turns in the direction of those he does not intend. This turning is psychological and seems at first to be a giving up of everything that belongs to humanity—for a musician, the giving up of music. This psychological turning leads to the world of nature, where, gradually or suddenly, one sees that humanity and nature, not separate, are in this world together; that nothing was lost when everything was given away. In fact, everything is gained. In musical terms, any sound may occur in any combination and in any continuity.

—John Cage

Die Erstaufführung dieses Stückes fand in Toronto statt. David Tudor, Gordon Mumma, David Behrman und Lowell Cross produzierten elektronische Musik ohne Unterbrechung. Zu hören jedoch war die Musik nur zeitweilig – auf meine Anregung hin hatte Lowell Cross ein Schachbrett gebaut, das als «Sperre» wirkte: nach jedem Zug, den ein Spieler auf dem Schachbrett ausführte, klang die Musik bzw. hörte sie auf. Marcel Duchamp, John Cage und Madame Alexina (Teeny) Duchamp waren die Schachspieler während dieser fünf Stunden dauernden Aufführung. Der Titel «Wiedersehen» entstand, weil alle Komponisten als gute Freunde von früher hier noch einmal zu einem Zusammen-spiel gekommen waren, auch wenn sie längst künstlerisch eigene Wege gesucht hatten.

— John Cage

René Block et al., *Für Augen und Ohren: Von der Spieluhr zum akustischen Environment (Objekte, Installationen, Performances)*, Akademie der Künste, Berlin, 1980.





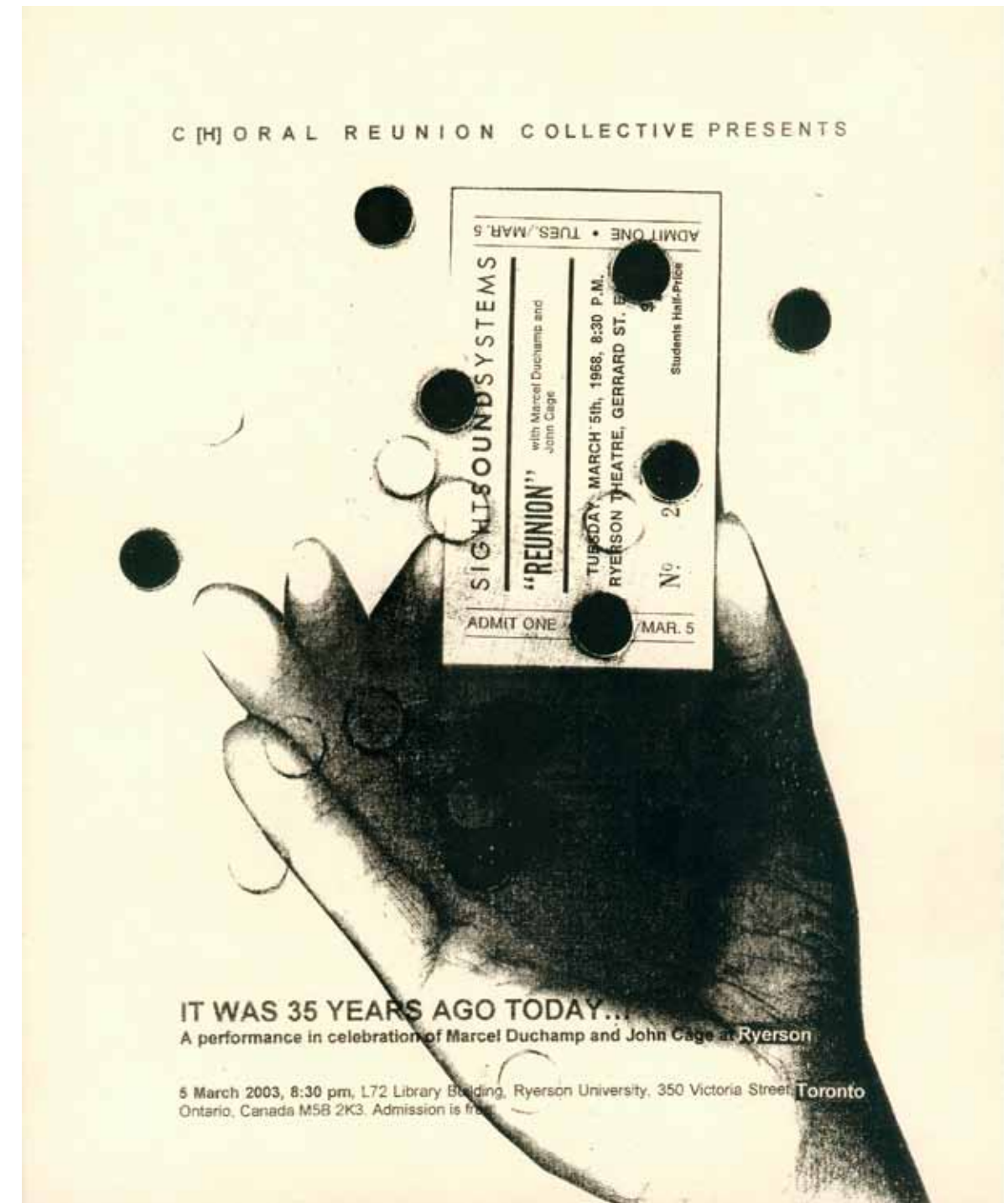
In celebration of a historical performance by Marcel Duchamp and John Cage at Ryerson, the C(h)oral Reunion Collective presents a performance and exhibition entitled IT WAS 35 YEARS AGO TODAY. . . .

On March 5, 1968, two of the twentieth-century's most influential artists, Marcel Duchamp and John Cage, appeared together on the Ryerson Theatre stage and performed "Reunion," a work by Cage.

This performance was the final installment in a trilogy of silent works the first of which was Cage's notorious 4'33" piano piece of 1952.

On March 5, 2003, a new work will be staged that both commemorates and expands upon ideas found expressed 35 years ago in Reunion. In the spirit of Cage and Duchamp this new work—entitled "It Was 35 Years Ago Today. . ."—will bring together the distinct voices of the C[h]oral Reunion Collective under the direction of Edward Slopek for a one-evening performance at Ryerson and a month-long exhibition at the Alliance Française. The latter will consist of documentation from the original performance as well as new work created specifically for the event.

The members of the collective include Sara Chan, Garrick Filewod, David Green, Michelle Kasprzak, Erin MacKeen, Frederick Matern, Lila Pine, Andrew Raspor, Greg Seale, Sarah Sharma, Edward Slopek, Pierre Tremblay with participation by Alexandra Anderson and Danijel Margetic.



## Marcel Duchamp

**Re:Duchamp.** Exhibition March 3-8, 2003, The Alliance Française de Toronto, 24 Spadina Road, Toronto, Ontario, Canada M5R 2S7. **Reception** Thursday March 6, 6:30 pm. **Panel Discussion** Saturday March 8, 2:30pm. Opening times are 9:30 to 6:00 pm Monday to Thursday, and 9:30 to 3:00 pm on Friday and Saturday. Admission is always free.



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## NOTES ON MARCEL DUCHAMP'S MUSIC

Although I've always felt that John Cage's text, *26 Statements re Duchamp*,<sup>(1)</sup> is one of the weakest ones that he wrote, it has for me one memorable line: 'One way to write music: study Duchamp.' The story of Cage's friendship with Duchamp towards the end of his life is a very moving one, interestingly outlined in the interview with Moira and William Roth, an interview in which he also talks about his response to Duchamp's work as a whole.<sup>(2)</sup> There are at least three major pieces in Cage's work that are directly linked with Duchamp: the prepared piano piece *Music for Marcel Duchamp*, 1947, written for the Duchamp sequence of Hans Richter's film *Dreams That Money Can Buy*, 1948; *Reunion*, 1968, in which Cage and Duchamp (then Cage and Teeny Duchamp) played chess on a board specially constructed by Lowell Cross, which contained circuits to allow the various moves to modify, transmit or interrupt the sounds made by musicians David Tudor, Gordon Mumma and David Behrman;<sup>(3)</sup> and *Not Wanting to Say Anything About Marcel*, 1969, a piece of visual work made in collaboration with Calvin Sumsion, printed on layers of plexiglass mounted in a frame, on which texts are fragmented through chance operations, these being described in an accompanying booklet.<sup>(4)</sup>

In many ways, these three works show the ambivalence of any attempts at drawing up relationships between Cage and Duchamp, although both are cited as being in part responsible, for example, for a shift away from an emphasis on the finished art object/ piece of music in performance and so on. Cage himself points to this difficulty in the interview with the Roths, and again in a recent interview with Michael Nyman. To the Roths, Cage said: 'A contradiction between Marcel and myself is that he spoke continuously against the retinal aspects of art, whereas I have insisted upon the physicality of sound and the activity of listening. You could say I was saying the opposite of what he was saying.' But Cage is well aware that the position is more complicated than this, as his observations on *Étant donnés* (1946–66) make clear. Cage had always enjoyed what he felt were the 'freedoms' offered by the *Large Glass* in, for instance, the way the environment was allowed to interact with it through the use of a transparent material and points to the 'uncomfortable' nature of *Étant donnés*: 'the imprisoning us at a particular distance and removing the freedom we had so enjoyed in the *Large Glass*.' However, it is plain from Richard Hamilton's work, and from that of Reg Woolmer, that the *Large Glass* imprisons the viewer in precisely the same way and that there is a uniquely 'right' view for that work too, even if Duchamp does not prescribe what it is. Cage hoped that the contrary aspects of his work and Duchamp's are resolved by this last work: 'with *Étant donnés* we feel his work very physically. . .' In the interview with Nyman, Cage points out how 'Feldman has complained that my

friendship with Duchamp was false because of this contrary. . . but I think the contrary was the same. It was just that the arts changed. In other words that being physical in music was the same as having ideas in painting. . .'<sup>(5)</sup>

I can understand the historical point that Cage is making, that introducing ideas into art stops the retinal rot—according to Duchamp dating from Courbet—and that the emphasis on the physical nature of sound and the musical experience of the listener shifts focus away from the presence of ideas in music (from allegories, from programmes, from systems etc). But I cannot imagine that Duchamp would have concurred with it. The parallel seems to be more that the physical emphasis, the tympanic I suppose, mirrors the Courbet/Impressionism heresy of retinal painting, and that the reintroduction of ideas into music by younger composers today represents the Duchampian alignment. Certainly both retinal art and tympanic music are necessary in a sense which Cage might appreciate, in that they fulfill the function of 'studying Zen' in the story that Christopher Hobbs once quoted to the effect that studying Zen may involve many deprivations, ascetic diet and so on, but after having achieved enlightenment, the monk may well feel free to eat anything, including lamb chops.<sup>(6)</sup> The 'physicality' of sound, about which Feldman especially talks, the retinal art that Duchamp deprecates, may all constitute this temporary and necessary asceticism so that one may go back to descriptive music, to figurative painting, with one's feet 'a little off the ground'—Duchamp's ironic distance.

Among all the various Duchampian hermeneutics, the least known, and the most attractive, is that put forward by Gary Glenn, an interpretation only casually hinted at in the letter columns of *Artforum*.<sup>(7)</sup> His thesis is that 'Duchamp was merely aping the thoughts and gestures of the greatest artist of all times, Sherlock Holmes'; and substantiates this in outline by pointing to the Queen Bee/Bride relationship and the frequent appearances of waterfalls and gaslamps at key points in their respective work. Later he developed this further in correspondence with me and, resting as it does on the complete absence of direct reference to Holmes in all Duchamp's known utterances, it is a good deal more plausible than the alchemic version which originates in a tentative negation on Duchamp's part.<sup>(8)</sup> A further piece of armour for Gary's arsenal can be found in the importance of musical and sounding experimentation in their work: and—although Duchamp never attempted a monograph on the scale of Holmes' treatise on the Polyphonic Motets of Lassus—notes on sound-making, musical references in notes, musical notations, the occasional presence of manuscript paper and the one or two intrusions of sounds into his iconography, are sufficiently considerable to form a body of perhaps peripheral but, in sum, significant probings into musical realms.

As an outline, let me list these as a kind of catalogue of Duchamp's music:  
(*Box of 1914*)

1. 'One can look at seeing; one cannot hear hearing.'

2. 'Make a painting of frequency.'

3. *Avoir l'apprenti dans le soleil* (To have the apprentice in the sun). Executed in ink and pencil on music paper, this is the only drawing Duchamp included in the *Box of 1914* and considered of sufficient importance to think about including in the bottom panel of the *Large Glass* (see 7) as a photographed 'commentary.' The idea of photographing this work does not necessarily mean that he would have printed the photograph on the Glass in the area of the Slopes. It is more likely to mean that having a photograph made of *Avoir l'apprenti*. . . would in itself be a 'commentary' on this section, an unusual and interesting move that may have been executed. The continuous line, moving up across music paper, may equally comment on the note on precision musical instruments (see 14), the notation for a continuous tone, unrealizable by the mechanical means he suggests in the note itself.

(*The Green Box*, 1934)

4. 'The number 3 taken as a refrain in duration — (number is mathematic duration)'. The occurrence of the number three in the scheme of the *Large Glass* has been commented on many times, most notably by Richard Hamilton,<sup>(9)</sup> and its use is so frequent as to constitute an almost invariable echo rather than the more optional refrain.

5. '*Musical Sculpture*. Sounds lasting and leaving from different places and forming a sounding sculpture which lasts.' This idea anticipates the much later three-dimensional musical pieces using continuous tones by Alvin Lucier.

6. 'To lose the possibility of recognising 2 similar objects — 2 colours, 2 laces, 2 hats, 2 forms whatsoever to reach the impossibility of sufficient visual memory, to transfer from one like object to another the memory imprint.  
— Same possibility with sounds; with brain facts.'

This note is one of the three 'academic ideas' which Jasper Johns says he has found particularly useful.<sup>(10)</sup>

7. 'As a "commentary" on the section Slopes. = have a photograph made of: to have the apprentice in the sun' (see 3)

8. 'Exposé of the Chariot (in the text = litanies of the chariot). — Slow life — Vicious circle — Onanism — Horizontal — Buffer of life — Bachelor life regarded as an alternating rebounding on this buffer — Rebounding — Junk of life — Cheap constructions — Tin — Cords — Iron Wires — Crude wooden pulleys — Eccentrics — Monotonous flywheel.'

9. 'By eros' matrix, we understand the group of 8 uniforms or hollow liveries destined to receive the illuminating gas which takes 8 malic forms (gendarme, cuirassier, etc). The gas castings so obtained, would hear the litanies sung by the chariot, refrain of the whole celibate machine.' These two notes (8 and 9) taken in conjunction, give a sort of soundtrack to the workings of the Glass and amplify what Duchamp meant when he told Pierre Cabanne that calculations and dimensions were the important elements of the work and that he was 'mixing story, anecdote (in the good sense of the word), with visual representation, while giving less importance to visuality, to the visual element, than one generally gives in painting. . .'<sup>(11)</sup>

10. '*Song*; of the revolution of the bottle of Benedictine.

— After having pulled the chariot by its fall, the bottle of Benedictine lets itself be raised by the hook. . . it falls asleep as it goes up; the dead point wakes it up suddenly and with its head down. It pirouettes and falls vertically according to the laws of geometry.'

11. '*Rattle*. With a kind of comb, by using the space between 2 teeth as a unit, determine the relations between the 2 ends of the comb and some intermediary points (by the broken teeth).'

12. '*Erratum musical*. Yvonne/Magdeleine/Marcel: 'To make an imprint mark with lines a figure on a surface impress a seal in wax.' It is worth noting that, although the musical score is composed by chance — picking the notes out of a hat — Duchamp evidently knew enough about music to pitch the voices within their respective ranges: his own tenor voice from C below middle C to B above it, and his two sisters having alto voices from F below middle C to E at the top of the treble stave. The changes of clef within each part are a little odd: he allows his own voice to go only to G in the bass clef before changing to treble clef (A flat), and his sisters' voices come down to G in the treble before changing it to the bass clef for F sharp; all of which, while being internally consistent, is not conventional. The text itself is a dictionary definition of the verb 'to print' and the title of Erratum, having the sense of 'misprint' (Musical Misprint) gives it an odd flavour, the more so when the whole range of meanings for 'print' are looked at, many of which have a more than casual significance for the procedures involved in the Glass.

13. 'Piggy Bank (canned goods). Make a readymade with a box containing something unrecognisable by its sound and solder the box —already done in the semi readymade of copper plates and a ball of twine.'<sup>(12)</sup> The realisation of this note, *With Hidden Noise*, 1916, was co-authored by Walter Arensberg in that it was he who chose the object for inclusion inside the ball of twine, and the secrecy element may reflect his interest in the cryptic. The phrase 'make a Readymade' has a curious flavour, and it seems likely that the childishly simple cipher that Duchamp wrote on the two metal plates is only the first stage of a more extended one. (To be developed, as Duchamp would say.)

(À l'infinif, 1966)

14. 'Construct one and several musical precision instruments which produce mechanically the continuous passage of one tone to another in order to be able to record without hearing them sculptured sound forms (against 'virtuosism' and the physical division of sound which reminds one of the uselessness of the physical colour theories)' (see 3).

15. 'A thing to be looked at with one eye  
" " " " " " " " " " " " " " "the left eye  
" " " " " " " " " " " " " "the right "  
What one must hear with one ear  
" " " " " " " " " " " " " "the right ear  
" " " " " " " " " " " " " "the left "

to put in the Crash-splash.

One could base a whole series of things to be looked at with a single eye (left or right). One could find a whole series of things to be heard (or listened to) with a single ear.'

While *To be looked at (from the other side of the glass) with one eye, close to, for almost an hour*, 1918, probably Duchamp's most underrated work, was a realisation of this note as a self-contained piece, serving in part as a study for the right hand side of the lower panel of the *Large Glass*, the notes relating to listening were not realised. The concern for determining what, exactly, should be the point and manner of perception of a piece related both to the *Large Glass* and to *Étant donnés*, as well as to many other manifestations of this, such as the exhibition installation of the *Exposition internationale du surréalisme*, Paris 1938; *First Papers of Surrealism*, New York 1942; *Anémic-cinéma*, 1926; *Hand Stereoscopy*, 1918-19; *Tu m'*, 1918; the unfinished *Cheminée anaglyphe*, 1968; and the lost films in anaglyphe and stereoscopy. It is also worth recalling the installation by Frederick Kiesler of the *Boîte-en-Valise* in the Peggy Guggenheim gallery, New York, 1942, in which the Box was observed through a fixed viewer.

(Miscellaneous Works)

16. *Erratum musical (La mariée mise à nu par ses célibataires, même)*, a musical composition not included in the collections of notes. (See below for discussions of this piece.)

17. *Flirt*, 1907. An inscribed early drawing with the following caption written below, of a woman sitting at a grand piano talking to a man: 'She: "Would you like me to play 'On the Blue Waters'? You'll see how well this piano renders the impression suggested by the title." He (wittingly): "There's nothing strange about that, it's a watery piano."' (*Piano aqueux* = watery piano, *piano à queue* = grand piano).

18. *Musique de chambre*, 1909-10. Another captioned picture of a woman at a piano, this time being given a music lesson. The woman says 'Button your jacket, here's the maid . . .'

19. *Sonata*, 1911. Duchamp said of this painting that it was his 'first attempt to exteriorize (his) conception of cubism at that time.' And the painting shows that, just as chess had been a constant activity in his family circle at home and became the subject for a series of exploratory drawings leading to *The Chess Players*, 1911 and *Portrait of Chess Players*, 1911 (painted by gaslight), so too music played a similar role both as a family pastime and as the subject for this important painting. It's worth noting that his choice of Magdeleine and Yvonne as the other two participants in the *Erratum musical* (see 12) originates in their already existing musical abilities, Yvonne as a pianist and Magdeleine as violinist, and the humour of *Flirt* and *Musique de chambre* could well stem indirectly from observation.

20. *With Hidden Noise*, 1916. The realisation of the note in the *Green Box*, there called *Piggy Bank* (see 13).

(Texts with musical sense)

21. '*Parmi nos articles de quincailleries paresseuses, nous recommandons un robinet qui s'arrête de couler quand on ne l'écoute pas.*' (Amongst our articles of lazy hardware, we recommend a faucet which stops dripping when no one is listening to it).

22. *Caleçons de musique (abréviation pour : leçons de musique de chambre)*. (Musical shorts (abbreviation for: chamber music lessons)).

23. *Il faut dire : La crasse du tympan, et non le 'Sacre du Printemps'* (One should say: Eardrum grease, and not *The Rite of Spring*).



24. *Une boîte de Suédoises pleine est plus légère qu'une boîte entamée parce qu'elle ne fait pas de bruit.* (A full box of matches is lighter than an opened box because it does not make any noise).

25. *Mi Sol Fa Do Re* (phonetic equivalent for Michel Cadoret).

26. 'après: *'Musique d'ameublement'* d'ERIK SATIE  
voici: *'Peinture d'ameublement'* de  
YO Savy (alias Yo Sermayer).  
Rose Sélavy (alias Marcel Duchamp).'  
(after 'Furniture Music' by Erik SATIE  
here is: 'Furniture Painting' by  
YO Savy (alias Yo Sermayer)  
Rose Sélavy (alias Marcel Duchamp).

27. 'A transformer designed to utilize the slight, wasted energies such as: . . . laughter . . . sneezing. . . the sound of nose blowing, snoring. . . whistling, singing, sighs etc. . .'

28. 'The sound or the music that corduroy trousers, like these, make when one moves, is pertinent to infra-slim. . .'

