THE EPISTEMOLOGY OF THE FAMILIAR: A HYMN TO PANDORA

Maria Rentetzi

In a preliminary fashion, here I ought to pay attention to the etymological origins of the box. To start with, the meaning of ‘box’ comes from the Latin *buxus*, which is a transliteration of the Greek *pyxis* (πυξίς, plural *pyxides*). Initially this was a cylindrical box with a separate lid, made of fine wood from the tree *pyksos* (known in Latin as *Buxus sempervirens*, a flowering tree native to southern Europe and ideal for crafting delicate wooden objects, especially boxes) (Rutherfurd Roberts 1978).

In the Classical world, *pyxis* was associated with cosmetic and jewellery boxes. The *pyxides* often contained make-up powder, hair accessories, and ornaments, and were used almost exclusively by women. Surviving *pyxides*, mostly Greek pottery, lead us to 400 BC, to ancient Athens, where women used them to enhance their femininity, covering blemishes and imperfections with their content: *psymithio* – that is, lead carbonate hydroxide. As a symbol of femininity and a sign of domesticity, the ancient box reveals its content through its imagery: its decorative images depict scenes that take place in *gynaikonitis*, women’s quarters, where women are getting dressed and doing their hair and make-up, or appear in wedding scenes (Oikonomou 2015).

With such a status, *pyxis*, as the myth demands, names the most precious holding: Pandora’s box. In Hesiod’s *Theogonia*, Pandora is described as the first female human, moulded out of earth and water by the Greek god Hephaestus at Zeus’s command. Zeus’s additional gift to her was a large *pyxis*, yet she was specifically instructed not to open it. Curious, impatient, and certainly disobedient to the gods, Pandora soon opened the *pyxis*. Regretting it too late, she ‘contrived baneful cares for men’ (Fraser 2011: 22). Filled with a myriad of evils, the open box released them all; besides one, hope (Fraser 2011: 22). Hence, a proverbial reference by now, Pandora’s box denotes a source of extensive troubles.
Mythology, and more specifically Pandora’s myth, provides a glimpse of what I call the *epistemology of the familiar*: the attempt to show how mundane objects that occupy our everyday lives are linked to the emergence of new structures of knowledge, new concepts, and new research directions. In short, an epistemology of the familiar is the study of the ordinary, the ephemeral, and the often unnoticed, such as a box. But how could such a humble form of materiality as a box be epistemologically important? The box, to remind you, names at once the container and its content, a double meaning that connects two principles at the same time. On the one hand, stands the principle of materiality that sees the container as a physical storage system, and the content as the material within it. On the other hand, I recall Jacque Derrida’s nomological principle, the principle according to the law where the box as a container orders and at the same time is ordered by the content (Derrida 1995). At first glance, the container seems to follow its content, be conditioned, defined, and prescribed by it. It comes second, as a result, and in an orderly, hierarchical way. The principle of materiality appears to condition the nomological, to be distinct and dominant. Content and container are seen through a sequential lens, enforcing the claim of the former to condition the latter. In a common sense, boxes – meaning the container – preserve and protect their content, are used for storage or to transport precious things, and frequently work as simple aesthetic artefacts. What is valuable, then, is the content – that which remains within, precious and privileged. The container, meanwhile, plays a simple functional role existing only for, and because of, its content. Building up a hierarchical sequence, the content comes first and the box – the container – exists in its favour, for it, because of it.

This perspective strips materiality from its nomological sense, leaves it naked, and allows the physical to pretend that it is not socially ordered. Instead, I argue that the box institutes the nomological principle through which order is given: Pandora’s *pyxis* does not exist without its relation to the evils it contains – hope included – and, thus, the contradictions and ambiguities these entail (Fraser 2011). Content and container are inextricably connected to form a material object from which the principle of order and rules of reason are given. Obviously, the *pyxis* is a physical object, which plays a central epistemological role in human lives. It signifies aspects of ancient femininity, questions the hierarchy
between gods and humans, and exists only in relation to – not subordinate to – its content: the evils, hope, or *pysmithio*. More importantly, the *pyxis* works as a metaphor. Thanks to her curiosity, Pandora’s box bestows upon mankind not only all evils and troubles but also the gift of knowledge. Releasing the evils into the world marks the end of human innocence, the beginning of knowledge, the pain of defining the human condition. The world is finally balanced. Fire is not the only privileged gift that Prometheus provided to humans. Pandora’s box brought into life an array of pains, leaving hope in an ambiguous status having provided knowledge to humans.

At this point it is relevant to mention that the ancient Greek *pyxis* acquired an additional meaning in modern Greek: it denotes the compass, the instrument that allows us to navigate. It is thus knowledge and navigation that mark the passage from the material to the nomological. This does not mean that the physical is absorbed by order, but that both remain in an always negotiable relation. Let me remind you that, historically, objects were the ones that enforced the fabrication of specific boxes. Having the need to pack up easily and move, nomadic tribes used to carry their light holdings in rawhide envelopes, while box-like containers appeared in civilisations that were settled and well-established in firm dwellings. The box embodies this memory of settlement, a condition of civilisation. In a similar manner, the sarcophagus in Ancient Egypt, a box-like stone coffin, followed the shape of the corpse, often a royal mummy, which it was destined to protect. In Ancient China a series of nested boxes, a set of caskets of graduated size that each fitted inside the next largest box, were designed to host and protect Buddha’s precious relics, his genuine finger bones, each conditioned by the size of the respective fingers. Moving to the modern period, throughout the eighteenth century the need to protect and transport precious Parisian porcelain led to the construction of elaborate wooden or metal boxes (Rentetzi 2011). Meanwhile, the value of diamonds, rubies, and emeralds was enhanced by storing them in boxes decorated with gold.

