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For a minor ornithology

Abstract

As part of the 15th Jakarta Biennale - Siasat - we curated the performance and installation piece For a Minor Ornithology at the Pasar Burung Pramuka in Jakarta, Indonesia. Accompanying the performances are a series of diagrams designed with Jono Sturt of HTCHBCK (below), and an essay written with curator Anna-Sophie Springer. The essay, "Some Notes For a Minor Ornithology," considers the remarkable role of avifauna in the history of European scientific experiments, public museum displays, and taxidermy practices.

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Some Notes For a Minor Ornithology

by Anna-Sophie Springer & Etienne Turpin

*Aunt Frances said, "Don't let the other /
Little boys kill the little birds." /
I said, "They will, though."*

— Jimmie Durham, *Frances Lasco*
(from *Poems That Do Not Go Together*)



In the biblical story of the Great Flood, it is a bird that acts as a messenger for Noah to learn about the possibility of new land existing for all the other species. In Papuan mythology, a magical bird is said to have revived a shipwrecked fisher who would then become the first ancestor of a newly emerging native island tribe, the Asmat people. Ancient creation myths like these illustrate the fascination and deep identification with birds that humans have shared for thousands of years. By comparison, the scientific discipline of modern, professional ornithology is a relatively young field. As a sub-discipline of zoology, ornithology is historically concerned with issues such as the classification and taxonomy of bird species, their evolution, geographical and ecological distribution, behavioral characteristics as well as conservation. With the Renaissance scholar Ulisse Aldrovandi's *Ornithologiae* (1599) as an early point of reference and the "Robo Raven"—a light-weight surveillance robot engineered to replicate the complexities of bird flight—as one of the latest technological iterations, it is clear that the systematic study of birds is entangled with processes of scientific, institutional, and epistemological development.

In the history of museums and their predecessors, cabinets of curiosity, it also becomes clear that ethnographic institutions are not the only European collections saturated with colonial legacies. As sites of collection, research, and display of exotic species, natural history museums are also entangled with violent expansionist histories and reckless environmental attitudes. The project of a minor ornithology is

therefore connected to the scientific ambitions of zoology as well as the museological organization of natural history.

Minor ornithology is immediately linked to experimental, local and critical forms of knowledge production. Philosophically, it is inspired by the concept of “minor science” which was produced by the French philosophers Gilles Deleuze and Félix Guattari. Pragmatically, it highlights the importance of the seemingly less significant, smaller, or oblique events that are necessary in the course of establishing anything like a science of zoology. Instead of concerning itself exclusively with the study of birds as zoological objects, minor ornithology is interested in how human relationships with *avifauna*—in the words of the major taxonomist Linnaeus, *this beautiful and cheerful portion of created nature*—evinces cultural preoccupations, estimations of nature, and the enduring legacy of colonialism.

In their book *A Thousand Plateaus* (1980) Deleuze and Guattari describe two kinds of science, which they call major (or royal) and minor science. Whereas the former aims for a sense of truth and order by operating through axioms, categories, and the means of representation, the latter is attentive to experimentation and variation. Yet, even with these key differences, major and minor science cannot be understood in terms of binary oppositions. Major and minor science do not exclude each other; instead, they are comparable to various tonalities of song, where the result is a different quality or kind of sound. For Deleuze and Guattari, relationships between major and minor practices are characterized by the ongoing tension between capture and flight. Through its ability to revel in the ambiguous, the unsolved, and the not-yet-established, minor science opens up a space for new questions, which major science can then “re-capture” within its own expanded field. Events in minor science often act as a sort of precondition for progress in the realm of major science. Regarding the establishment of the natural history museum (often literally the site of royal science) with its thorough taxonomies, descriptions, and displays, one such decisive laboratory event was the discovery of arsenical soap as a reliable preservative for bird taxidermy. Although illustrations of early museum halls filled with impressive specimens might paint more flattering pictures, for centuries bird collections had remained ephemeral and fragmentary. Until taxidermy was finally perfected as a technique, the dead specimens would continue to decay, or fall prey to insect infestations, troubling the seemingly impossible project of maintaining a natural history museum. It was precisely the finally stabilized specimens and quickly expanding collections of inanimate bird-objects of the late eighteenth and nineteenth century which gave ornithologists a crucial push towards publishing extensive knowledge about the world of birds.