The various texts not linked directly to elements in the *Large Glass* itself, but nevertheless included in the collections of notes associated with it, are largely researches of a speculative nature—not unlike the kind of researches undertaken by Leonardo into musical areas, such as the invention of possible musical instruments (often of a mechanical nature), especially in two pages of the Madrid notebooks that appeared in 1967. The comments that Winternitz makes about those drawings and notes seem, in part, to be appropriate to the musical ideas in Duchamp's collections of notes:

they add considerably to our comprehension of (Leonardo's) restless, indefatigable mind, so overwhelmed by new ideas, associations, and technological imagination that he could cope with this onslaught only by jotting down passing thoughts, often so sketchily that important details which he evidently took for granted are neither delineated nor explained in his comments.<sup>(13)</sup>

In the Madrid notebooks we find designs for a bell using a damper mechanism to produce four distinct tones, a system of bellows for 'continuous wind' with a three-piped instrument, string instruments played by elbow action, a keyed string instrument, and so on. The mechanical nature of Leonardo's speculations compares very well with that of much of Duchamp's musical writing, for example the 'musical precision instruments' (see 14) that 'produce mechanically the continuous passage of one tone to another' and which have the effect of suppressing the virtuosic role of the performer.<sup>(14)</sup> This effect is equivalent to his concern for eliminating the manipulation of paint which, as Hamilton says, had 'become repugnant'<sup>(15)</sup> to him but which he was obliged to overcome in painting the 'blossoming' in the top panel of the *Large Glass*.

It was from Brisset that Duchamp found that a concern for the sounding aspect of language, what might seem superficially to be its retinal aspect, could lead to a new dimension of meaning. Brisset's system of finding new relations of meaning through a network of alliteration and pun corresponded to his own developing sense of '*infra-mince*',<sup>(16)</sup> through which minute shifts produce large scale change. The pun itself is an example of this concept, in that it is the shift of focus by the *hearer* which induces new meanings. Clearly, sound is necessary for the pun (and for its extension, the strict rebus) and several of the puns themselves (see 21-28) deal with sounding elements as though to emphasise this fact. One of them, 'Lazy Hardware' (see 21), occurs so often that it must have had additional significance for Duchamp. It is one of the discs in *Anémic-cinéma*, 1926; it is included in the André Breton *Anthologie de l'humour noir*, 1940; it is reprinted in the *Boîte en valise*, 1941; it is written on a photograph of Duchamp working on the window display at the Gotham Book Mart, New York 1945, where he fixes a tap to the mannequin's thigh: and it also appears on a 1965 etching of the *Fountain* entitled 'An Original Revolutionary Faucet: Mirrorical Return?' Again this text throws the onus of artistic activity onto the spectator (listener), in a sense closely related to Berkeley's idealist philosophy in which existence is conditional on being perceived. Duchamp emphasises this in his conversation with Cabanne, when he maintains that, even if some 'genius were living in the heart of Africa and doing extraordinary paintings every day, without anyone's seeing them, he wouldn't exist.' On the other hand he felt, mistakenly I think, that Walter Arensberg's Baconian studies were only 'the conviction of a man at play,' whereas Arensberg is really a very good example of the creative spectator (here decoder) completing the artwork.

It is in the musical works themselves, the two sets of *Erratum musical*, that the difference between Cage's and Duchamp's attitudes to chance are most apparent. In the vocal *Erratum musical*, Duchamp wrote the notes on pieces of paper, put them in a hat, and then pulled them out again. Cage says: 'I wouldn't be satisfied with that kind of chance operation in my work. . . there are too many things that could happen that don't interest me, such as pieces of paper sticking together and the act of shaking the hat.' On the other hand, it is very clear that this very feeble (a frequent term in Duchamp's work) use of chance is very appealing to Duchamp. *The Large Glass* is full of similar pieces of puniness: the 'feeble cylinders' and the 'timid power' of the *Bride*,<sup>(17)</sup> the falling metre of thread for the *Standard Stoppages*, the air currents used to form the *Draft Pistons*, the toy cannon shooting painted matchsticks for the *Nine Shots* and so on.

The other *Erratum musical*, the manuscript of which was given to Cage by Teeny after Marcel's death, is another example of a use of chance which would be quite alien to Cage. For this, a vase containing 89 numbered balls, each one indicating a note, has

an opening at the base which allows the balls to drop into a series of small wagons, like a miniature goods train, which travel E at a variable speed so that each wagon received a number of these balls. When the vase is empty, the notes are recorded and this indicated one period of the composition. It is odd that Duchamp says 89 notes since in all the transcriptions of the numbers he only ever uses 85, and, in fact, 85 is the number of notes on a 7 octave piano from A to A, and even a piano having the extra high C would only have 88. (Although he notes the possibility of there being more notes—using quarter tones he does not mention using less.) Given what Richard Hamilton feels is the improvisatory nature of the original composition of the large Glass in plan view, working outwards from the stem of the Chocolate Grinder,<sup>(18)</sup> it seems feasible that the measurements in that plan, especially the overall width of 170 centimetres, gave Duchamp the idea of the piano’s width (2 x 85). The coincidence of the one generates the parenthetical research of the other and, given also that at this time the ninth *Malic Mould* had not been added to the scheme, the limitation of the number of periods in Duchamp’s transcription to eight may not be arbitrary. As in the note ‘precision musical instruments’ (see 14), he again indicates his preference for ‘a designated musical instrument (player piano, mechanical organ or other new instruments for which the virtuoso intermediary is suppressed).’<sup>(19)</sup>

It is when examples like this come to light that Duchamp’s debt to the stage performance of Roussel’s *Impressions d’Afrique* becomes even more apparent. The third of the ‘tableaux vivants’ announced by Carmichael in *Impressions d’Afrique* is the one where the actor Soreau plays the part of Händel as an old blind man ‘composing the theme of his oratorio, Vesper, by a mechanical process.’ Granted that Roussel’s wonderful conception of Händel composing the work by selecting one from the seven sprigs of holly in his left hand, each indicating a note on the diatonic scale, and noting it on the balustrade of a winding staircase, is far in excess of Duchamp’s piece of mechanical music, it is sufficiently striking in the context of all other half remembered elements from *Impressions d’Afrique* that filter through into his work. (Only the consummate skill of the ageing 5 composer prevents chance selection of notes from the diatonic scale from becoming tedious, a fear that Duchamp feels for his own piece when he adds that it would be ‘a very useless performance in any case’).<sup>(20)</sup> Of the five possible Rousselian examples that leave traces in the *Large Glass*, three deal directly with music of a mechanical nature and of these three, two involve performance within glass containers.<sup>(21)</sup>

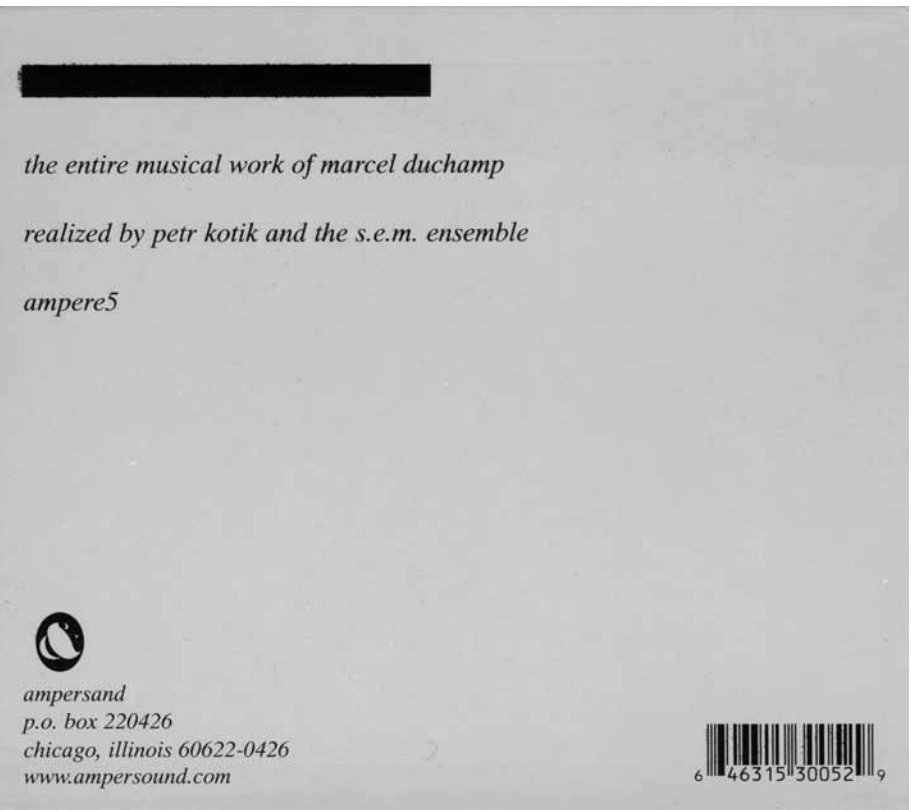
Apart from his friendship with John Cage in the last years of his life, we know that Duchamp previously had other connections with the world of musicians, though of a more tangential kind. He knew Varese, having met him at the Arensberg’s and he took part in a performance of Satie and Picabia’s *Relâche* in 1924, appearing as Adam, wearing a false beard and a fig leaf, with Brogna Perlmutter as Eve (and made an etching, one of the Lovers series of 1967–8, based on the photograph of this tableau, *Selected Details after Cranach and Relâche*, 1967), as well as appearing in the

film *Entr’acte* with Satie, Picabia and Man Ray. Duchamp lived in the Hotel Istria in Paris from 1923–26, during which time Satie moved there during his last illness before being finally moved to hospital. And, though even more fleeting than this previous example and absolutely of no use for any historical connection to be made, he was a regular visitor to Katherine Dreier’s home in the 1930s where he reassembled the broken *Large Glass*, in West Redding, Connecticut, the place where Charles Ives had retired to live. Such remote and passing in the street acquaintances apart, it is worth noting the curiosity that *To have the apprentice in the sun*, 1914, the two examples of *Erratum musical* and the set of puns *Poils et coups de pied en tous genres* included in the *Boîte-en-valise*, were all done on music paper. Given Duchamp’s extraordinary care about the choice of the different papers in the edition of the *Green Box*, what was he doing with all that music paper?

Notes

1. John Cage, ‘26 Statements re Duchamp,’ 1963, first published in *Mizue*, Sept. 1963, reprinted in *A Year from Monday*, Calder and Boyars, London, 1968, p. 70–72.
2. Moira Roth and William Roth, ‘John Cage on Marcel Duchamp: An Interview,’ *Art in America*, November December 1973, p. 72–79.
3. See also, Shigeko Kubuta, *Marcel Duchamp and John Cage*, Tokyo 1968, a limited edition of 500 copies, being a photo-essay of *Reunion*, including *36 acrostics re and not re Duchamp* by John Cage, and a recording of the piece by David Behram.
4. John Cage, *To Describe the Process of Composition Used in Not Wanting to Say Anything About Marcel*, Cincinnati, 1969. The booklet itself, which details the compositional method, is a much more impressive work than the eight plexiglass constructions and it is ridiculous to maintain, as Barbara Rose does in her oft reprinted but uncritical essay on the work, that they represent ‘another extension of a multi-dimensional personality defying the limitations of a one-dimensional world.’ In fact this imbalance between the realisation of the work and the composition is something that characterises Cage’s music of the last 20 years. For Barbara Rose, the ‘feeling of 3-dimensional forms floating in free space’ inevitably recalls Duchamp, although I fail to find that fragments of words in superimposition give any feeling of three-dimensionality. But certainly Cage’s choice of a transparent material is odd if, as he says, he wanted to ‘not say anything about Marcel,’ for few things are more likely to bring Duchamp to mind.
5. Michael Nyman, ‘Interview with John Cage,’ August 1976 (not yet published).
6. In Christopher Hobbs, *English Music*, programme for John Tilbury’s series of concerts, *Volo Solo*, Macnaghten Concerts, October–December 1970.
7. *Artforum*, November 1972, p. 6–7.
8. ‘If I have ever practised alchemy, it was in the only way it can be done now, that is to say, without knowing it.’ (Marcel Duchamp, quoted by Robert Lebel in *L’art magique*, ed. André Breton and Gérard Legrand, Club Français de l’Art, Paris, 1957, p. 98.
9. Richard Hamilton, ‘*The Large Glass*,’ in *Marcel Duchamp*, Museum of Modern Art and Philadelphia Museum of Art, 1973.
10. Quoted in John Cage ‘Jasper Johns: Stories and Ideas,’ first published in catalogue of Jasper Johns exhibition at the Jewish Museum, New York 1964, reprinted in *A Year from Monday*, pp. 73–84. The other own ‘academic ideas’ Johns refers to are ‘what a teacher of mine (speaking of Cézanne and cubism) called “the rotating point of view”. . . and Leonardo’s idea. . . that the boundary of a body is neither a part of the enclosed body nor a part of the surrounding atmosphere.’
11. Pierre Cabanne (trans. Ron Padgett), *Dialogues with Marcel Duchamp*, Thames and Hudson, London 1971 . p389.
12. The linguistic twist involved in using ‘twine’ would have appealed to Arensberg: *ficelle* (twine) in French is also a colloquialism for ‘pal’ or ‘chum.’
13. See Emanuel Winternitz, ‘Strange Musical Instruments in the Madrid Notebooks of Leonardo da Vinci,’ *Metropolitan Museum Journal*, vol. 2, 1969.
14. Erik Satie in ‘*Propos à propos de Igor Stravinski*,’ published in *Les Fenilles libres*, October–November 1922, wrote in support of Stravinsky’s then current interest in theories of mechanical interpretation. Although Satie did not favour them himself, he pointed out that while the virtuosity of the mechanism could never be equaled by the performer, it did not take his place. He added that the player piano differs from the piano not so much as a photograph from a drawing: ‘the lithographer as it were plays the pianola, while the draughtsman plays the piano.’

15. Richard Hamilton, *op cit.*, p. 63.
16. The term *infra-mince*, often translated as ‘infra-slim,’ first appears on the back cover of *View* magazine, March 1945, an issue devoted to Duchamp who designed the cover. The text, in translation, means ‘when the tobacco smoke also smells of the mouth which inhales it, the two odours are married by ‘infra-slim,’ ‘*mince*’ means either ‘slender’ or ‘slim.’ What Duchamp called ‘human or affective connotations’, and it also has the sense of insignificance when used, for example, with a word such as ‘argument.’ The alliance of this imprecise term with ‘infra,’ a precise preposition with scientific overtones (as in ‘infra-red,’ ‘infra-mammary,’ etc.), mirrors the conjunction of precision and inexactitude found in the various examples of it. Duchamp said to Denis de Rougemont, in 1968, that the concept of *infra-mince* was ‘a category which has occupied me a great deal over the last 10 years.’
17. Ironically, these so-called ‘feeble’ elements are the most efficacious sources of power and energy in the *Large Glass*’s mechanics.
18. Richard Hamilton and Reg Woolmer, in redrawing the plan and elevation of the *Large Glass* to scale with absolute precision—that is, not allowing any gaps in the procedure to be filled in by information only knowable after the existence of such a drawing, not copying the existing one, and not making any guesses, however intelligent—both found it very striking that the only point from which it is possible to begin, clearly the starting-point for Duchamp too, is the central stem of the Chocolate Grinder, and that there is a definite and fixed sequence of moves from this outwards. Richard Hamilton said, in conversation, that he sensed a kind of freedom in the drawing process that may not be apparent from the finished result, but which is found in redrawing it.
19. Recently a number of realisations of this piece have been made, taking it as an indeterminate piece of music, by Petr Kotik of the SEM Ensemble, Buffalo. A recording of this has been made for West German Radio in Cologne, and for the Gallery Multipla, Milan. A percussionist, Donald Knaack, also of the State University of New York at Buffalo, is making a realisation, which he has recorded on Finnadar Records, New York. He plans to perform it in London in May 1977. These ‘realisations’ of Duchamp’s work seem to me to be as awkward an enterprise as the vogue, early in the days of graphic notation, for taking extant paintings, especially systemic ones, and treating them as musical scores—the obverse of transcribing Bach fugues into multi-coloured grids, or making hazy impressions of Sibelius’ *Swan of Tuonela*. If, as a cursory glance would seem to confirm, the second *Erratum musical* is directly concerned with the *Large Glass*, then it is an important element in the body of notes that accompany it and is an integral part of that work; and it makes no more sense to make ‘realisations’ of this piece than to do the same for the *Large Glass* itself. Clearly anything can be used as a notation—at one time it was said of David Tudor that he could play the cross-section of a currant bun—and, as an exercise, it is harmless enough. But it does seem odd that Cage, who rightly tries to ensure that his own music is played within the spirit of its composition, should be much less careful with the work of others whom he respects. His argument that a response to other people’s work should take the form of creation rather than criticism begs the question, especially when he finds the highly creative Duchampian criticism of no interest—he says that although he has the books, he never reads them. The problem seems to be that, for someone with a powerfully defined position of their own, like Cage, it is difficult to see someone else’s work without it being subsumed within that philosophy. And Cage’s thought inevitably colours his view of Duchamp, so that he sees the *Large Glass*, for example, as allowing the environment to interpenetrate the art work just as, in Christian Wolffs early music, performed sounds have no greater value than incidental ones and, in 4’33”, our attention is drawn to these incidental sounds alone, but this has little or no place in Duchamp’s thought. On the other hand, although Cage’s text is weak on the Readymades (and even to use a single unqualified term blurs their complexity) he reveals, in the Roth interview, a sensitivity to the fundamental difference between himself and Duchamp, pointing out that: ‘When we think of the Readymades we think of something other than what Duchamp did.’ And Cage’s ‘blurring of the distinction between art and life’ is, as he indicates, only remotely related to Duchamp.
20. The other examples which appeared in the play and that relate strongly to the *Large Glass* are: 1. The performance on the zither by the miraculous worm held in a glass (mica) casing filled with a liquid as heavy as mercury: 2. The statue made from corset whalebones resting on a chariot which moved from side to side on rails of calf’s lights: 3. The painting machine of Louise Montalescot and 4. The thermodynamic orchestra of Bex, which was housed in a glass case.
21. It is clear from the interview with Cabanne that, although the initial impact was the play’s presentation, he did follow this up by reading the book soon afterwards. Hence, it is worth conjecturing a further, possibly remote, connection much later in Duchamp’s oeuvre when he specifies that one of the rotoreliefs is of ‘a soft-boiled egg,’ recalling a striking image in the story when Balbet, the crack marksman, shot away the outside of a softboiled egg to reveal the yellow, but without disturbing the inner content. Although this was not portrayed in the stage version, Duchamp had by then, in 1935, read the novel. And the specification ‘soft-boiled’ is so peculiar, in view of the fact that the spectator sees the exterior form of the egg that it draws attention to its Rousselian parallel and, further, reinforces the connections that can be drawn earlier.



Cage taught us that indeterminacy is liberation and also condemnation, or maybe condemnation and also liberation.

There's nothing to listen to.  
It's all to be heard.

—Yago Conde



*This lecture was printed in Incontri Musicali, August 1959. There are four measures in each line and twelve lines in each unit of the rhythmic structure. There are forty-eight such units, each having forty-eight measures. The whole is divided into five large parts, in the proportion 7, 6, 14, 14, 7. The forty-eight measures of each unit are likewise so divided. The text is printed in four columns to facilitate a rhythmic reading. Each line is to be read across the page from left to right, not down the columns in sequence. This should not be done in an artificial manner (which might result from an attempt to be too strictly faithful to the position of the words on the page), but with the rubato which one uses in everyday speech.*

## LECTURE ON NOTHING

I am here , and there is nothing to say .  
 those who wish to get somewhere , let them leave at  
 any moment . What we re-quire is  
 silence ; but what silence requires  
 is that I go on talking . Give any one thought  
 a push : it falls down easily .  
 ; but the pusher and the pushed pro-duce that enter-  
 tainment called a dis-cussion .  
 Shall we have one later ?  
 Or , we could simply de-cide not to have a dis-  
 cussion . What ever you like . But  
 now there are silences and the  
 words make help make the  
 silences .  
 I have nothing to say  
 and I am saying it and that is  
 poetry as I need it .  
 This space of time is organized  
 . We need not fear these silences, —



we may love them .  
 talk , for I am making it  
 just as I make a piece of music. It is like a glass  
 of milk . We need the glass  
 and we need the milk . Or again it is like an  
 empty glass into which at any  
 moment anything may be poured  
 . As we go along , (who knows?)  
 an i-dea may occur in this talk .  
 or not. I have no idea whether one will  
 momentarily , Re-  
 gard it as something seen , as  
 though from a window while traveling .  
 If across Kansas , then, of course, Kansas  
 . Arizona is more interesting,  
 almost too interesting , especially for a New-Yorker who is  
 being interested in spite of himself in everything. Now he knows he  
 needs the Kansas in him . Kansas is like  
 nothing on earth , and for a New Yorker very refreshing.  
 It is like an empty glass , or  
 is it corn ? Does it matter which ?  
 Kansas has this about it: at any instant, one may leave it,  
 and whenever one wishes one may return to it .  
 Or you may leave it forever and never return to it ,  
 for we pos-sess nothing . Our poetry now  
 is the reali-zation that we possess nothing  
 . Anything therefore is a delight  
 (since we do not pos-sess it) and thus need not fear its loss  
 . We need not destroy the past: it is gone;  
 at any moment, it might reappear and seem to be and be the present  
 . Would it be a repetition? Only if we thought we  
 owned it, but since we don't, it is free and so are we

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and how un-certain it is .  
 Most anybody knows a-bout the future .  
 What I am calling poetry is often called content.  
 I myself have called it form . It is the conti-  
 nuity of a piece of music. Continuity today,  
 when it is necessary , is a demonstration of dis-  
 interestedness. That is, it is a proof that our delight  
 lies in not pos-sessing anything . Each moment  
 presents what happens . How different  
 this form sense is from that which is bound up with  
 memory: themes and secondary themes; their struggle;  
 their development; the climax; the recapitulation (which is the belief  
 that one may own one's own home) . But actually,  
 unlike the snail , we carry our homes within us,  
 which enables us to fly or to stay  
 , — to enjoy each. But beware of  
 that which is breathtakingly beautiful, for at any moment  
 the telephone may ring or the airplane  
 come down in a vacant lot . A piece of string  
 or a sunset , possessing neither ,  
 each acts and the continuity happens  
 . Nothing more than nothing can be said.  
 Hearing or making this in music is not different  
 — only simpler — than living this way .  
 Simpler, that is , for me, — because it happens  
 that I write music .  
 That music is simple to make comes from one's willingness to ac-  
 cept the limitations of structure. Structure is  
 simple be-cause it can be thought out, figured out,  
 measured . It is a discipline which,  
 accepted, in return accepts whatever , even those  
 rare moments of ecstasy, which, as sugar loaves train horses,  
 train us to make what we make . How could I

LECTURE ON NOTHING / 111







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That is finished now. It was a pleasure .  
And now , this is a pleasure.  
“Read me that part a-gain where I disin-herit everybody .”  
The twelve-tone row is a method; a  
method is a control of each single  
note. There is too much there there .  
There is not enough of nothing in it . A structure is  
like a bridge from nowhere to nowhere and  
anyone may go on it : noises or tones  
, corn or wheat . Does it matter which  
? I thought there were eighty-eight tones .  
You can quarter them too .