But, contrary to the impression one might have, the box is more than a shelter for its content. It is an artefact, an object made by a human being, one of cultural and historical importance that ascribes meaning to, shapes, and is shaped by its content. The box is therefore an object of epistemic
interest: it conveys the accumulated knowledge of a historical period and stands as the concrete evidence of medical history (Endo, this volume); it works as source of lost knowledge (Darmstädter, this volume); it becomes a repository of strong arguments in scientific meetings (Mechler, this volume), a performative thinking tool (Schaefer, this volume), a regulatory device constitutive of concepts of public health and safety (Rentetzi, ‘Black-boxing Knowledge’, this volume). Thus, the box is necessarily the relation between the container and the content. It cannot be understood outside it, without it. The box is at once an object and a relation, a material and a metaphor, a physical entity and a significant association of the nomological principle and that of materiality.

I like to think of some favourable examples. In the early 1900s Pierre Curie carried radium in his pocket, and scientists touched it with their bare hands; meanwhile, radioactive materials arrived from the Bohemian mines to the Vienna Radium Institute in glass bottles sealed merely with corks. Well into the 1920s, containers for radium needles and tubes were made of lead or iron, signifying the beginning of the era of radiation protection. These developments in the ways radium products were historically packaged, transferred, and shipped – the boxes of radium products – reveal changes in assumptions about safety issues connected to the element (Rentetzi 2011).

Moving to the later twentieth century, the container transport system becomes an instantiation of how the material orders the globalised world. According to Alexander Klose, this instantiation signals a change in the fundamental order of thinking and things – a reification into single principle called the container principle (Klose 2009). The cross section of physicality and ordering, the relation of the container to its global standardisation, is linked to an array of other issues: microeconomics, labour provisions, international economic diplomacy, national and international agreements on tariffs, the development of technologies, but also the reestablishment of human settlements. Boxes – containers, in this case – function as primary epistemic objects that define our own way of thinking and practising.

Philosopher Mark Johnson has argued for the important role of the container schema in defining our understanding of ‘in’ and ‘out’. Our experience is structured in a significant way prior to any concepts, and even independent of them
The epistemeology of the familiar (Johnson 1990). Thus, basic experiential structures are present regardless of any imposition of concepts. The container schema – one that consists of a boundary which distinguishes an interior from an exterior – is a powerful image that structures our daily experiences. As Johnson describes the start of an ordinary day, ‘you reach into the medicine cabinet, take out the toothpaste, squeeze out some toothpaste, put the toothpaste into your mouth, brush your teeth, and rinse out your mouth’. Indeed, the container schema is integral to many of the orientational feats that we all perform constantly in our daily lives: as extensions of our selves (Duprez, this volume); containers of fears and anxieties (Fridlund; Rentetzi ‘Cardboard Box’, both in this volume); even as an understanding of our own bodies as containers (Day, this volume).

Contemporary material scientists take this metaphor one step further, and scale it down (Uchida et al. 2007). Designing synthetic materials, material scientists mimic macromolecular structures and biological processes. At the intersection of biology and material science, what seem to have significant value are container-like protein architectures that allow the introduction of multifunctionality in a single cage. Viruses serve as an illustrative example. Their structural analysis reveals that all viruses are partially constituted by a protein shell architecture comprising a limited number of subunits that contain and protect the viral genome. This structure allows them a great deal of synthetic flexibility, and stands as a model for the controlled assembly of functional architectures in cases of synthetic materials. In short, the container schema stands as a powerful epistemic tool, opening up new experimental practices, and even producing new kinds of materials.

This field guide stands as an instance – more accurately as numerous instances – of how the physical is at the same time nomological, of how mundane things – boxes, in this case – shelter within themselves both order and materiality, thereby producing our knowledge about the world. Last but not least, beyond playing with metaphors, a book is a box. Let us take this collection of articles as a box in itself, as a container and as a thing in containers. Literarily and figuratively, this field guide puts in practice the epistemology of the familiar and, at the same time, it guides surprising openings of forbidden boxes.
REFERENCES


Day, D., ‘“As Modern as Tomorrow”: The Medicine Cabinet’, this volume.


Fridlund, M., ‘Keep Calm and Carry One: The Civilian Gas Mask Case and its Containment of British Emotions’, this volume.


Mechler, U., ‘Slide Box: How to Stock Some Thousand Cancer Cases’, this volume.


Rentetzi, M., ‘Black-boxing Knowledge: Glass Dosimeters and Governmental Control’, this volume.

——, ‘Cardboard Box: the Politics of Materiality’, this volume.


**Fig. 3.1** Retired overseas containers, reused to house workshops and storage in Kyrgyzstan (photograph by Susanne Bauer, 2018)