The bird market Pasar Burung Pramuka in Jakarta is a locale for the exploration of minor ornithology today. The three visits to the bird market and the performances there which constitute the site of *For a Minor Ornithology* are framed by a triptych of historical case studies from the intertwined realms of early natural science, museum culture, and colonial collecting. All three are represented in diagrams of knowledge and show the ambivalence between minor and major science—each time as performed through the violent interaction of men with birds—whether through questions of evidence, display, or collection. In each case, the diagram attempts to perform the ambivalence of the practice under consideration by suggesting a ratio of capture and flight. As minor experimentations become major normative assumptions, we discover the strange, contingent unfolding of the will to knowledge.

Carolus Linnaeus (1707–1778) attempted to create rules for the classification of nature. With his *Species Plantarum* (1753) and *Systema Naturae* (10th Edition, 1758), Linnaeus’s binomials (names for species) and generic names created the foundation for biological nomenclature codes. Linnaean taxonomy is based on a system of class and genus, which form the principles of a universal order. The museum of the American artist and naturalist Charles Willson Peale (1741–1827) was one of the first institutions of its kind to present its collection according to the Linnaean taxonomic system. The collection, which combined Peale’s interests in natural history and aesthetics, included his grid of display cases filled with taxidermied birds, of which Peale is said to have collected over 1,800 specimens. The walls of the Long

Room in his Philadelphia museum exhibit the animals in front of painted backgrounds of natural landscapes, which is one of the earliest examples of the habitat diorama. Peale wrote lectures and essays, in which he would single out specimens for anthropomorphic character studies. The behavior of animals such as the eagle, the woodpecker or the swan, he believed, could be interpreted in order to draw analogies for an ideal human society. Despite his efforts to use these innovative ideas to educate the public about issues of both natural science and political organization, the Peale museum failed to obtain government funding and, following Peale's death, the collection was divided and sold to the American entertainer Phineas Taylor Barnum. In the miniature mode of the museum, the display was an ordering and ranking of nature, meant to instruct the public on the correct hierarchy of animals and humans.



It is in the early laboratory of Robert Boyle (1627–1691) that we discover, almost one hundred years before Linnaeus, the first apparatus of “big science”—an air-pump whose construction was described in detail in his *New Experiments Physico-Mechanical* (1660). The pump, also known as a *machina Boyleana* and a “pneumatical engine,” was the central device around which Boyle constructed his argument for natural philosophical knowledge to be gained by experimentally-produced matters of fact. By performing his experiments in the public forum of the Royal Society where they were witnessed by esteemed guests and other scientists, Boyle used the pump to generate knowledge through experimentation, but, more importantly, to change the terms by which knowledge was considered knowledge. In Experiment No. 41, Boyle used his pump to create evidence for his claim that voids exist within the material reality of air.

In Boyle's quest for an empirical proof of airless space, a gradually suffocated bird—the creature of air *par excellence*—pays with its life while giving birth to evidence-based modern science. By placing a bird within his “pneumatical engine,” Boyle could vividly demonstrate the effects of the void on a living creature. As the bird began to asphyxiate, the audience witnessed the real cost of deprivation of vital air; although some still refused his explanation, the violent death of a bird in the glass chamber was said to be “ostensive” because it proved to the witnesses the fact that a void could be created by actively depleting the vitality of the air itself. In this relationship of knowledge and violence, the bird is the dramatic actor that performs through its death the production of modern science.

Between 1854 and 1862 the British naturalist, Alfred Russel Wallace, explored the Southeast Asian Malay Archipelago, ardently documenting the region's geography and biodiversity while amassing a gigantic collection of specimens for museums in England. Chronicled with great meticulousness, his field work, findings and personal experiences are recorded in the book *The Malay Archipelago: The land of the orang-utan, and the bird of paradise—A narrative of travel, with sketches of man and nature* published in 1869 after Wallace's return to England. While the orang-utans are discussed towards the beginning of the book, towards its end, the narration culminates with vivid descriptions of the different types of birds of paradise, which Wallace managed to observe and collect on various islands. Throughout the first 300 pages of his book, the mass-killing of animals to produce a collection of more than 100,000 specimens generally caused Wallace hardly any pause for reflection or regret; however, his live encounter with the mythical birds of paradise provoked a decisive exception. It was these birds' exquisite beauty, along with the rare observation of them in their remote environment, that poignantly revealed to Wallace the future tragedy of a colonial expansionism annihilating previously untouched nature.