If it were feet , would it be a two-tone row  
? Or can we fly from here to where

? I have nothing against the twelve-tone row;  
but it is a method, not a structure .  
We really do need a structure , so we can see  
we are nowhere . Much of the music I love  
uses the twelve-tone row , but that is not why I  
love it. I love it for no reason .  
I love it for suddenly I am nowhere  
(My own music does that quickly for me .)  
And it seems to me I could listen forever  
to Japanese shakuhachi music or the Navajo

¶

Yeibitchai . Or I could sit or  
stand near Richard Lippold's *Full Moon*  
any length of time .  
Chinese bronzes , — how I love them

which others have made,  
the need to possess  
I possess nothing .  
Record collections , —  
that is not music .

¶

The phonograph is a thing, — not a musical instrument  
A thing leads to other things, whereas a musical instrument  
leads to nothing .  
Would you like to join a society called Capitalists Inc.  
? (Just so no one would think we were Communists.)  
Anyone joining automatically becomes president .  
To join you must show you've destroyed at least one hundred  
records or, in the case of tape, one sound mirror  
any piece of music To imagine you own  
is to miss the whole point  
or the point is nothing;  
and even a long-playing record is a thing.

¶



A lady from Texas said: I live in Texas .  
 We have no music in Texas. The reason they've no  
 music in Texas is because they have recordings  
 in Texas. Remove the records from Texas  
 and someone will learn to sing .  
 Everybody has a song  
 which is no song at all :  
 it is a process of singing ,  
 and when you sing ,  
 you are where you are .  
 All I know about method is that when I am not working I sometimes  
 think I know something, but when I am working, it is quite clear that I know nothing.

~ ~ ~

#### Afternote to LECTURE ON NOTHING

*In keeping with the thought expressed above that a discussion is nothing more than an entertainment, I prepared six answers for the first six questions asked, regardless of what they were. In 1949 or '50, when the lecture was first delivered (at the Artists' Club as described in the Foreword), there were six questions. In 1960, however, when the speech was delivered for the second time, the audience got the point after two questions and, not wishing to be entertained, refrained from asking anything more.*

*The answers are:*

1. *That is a very good question. I should not want to spoil it with an answer.*
2. *My head wants to ache.*
3. *Had you heard Marya Freund last April in Palermo singing Arnold Schoenberg's Pierrot Lunaire, I doubt whether you would ask that question.*
4. *According to the Farmers' Almanac this is False Spring.*
5. *Please repeat the question . . .*  
*And again . . .*  
*And again . . .*
6. *I have no more answers.*

Now giving lecture on Japanese poetry. First giving very old Japanese poem, very classical:

Oh willow tree,  
 Why are you so sad, willow tree?  
 Maybe baby?

Now giving nineteenth-century romantic Japanese poem:

Oh bird, sitting on willow tree,  
 Why are you so sad, bird?  
 Maybe baby?

Now giving up-to-the-minute twentieth-century Japanese poem, very modern:

Oh stream, flowing past willow tree,  
 Why are you so sad, stream?  
 Baby?

I was never psychoanalyzed. I'll tell you how it happened. I always had a chip on my shoulder about psychoanalysis. I knew the remark of Rilke to a friend of his who wanted him to be psychoanalyzed. Rilke said, "I'm sure they would remove my devils, but I fear they would offend my angels." When I went to the analyst for a kind of preliminary meeting, he said, "I'll be able to fix you so that you'll write much more music than you do now." I said, "Good heavens! I already write too much, it seems to me." That promise of his put me off.

And then in the nick of time, Gita Sarabhai came from India. She was concerned about the influence Western music was having on traditional Indian music, and she'd decided to study Western music for six months with several teachers and then return to India to do what she could to preserve the Indian traditions. She studied contemporary music and counterpoint with me. She said, "How much do you charge?" I said, "It'll be free if you'll also teach me about Indian music." We were almost every day together. At the end

of six months, just before she flew away, she gave me the *Gospel of Sri Ramakrishna*. It took me a year to finish reading it.

I was on an English boat going from Siracusa in Sicily to Tunis in North Africa. I had taken the cheapest passage and it was a voyage of two nights and one day. We were no sooner out of the harbor than I found that in my class no food was served. I sent a note to the captain saying I'd like to change to another class. He sent a note back saying I could not change and, further, asking whether I had been vaccinated. I wrote back that I had not been vaccinated and that I didn't intend to be. He wrote back that unless I was vaccinated I would not be permitted to disembark at Tunis. We had meanwhile gotten into a terrific storm. The waves were higher than the boat. It was impossible to walk on the deck. The correspondence between the captain and myself continued in deadlock. In my last note to him, I stated my firm intention to get off his boat at the earliest opportunity and without being vaccinated. He then wrote back that I had been vaccinated, and to prove it he sent along a certificate with his signature.

David Tudor and I went to Hilversum in Holland to make a recording for the Dutch radio. We arrived at the studio early and there was some delay. To pass the time, we chatted with the engineer who was to work with us. He asked me what kind of music he was about to record. Since he was a Dutchman I said, "It may remind you of the work of Mondrian."

When the session was finished and the three of us were leaving the studio, I asked the engineer what he thought of the music we had played. He said, "It reminded me of the work of Mondrian."



## THE AESTHETICS OF SILENCE (cont'd)

Language seems a privileged metaphor for expressing the mediated character of art-making and the artwork. On the one hand, speech is both an immaterial medium (compared with, say, images) and a human activity with an apparently essential stake in the project of transcendence, of moving beyond the singular and contingent (all words being abstractions, only roughly based on or making reference to concrete particulars). On the other hand, language is the most impure, the most contaminated, the most exhausted of all the materials out of which art is made.

This dual character of language—its abstractness, and its “fallenness” in history—serves as a microcosm of the unhappy character of the arts today. Art is so far along the labyrinthine pathways of the project of transcendence that one can hardly conceive of it turning back, short of the most drastic and punitive “cultural revolution.” Yet at the same time art is foundering in the debilitating tide of what once seemed the crowning achievement of European thought: secular historical consciousness. In little more than two centuries, the consciousness of history has transformed itself from a liberation, an opening of doors, blessed enlightenment, into an almost insupportable burden of self-consciousness. It’s scarcely possible for the artist to write a word (or render an image or make a gesture) that doesn’t remind him of something already achieved.

As Nietzsche says: “Our preeminence: we live in the age of comparison, we can verify as has never been verified before.” Therefore, “we enjoy differently, we suffer differently: our instinctive activity is to compare an unheard number of things.”

Up to a point, the community and historicity of the artist’s means are implicit in the very fact of intersubjectivity: each person is a being-in-a-world. But today, particularly in the arts using language, this normal state of affairs is felt as an extraordinary, wearying problem.

Language is experienced not merely as something shared but as something corrupted, weighed down by historical accumulation. Thus, for each conscious artist, the creation of a work means dealing with two potentially antagonistic domains of meaning and their relationships. One is his own meaning (or lack of it); the other is the set of second-order meanings that both extend his own language and encumber, compromise, and adulterate it. The artist ends by choosing between two inherently limiting alternatives, forced to take a position that is either servile or insolent. Either he flatters or appeases his audience, giving them what they already know, or he commits an aggression against his audience, giving them what they don’t want. Modern art thus transmits in full the alienation produced by historical consciousness.

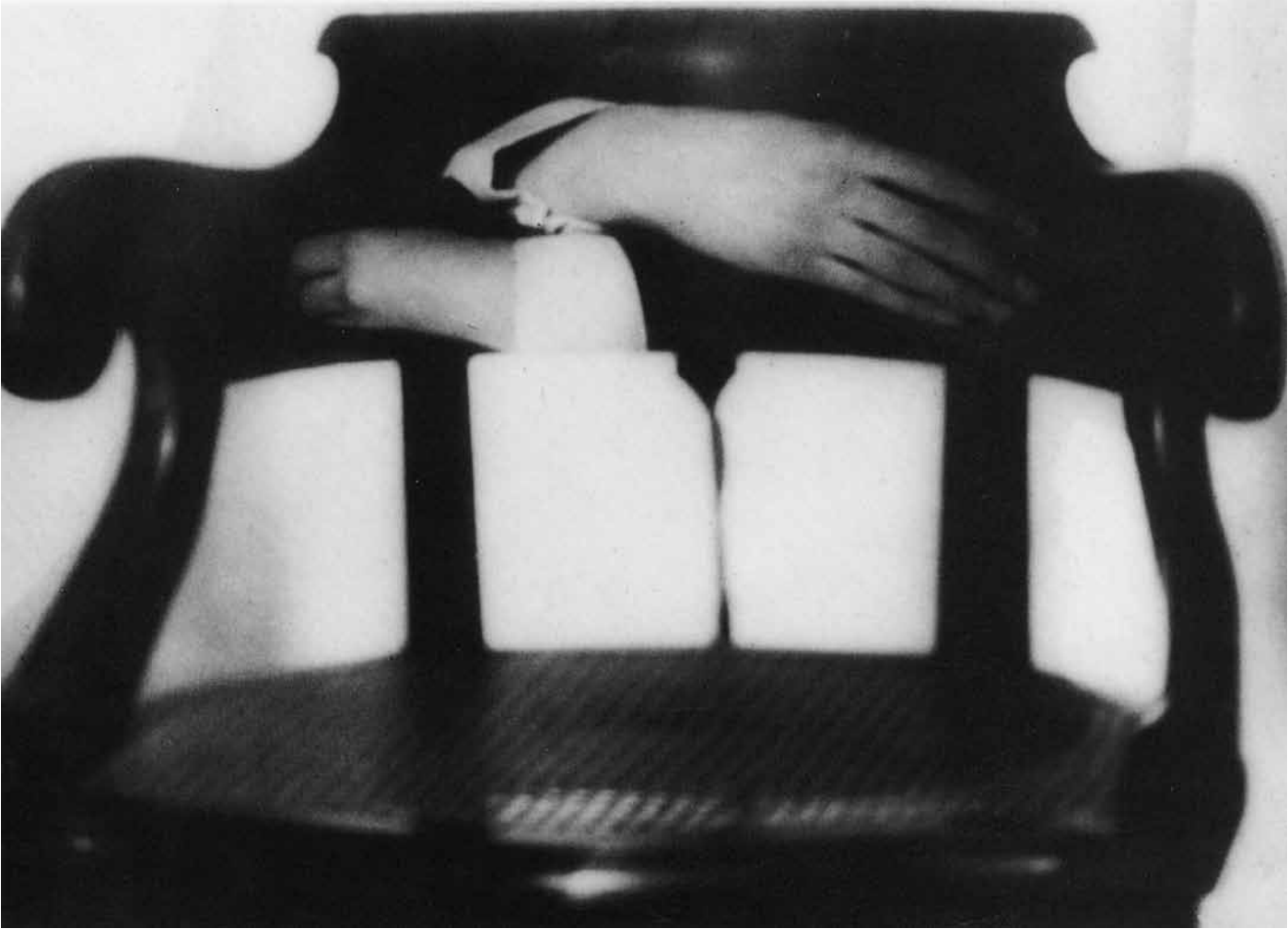
Whatever the artist does is in (usually conscious) alignment with something else already done, producing a compulsion to be continually checking his situation, his own stance against those of his predecessors and contemporaries. To compensate for this ignominious enslavement to history, the artist exalts himself with the dream of a wholly ahistorical, and therefore unalienated, art.

(...)

As language points to its own transcendence in silence, silence points to its own transcendence—to a speech beyond silence.



Man Ray, **Untitled**, 1924.



Previous page: Robert Fludd, **The Intellectual, Imaginative, and Sensible Faculties of Mankind**, Etching from Robert Fludd, *Utriusque cosmi maioris scilicet et minoris metaphysica, physica atque technica historia*, 1617-1621. (postcard CCA Collection, Montréal)

Giuseppe Chiari, **Gestures**, 1972.





“Every now and then it is possible to have absolutely nothing; the possibility of nothing.”

—John Cage

## EXCERPTS FROM AN INTRODUCTION TO E.M. CIORAN’S THE TEMPTATION TO EXIST

Ours is a time in which every intellectual or artistic or moral event gets absorbed by a predatory embrace of consciousness: historicizing. Any statement or act can be assessed as a necessarily transient “development” or, on a lower level, belittled as mere “fashion.” The human mind possesses now, almost as second nature, a perspective on its own achievements that fatally undermines their value and their claim to truth. For over a century, this historicizing perspective has dominated our ability to understand anything at all. Perhaps once a marginal tic of consciousness, it’s now a gigantic, uncontrollable gesture—the gesture whereby man indefatigably patronizes himself.

We understand something by locating it in a multi-determined temporal continuum. Existence is no more than the precarious attainment of relevance in an intensely mobile flux of past, present, and future. But even the most relevant events carry within them the form of their obsolescence. Thus, a single work is eventually a contribution to a body of work; the details of a life form part of a life history; an individual life history is unintelligible apart from social, economic, and cultural history; and the life of a society is the sum of “preceding conditions.” Meaning drowns in a stream of becoming: the senseless and over-documented rhythm of advent and supercession. The becoming of man is the history of the exhaustion of his possibilities.

(...)

Subjected to the attritions of change on this unprecedented scale, philosophy’s traditionally “abstract,” leisurely procedures no longer appeared to address themselves to anything; which is to say, they weren’t substantiated any more by the sense that intelligent men had of their experience. Neither as descriptions of Being (reality, the world, the cosmos) nor, in the alternative conception (in which Being, reality, the world, the cosmos are taken as what lies “outside” the mind) that marks the first great retrenchment of the philosophical enterprise, as descriptions of mind only, did philosophy inspire much trust in its capacity to fulfill its traditional aspiration: that of providing the formal models for understanding anything. Some kind of further retrenchment or relocation of discourse, at the least, was felt to be necessary.

(...)

The starting point for this modern post-philosophic tradition of philosophizing is the awareness that the traditional forms of philosophical discourse have been broken.

What remain as leading possibilities are mutilated, incomplete discourse (the aphorism, the note or jotting) or discourse that has risked metamorphosis into other forms (the parable, the poem, the philosophical tale, the critical exegesis).

(...)

Still hoping to command something resembling its former prestige, philosophy now undertakes to give evidence incessantly of its own good faith. Though the existing range of its conceptual tools could no longer be felt to carry meaning in themselves, they might be recertified: through the passion of the thinker.

Philosophy is conceived as the personal task of the thinker. Thought becomes “thinking,” and “thinking”—by a further turn of the screw—is redefined as worthless unless it is an extreme act, a risk. Thinking becomes confessional, exorcistic: an inventory of the most personal exacerbations of thinking.

Notice that the Cartesian leap is retained as the first move. Existence is still defined as thinking. The difference is that it's not any kind of cogitation, but only a certain kind of difficult thinking. Thought and existence are neither brute facts nor logical givens, but paradoxical, unstable situations.

(...)

However much we may long to repair the disorders in the natural harmony of man created by consciousness, this is not to be accomplished by a surrender of consciousness. There is no return, no going back to innocence. We have no choice but to go to the end of thought, there (perhaps), on the other side, in total self-consciousness, to recover grace and innocence.

In Cioran's writings, therefore, the mind is a voyeur.

But not of “the world.” Of itself. Cioran is, to a degree reminiscent of Beckett, concerned with the absolute integrity of thought. That is, with the reduction or circumscription of thought to thinking about thinking. “The only free mind,” Cioran remarks

in one of his finest essays, ‘Thinking Against Oneself,’ is “the one that, pure of all intimacy with being or objects, plies its own vacuity.” (...)

Philosophy becomes tortured thinking. Thinking that devours itself—and continues intact and even flourishes, in spite of these repeated acts of self-cannibalism. Or because of them, perhaps? The thinker plays both roles in the passion-play of thought. He is both protagonist and antagonist, both suffering Prometheus and the remorseless eagle who consumes his perpetually regenerated entrails.

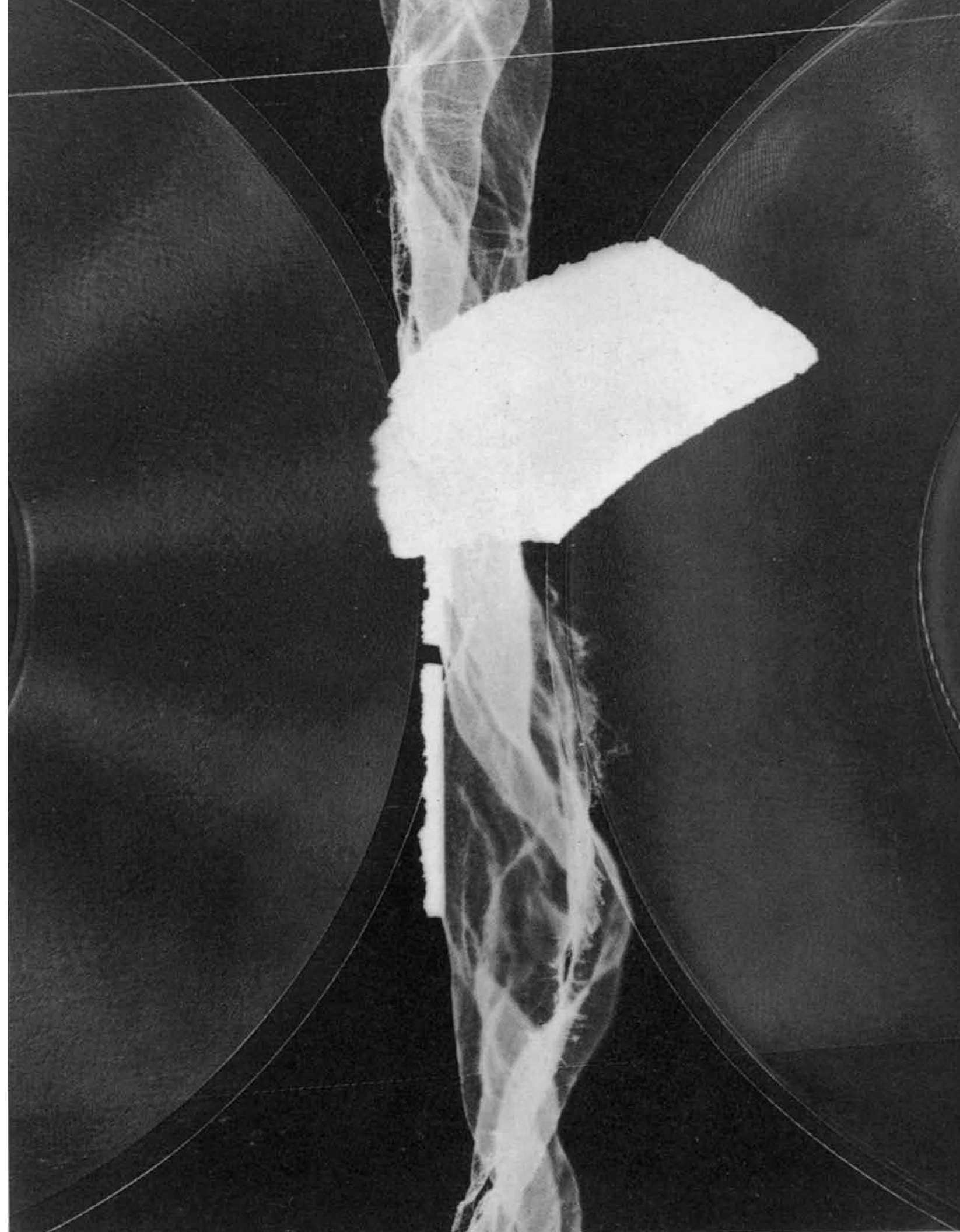
Cioran writes about impossible states of being, about unthinkable thoughts. That's his material for speculation. (Thinking against oneself, etc.) But he comes after Nietzsche, who set down almost all of Cioran's position almost a century ago. An interesting question: why does a subtle, powerful mind consent to say what has, for the most part, already been said? In order to make those ideas genuinely his own? Because, while they were true when originally set down, they have since become more true?