While the birds' existence was known in Europe at least since the Renaissance, they were mostly delivered in the form of lifeless skins; legend had it that they lived in the sky and never landed on earth except to die. In contrast to scientific predecessors such as Linnaeus, Wallace proudly proclaimed himself the first Englishman to ever see birds of paradise alive in their terrestrial habitats. He even succeeded, against all odds, in transporting two living birds to London and estimated that, for the admiration of their spectators, the species could flourish in domestic aviaries at the Crystal Palace or Kew Gardens. Paradoxically, it is the sublime experience of beholding their natural beauty in the wild that inspires Wallace to possess a remarkable foresight of the human-inflicted "death of nature," albeit narrated in the chauvinist colonial jargon of his time:

I thought of the long ages of the past, during which the successive generations of this little creature had run their course – year by year being born, and living and dying amid these dark and gloomy woods with no intelligent eye to gaze upon their loveliness; to all appearance such a wanton waste of beauty. Such ideas excite a feeling of melancholy. It seems sad that on the one hand such exquisite creatures should live out their lives and exhibit their charms only in these wild, inhospitable regions, doomed for ages yet to come to hopeless barbarism; while on the other hand, should civilized man ever reach these distant lands, and bring moral, intellectual and physical light into the recesses of these virgin forests, we may be sure that he will so disturb the nicely-balanced relations of organic and inorganic nature as to cause the disappearance, and finally the extinction, of these very beings whose wonderful structure and beauty he alone is fitted to appreciate and enjoy. This consideration must surely tell us that all living things were not made for man. Many of them have no relation to him. The cycle of their existence has gone on independently from his, and is disturbed or broken by every advance in man's intellectual development; and their happiness and enjoyments, their loves and hates, their struggles for existence, their vigorous life and early death, would seem to be immediately related to their own well-being and perpetuation alone, limited only by the equal well-being and perpetuation of the numberless other organisms with which each is more or less intimately connected.

After Wallace has already slaughtered, dissected, and preserved thousands of other animals during his exploration, it is the encounter with a little dead bird—this "perfect little organism"—which stirs an intense and conflicted reflection. Aware of the historic significance of the moment (before him the Frenchman René Primevère Lesson was the only other European to ever have seen the birds of paradise in their natural environment), Wallace is shaken by his responsibility as an expansionist agent at the Eastern edge of Western colonization. His response articulates a tension between, on the one hand, his nineteenth-century conceptions of European cultural superiority and, on the other, concern about violent interference and inevitable destruction. His assumption that nature left in a wild state was a "waste of beauty" tellingly ignores the existence of native skills, knowledge, and cultural appreciation of the birds by local communities.



Traditionally referred to by the Malay as *Manuk dewata* (“God’s birds”), it is thus their second, and later, Malay appellation, *Burung mati* (“dead birds”) that expresses the cruel irony of their fate as mascots for the expulsion from paradise. No doubt, human activities including a fanatical consumption of fossil fuels, industrialized agriculture, bioengineering, resource extraction, global waste management, and pollution have violently disturbed Wallace’s “nicely-balanced relations of organic and inorganic nature.” Yet, only a few decades after Wallace left Asia, the hunting and trade of birds of paradise saw export numbers reach annual highs of up to 80,000 skins and caused a far-reaching conflict among the colonial authorities that lasted for forty years and ended with a prohibition on killing the birds in 1931. Echoing Wallace’s initial revelation, towards the end of the official colonial occupation, the debates over the preservation of habitats for the birds of paradise are also said to mark the start of environmental politics in Indonesia.