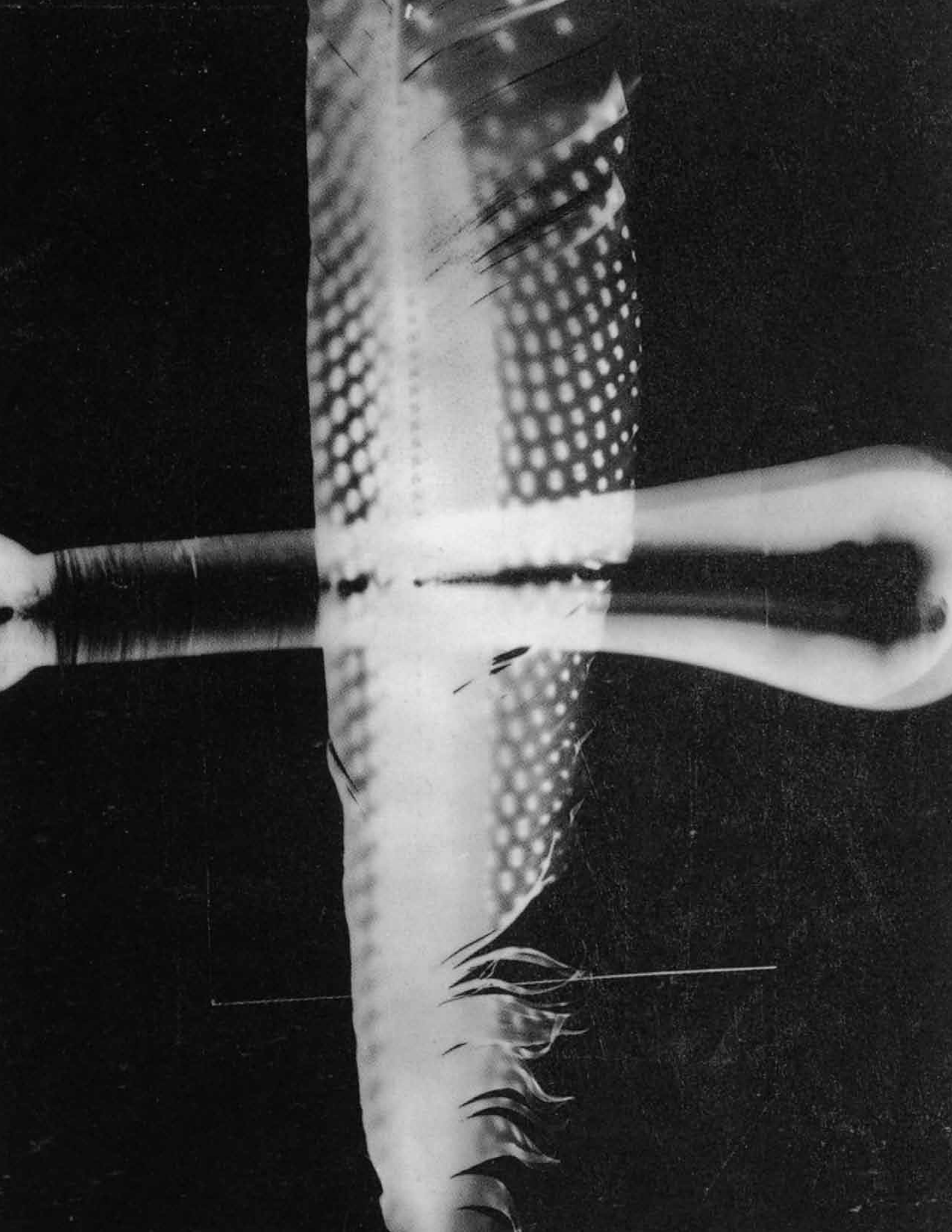
(...)

Characteristically, Cioran begins an essay where another writer would end it. And, beginning with the conclusion, he goes on from there.

His is the kind of writing that's meant for readers who, in a sense, already know what he says; they have traversed these vertiginous thoughts for themselves.

This page and following: Man Ray, **Untitled**, 1923.





## Next to Nothing

At first there was mud, and the sound of breathing  
and no one was sure of where we were.  
When we found out, it was much too late.  
Now nothing can happen save as it has to happen.  
And then I was alone, and it did not matter.  
Only because by that time nothing could matter.

The next year there were Knifing matches in the stadium.  
I think the people are ready for it, the mayor said.  
Total involvement. A new concept in sports.  
The loser does not leave the ring alive.

But no one can know where he is until he knows where he  
has been.

I sat quietly, and the air changed then, and I looked up.  
And the black branches trailing in the living water  
stirred slowly with the change of air.  
Piropos, you said. El aire les hace piropos.

Have you change for this banknote?  
It is closed off for the time being.  
Take me to the other end of the city  
where they slice up the sharks on the sand.

The double tariff applies after sundown.  
It is forbidden to pass beyond this railing.  
Take me to the other end of the city  
where nobody wants to go.

Yes, I said we would need the machine guns by next March,  
but I also warned against saying life was easy.  
I mixed hoops and coffins, cradles and needles  
while the lights twinkled on far-off Monte Tomás.  
We sat in a park that smelled of pine trees,  
and that night there were voices in the corridors  
and I remembered the empty face of the blind man as he  
sang.

Tu misma tienes la culpa  
de lo que has hecho conmigo.

You will find yourself among people.  
There is no help for this  
nor should you want it otherwise.  
The passages where no one waits are dark  
and hard to navigate.  
The wet walls touch your shoulders on each side.  
When the trees were there I cared that they were there.  
And now they are gone, does it matter?  
The passages where no one waits go on  
and give no promise of an end.  
You will find yourself among people,  
Faces, clothing, teeth and hair  
and words, and many words.  
When there was life, I said that life was wrong.  
What do I say now? You understand?

After sunset birds fly down  
push inside the grill and eat the plants.  
Sea fog swells across the lowlands  
and the slow ships moan.

Yes, something is going on.  
You said you saw them together  
but they were not together

Who loves the fog?  
Why do the birds come?  
As to the clouds, you may be innocent.

Living branches trail in black water. Nothing moves.  
And how do I know what you are to me?  
Our theories are untested. You must not laugh.  
We thought there were other ways.  
Probably there are, but they are hidden  
and we shall never find them.

What's his name?  
God forbid.  
Where does he live?  
Nobody knows.  
How do we get there?  
Ask the conductor.  
That's his face?  
Nobody knows.  
Now shall I ask him?  
God forbid.

Take me to the other end of the city  
where no one knows the difference between you and me.  
I went back. I did not find him.  
And what do I say now? You understand?



The woman pointed.  
That's the model we  
should have had with us.  
We thought about it,  
hung back and didn't.

Wished a thousand times we had.  
But that's the way those things go.

You never can know  
until afterwards.  
Roads of nothing but  
sharp pebbles and stones.

And they say there are  
snakes behind the rocks.  
You see no snakes but  
you know they are there.

And after you've gone  
down into seven  
empty valleys, one  
after the other,

you find that you've been  
quietly crying  
for the past half hour.  
Or at least I did.

Because there was no  
connection. No more

connection to any-  
thing at all. Nothing.

It might not have been  
such an awful trip  
if we'd had that one.

The woman pointed.  
That's the model we  
ought to have chosen.

It will be raining up there by the time you arrive.  
Try to get through quickly. The forest's cold green breath  
is best left undisturbed, coiled close to the boughs.  
In open country again you can breathe.  
That is the theory, but our theories are untested.  
Things are not the way they were.  
How can we be sure? New laws apply,  
and who knows the difference between the law and the wind?  
And who knows the difference between you and me?  
Y tu misma tienes la culpa  
de lo que has hecho conmigo.

I should like to see the bottom of the fountain.  
Do not go too near the edge.  
Does this path lead to the artificial lake?  
The band concert has been postponed.  
Is there a waterfall behind these rocks?  
The guardian is not on duty.

I have no idea of what is going to happen  
or in which parts the pain will be.  
We are only in spring, and spring has a  
twisting light.

Spring's images are made of crystal and  
cannot be recalled.

There will be suffering, but you know how  
to coax it.

There will be memories, but they can be  
deflected.

There will be your heart still moving  
in the wind that has not stopped flying  
westward,  
and you will give a signal. Will someone  
see it?

We thought there were other ways.

The darkness would stay outside.

We are not it, we said. It is not in us.

Yes, yes, go with her. The old man smiled.  
You will be back. You will not find me.

There was a time when life moved on a straighter line.  
We still drank the water from the lake,  
and the bucket came up cold  
and sweet with the smell of deep water.

The song was everywhere that year, an absurd refrain:  
It's only that it seems so long, and isn't.  
It's only that it seems so many years,  
and perhaps it's one.

When the trees were there I cared that they were there,  
and now they are gone.

On our way out we used the path that goes around the  
swamp.

When we started back the tide had risen.

There was another way, but it was far above and hard  
to get to.

And so we waited here, and everything is still the same.

There were many things I wanted to say to you  
before you left. Now I shall not say them.

Though the light spills onto the balcony  
making the same shadows in the same places,  
only I can see it, only I can hear the wind  
and it is much too loud.

The world seethes with words. Forgive me.

I love you, but I must not think of you.

That is the law. Not everyone obeys it.

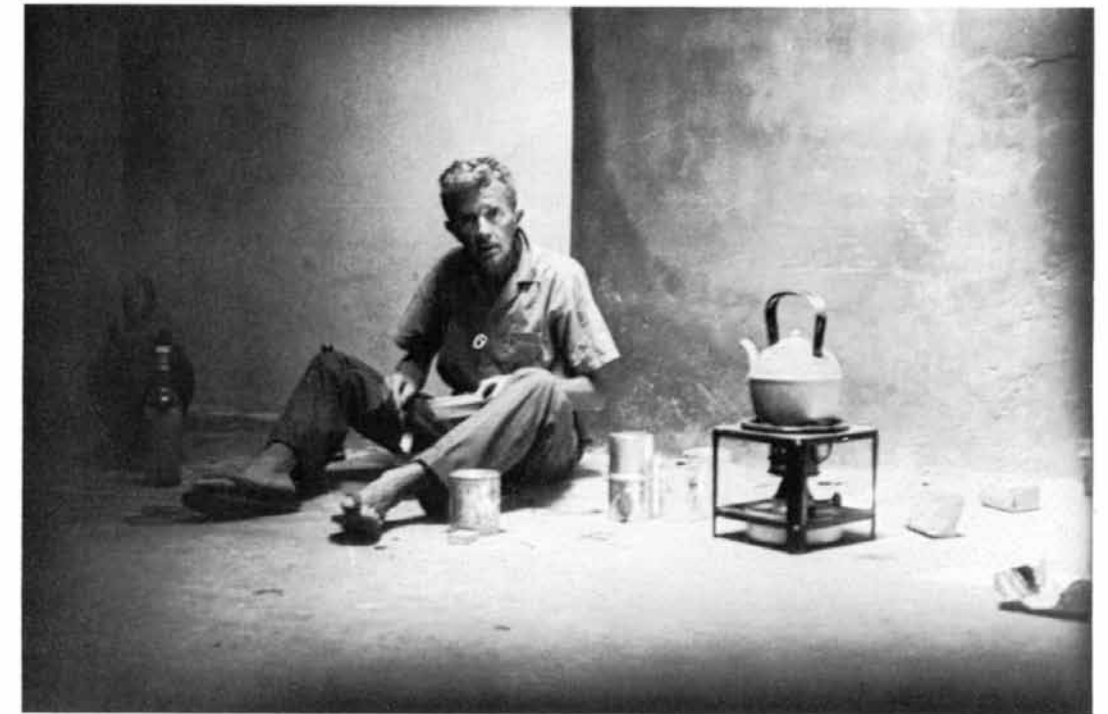
Though time moves past and the air is never the same  
I shall not change. That is the law, and it is right.

Yes, yes, I went with her. Yes.  
In the shine of morning and the glow of  
afternoon.

Pisopos, you said. El tiempo te hace pisopos.  
There will never be a way of knowing.  
I did go back. The old man was gone.

Do no thinking, give no reasons,  
 Have no sensations, make no apologies.  
 The anguish was not real enough,  
 the age of terror too short-lived.  
 They thought all that was finished, left  
 behind.  
 They were sure there must be other ways.

I am the spider in your salad, the bloodsmear on your  
 bread.  
 I am the rusted scalpel, the thorn beneath your nail.  
 Some day I shall be of use to you, as you can never be to me.  
 The goats leap from grave to grave, and nibble at last  
 year's thistles.  
 In the name of something more than nothing, of Sidi Bouayad,  
 and all who have wisdom and power and art,  
 I am the wrong direction, the dead nerve-end, the unfinished  
 scream.  
 One day my words may comfort you, as yours can never  
 comfort me.



Paul Bowles visiting Morocco, 1961

Allen Ginsberg

Novalis wrote that “philosophy is properly homesickness; the wish to be everywhere at home.” If the human mind can be everywhere at home, it must in the end give up its local “European” pride, and something else—that will seem strangely unfeeling and intellectually simplistic—must be allowed in. “All that is necessary,” says Cage with his own devastating irony, “is an empty space of time and letting it act in its magnetic way.”

—Susan Sontag

## THE SILENCE OF POLYGLOTS

Not speaking one’s mother tongue. Living with resonances and reasoning that are cut off from the body’s nocturnal memory, from the bittersweet slumber of childhood. Bearing within oneself like a secret vault, or like a handicapped child—cherished and useless—that language of the past that withers without ever leaving you. You improve your ability with another instrument, as one expresses oneself with algebra or the violin. You can become a virtuoso with this new device that moreover gives you a new body, just as artificial and sublimated—some say sublime. You have a feeling that the new language is a resurrection: new skin, new sex. But the illusion bursts when you hear, upon listening to a recording, for instance, that the melody of your voice comes back to you as a peculiar sound, out of nowhere, closer to the old spluttering than to today’s code. Your awkwardness has its charm, they say, it is even erotic, according to womanizers, not to be outdone. No one points out your mistakes, so as not to hurt your feelings, and then there are so many, and after all they don’t give a damn. One nevertheless lets you know that it is irritating just the same. Occasionally, raising the eyebrows or saying “I beg your pardon?” in quick succession lead you to understand that you will “never be a part of it,” that it “is not worth it,” that there, at least, one is “not taken in.” Being fooled is not what happens to you either. At the most, you are willing to go along, ready for all apprenticeships, at all ages, in order to reach—within that speech of others, imagined as being perfectly assimilated, some day—who knows what ideal, beyond the implicit acknowledgment of a disappointment caused by the origin that did not keep its promise.

Thus, between two languages, your realm is silence. By dint of saying things in various ways, one just as trite as the other, just as approximate, one ends up no longer saying them. An internationally known scholar was ironical about his famous polyglotism, saying that he spoke Russian in fifteen languages. As for me I had the feeling that he rejected speech and his slack silence led him, at times, to sing and give rhythm to chanted poems, just in order to say something.

When Hölderlin became absorbed by Greek (before going back to the sources of German), he dramatically expressed the anesthesia of the person that is snatched up by a foreign language: “A sign, such are we, and of no meaning / Dead to all suffering, and we have almost / Lost our language in a foreign land” (Mnemosyne).

Stuck within that polymorphic mutism, the foreigner can, instead of saying, attempt doing—housecleaning, playing tennis, soccer, sailing, sewing, horseback riding, jogging, getting pregnant, what have you. It remains an expenditure, it expends, and it propagates silence even more. Who listens to you? At the most, you are being toler-

ated. Anyway, do you really want to speak?

Why then did you cut off the maternal source of words? What did you dream up concerning those new people you spoke to in an artificial language, a prosthesis? From your standpoint, were they idealized or scorned? Come, now! Silence has not only been forced upon you, it is within you: a refusal to speak, a fitful sleep riven to an anguish that wants to remain mute, the private property of your proud and mortified discretion, that silence is a harsh light. Nothing to say, nothingness, no one on the horizon. An impervious fullness: cold diamond, secret treasury, carefully protected, out of reach. Saying nothing, nothing needs to be said, nothing can be said. At first, it was a cold war with those of the new idiom, desired and rejecting; then the new language covered you as might a slow tide, a neap tide. It is not the silence of anger that jostles words at the edge of the idea and the mouth; rather, it is the silence that empties the mind and fills the brain with despondency, like the gaze of sorrowful women coiled up in some nonexistant eternity.

Tom Marioni, performance, creating a sound drawing, 1980.













Charlotte Moorman and Nam June Paik in their first performance together, Judson Hall, New York, August 30, 1964







# A YEAR

WITH SWOLLEN APPENDICES



## Generative music

One of my long-term interests has been the invention of 'machines' and 'systems' that could produce musical and visual experiences. Most often these 'machines' were more conceptual than physical: the point of them was to make music with materials and processes I specified, but in combinations and interactions that I did not.

My first released piece of this kind was *Discreet Music* (1975), in which two simple melodic cycles of different durations separately repeat and are allowed to overlay each other arbitrarily. (Thus, for instance, if one cycle is 29 seconds long and the other 33 seconds long, they will come back into sync every 957 (i.e.  $29 \times 33$ ) seconds. Subsequently I released *Music for Airports*, *On Land*, *Thursday Afternoon*, *Neroli* and other works, all of which use variations on this and similar 'automatic' systems.

In my audio-visual installations I found another way of making ever-changing music. I distributed the pre-recorded musical elements over several (usually four to eight) audio cassettes of different lengths. These were all played back simultaneously, each cassette feeding its own amplifier and pair of speakers. It was thus possible to make music that was different at any point in space and time – or effectively so, because in fact the cassettes would have come into sync again after a few years, if any of the shows had lasted that long (e.g. five cassettes of lengths 23, 25.5, 30.2, 19.7 and 21.3 minutes would fall into sync about every 14 years).

I enjoyed these shows – especially the knowledge that the music I was hearing at any given moment was unique, and would probably never be heard in exactly that way again.

My records, however, were always recordings of the output of one or another of these combinatorial systems: though it could produce original music forever, what went on the record was a 30-minute section of its output, which would then of course be identical each time you played it. However, what I always wanted to do was to sell the system itself, so that a listener would know that the music was always unique. Since this would have involved persuading my listeners to buy four or five CD-players instead of just one, and then buy the set of four or five CDs to play on them, I didn't spend too much time on the project.

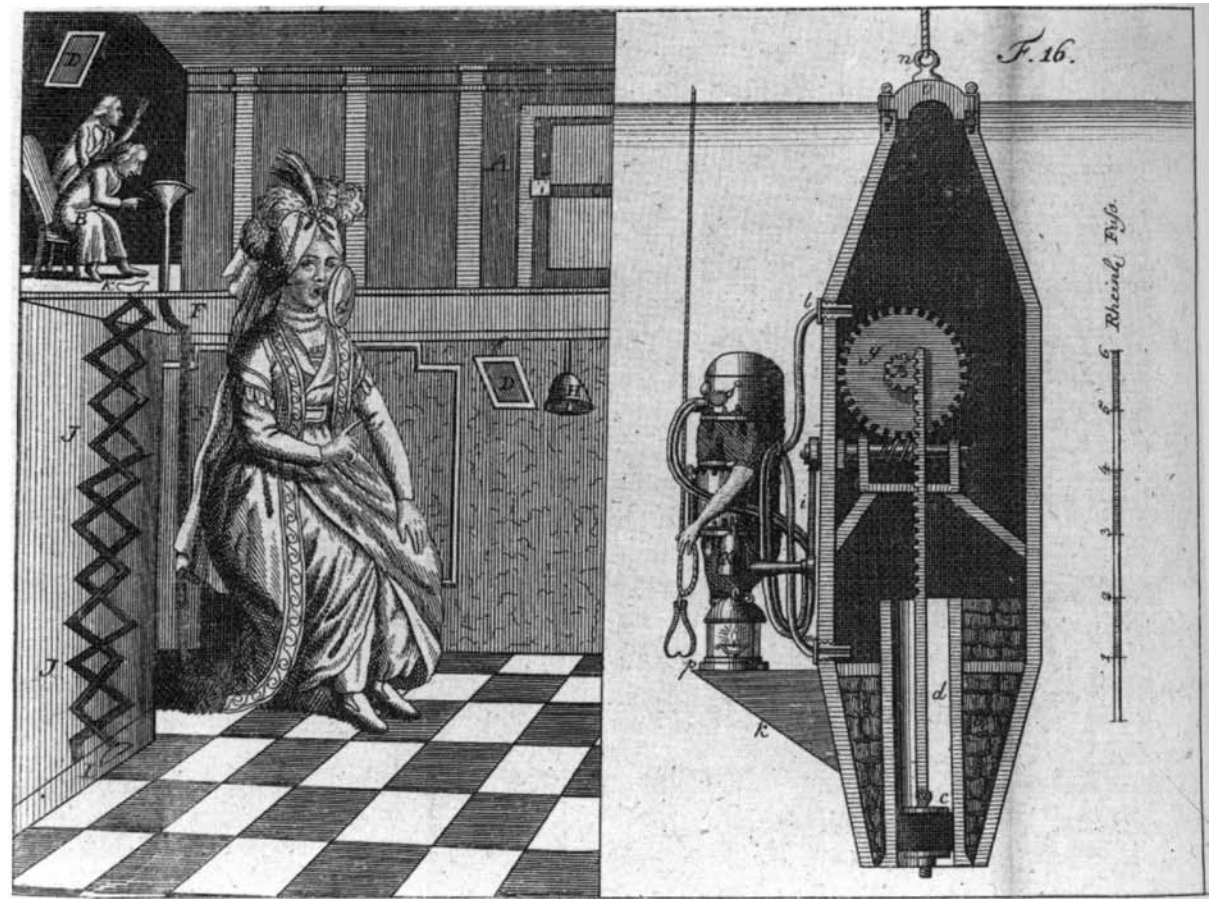
But with computer technology I began to think that there might be a

way of doing it. I was inspired initially by certain screensavers – those little graphic devices that use very little computer memory but keep generating new images on the screen. I wrote several proposals based on the idea of using the computer to make music in a similar manner – not as a way of replaying huge chunks of preformed material (which was what was being done, to devastatingly miserable effect, with CD-Roms at the time) but instead as a place where compositional 'seeds' provided by the composer would be grown. I thought this made composing into a kind of genetic activity – in the sense that the compositional 'seeds' were actually interacting sets of rules and parameters rather than precise musical descriptions. I imagined the piece evolving out of the interaction of these probabilistic rule-sets – and therefore evolving differently in each 'performance'.

Since I know nothing about writing code for computers, this would probably have remained a pipedream were it not for a company called Sseyo who had been thinking on exactly the same lines.

In early 1995 I received from them a CD of music that had been made by their software program called Koan. A couple of the pieces were clearly in 'my' style (they readily acknowledged that my 'ambient' work had been part of their inspiration for the Koan system), but what surprised me was that I would have been proud of them. I contacted Tim Cole at Sseyo, and he arranged for me to get a copy of the Koan 'authoring tool' – the program by which one writes the rules for these pieces – and, after a few days of typical interface frustration, I took to it like a duck to water.

Koan works by addressing the soundcard in the computer. A soundcard is a little synthesizer sold as an optional add-on to the computer. The computer sends instructions to that soundcard and tells it what noises to produce and in what patterns. Koan is a very sophisticated way of doing this, enabling a composer to control about 150 parameters that specify things like sound-timbre and envelope, scale, harmony, rhythm, tempo, vibrato, pitch range, etc. Most of Koan's instructions are probabilistic – so that rather than saying 'Do precisely this' (which is what a musical sequencer does) they say 'Choose what to do from within this range of possibilities.' The Koan program allows that range to be more or less specific – you could, if you so chose, write absolutely precise pieces of music with it, though this would probably be its least interesting use.