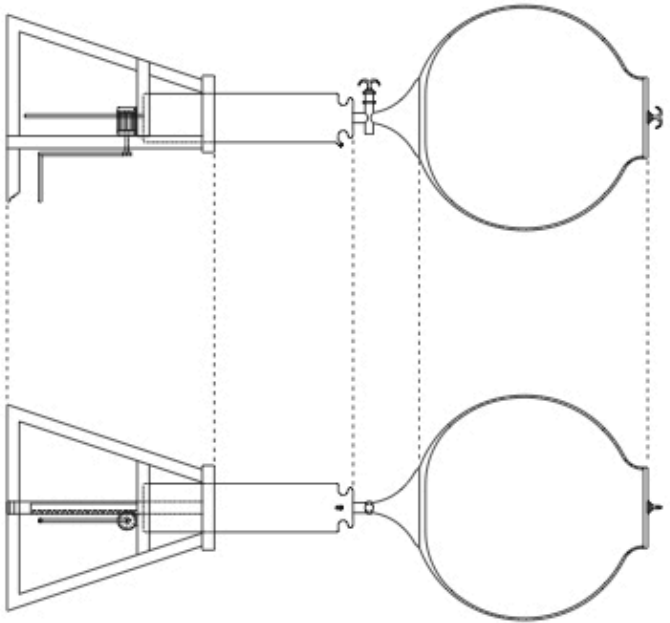


With some of these ideas as the framework for the tours and performances, in Pasar Burung Pramuka we want to explore questions of minor knowledge, experimental understanding, and local practices. We are not interested in creating identities for local sellers and buyers. Instead, we will have conversations about how they understand their practice, what strategies they deploy, what politics they conceive of, etc. We have asked the local sellers and buyers how they envision their practices, and if they would perform with us, as visitors, the production of minor ornithology. Are these practices similar to, or different from, colonial practices? Is there a continuity between the colonial and postcolonial treatment of animals? Of nature? Of song? Of confinement? Does the caged bird sing differently after Independence? Or, do human ears hear it differently? We don’t know; these are questions that don’t have obvious answers. This is why we make and curate art—to find ways of approaching history, and ways of learning to talk and share stories that connect us to the violence of our past as well as the potential of our future. But, to consider both of these temporalities, we must also be present. So, a slow visit, with a series of performances and conversations that meander through the market, is a way for us to become present and attentive to these superimposed realities. We need to be among the creatures of the world to begin to understand both our shared captivity and our asymmetrical coercion. As Deleuze and Guattari suggested, “it is when she is held prisoner that she emits the particles of a bird.”

With this project, we are interested in how the local knowledge of birds, rare species, breeding, bird-cage making, etc., all offer singular insights into the legacy of the colonial aviary, suggesting the importance of forms of localized knowledge, commercial production, craft and tradition that variously compliment, divert, and distort colonial practices. Our research into the three conceptual characters—Robert Boyle, Charles Willson Peale, and Alfred R. Wallace—provides a historical and conceptual framework for approaching the contemporary space of the market; however, the visual and sonorous exuberance of Pasar Burung Pramuka provokes our thinking of the present. X



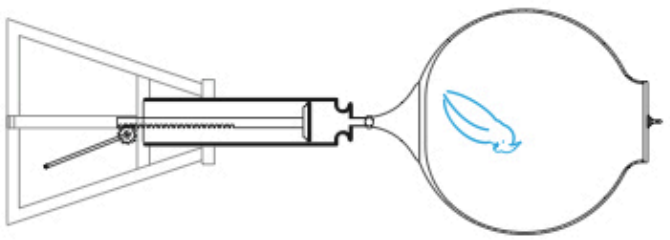
Anna-Sophie Springer is a curator and co-director of the Berlin-based independent press **K. Verlag**. Etienne Turpin is the principal director of Jakarta-based **anexact office**, a design research practice committed to multidisciplinary urban activism, artistic and curatorial experimentation, and applied philosophical inquiry. As members of the **Synapse International Curators' Network**, Anna-Sophie and Etienne are co-curating the exhibition *125,600 Specimens of Natural History: Re-imagining the Practice of Collection Through Alfred R. Wallace's Malay Expedition*, in collaboration with Richard Pell and the Center for PostNatural History. The exhibition will debut in Jakarta, Indonesia, at Komunitas Salihara, in 2015.



BOYLE'S EXPERIMENT NO. 41 PERCOBAAN BOYLE NO. 41

In a laboratory laboratory of Robert Boyle (1627 - 1691) and Robert Boyle the first apparatus of "The vacuum" - a glass vessel with a piston and a vertical tube with a sliding piston. The vessel is partially filled with air, and the piston is at a certain height. The diagram shows two states: one where the vessel is open to the atmosphere and the piston is at a higher position, and another where the vessel is closed and the piston is at a lower position, compressing the air.