## TEXTES POUR RIEN

(...) Je préparai donc ma phrase et ouvris la bouche, croyant que j'allais l'entendre, mais je n'entendis qu'une sorte de râle, inintelligible même pour moi qui connaissais mes intentions. Mais ce n'était rien, rien que l'aphonie due au long silence, comme dans le bosquet où s'ouvrent les enfers, vous rappelez-vous, moi tout juste. Lui, sans lâcher la chèvre, vint se mettre tout contre moi et m'offrit un bonbon, dans un cornet de papier, comme on en trouvait pour un penny. Il y avait au moins quatre-vingts ans qu'on ne m'avait offert un bonbon, mais je le pris avidement et le mis dans ma bouche, je retrouvai le vieux geste, de plus en plus ému, puisque j'y tenais. Les bonbons étaient collés ensemble et j'eus du mal, de mes mains tremblantes, à séparer des autres le premier venu, un vert, mais il m'y aida et sa main frôla la mienne. Merci, dis-je. Et comme quelques instants plus tard il s'éloignait, en traînant sa chèvre, je lui fis signe, d'un grand mouvement de tout le corps, de rester, et je dis, dans un murmure impétueux, Où vas-tu ainsi, mon petit bonhomme, avec ta biquette? Cette phrase à peine prononcée, de honte je me couvris le visage. C'était pourtant la même que j'avais voulu sortir tout à l'heure. Où vas-tu, mon petit bonhomme, avec ta biquette! Si j'avais su rougir je l'aurais fait, mais mon sang n'allait plus jusqu'aux extrémités. Si j'avais eu un penny dans ma poche je le lui aurais donné, pour me faire pardonner, mais je n'avais pas un penny dans ma poche, ni rien d'approchant, rien qui pût faire plaisir à un petit malheureux, au bord de la vie. Je crois que ce jour-là, étant sorti pour ainsi dire sans préméditation, je n'avais sur moi que ma pierre.

Un jour je rencontrai un homme qui m'était connu d'une époque antérieure. Il vivait dans une caverne au bord de la mer. Il avait un âne qui broutait le long des falaises, ou dans les petits sentiers creux qui descendent vers la mer. Quand il faisait très mauvais cet âne venait de son propre chef dans la caverne et s'y abritait, pendant tout le temps de l'orage. Ils avaient passé bien des nuits ensemble, serrés l'un contre l'autre, pendant que le vent hurlait et que la mer tonnait sur la grève. Grâce à cet âne il pouvait livrer du sable, de l'algue et des coquillages aux citadins, pour leurs jardins. Il ne pouvait en transporter beaucoup à la fois, car l'âne était vieux, petit aussi, et la ville était loin. Mais il gagnait ainsi un peu d'argent, suffisamment pour s'acheter du tabac et des allumettes et de temps en temps une livre de pain. Ce fut lors d'une de ces sorties qu'il me rencontra, dans les faubourgs. Il était enchanté de me revoir, le pauvre. Il me supplia de l'accompagner chez lui et d'y passer la nuit. Restez aussi longtemps que vous voudrez, dit-il. Qu'est-ce qu'il a, votre âne? dis-je. Ne faites pas attention, dit-il, il ne vous connaît pas. Je lui rappelai que je n'avais l'habitude de rester avec personne plus de deux ou trois minutes à la file et que j'avais horreur de la mer. Il eut l'air désolé. Alors vous ne venez pas, dit-il. Brusquement, non, à force, à force, je n'en pus plus, je ne pus continuer. Quelqu'un

dit, Vous ne pouvez pas rester là. Je ne pouvais pas rester là et je ne pouvais pas continuer. Je vais décrire l'endroit, ça c'est sans importance. Le sommet, très plat, d'une montagne, non, d'une colline, mais si sauvage, si sauvage, assez. Bourbe, bruyère à hauteur de genou, imperceptibles sentiers de brebis, dénudations profondes. C'est au creux d'une de celles-ci que je gisais, à l'abri du vent. Beau panorama, sans le brouillard qui voilait tout, vallées, lacs, plaine, mer. Comment continuer? Il ne fallait pas commencer, si, il le fallait. Quelqu'un dit, peut-être le même, Pourquoi êtes-vous venu? J'aurais pu rester dans mon coin, au chaud, au sec, à l'abri, je ne pouvais pas. Mon coin, je vais le décrire, non, je ne peux pas. C'est simple, je ne peux plus rien, on dit ça. Je dis au corps, Ouste, debout, et je sens l'effort qu'il fait, pour obéir, comme une vieille carne tombée dans la rue, qu'il ne fait plus, qu'il fait encore, avant de renoncer. Je dis à la tête, Laisse-le tranquille, reste tranquille, elle cesse de respirer, puis halète de plus belle. Je suis loin de toutes ces histoires, je ne devrais pas m'en occuper, je n'ai besoin de rien, ni d'aller plus loin, ni de rester où je suis, tout cela m'est vraiment indifférent. Je devrais m'en détourner, du corps, de la tête, les laisser s'arranger, les laisser cesser, je ne peux pas, il faudrait que moi je cesse. Ah oui, nous sommes plus d'un on dirait, tous sourds, même pas, unis pour la vie. Un autre dit, ou le même, ou le premier, ils ont tous la même voix, tous les mêmes idées, vous n'aviez qu'à rester chez vous. Chez moi. On voulait que je rentre chez moi. Ma demeure. Sans le brouillard, avec de bons yeux, avec une longue-vue, je la verrais d'ici. Ce n'est pas de la simple fatigue, je ne suis pas simplement fatigué, malgré l'ascension. Ce n'est pas non plus que je veuille rester ici. J'avais entendu, j'avais dû entendre parler de la vue, la mer là-bas au fond en plomb repoussé, la plaine dite d'or si souvent chantée, les doubles vallons, les lacs glaciaires, les fumées de la capitale, on n'avait que cela dans la bouche. Au fait, qui sont ces gens? M'ont-ils suivi, précédé, accompagné? Je suis dans l'excavation que les siècles ont creusée, siècles de mauvais temps, couché face au sol brunâtre où stagne, lentement bue, une eau safran. Ils sont là-haut, tout autour, comme au cimetière. Je ne peux pas lever les yeux vers eux, dommage. Je ne verrais pas leurs visages. Les jambes peut-être, plongées dans la bruyère. Me voient-ils, que peuvent-ils voir de moi? Peut-être qu'il n'y a plus personne, peut-être qu'ils sont partis, écœurés. J'écoute et ce sont les mêmes pensées que j'entends, je veux dire les mêmes que toujours, curieux.

Je ne me rappelle pas être venu, je ne pourrai jamais partir, tout mon petit monde, j'ai les yeux fermés et je sens contre ma joue l'humus rêche et moite, mon chapeau est tombé, il n'est pas tombé loin ou le vent l'a apporté loin, j'y tenais. Tantôt c'est la mer, tantôt la montagne, souvent ça a été la forêt, la ville, la plaine aussi, j'ai tâté de la plaine aussi, je me suis laissé pour mort dans tous les coins, de faim, de vieillesse, tué, noyé, et puis sans raison, souvent sans raison, d'ennui, ça ravigote, un dernier soupir, et les chambres alors, de ma belle mort, au lit, croulant sous mes pénates, et toujours marmonnant, les mêmes propos, les mêmes histoires, les mêmes questions et réponses, bon enfant, assez, à l'extrême de mon monde d'ignorants, jamais une imprécation, pas si bête, ou bien j'oublie.

Et quand il me sent sans existence, c'est de la sienne qu'il me veut privé, et inverse-

ment, fou, fou, il est fou. En vérité il me cherche pour me tuer, pour que je sois mort comme lui, mort comme les vivants. Tout cela il le sait, mais cela ne sert à rien, de le savoir, moi je ne le sais pas, moi je ne sais rien. Il se défend de raisonner, mais il ne fait que raisonner, faux, comme si cela pouvait aider. Il croit balbutier, il croit en balbutiant saisir mon silence, se taire de mon silence, il voudrait que ce soit moi qui le fasse balbutier, bien sûr qu'il balbutie. Il raconte son histoire toutes les cinq minutes, en disant que ce n'est pas la sienne, avouez que c'est malin. Il voudrait que ce soit moi qui l'empêche d'avoir une histoire, bien sûr qu'il n'a pas d'histoire, est-ce une raison pour vouloir m'en coller une? Voilà comme il raisonne, à côté, d'accord, mais à côté de quoi, c'est ça qu'il faut voir. Il me fait parler en disant que ce n'est pas moi, avouez que c'est fort, il me fait dire que ce n'est pas moi, moi qui ne dis rien.

Seuls les mots rompent le silence, tout le reste s'est tu. Si je me taisais je n'entendrais plus rien. Mais si je me taisais les autres bruits reprendraient, ceux auxquels les mots m'ont rendu sourd, ou qui ont réellement cessé. Mais je me tais, cela arrive, non, jamais, pas une seconde. Je pleure aussi, sans discontinuer. C'est un flot ininterrompu, de mots et de larmes. Le tout sans réflexion. Mais je parle plus bas, chaque année un peu plus bas. Peut-être. Plus lentement aussi, chaque année un peu plus lentement. Peut-être. Je ne me rends pas compte. Les pauses seraient donc plus longues, entre les mots, les phrases, les syllabes. Les larmes, je les confonds, mots et larmes, mes mots sont mes larmes, mes yeux ma bouche. Et je devrais entendre, à chaque petite pause, si c'est le silence comme je le dis, en disant que seuls les mots le rompent. Eh bien non, c'est toujours le même murmure, ruisselant, sans hiatus, comme un seul mot sans fin et par conséquent sans signification, car c'est la fin qui la donne, la signification aux mots. Alors de quel droit, non, cette fois je me vois venir, et je m'arrête, en disant, D'aucun, d'aucun. Mais le poursuivant, le vieux thrène stupide, je me pose, et jusqu'au bout, une nouvelle question, la plus ancienne, celle de savoir si cela a toujours été ainsi. Eh bien, je vais me dire une chose (si je peux), lourde j'espère de promesses pour l'avenir, à savoir que je commence à ne plus du tout savoir comment cela se passait autrefois (j'ai pu), et par autrefois j'entends ailleurs, le temps s'est fait espace et il n'y en aura plus, tant que je ne serai pas hors d'ici. Oui, mon passé m'a mis dehors, ses grilles se sont ouvertes, ou c'est moi qui me suis évadé, peut-être en creusant. Pour traîner un instant libre dans un rêve de jours et de nuits, me rêvant allant, saison après saison, vers une dernière, comme un vivant, avant d'être, soudain, ici, sans mémoire. Plus rien dès lors qu'imagination et l'espoir de me voir une histoire, d'être venu de quelque part et de pouvoir y retourner, ou continuer, un jour, ou sans espoir. Sans quel espoir, je viens de le dire, celui de me voir vif, et non seulement dans une tête imaginaire, un galet promis au sable, sous un ciel changeant, et changeant un peu de place, chaque jour, chaque nuit, comme si cela pouvait aider, de devenir moindre, toujours moindre, sans jamais disparaître.



Man Ray, *Objet indestructible*, 1923/65

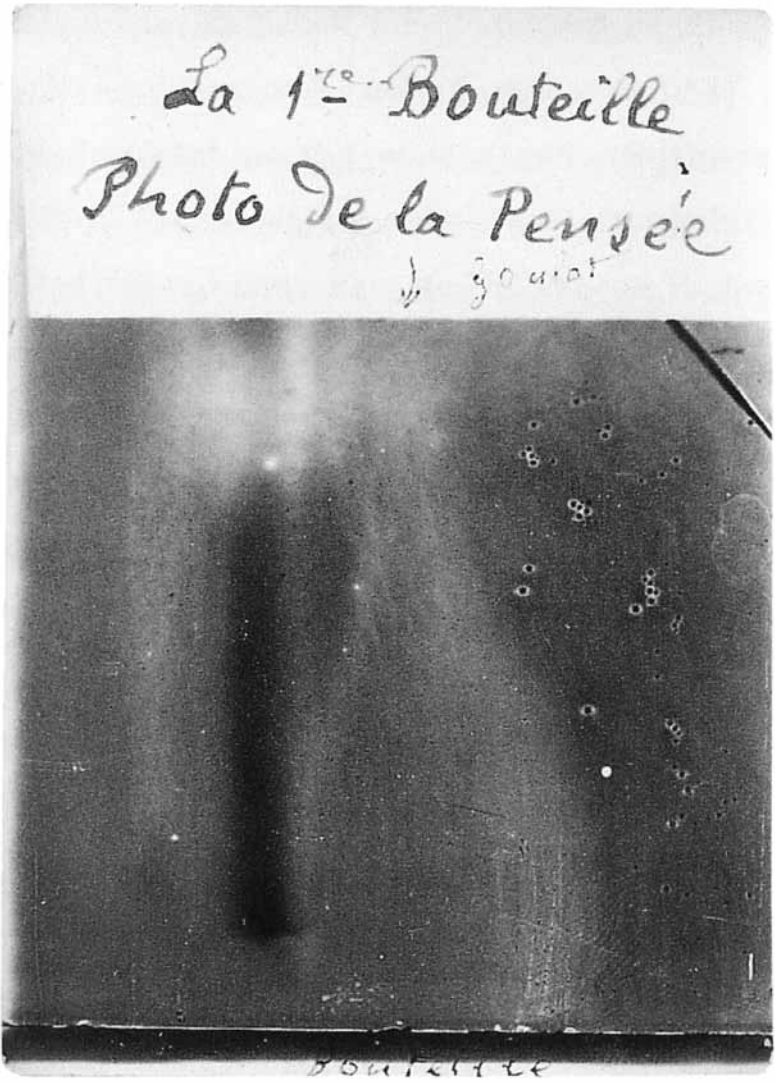


“(…) and the Devil was unleashed,” was Wilhelm Konrad Roentgen’s comment upon hearing the announcement that he had discovered X-rays, early in 1896. (…) While X-rays support ancient occult theories, they also generate new ones. Some speculate that, using similar rays and comparable equipment, photographing thoughts will be possible in the near future. After seeing a radiograph of a human skeleton taken through the epidermal envelope, it is natural to think that taking a picture of thoughts through a skull will come soon. Eminent English chemist and physicist William Crookes, whose tubes were commonly used in radiography, brings up such a hypothesis when addressing London’s Psychic Sciences Society. Using X-rays and a strange crown screwed onto his head, famous inventor Thomas Edison’s son, evidently ready to follow in his father’s footsteps, attempts to take a photograph of his thoughts. So many operators, around the turn of the twentieth century, are trying to imprint the volutes of their brain onto sensitive plates, that it would be no easy task to list them: doctors O’Donnel and Veeder in the US, Ingles Rogers in Plymouth, René Bertin in Vienna, a certain Noël from the Metapsychical Club in Brussels, and probably many more. In France, for the purpose of taking photographs of their thoughts, Hippolyte Baraduc and Louis Darget develop a “portable radiographer”, obviously inspired from Roentgen’s discovery. It consists of a small case containing a sensitive plate, held against the forehead with a headband. As in radiography, the photographic equipment is reduced to a strict minimum (no camera obscura, no lens), and, as for X-rays, the sensitive plate is laid flat on the outside of the area to reproduce.

Knowing that Roentgen placed the plate under a hand to take a picture of its finger bones, Baraduc and Darget consider that it makes obvious sense to apply it to the forehead to photograph thoughts. For Darget, “thoughts are creative, radiating, almost tangible, forces. (…) When the human soul produces a thought, it sends vibrations through the brain, the phosphorus it contains starts radiating, and the rays are projected out\*”. While Baraduc only produces shapeless swirls, stains and blurs\*, Darget obtains precise and even figurative forms. When a certain Monsieur H. is decrypting a Beethoven music score at the piano, he sets the portable radiographer on his forehead and a portrait of the composer appears on the plate When Madame A. is looking at an astronomical atlas, she obtains an image of two spheres: a planet and its satellite.

\* Louis Darget, quoted in *La Photographie transcendante*, Librairie nationale, Paris, 1911, p. 31.

\*\* Cf. Hippolyte Baraduc, *L’Âme humaine, ses mouvements, ses lumières et l’iconographie de l’invisible fluide*, Ollendorff, Paris, 1897.





## NON-KNOWLEDGE

Living in order to be able to die, suffering to enjoy, enjoying to suffer, speaking to say nothing. No is the middle term of a consciousness that has as its end point—or as the negation of its end—the passion for not knowing.

There is a point after which there is nothing to say. We reach this point more or less quickly, but definitively, if we've reached it, we are no longer able to allow ourselves to be caught up in the game.

(...) As for the sphere of thought, it is horror. Yes, it is horror itself.

It is led to be, by an aberration that is nothing more than an unbearable desire, led to the moment of death. To think is to slip in the night on the slope of a roof without parapets, in a wind that nothing appeases. The more rigorous the thought, the more the threat is intensified.

Rigorous thought, the firm resolution to think, is already exhaustion.

The possibility, on the roof, of an anguished equilibrium is itself conditioned by a vocation: that of responding to the call of the wind, responding to the call of death.

But if death calls, although the noise of the call fills the night, the call is a kind of profound silence. The response itself is silence stripped of every possible meaning. (...)

A stupid and cruel feeling of insomnia, a monstrous, amoral feeling, in accord with the unregulated cruelty of the universe, the cruelty of famine, of a hopeless sadism: God's unfathomable taste for the extreme suffering of his creatures, suffocating and dishonoring them. In this equality with limitless error, wherein I myself am led astray, have I ever felt more plainly human?

(...)

If I hadn't noted this feeling at once in the night, I would have forgotten it. Such states suppose a kind of withdrawal from the reality of the world: I woke up from a point at which I was certain that I was going to enter into the bed's inertia, I was this drifting life that took hold of nothing, and that was no longer taken hold of by anything. Insofar as they are entirely outside the world, we neglect such moments: their indifference, their solitude, their silence are not objects for our attention; they remain as if they didn't exist (it's the same as with an expanse of deserted mountains). We take such moments as insignificant, though only their daylight meaning has disappeared, like getting dressed, going out, tidying up: herein resides their insignificance. They don't have the meaning of a dream either, but these final moments are those of a day become absurd; their absurdity captures our attention, their absurdity prevents our finally perceiving their *nudity*: this immense silent object, which slips away, resists itself and, escaping, reveals that everything else lied.

In spite of the feverish aspect of these few pages, could there be a more positive, colder mind than mine?

(...)

We continuously move further away, in the examination of thought, from the decisive moment (of resolution) when thought fails, not as an awkward gesture, but, on the contrary, as a conclusion, which cannot be surpassed; because thought gauged the awkwardness involved in the act of accepting the exercise: it's a servility! Common men were right to despise those who stoop to thought; those who believed they could escape the truth of this contempt through an effective superiority, which they allowed themselves to the degree that humanity as a whole is engaged in the exercise of thought: but this superiority cannot be reduced to greater or lesser excellence in a servile occupation. But established excellence shows that, so long as the final search for man and thought is sovereignty, resolved thought reveals the servility of all thought: this operation by which, exhausted, thought is itself the annihilation of thought. Even this phrase is uttered in order to establish the silence that is its own suppression.

It is the meaning, or better, the absence of meaning of that which I noted the other night.

In order to perceive the meaning of a novel, it is necessary to go to the window and watch strangers go by. Letting go of our profound indifference for everyone we don't know is the most complete protest against the face adopted by humanity as a species of anonymous passersby. The stranger is negligible and, in a character from a novel,

the opposing affirmation is implied, that this stranger has the world to himself. That he is sacred, as soon as I lift the profane mask that conceals him.

I imagine the heavens without me, without God, without anything general or particular—this isn’t nothingness. In my eyes, nothingness is something else. It is the negation—of myself or of God—God and myself having never been, nothing ever having been (unless nothingness is only a facility for the philosophical game). I’m talking on the contrary about a slipping of my mind wherein I propose the possibility of a total disappearance of the general or the particular to it (the general being only a common aspect of particular things): what remains is not what existentialism calls a foundation from which. . . detaches itself, but if necessary what would appear to the ant if it were outside itself, which it cannot be but which my imagination can represent to me. In the unlimited oblivion, which, through my phrase, in myself, is the moment in transparency, there is, effectively, nothing that can give a meaning to my phrase, but my indifference (my indifferent being) rests in a kind of resolution of being: non-knowledge, non-question, although, on the level of discourse, it is essentially a question (in this sense it is perfectly intelligible), but, by this even, essentially a return, an annihilation of the question. Everything that happens unexpectedly is indifferent—through the repetition of complexity, we are only a pretext to happiness, to the onanistic anguish of which I have spoken, to the anguish of irony, at stake. But fundamentally, if nothing happens unexpectedly, there isn’t even a risk. There is only the negation of meaning, complete enough to allow the persistence of the interest—through habit—that all the objects of my thought have for me.

I’m not alone. If I were, I could have thought that in knowing myself I knew humanity, but, in the multiplicity of irreconcilable thoughts, I admitted that, without a barrier to protect me from the continuous stimulation, my own thought would be lost. But for all of us, not through fault of method, but through the powerlessness of the multitude, which is the great strength of man, about which we know nothing. I, however, add this simple affirmation to the tempestuous noise of discordant minds—similar in battle to the fall of the wounded soldier to the ground, already expiring: “We had limited truths, the meaning, the structure of which was valuable in a given sphere. But from there, we always wanted to go further, being unable to bear the idea of the night into which I am now entering; the night alone is desirable, in comparison to the night, day is as petty avarice to the overture of thought.”

The unappeased multitude that I am (will nothing permit my withdrawal? Am I not in every way similar to it?) is generous, violent, blind. It is a laugh, a sob, a silence that has nothing, which hopes for and retains nothing. Because the mania of possession made intelligence the opposite of laughter, a poverty at which those who are enriched by their mad generosity laugh endlessly.

(...)

My phrase wanted to make silence from words, but in the same way that knowledge loses itself in non-knowledge, in proportion to the extension of knowledge. The true sage, in the Greek sense, uses science the way it can be used, in view of the moment wherein every notion will be brought to the point at which its limit will appear—the beyond of any notion.

My contribution. The honesty of non-knowledge, the reduction of knowledge to what it is. But it will augment itself, through consciousness of the night, through awakening in the night of non-knowledge; I changed a knowledge that dishonestly transgressed its possibilities through dangerous connections, fundamentally unjustified, into a continuously renewed awakening, every time that reflection could no longer be pursued (since on waking, being pursued, it would substitute acts of discernment grounded on falsifications for non-knowledge). Awakening, on the contrary, restores the sovereign element, the impenetrable (inserting the moment of nonknowledge into the operation of knowledge; I restore what was missing to knowledge, a recognition, in the anguished awakening, of what it is necessary for me, being human, to resolve whereas the objects of knowledge are subordinated).

Always at the limit, while we think discursively, in the instant, wherein the object of our thought is no longer reducible to discourse, and wherein we have no more than to feel a point in our heart—or to close ourselves to that which exceeds our discourse. It is not about ineffable states: it is possible to speak about all the states we go through. But there remains a point that always has the meaning—rather, the absence of meaning—of totality. (...)

My writing is always a mixture of the aspiration to silence and that which speaks in me, even complaining about money; at least these appropriations enrich me in some way and cannot all be the negation of myself, the negation of my interests. Besides, isn’t it sad to link proper interest to the negation of proper interest!



U.S. army tanks are illuminated by rocket launchers during night exercises in Kuwait. (Photograph Chris Helgren/Reuters)

Raymond Gervais, Poster for Elementa Naturae exhibition, 1987.

# ELEMENTA MUSICAE

## Trois duos

Claude Debussy	piano
Paul Desmond	saxophone alto
Gustav Mahler	piano
Lester Young	saxophone ténor
Manuel de Falla	piano
Charles Mingus	contrebasse

*Présentés par le Musée d'art contemporain dans le  
cadre de l'exposition Elementa Naturae  
Montréal 7 juin – 6 septembre 1987  
entrée libre*



## THE WEIGHT OF MUSIC

(...) Musical ideas and analogies are constantly employed throughout the non-musical arts, and the closer their proximity to sound, the more powerful they become as productive aids, circumventions, or impediments. Within the period of modernism and the avant-garde, when many present-day assumptions were generated, music was valued as a model of artistic ambitions for self-containment. Having already thus arrived at what the other arts sought, music failed to question its own representational operations, even though acoustic and electronic recording were to offer other possibilities. Thus secured, musical auto-referentiality did violence to a system of aural signification whereby the associative characteristics of sounds, their attendant social and imaginative domains, were reduced, trivialized, or eradicated. (...)

You have two sources for sounds: noises, which always tell you something—a door cracking, a dog barking, the thunder, the storm; and then you have instruments. An instrument tells you, la-la-la-la (sings a scale). Music has to find a passage between noises and instruments. It has to escape. It has to find a compromise and an evasion at the same time; something that would not be dramatic because that has no interest to us, but something that would be more interesting than sounds like Do Re Mi Fa. . . .\*

The claim is that one is opening music to all events, all irruptions, but one ends up reproducing a scrambling that prevents any event from happening. All one has left is a resonance chamber well on the way to forming a black hole. A material that is too rich remains too “territorialized”: on noise sources, on the nature of the objects. . . (this even applies to Cage’s prepared piano).\*\*

Of course, the name of Cage leaps instinctually to the lips of most post-modern theorists when required to add a musical name (acid test: do they ever name a tune?) to the roster of painters, poets, novelists, theorists, architects, and the like. But Cage’s emancipatory endgame does







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not depart from Russolo’s modernist strategy for musical rejuvenation. The “lateness” of his modernism is directly related to the conservatism of Western art music. Cage performed the last possible modernist renovation of Western art music and thereby “filled music up.” After him there is no dividing line between musical sound and sound because all sound can be music. Also, there need be neither artistic intention nor any other act of human volition except the willingness to attune to aural phenomena for music to exist. This collapse of sound into a problematic of musical sound betrays a contradiction at the very center of his philosophy. By saying that sounds not intrinsically human should be thought of as music, he contradicts his anti-anthropomorphism. His suppression of anthropomorphism opposes the politics of ecology, which must begin with an assumption of both the social incursion into nature and the historical determination of the very idea of nature. Cage’s subscription to Eastern philosophies—which were constituted prior to the effective capacity for domination of nature, let alone total global ruin—betrays his notion of an idealized separation of nature and society. He speaks for an odd transcendence through musical means that entails something of an urban asceticism. Individuals lack or must deny or purge themselves of subjectivity, sociality, and historical situation in order to become empty vessels, receptive of the aural surround as natural and pure as the air they breathe. In fact, it is because he understands music to be a natural element of the world that his claims for “all sound” run counter to an ecology of aural signification that includes sociality. (...)

### THE NATURE OF SOUND

(...) The early break-up of naturalization began with the rise of communications technologies in the nineteenth century. The result was the technical capacities to see visual sound and visual speech and to transport over great distances the movements of the finger and the voice. Phonography played a crucial role, for with it came the unique ability to return the subject’s voice to his or her own ears; previously this return had been limited to mandibular and cranial resonance along the throat

on up through the head. The voice as the privileged site of union between audition and utterance (perhaps the most common privatized act performed in the company of others) was “deboned” as vocal presence, was wrenched from the throat and phonographically inscribed. This served to represent and technologically manifest the severance of speech from the speaker, the voice from the body, the voice from the soul, and the voice from the literary voice. The mix of utterance and audition moved from experience to representation, a representation bereft of the resonating chamber of the skull or the reflective landscapes of the echo; but it could move back toward experience, simulating it, in moments of dislocation, composition, relocation, dispersal, and so forth. (...)

Ears had not suddenly grown prehensile, but what was made of what was listened to and listened for had become increasingly social, cognitive, and self-conscious. Furthermore, it is not only that the complexity of our senses and of the information they impart has increased; the sense of hearing has acquired a greater aptitude for interpreting visual perceptions and the sense of sight for interpreting auditive ones, so that they signify each other reciprocally. The senses are more highly educated and their theoretical ability has increased; they are becoming “theoreticians”; by discarding immediacy they introduce mediation, and abstraction combines with immediacy to become “concrete.” Thus objects in practice become signs, and signs objects; and a “second nature” takes the place of the first, the initial layer of perceptible reality. \*\*\*

Within the avant-garde at about this time, sound began to be consistently conceived in non-musical and non-synesthetic ways, relating instead in a new way to graphic, textual, spatial, spatial/static, conceptual, and corporeal forms. Important in this respect were Roussel’s novels, Duchamp’s ideas for conceptual sound, Marinetti’s documentary onomatopoeia, Apollinaire’s writings, the French Surrealists’ approach to sound and their antipathy to Western art music, and so forth. . . . Optical sound film held out the greatest technological promise through its plasticity and graphic overlap with writing. During the mid-1930s, how-

ever, the question as to why this promise was never fulfilled exceeded attempts at its realization.

In the latter half of the 1920s, however, radio and the sound film did change sound in two major ways. They introduced spatial representation and modulation among the auricular and ventricular chambers of minds, bodies, and environments, and they introduced on a social scale a pervasive, detailed, and atomized encoding. For the first time, a diapason of worldly sound encompassing all of its visual, literary, environmental, gestural, and affective context could be displaced, presented, and represented. Worldly sound became worldly; the nature of sound was less natural; the realm of sound expanded and the number of sounds increased. . . .

Sound began to be sedimented with multiple allusions and meanings. The famed ephemerality of music itself began to be inflected with code, even if it was just the code of a famed ephemerality. In a century during which the nature of sound had increasingly become one of sociality, the goal of Cage’s art — “to imitate nature in the manner of her operation” — has become beleaguered, and Adorno’s axiom — “music rescues name as pure sound — but at the cost of severing it from things” — has become deeply wistful. \*\*\*\*

\* John Diliberto, **Pierre Schaeffer and Pierre Henry: Pioneers in Sampling**, *ELECTRONIC MUSICIAN*, December 1986, p. 56.

\*\* Gilles Deleuze and Felix Guattari, **A Thousand Plateaus** (Minneapolis: University of Minnesota Press, 1987).

\*\*\* Henri Lefebvre, **Everyday Life in the Modern World** (New Brunswick, New Jersey: Transaction Books, 1984), “A hundred years ago words and sentences in a social context were based on reliable referentials that were linked together, being cohesive if not logically coherent, without however constituting a single system formulated as such. These referentials had a logical or commonsensical unity derived from material perception (euclidean three-dimensional space, clock time), from the concept of nature, historical memory, the city and the environment. . . .”

\*\*\*\* Theodor Adorno, **Minima Moralia**, London, New Left Books, 1974.





La »Musique d'Ameublement« est foncièrement industrielle. L'habitude – l'usage – est de faire de la musique dans des occasions où la musique n'a **rien à faire**. Là, on joue des »Valses«, des »Fantaisies« d'Opéras, & autres choses semblables, écrites pour un autre objet. Nous, nous voulons établir une musique faite pour satisfaire les besoins »utiles«. L'Art n'entre pas dans ces besoins. La »Musique d'Ameublement« crée de la vibration; elle n'a pas d'autre but; elle remplit le même rôle que la lumière, la chaleur & *le confort* sous toutes ses formes.

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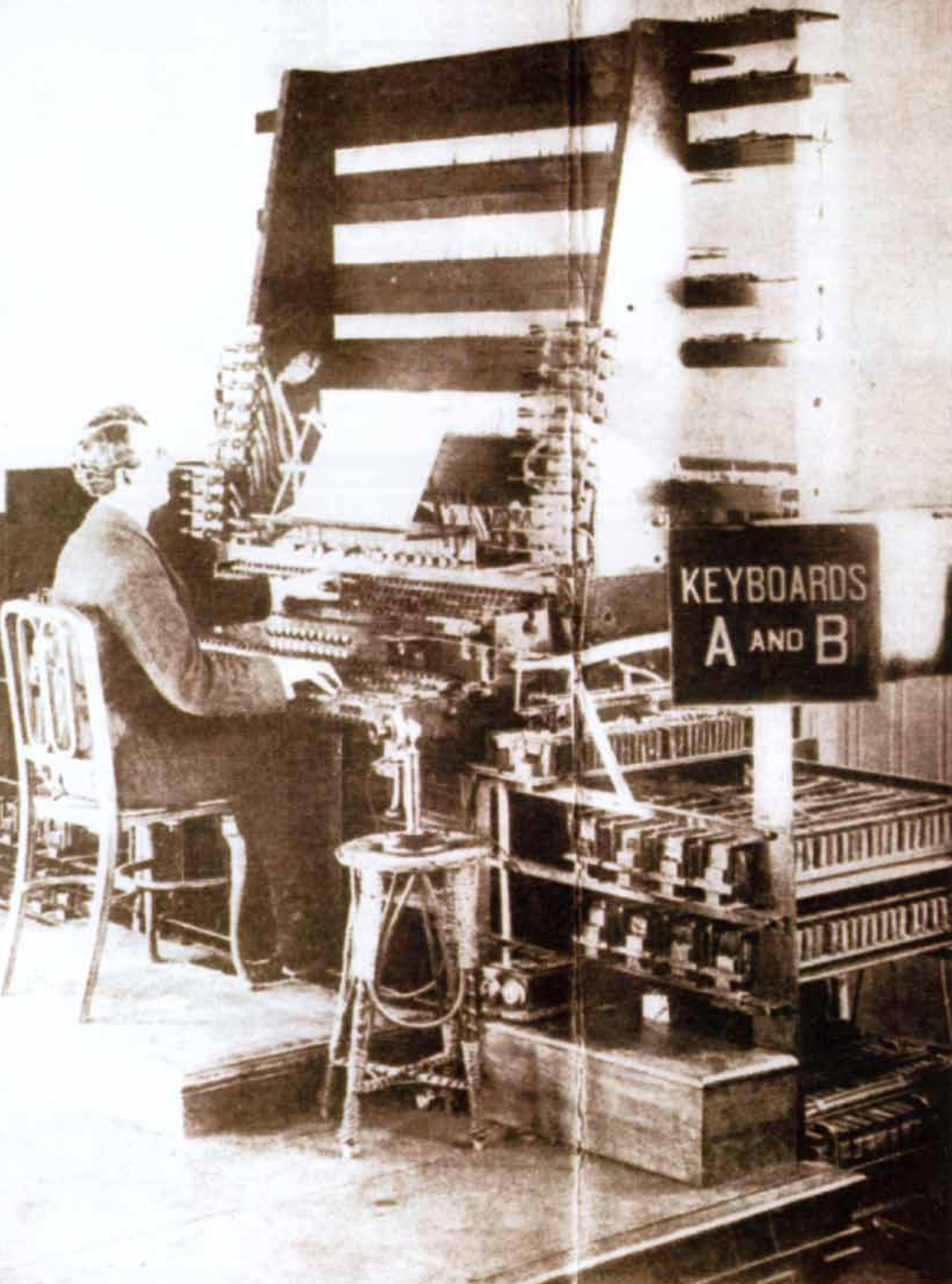
\*

Celui qui n'a pas entendu la »Musique d'Ameublement« ignore le bonheur.

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## SOUND AND FURY

. . . Human noise is political from its inception, not only because it emerges with the *polis*—that artificial forest where the tree that falls always makes a sound—but also because it lends itself so well to political conflict. Noise is both an objective and a subjective phenomenon; it comprises both common and uncommon ground. On the one hand, a decibel is a decibel is a decibel. The fact that the human ear can endure about two continuous hours of a power drill but only thirty minutes of a typical video arcade before sustaining permanent hearing loss and the related fact that eighty-year old Sudanese villagers hear better than thirty-year old Americans are just that: facts. On the other hand, the reasons why an airport will affect its neighbors in different ways, leaving some depressed or hypertensive and others relatively unfazed, are as variable and invisible as sound itself. (...)

Loud noise hates nature and nurture alike. Certain species of birds fail to learn their mating songs, and therefore to reproduce, in noisy environments; as early as 1915, researcher Arline Bronzaft found that children on the train track side of a New York public school were lagging a year behind their classmates on the other side of the building in learning to read. Even relatively low levels of noise can interfere with conversation (at 55 to 60 decibels); the price of making ourselves heard is a loss of nuance, inflection, vocal stamina—in every sense a “loss of voice.” Noise has been linked to heart disease, high blood pressure, low birth weight, gastrointestinal disorders, headaches, fatigue, insomnia—in short, to nearly every known by-product of stress. (Anti-stress medications are actually tested by exposing experimental subjects to loud sounds.) Noise deafens us, aurally and—there is strong evidence to suggest—morally as well. People subjected to high levels of noise are less likely to assist strangers in difficulty, less likely to recommend raises for workers, more likely to administer electric shocks to other human subjects.

Noise speaks danger; it both threatens and invites aggression. It triggers the physiological chemistry of the “fight or flight” response. Before we were even human, noise signaled the approach of the carnivore, of lightning and lava. More recently it became the alarm of invasion, first of the barbarian outside the gates and increasingly of the barbarian within.









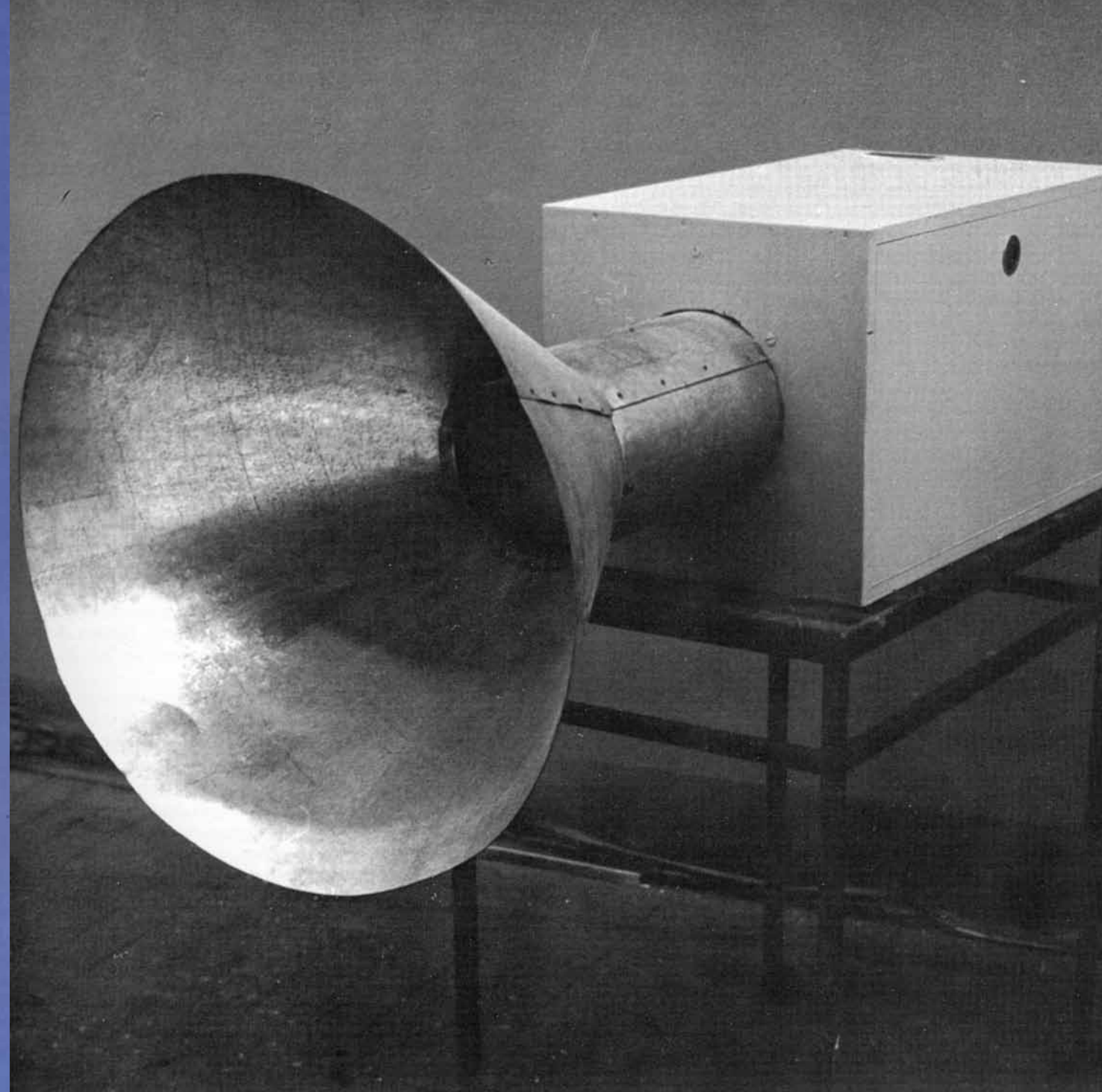


Baku, 1922 (Concert for factory sirens, the conductor is standing on the roof of a tall building).





Stan Denniston, *Still #1 (McGrew, Nebraska)*, 1999.



Luigi Russolo (1885-1947), *Intonarumori*, 1913.



# UNITED STATES FREQUENCY ALLOCATIONS

## THE RADIO SPECTRUM

### RADIO SERVICES COLOR LEGEND

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AERONAUTICAL MOBILE SATELLITE	LAND MOBILE	RADIO DETERMINATION SATELLITE
AERONAUTICAL RADIONAVIGATION	LAND MOBILE SATELLITE	RADIOLOCATION
AMATEUR	MARITIME MOBILE	RADIOLOCATION SATELLITE
AMATEUR SATELLITE	MARITIME MOBILE SATELLITE	RADIONAVIGATION
BROADCASTING	MARITIME RADIONAVIGATION	RADIONAVIGATION SATELLITE
BROADCASTING SATELLITE	METEOROLOGICAL AID	SPACE OPERATION
EARTH EXPLORATION SATELLITE	METEOROLOGICAL SATELLITE	SPACE RESEARCH
FIXED	MOBILE	STANDARD FREQUENCY AND TIME SIGNAL
FIXED SATELLITE	MOBILE SATELLITE	STANDARD FREQUENCY AND TIME SIGNAL SATELLITE

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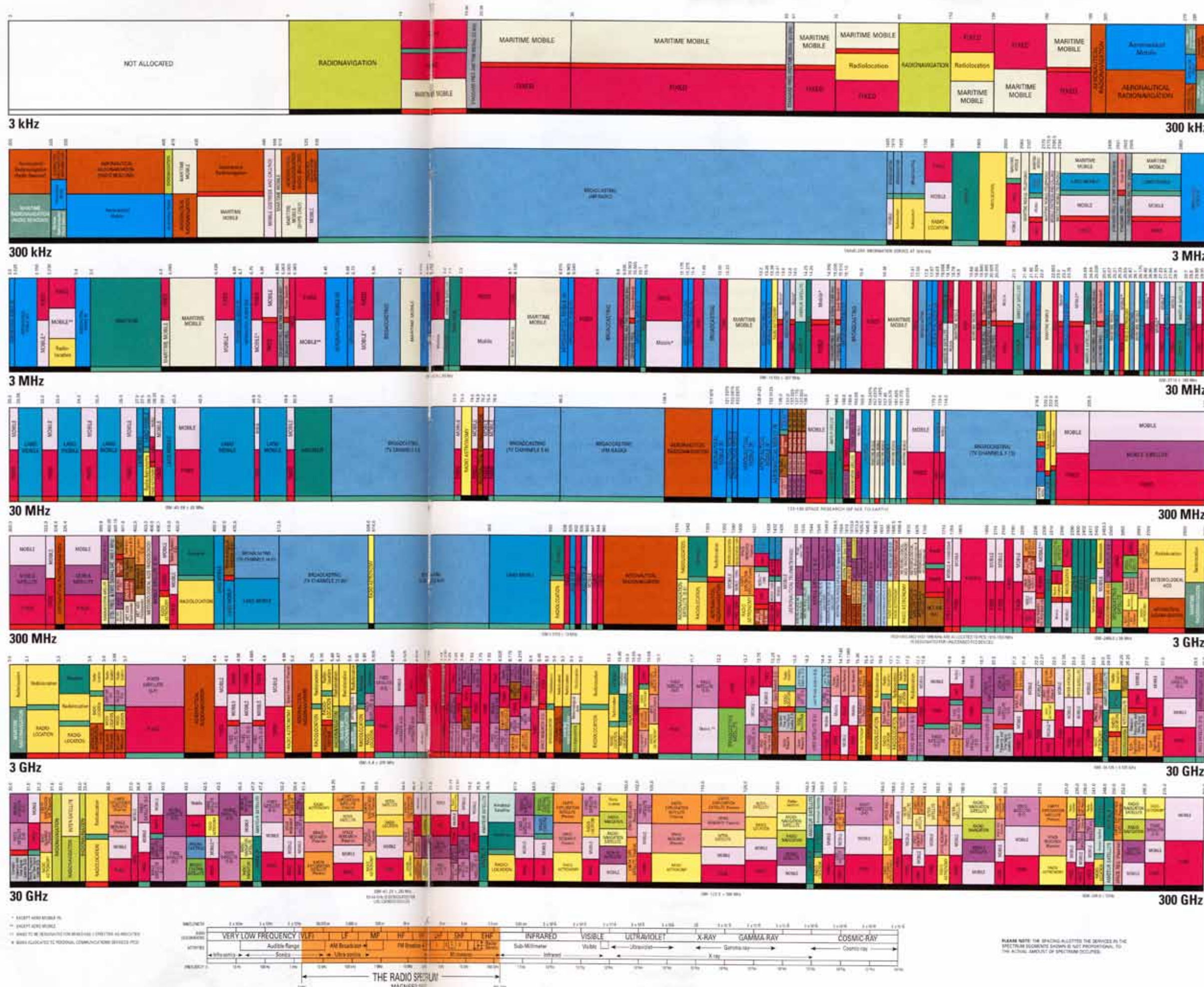
GOVERNMENT EXCLUSIVE	GOVERNMENT/NON-GOVERNMENT SHARED
NON-GOVERNMENT EXCLUSIVE	

### ALLOCATION USAGE DESIGNATION

SERVICE	EXAMPLE	DESCRIPTION
Primary	FIXED	Capital Letters
Secondary	MOBILE	1st Capital with lower case letters
Permitted	BROADCASTING	Capital Letters between oblique strokes



U.S. DEPARTMENT OF COMMERCE  
National Telecommunications and Information Administration  
Office of Spectrum Management  
March 1996





In those days the world teemed, the people multiplied, the world bellowed like a wild bull, and the great god was aroused by the clamour. Enlil heard the clamour and he said to the gods in council, “The uproar of mankind is intolerable and sleep is no longer possible by reason of the babel.” So the gods agreed to exterminate mankind.