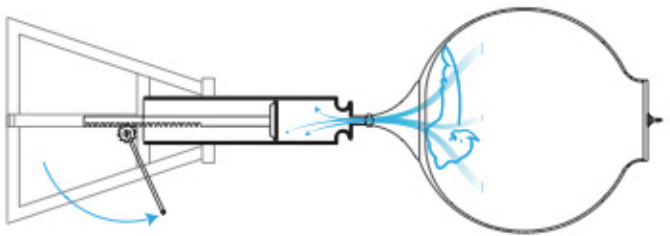
Boyle's experiment was designed to demonstrate Boyle's Law, which states that the pressure of a gas is inversely proportional to its volume. Boyle used a glass vessel with a piston and a vertical tube with a sliding piston. The vessel is partially filled with air, and the piston is at a certain height. The diagram shows two states: one where the vessel is open to the atmosphere and the piston is at a higher position, and another where the vessel is closed and the piston is at a lower position, compressing the air.



01

When the piston is moved down, the air is compressed. This causes the air to heat up, as shown by the small flame. The heat is a result of the work done on the gas during compression.

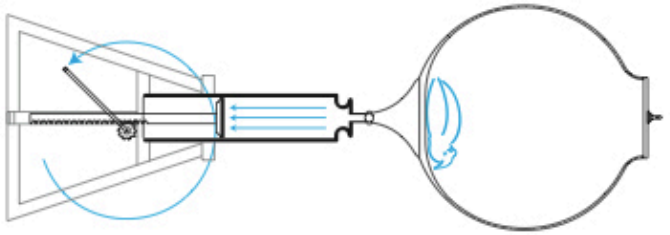
The heat is a result of the work done on the gas during compression. The work done is the product of the force applied to the piston and the distance it moves. The force applied is the weight of the piston plus the atmospheric pressure. The distance it moves is the change in height of the piston.



02

By pushing a lid with the "pneumatic engine," Boyle could easily demonstrate the effects of the heat on a long cylinder. As the piston is moved up, the air expands and cools down. The cooling is a result of the work done by the gas during expansion.

The cooling is a result of the work done by the gas during expansion. The work done is the product of the force applied to the piston and the distance it moves. The force applied is the weight of the piston plus the atmospheric pressure. The distance it moves is the change in height of the piston.

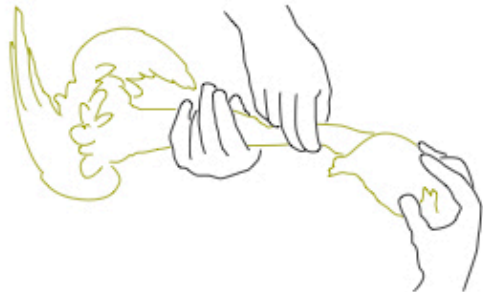


03

The heat of the air was used to be "compressed" - it provides the "vacuum" the heat that a void could be created by withdrawing the air. The heat is the energy of the air that is being compressed. The heat is the energy of the air that is being compressed.

The heat is the energy of the air that is being compressed. The heat is the energy of the air that is being compressed. The heat is the energy of the air that is being compressed.

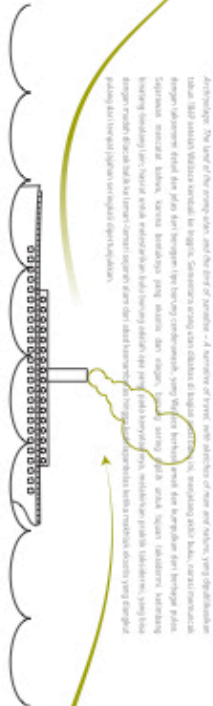
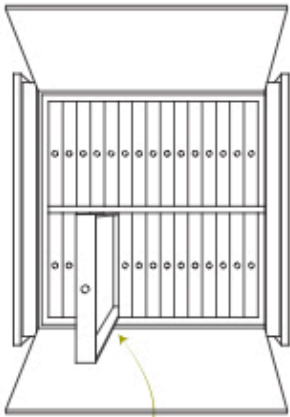
01 DIAGRAM OF EVIDENCE 01 DIAGRAM BUKTI



AR WALLACE'S TAXIDERMY

TAKSIDERMI AR WALLACE

Diambil dari: *1847 The Birds of the Malay Archipelago*, Vol. 1, Part 1, p. 10. The original text is in English. The text describes the process of taxidermy, including the removal of feathers, the use of a knife to trim the wings and tail, and the use of a cabinet to store the specimens. The text is written in a historical, descriptive style.



03 DIAGRAM OF A COLLECTION 03 DIAGRAM SEBUAH KOLEKSI