—The Epic of Gilgamesh



I cannot listen to Mahler's Ninth Symphony with anything like the old melancholy mixed with the high pleasure I used to take from this music. There was a time, not long ago, when what I heard, especially in the final movement, was an open acknowledgment of death and at the same time a quiet celebration of the tranquility connected to the process. I took this music as a metaphor for reassurance, confirming my own strong hunch that the dying of every living creature, the most natural of all experiences, has to be a peaceful experience. I rely on nature. The long passages on all the strings at the end, as close as music can come to expressing silence itself, I used to hear as Mahler's idea of leave taking at its best. But always, I have heard this music as a solitary, private listener, thinking about death.

Now I hear it differently. I cannot listen to the last movement of the Mahler Ninth without the door smashing intrusion of a huge new thought: **death everywhere, the dying of everything, the end of humanity.** The easy sadness expressed with such gentleness and delicacy by that repeated phrase on faded strings, over and over again, no longer comes to me as old, familiar news of the cycle of living and dying. All through the last notes my mind swarms with images of a world in which the thermonuclear bombs have begun to explode, in New York and San Francisco, in Moscow and Leningrad, in Paris, in Paris, in Paris. In Oxford and Cambridge, in Edinburgh. I cannot push away the thought of a cloud of radioactivity drifting along the Engadin, from the Moloja Pass to Ftan, killing off the part of the earth I love more than any other part.

I am old enough by this time to be used to the notion of dying, saddened by the glimpse when it has occurred but only transiently knocked down, able to regain my feet quickly at the thought of continuity, any day. I have acquired and held in affection until very recently another sideline

of an idea which serves me well at dark times: the life of the earth is the same as the life of an organism: the great round being possesses a mind: the mind contains an infinite number of thoughts and memories: when I reach my time I may find myself still hanging around in some sort of midair, one of those small thoughts, drawn back into the memory of the earth: in that peculiar sense I will be alive.

Now all that has changed. I cannot think that way anymore. Not while those things are still in place, aimed everywhere, ready for launching.

This is a bad enough thing for the people in my generation. We can put up with it, I suppose, since we must. We are moving along anyway, like it or not. I can even set aside my private fancy about hanging around, in midair.

What I cannot imagine, what I cannot put up with, the thought that keeps grinding its way into my mind, making the Mahler into a hideous noise close to killing me, is what it would be like to be young.

### How do the young stand it?

How can they keep their sanity? If I were very young, sixteen or seventeen years old, I think I would begin, perhaps very slowly and imperceptibly, to go crazy.

There is a short passage near the very end of the Mahler in which the almost vanishing violins, all engaged in a sustained backward glance, are edged aside for a few bars by the cellos. Those lower notes pick up fragments from the first movement, as though prepared to begin everything all over again, and then the cellos subside and disappear, like an exhalation. I used to hear this as a wonderful few seconds of encouragement: **we'll be back, we're still here, keep going, keep going.**

Now, with a pamphlet in front of me on a corner of my desk, published by the Congressional Office of Technology Assessment, entitled MX Basing, an analysis of all the alter-native strategies for placement and protection of hundreds of these missiles, each capable of creating artificial suns to vaporize a hundred Hiroshimas, collectively capable of destroying the life of any continent, I cannot hear the same Mahler. Now, those cellos sound in my mind like the opening of all the hatches and the instant before ignition.

If I were sixteen or seventeen years old, I would not feel the cracking of my own brain, but I would know for sure that the whole world was coming unhinged. I can remember with some clarity what it was like to be sixteen. I had discovered the Brahms symphonies. I knew that there was something going on in the late Beethoven quartets that I would have to figure out, and I knew that there was plenty of time ahead for all the figuring I would ever have to do. I had never heard of Mahler. I was in no hurry. I was a college sophomore and had decided that Wallace Stevens and I possessed a comprehensive understanding of everything needed for a life. The years stretched away forever ahead, forever. My great-great grandfather had come from Wales, leaving his signature in the family Bible on the same page that carried, a century later, my father's signature. It never crossed my mind to wonder about the twenty first century; it was just there, given, somewhere in the sure distance.

The man on television, Sunday midday, middle-aged and solid, nice-looking chap, all the facts at his fingertips, more dependable looking than most high-school principals, is talking about civilian defense, his responsibility in Washington. It can make an enormous difference, he is saying. Instead of the outright death of eighty million American citizens in twenty minutes, he says, we can, by careful planning and practice, get that number down to only forty million, maybe even twenty. The thing to do, he says, is to evacuate the cities quickly and have everyone get under shelter in the countryside. That way we can recover, and meanwhile we will have retaliated, incinerating all of Soviet society, he says. What about radioactive fallout? he is asked. Well, he says. Anyway, he says, if the Russians know they can only destroy forty million of us instead of eighty million, this will deter them. Of

course, he adds, they have the capacity to kill all two hundred and twenty million of us if they were to try real hard, but they know we can do the same to them. If the figure is only forty million this will deter them, not worth the trouble, not worth the risk. Eighty million would be another matter, we should guard ourselves against losing that many all at once, he says.

If I were sixteen or seventeen years old and had to listen to that, or read things like that, I would want to give up listening and reading. I would begin thinking up new kinds of sounds, different from any music heard before, and I would be twisting and turning to rid myself of human language.

Sonic Channels: an audio concert will be held on Friday, May 12, 2006 at 7pm at 15 Nassau Street. Sonic Channels is an electroacoustic concert held in conjunction with the Channels: Emerging Media Publics exhibition that opened on May 9th.

This concert will feature a wide range of recorded works and live performances by sound artists and composers from around the world. Curated by composer Melissa Grey and sound artist Jim Briggs III the pieces will provide an additional layer of meaning to the exhibition.

Participating composers, artists, and performers include: Jim Briggs III (NYC); Lin Culbertson (NYC); dis.playce (Germany); Lyudmila German (NYC); Melissa Grey (NYC) performed by Harold Jones, flute and Mioi Takeda, violin; Koji Kawai (Japan); Hiroki Nishino (Japan/Seattle WA); Jonathan Pieslak (NYC); Evan Raskob (London/NYC); Susan Robb (Seattle WA); and Adam Trowbridge (Chattanooga TN). Performances by Jacques Burtin, kora, (Spain/France) and Julia Crowe, electric guitar (NYC).

“By responding to and augmenting sub-themes of how public and semi-public spaces are perceived, this concert will explore how sound constructs and deconstructs spaces,” says co-curator and composer Melissa Grey.

Sonic Channels will be held on Friday, May 12, 2006 at 7pm at LMCC’s 15 Nassau Street Space (@ Pine) in New York City. Tickets cost \$5.00 at the door. Limited Seating. RSVP to GreyM593@newschool.edu. This event is presented by The Department of Media Studies and Film at The New School.

For more information about the exhibition and programming events:  
<http://MEDIASTUDIES.NEWSCHOOL.EDU/PROJECTMSPS/EXHIBITION.HTM>  
15 Nassau is a venue of Lower Manhattan Cultural Council (LMCC), made possible by the Swing Space Program. Space donated by Silverstein Properties. [www.lmcc.net](http://www.lmcc.net).



In the late nineteen sixties, a group of Swedish artists working as ‘The Language Group’ of a recently re-organized chamber music society, known as Fylkingen along with members from the Literary Unit of the Swedish Broadcasting Corporation, began producing a new kind of literary work for the tape recorder. It was a form of language art realized solely for the audio domain -- either projected from a loudspeaker, from the radio or in some similar sonic performance venue. In the early nineteen sixties, Fylkingen began to introduce Sweden to all kinds of artistic experimentation contemporary to the times such as concrete poetry, FLUXUS, electro-acoustic music, what eventually became known as performance art, and ways of working which were called ‘borderline transgressors’ since they were not easily categorized as being in any one particular field of art. After returning from a meeting of contemporary radio producers in Holland in 1967, two members of the Fylkingen group, Bengt Emil Johnson and Lars-Gunnar Bodin, coined a term to both separate what they were doing from some of the similar material which they had been hearing, as well as to give their material a descriptive flourish and cohesive identity.

**Their term was text-ljudkomposition,  
or text-sound composition.**

In 1968, Fylkingen organized a three-day event which they called the International Festival of Text-Sound Composition. François Dufrêne and Bernard Heidsieck from France and Bob Cobbing from England were invited to come to Stockholm to use the recording and electronic music facilities along with the Swedish practitioners, to produce new pieces, as well as to perform and discuss their works. These individuals had been using the tape recorder, since the fifties, to produce works for the spoken voice. The Text-Sound Festival was expanded and held for at least a dozen more times in various places in the world. However by 1975, it had changed its name to the International Festival of Sound Poetry, with the term sound poetry being much more widely known and to include an acoustic, ‘unplugged’ version of the art.

In its originally conceived form, what was unique about text-sound composition besides it being a type of electro-acoustic literature conceived to be

presented in a sonic environment, was that it could allow a writer or poet to explore an expressive space which was quite a bit different than the printed word on the page. By replacing paper with magnetic tape, a whole inventory of manipulatory techniques became known that before could only be achieved (if at all) on a very rudimentary level with previous technologies. With the flexibility of tape, vocal sounds and effects could be produced which were unique and largely unheard of before this time.

Besides temporal and sequenced-based distortion effects, tape allowed the individual speaker to **have a dialogue with multiple copies of their own voice**. A unique timbre which does not exist between different individuals in a group could be explored among several simultaneous narrative flows. Dialogs between the flows ranging from one layer accenting or underscoring the effects of another, to a ‘call and response’ kind of structure, on up to a fully responsive, conversation between the layers, could be produced. Such layers or narrative flows could also be presented as continuous or discontinuous derivatives of the flows adjacent to them. The parsing out and recognition of a specific, single narrative line could be arbitrary, though its perception as a sub-entity within the piece could be enhanced if there were something unique or ‘strange’ exhibited in terms of its acoustical characteristics.

The availability of recording technology, like any other technology, changed the way in which information was transmitted and received and in the process changed information itself. Each technological ‘innovation’ in communication beginning with writing, can be depicted by a finite number of dimensional representations which are modulated into the degree of expressivity which the new media has. These can be conceived of as a whole in the form of topological manifold of possibilities. Generally, a specific venue will only partially articulate the several directions of freedom that a new manifold of expressivity can represent. A presentation venue can therefore be seen as a kind of plane which cuts through this manifold of expressivity, and the untouched dimensions can only be implied or imagined.

The first impulse towards the use of a new media, is to present ‘old wine in new bottles’ -- the forms and models for its manifestation are just copied from the previous media’s art. In the case of recording technology, it allowed the voice of a poet or a writer to be distributed over the airwaves or through the sales of recordings, with the same kind of gestures that are used in private and public poetry readings and book sales. Considering that the promotion and wide scale acceptance of any new innovation in media is largely controlled by economic/political concerns, only a partition (the size of which is dependent upon the stability of the supporting economic/political system) is available for experimental or progressive work, since the rest is required to support the system that created it. Often, a gap has to be pried open and maintained for any new form of expression to survive. This partition is generally marginalized and ghettoized, so that only those elements which support the overall stability of the system are co-opted from it. By existing on the borderlines and within that compartmentalized space grudgingly allocated to it, text-sound composition is outside of the ‘accepted’ forms of communications. Its isolation reminds us of other experiments both present and past and harks back to the discarded form of what we imagine to be as preliterate, oral traditional poetry. If one could compress the simultaneous narrative flows of a text-sound piece and represent it as a semantic and serial voice, a singular kind of articulatory line would result -- one which would traverse an area of description in one direction and eventually snap back to its originating point of declaration and then begin another digression, to repeat the process until exhaustion. It is the kind of narrative reminiscent of someone attempting to recount some event that they barely remember -- they will go over pieces of the event several times, focusing on some different aspect with each reiteration.

As one peels back the onion skin abstractions of media technology, voice as sound is revealed as the forgotten memory of a culture steeped in vision. If recollection is too vague (which it is fated to be), the snap-backs and digressions are only partially implied, then the line-of-sight connective tissue between logical movement deteriorates. A fragmentary and ‘noisy’ structure is strung together in an arbitrary serial fashion -- a genetic code gone nuts, composed of repetitive and episodic anecdotes, where a particular sign might be reversed, exchanged, or confused with another. We are forever

lost in a maze of signs which erases our remembrance of the actual event. This is a characteristic we often observe in the recounting of a myth. There is no linear beginning, middle, and end. Rather the story exists at the interface between the receding, imagined past and an ever-changing, incomprehensible present -- its historicity can now only exist as the mirror of the present. It is a form of narrative which hypertext is attempting to inherit as it replaces print culture-- a rhizomic structure in which linear hierarchy implodes upon itself to become the point from which all logical movement is directed by frenzied spurts that constantly disassembles and reassembles partial and random inventories. It is narrative as genealogy.

<http://cotati.sjsu.edu/spoetry/nghome.html>

Sound

Collective / ‘The Language Group’

‘Eudosin d’orheon korhuphai te kai pharhagges’  
‘Prhones te kai charhadrhai.’ ALCMAN. (60 (10),646.) The mountain pin-  
nacles slumber; valleys, crags and caves are silent.

“**LISTEN to me,**” said the Demon as he placed his hand upon my head. “The region of which I speak is a dreary region in Libya, by the bor-  
ders of the river Zaire. And there is no quiet there, nor silence.

“The waters of the river have a saffron and sickly hue; and they flow not  
onwards to the sea, but palpitate forever and forever beneath the red eye of  
the sun with a tumultuous and convulsive motion. For many miles on either  
side of the river’s oozy bed is a pale desert of gigantic water-lilies. They sigh  
one unto the other in that solitude, and stretch towards the heaven their  
long and ghastly necks, and nod to and fro their everlasting heads. And  
there is an indistinct murmur which cometh out from among them like the  
rushing of subterrene water. And they sigh one unto the other.

“But there is a boundary to their realm--the boundary of the dark, horrible,  
lofty forest. There, like the waves about the Hebrides, the low underwood  
is agitated continually. But there is no wind throughout the heaven. And  
the tall primeval trees rock eternally hither and thither with a crashing and  
mighty sound. And from their high summits, one by one, drop everlasting  
dews. And at the roots strange poisonous flowers lie writhing in perturbed  
slumber. And overhead, with a rustling and loud noise, the gray clouds rush  
westwardly forever, until they roll, a cataract, over the fiery wall of the hori-  
zon. But there is no wind throughout the heaven. And by the shores of the  
river Zaire there is neither quiet nor silence.

“It was night, and the rain fell; and falling, it was rain, but, having fAllan, it  
was blood. And I stood in the morass among the tall and the rain fell upon  
my head --and the lilies sighed one unto the other in the solemnity of their  
desolation.

“And, all at once, the moon arose through the thin ghastly mist, and was  
crimson in color. And mine eyes fell upon a huge gray rock which stood by

the shore of the river, and was lighted by the light of the moon. And the  
rock was gray, and ghastly, and tall, --and the rock was gray. Upon its front  
were characters engraven in the stone; and I walked through the morass of  
water-lilies, until I came close unto the shore, that I might read the charac-  
ters upon the stone. But I could not decypher them. And I was going back  
into the morass, when the moon shone with a fuller red, and I turned and  
looked again upon the rock, and upon the characters;--and the characters  
were DESOLATION.

“And I looked upwards, and there stood a man upon the summit of the  
rock; and I hid myself among the water-lilies that I might discover the  
actions of the man. And the man was tall and stately in form, and was  
wrapped up from his shoulders to his feet in the toga of old Rome. And the  
outlines of his figure were indistinct--but his features were the features of  
a deity; for the mantle of the night, and of the mist, and of the moon, and  
of the dew, had left uncovered the features of his face. And his brow was  
lofty with thought, and his eye wild with care; and, in the few furrows upon  
his cheek I read the fables of sorrow, and weariness, and disgust with man-  
kind, and a longing after solitude.

“And the man sat upon the rock, and leaned his head upon his hand, and  
looked out upon the desolation. He looked down into the low unquiet  
shrubbery, and up into the tall primeval trees, and up higher at the rustling  
heaven, and into the crimson moon. And I lay close within shelter of the lil-  
ies, and observed the actions of the man. And the man trembled in the soli-  
tude; --but the night waned, and he sat upon the rock.

“And the man turned his attention from the heaven, and looked out upon  
the dreary river Zaire, and upon the yellow ghastly waters, and upon the  
pale legions of the water-lilies. And the man listened to the sighs of the  
water-lilies, and to the murmur that came up from among them. And I lay  
close within my covert and observed the actions of the man. And the man  
trembled in the solitude; --but the night waned and he sat upon the rock.

“Then I went down into the recesses of the morass, and waded afar in  
among the wilderness of the lilies, and called unto the hippopotami which



dwelt among the fens in the recesses of the morass. And the hippopotami heard my call, and came, with the behemoth, unto the foot of the rock, and roared loudly and fearfully beneath the moon. And I lay close within my covert and observed the actions of the man. And the man trembled in the solitude; --but the night waned and he sat upon the rock.

“Then I cursed the elements with the curse of tumult; and a frightful tempest gathered in the heaven where, before, there had been no wind. And the heaven became livid with the violence of the tempest --and the rain beat upon the head of the man --and the floods of the river came down --and the river was tormented into foam --and the water-lilies shrieked within their beds --and the forest crumbled before the wind --and the thunder rolled --and the lightning fell --and the rock rocked to its foundation. And I lay close within my covert and observed the actions of the man. And the man trembled in the solitude; --but the night waned and he sat upon the rock.

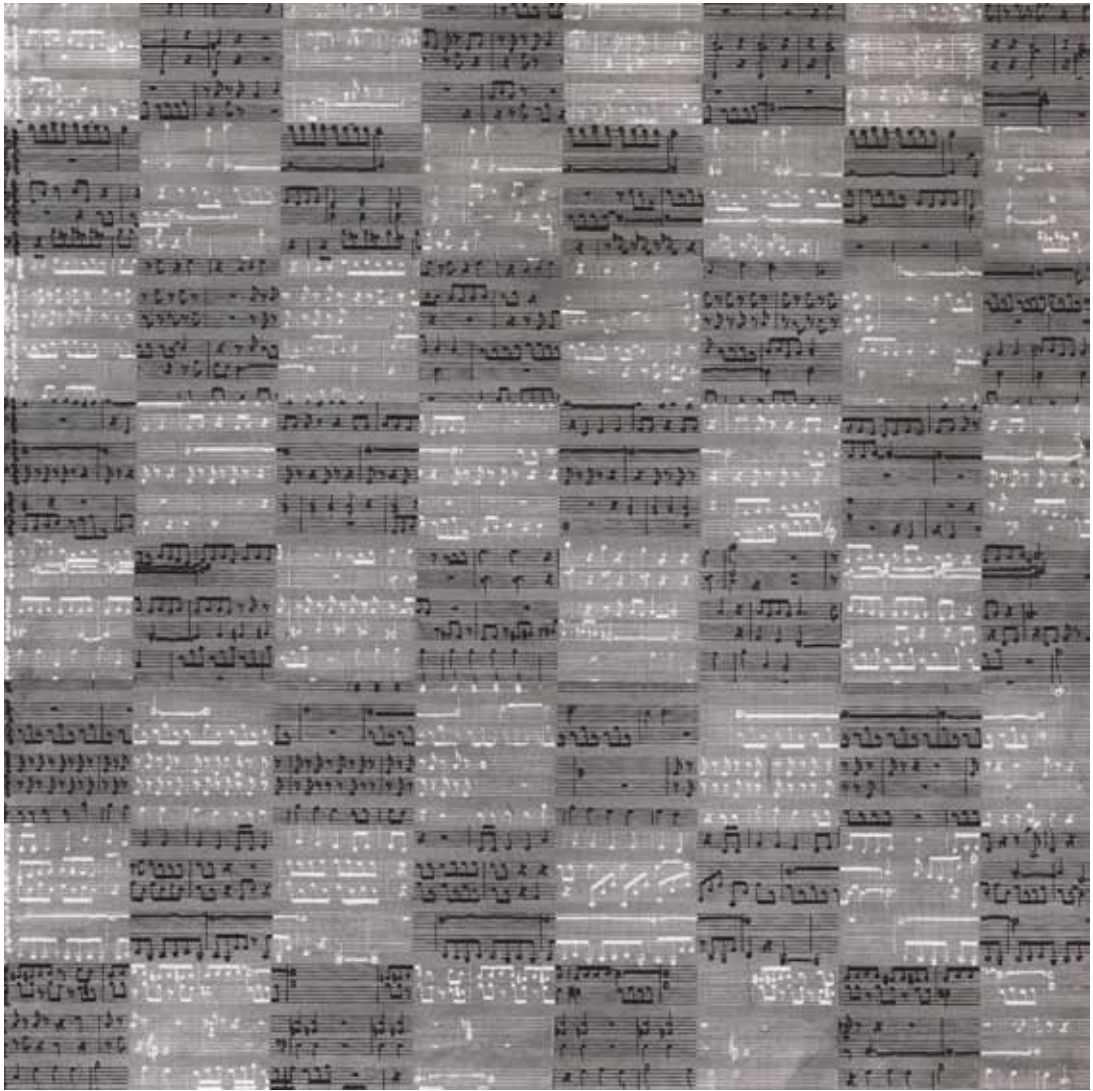
“Then I grew angry and cursed, with the curse of silence, the river, and the lilies, and the wind, and the forest, and the heaven, and the thunder, and the sighs of the water-lilies. And they became accursed, and were still. And the moon ceased to totter up its pathway to heaven --and the thunder died away --and the lightning did not flash --and the clouds hung motionless --and the waters sunk to their level and remained --and the trees ceased to rock --and the water-lilies sighed no more --and the murmur was heard no longer from among them, nor any shadow of sound throughout the vast illimitable desert. And I looked upon the characters of the rock, and they were changed; --and the characters were SILENCE.

“And mine eyes fell upon the countenance of the man, and his countenance was wan with terror. And, hurriedly, he raised his head from his hand, and stood forth upon the rock and listened. But there was no voice throughout the vast illimitable desert, and the characters upon the rock were SILENCE. And the man shuddered, and turned his face away, and fled afar off, in haste, so that I beheld him no more.”

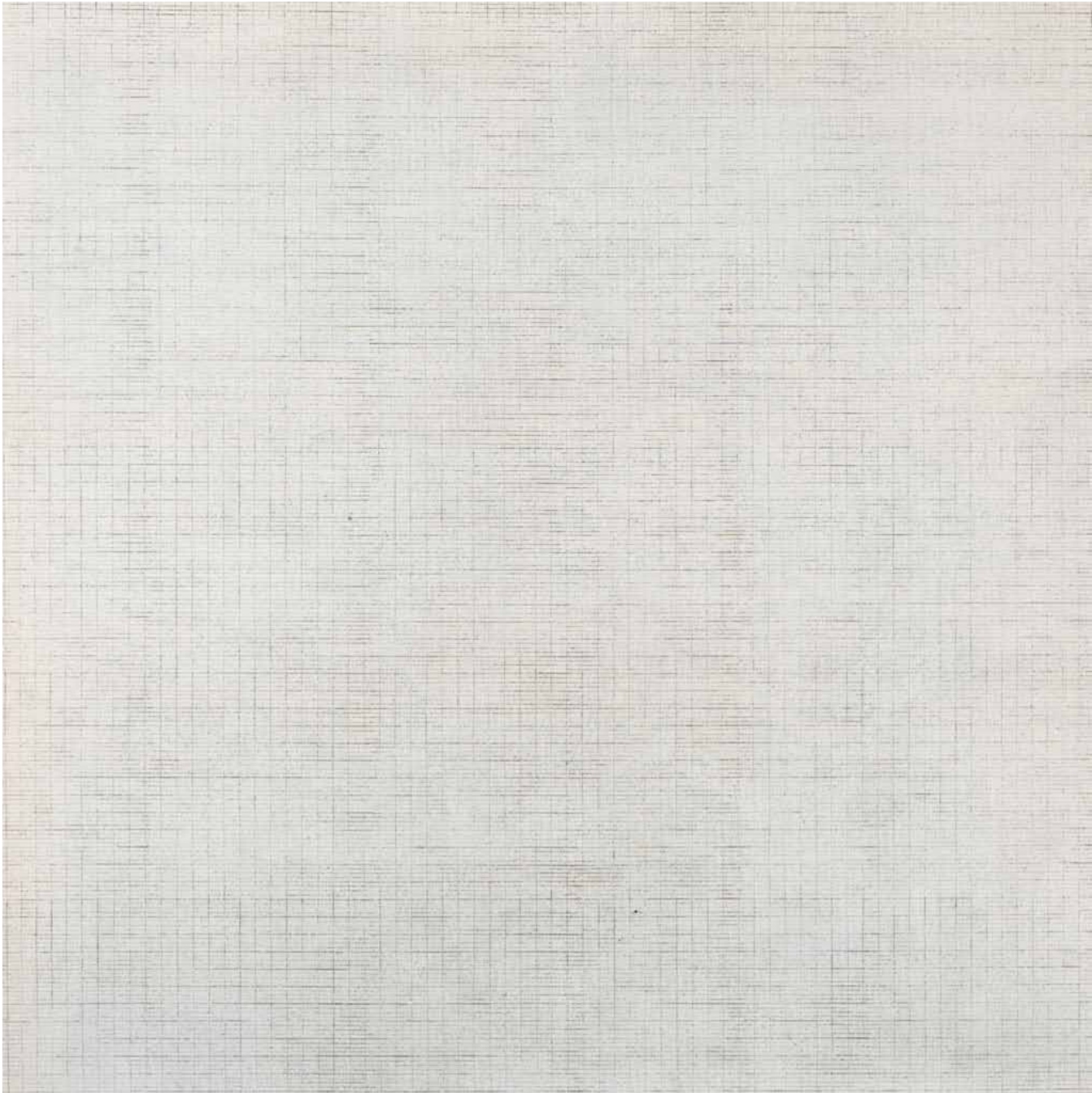
Now there are fine tales in the volumes of the Magi --in the iron-bound, melancholy volumes of the Magi. Therein, I say, are glorious histories of

the Heaven, and of the Earth, and of the mighty sea --and of the Genii that over-ruled the sea, and the earth, and the lofty heaven. There was much lore too in the sayings which were said by the Sybils; and holy, holy things were heard of old by the dim leaves that trembled around Dodona --but, as Allah liveth, that fable which the Demon told me as he sat by my side in the shadow of the tomb, I hold to be the most wonderful of all! And as the Demon made an end of his story, he fell back within the cavity of the tomb and laughed. And I could not laugh with the Demon, and he cursed me because I could not laugh. And the lynx which dwelleth forever in the tomb, came out therefrom, and lay down at the feet of the Demon, and looked at him steadily in the face.

THE END









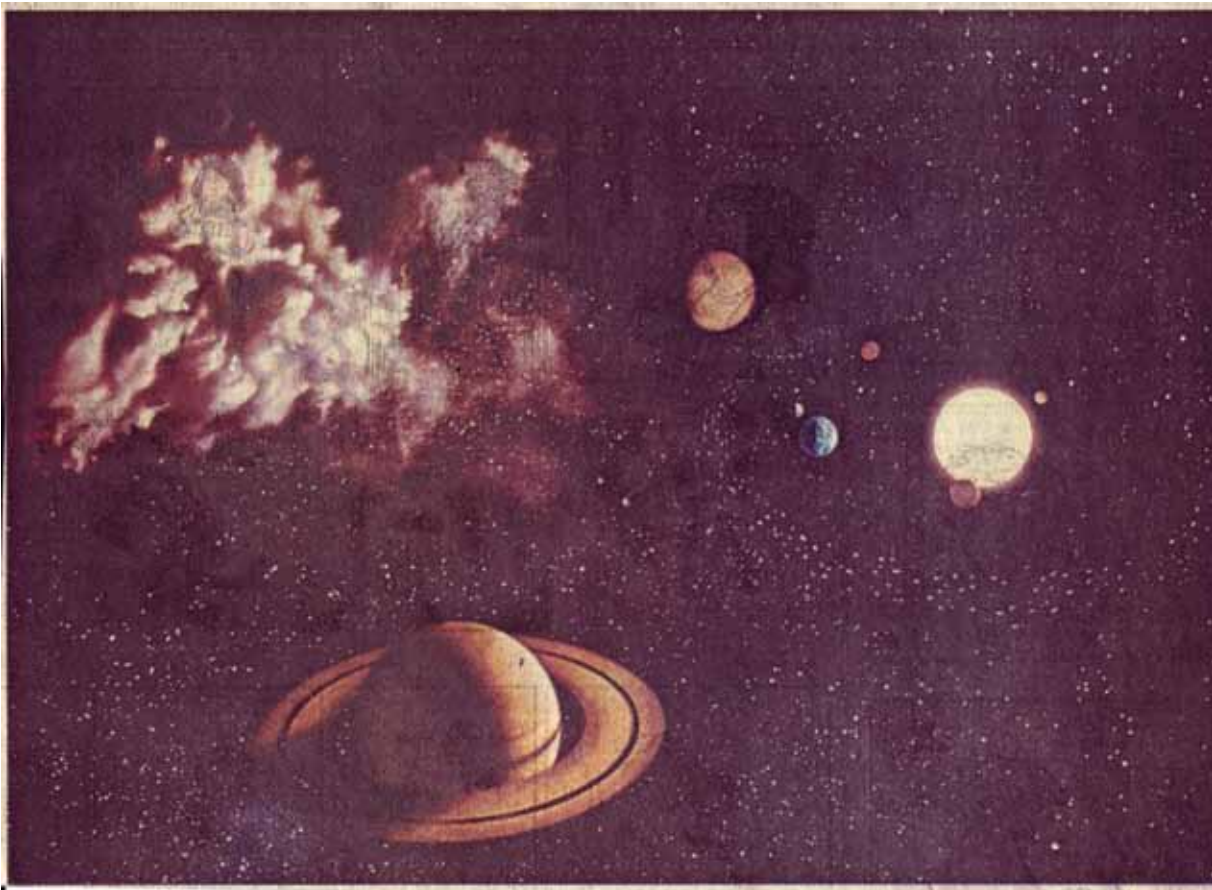




Gallery Window



Universe/Weight of Nothing





# Weight problem

Fresh evidence suggests scientists do not have a fully working model of the universe, and to explain their observations, they must ask a question that sounds paradoxical: how much does emptiness weigh?

**JAMES GLANZ**  
*New York Times*

**N**EW YORK—Like the sorcerer's apprentice, who could not banish the spirits that his spells had conjured up, astronomers around the world have been trying—with increasing desperation—to disprove an astonishing discovery announced early last year: distant galaxies are being swept apart, ever faster, by a tide formed of apparently empty space.

Although scientists have long known that the universe is expanding, they had assumed that the expansion was gradually slowing because of the gravitational attractions of the galaxies. Instead, scientists announced last year, some anti-gravity effect seemed to be accelerating the expansion.

The finding was such a challenge to conventional theories that most scientists assumed they would quickly discredit the theory. But almost two years of effort to do so has yielded observational data that only support the conclusion. Last month, a subtle but initially promising objection to the measurements of the accelerating expansion by one group of astronomers was disproved by a new analysis of that data.

Last week, a different team of astronomers reported its observations of

ries of physics is terribly wrong. To explain their observations, scientists say, they must answer a question that sounds paradoxical: how much does emptiness weigh?

Although the answer has eluded scientists since Einstein first raised the question more than 70 years ago, physicists are comfortable with the idea that a seemingly perfect vacuum could weigh something. According to the theory of elementary particle physics, even a vacuum is filled with fields containing energy and evanescent particles that flit in and out of existence, adding heft to nothingness.

According to Einstein, this "funny energy," as cosmologists have sometimes called it, would be so different from ordinary matter and energy that it would have the opposite gravitational effect, producing repulsion instead of attraction.

But when physicists try to use conventional theories to calculate how much energy should repose in emptiness, the result is a vacuum so monstrously heavy that it would blow the universe apart. Galaxies, stars, planets and life could never have formed.

tally mysterious thing in basic science."

Jeff Harvey, a physicist at the University of Chicago, said, "Basically, people don't have a clue as to how to solve this problem."

Some physicists have gone so far as to wash their hands of the search for a solution, suggesting simply that all of the calculated weight of a vacuum is the product of imperfect theories and that some other strange inhabitant of empty space could be pushing the galaxies apart. They call this shifting, flowing form of energy quintessence.

Though any weight of the vacuum should stay the same over cosmic time, accelerating the expansion with a steady nudge, quintessence could push more strongly at some times, more weakly at others.

Because the key to those changes may lie in the properties of matter and space as they exist at energies that are unattainable on Earth, the universe would become in effect a giant physics experiment, said Andreas Albrecht, a physicist at the University of California in Davis.

Quintessence or no quintessence,

Beaux-Arts Cover

# Beaux Arts

magazine

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## Photo

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Candace Osborne Bell, 22, a fine-arts student at McMaster University, has synesthesia. Synesthetes see the alphabet in colour or experience touch and tastes as colours. Her synesthesia emerges in her artwork.

# Vision, in a way

SENSES from page A1

One of her colleagues, Jamie Ward at University College London, asked six synesthetes to describe what they saw in their mind's eye when they listened to music from the New London Orchestra. He asked six non-synesthetes to do the same.

Then 200 people were shown the images, and asked to choose which ones best fit the same music. They consistently chose the images drawn by the synesthetes, Dr. Ward says.

This is evidence, he says, that vision and hearing are "inextricably linked" in everyone's brain, but that only synesthetes are aware of it.

"Although information from the world enters our heads via different sensory organs — the eyes and ears in this instance — once they are in the brain they are intimately connected with each other. Impressively, they are connected in non-random ways, so that some combinations of sound and vision go together better than others."

It is estimated that one in 2,000 people have synesthesia. Some see colour sensations in front of their eyes when they listen to music. Brain imaging studies have shown these are genuine perceptual experiences — when they hear a sound, the regions of the brain that process colour are activated.

Dr. Ward and his colleagues found that they are likely to see light colours when they hear high sounds, and dark colours when they hear low sounds. But the same is true for the rest of us.

"If I played you the top note on piano, and said to you 'Is that light yellow, or is that deep dark purple?' you are likely to say that

# Vision, hearing linked in a way few understand

SENSES from page A1

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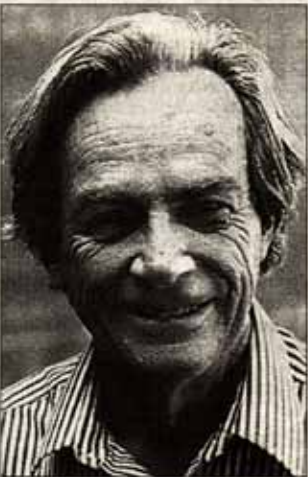
"If I played you the top note on piano, and said to you 'Is that light yellow, or is that deep dark purple?' you are likely to say that is

## Noted synesthetes

Numerous famous people were synesthetes, including some well-known artists. Researchers say synesthesia is eight times more common among artists than it is in the general population.

Here are a few examples:

- Painter David Hockney
- Writer Vladimir Nabokov
- Jazz musician and composer Duke Ellington
- Composer and pianist Franz Liszt
- Physicist and writer Richard Feynman



Richard Feynman won the 1965 Nobel Prize in physics for his quantum electrodynamics work.



Duke Ellington was one of the most important figures in 20th-century jazz.



# Savouring a rainbow of taste, smell and sound

BY ANNE McILROY  
SCIENCE REPORTER

When Candace Osborne Bell gets a back massage, she sees rich, golden yellows, oranges and greens in her mind's eye. A recent meal of pasta and sauce tasted dark purple. When she walked by a sewer grate, she smelled a swirl of pink and brown.

"It was the colour of melted Neapolitan ice cream," says the 22-year-old fine-arts student at McMaster University in Hamilton.

The senses mingle in people like Ms. Bell, who have what scientists call synesthesia. In her case, touches, tastes and smells can also be experienced as colours. Her alphabet is rainbow hued, with every let-

ter a distinct shade: A is always baby blue, while C is cotton-candy pink, and some letters have more personality than others.

"M is dark red. It has a different presence, almost overwhelming," she says.

If her words sound strange, consider that scientists, who for years have been studying what makes people like Ms. Bell different, are now investigating whether there might be a little synesthete in all us.

"Synesthetes are not hugely different; they are extreme manifestations of the average person," says Julia Simner, a researcher in the department of psychology at the University of Edinburgh in Scotland.

See SENSES on page A8

First she and her graduate student, Ferrinne Spector, tested two-year-olds, who couldn't read. They had two boxes, one red and one green.

"I would say, 'I'm looking for my friend A,' where do you think he is hiding," says Dr. Maurer.

There was no pattern. Sometimes the children thought A was hiding in the green box. Other times he was in the red one.

Then she and Ms. Spector tried it with X and O. This time, there was a connection. The toddlers were more likely to say that X was in the black box, and O was in the white box.

This suggests that when adults pick red for A and green for G, it is because they are associating the letters with apple and with green. But not when they say that X is black, and O is white.

Dr. Maurer, an expert in early childhood development, believes that synesthesia may be the remnants of ways our brains are wired when we are babies.

Babies don't have specialized brains, like adults, with one region used exclusively for processing what we see and another for what we hear. They also have more connections between regions of the brain, links get pruned or inhibited in most of us, but perhaps not in synesthetes.

Ms. Bell isn't sure what she thinks of the notion that there may be a little bit of synesthete in all of us.

She didn't realize she was different until she was 16, and her parents passed her a newspaper arti-

cle about synesthesia, and how some people see letters and numbers in colour.



British artist David Hockney was an influential artist of the 20th century.

"Doesn't everyone?" she asked them.

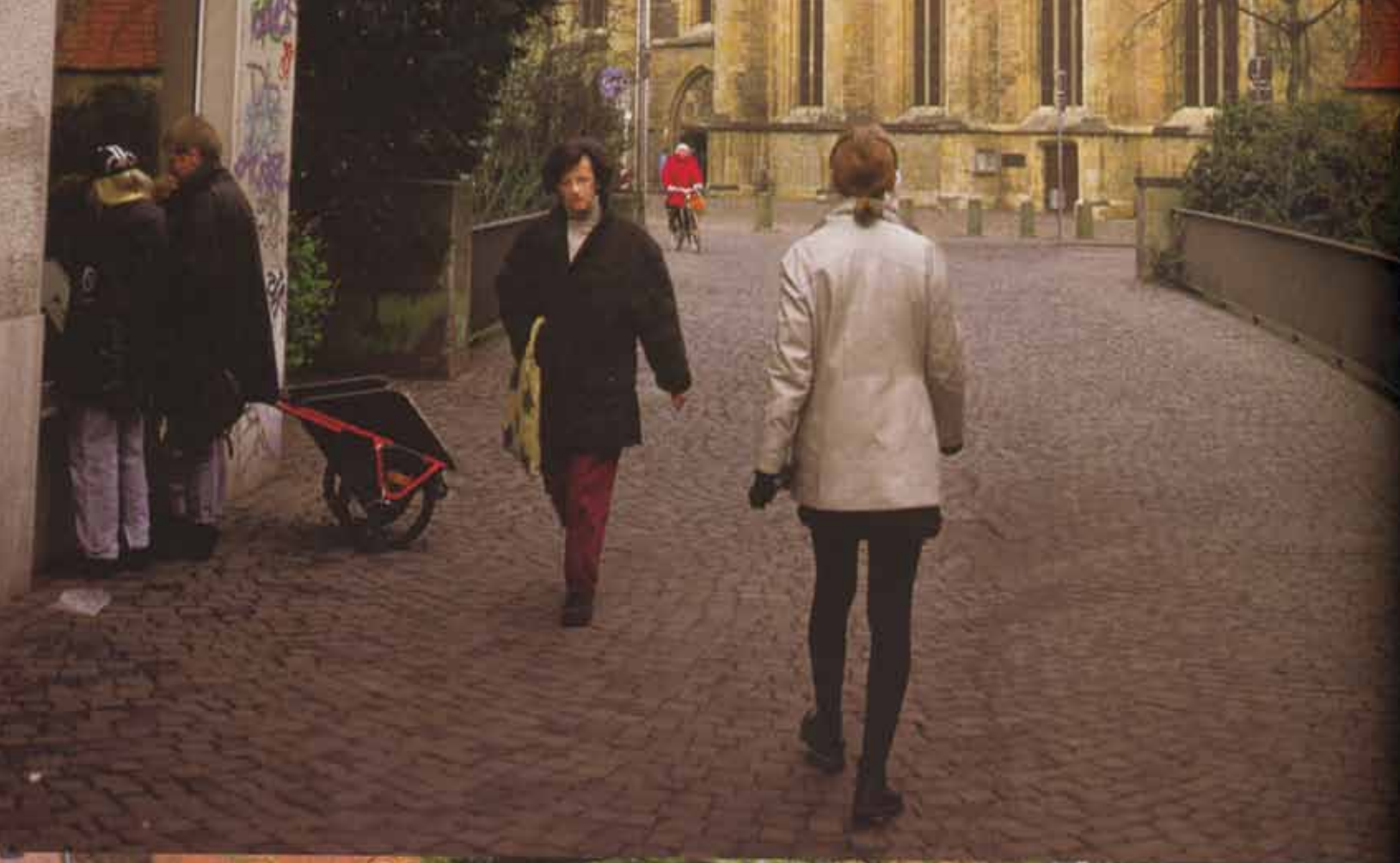
She sees synesthesia as a gift. "I am very grateful. I can't imagine the world without it. . . . Life is so rich this way."

She is not sure that the fact most of think X is black is a variation of the vivid way she experiences the world.

"But I think it is cool, and I think it is interesting."







Janet Cardiff Münsterwalk

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Sound notes

Karsten Nicolai – ice – water – sound

Dance/India/sign: ATTAKK...???

Rauschenberg/sound tennis game 1966 (Fondation Langlois)

“Open Score” with Stella at the Armory...great images at end of film with infra red camera – 1000 spectators leaving and two screens showing the proceedings..

