Alexandra Paperno (b. 1978, Moscow) *Abolished Constellations (51 parts)*, 2016 Ink on wood, 60 x 80 cm each Courtesy of the artist and Volker Diehl gallery

'These constellations are all false, but deliciously false! They have grouped totally foreign stars in a single figure. Between real points, that is between stars that are isolated like one-of-a-kind diamonds, the dream of constellations has drawn imaginary lines.' – Gaston Bachelard, *Air and Dreams* (1943)

Constellations are groups of stars, perceived to form a pattern, typically mapping the shape of an animal or mythological object. The ancient Sumerians, and later the Greeks, established most of the constellations in the northern hemisphere in use today. Ptolemy, a Greek astronomer, catalogued more than 1,000 stars and proposed 48 constellations. The stars of the southern hemisphere were mapped by colonial explorers in the seventeenth century, who proposed new constellations for the region. Eventually, the constellations were standardised: in 1922, the International Astronomical Union (IAU) adopted a list of 88 constellations, which depict 42 animals, 29 inanimate objects and 17 humans or mythological characters. It was agreed that the list would be final and no new constellations would be added. The number 88 has no specific scientific or cultural significance — it is random.

Some constellations were not recognised by the IAU in 1922, and were thus abolished. More than 50 constellations fall in this category. Some of them appear in old maps and etchings, among them Argo Navis, a large constellation mapping an ancient Greek ship, the Argo, and proposed by Ptolemy. The list of the 51 'victims' of IAU's standardisation forms the basis of Alexandra Paperno's project, *Abolished Constellations*. This list was the result of a paradoxical bureaucratic process: patterns in the sky, which could not be seen by the naked eye and thus never objectively existed, were officially abolished. Paperno's artworks carefully recreate the maps of these former constellations.

The artwork was originally commissioned for a tenth-century desecrated church in North Caucasus, Russia, near to a once-significant Soviet science town, where an observatory held the biggest telescope in the world, at the time. Paperno's artwork alludes to the Soviet-era science towns – which were crucial to communist propaganda and its vision of a cosmic utopia – and their gradual decline.

At Mimosa House, the 51 wooden panels, which make up *Abolished Constellations*, are displayed on the floor of the mezzanine, to appear as a sky map laid out under our feet. Positioned below a glass roof, as if reflecting the sky beyond, the constellations invert the very concept of stargazing, locating the distant cosmos on earth.

Janina Kraupe-Świderska (b. 1921, Sosnowiec; d. 2016, Krakow) A selection of paintings, lithographs and drawings, various years Courtesy of the artist's estate

Exhibited for the first time in the UK, Mimosa House features a selection of paintings, drawings and lithographs by the late Polish artist Janina Kraupe-Świderska. Kraupe-Świderska was an artist, poet, professor, philosopher and astrologer, associated with the post-war Krakow avant-garde. Across her practice, Kraupe-Świderska engaged with esoteric knowledge, spirituality and religion, interests that were part of a wider struggle for individual freedom, led by artists and writers during the Soviet control of Poland, up until the early 1990s.

Kraupe-Świderska's paintings often depict abstract colourful shapes, signs and signals. In a self-portrait from 1970, included in the exhibition, her canvas is filled with the dots, swirls and lines of an illegible writing system – reminiscent of the Surrealist's automatic writing experiments. It is Kraupe-Świderska's interpretation of an esoteric language, one that might be a non-verbal, sensory form of communication.

Kraupe-Świderska's creative process was inspired by in-depth study of Eastern Philosophies, such as Buddhism and Kabbalah, alongside her own practice of astrology, divination and meditation. In her diaries, the artist described her attempt to depict 'what is changeable, elusive, playing out on various planes and existing in different time frames.' The drawings and paintings on show depict peoples' auras, astrological charts, spiritual guardians and pictorial interpretations of music. Central to her artistic enquiry was the very act of creation, often performed in a meditative state – instinctual and automatic, as she tuned into the rhythms of the universe. In this state, she created musical notations that interpret and transmit the sounds of the spheres, planets' movement and prayers, through a varying colour palette and with spontaneous gestures.

The artist was also influenced by the Armenian philosopher and mystic George Gurdjieff (1877–1949), who believed in the possibility of a higher state of consciousness that could be awakened in humans. Kraupe-Świderska lived in a perpetual search for the meaning of existence, and for the pictorial expression of a state of oneness, coexistence and calibration with all of the elements of the universe.

Bonnie Camplin (b. 1970, London) *Untitled*, 2018 15 drawings, felt-tip on paper and 28 print-out materials

Bonnie Camplin's work questions ideological forces, established knowledge systems, and mechanisms of manipulation such as propaganda – all of which must be resisted, she contends, to allow for the continued expansion of the mind. In opposition to the accumulation of skills and learned techniques, Camplin turns to deep, inner knowing, where knowing the universe can be achieved through knowing oneself.

Attempting to reconcile witchcraft and science, magic and quantum physics, Camplin questions how desire, intention and the unconscious can predict and produce the future. She approaches her work as a survey, where art and subjective experience becomes a strategy for accessing knowledge.

The series of drawings and print-out materials on display at Mimosa House synthesise the concept of vortex geometry by Viktor Schauberger (1885 – 1958), derived from his observations of Nature; Walter Russell's (1871–1963) description of electricity and time; and the artist's knowledge, acquired "from Source".

An American painter and author, Russell published the thesis *A New Concept of the Universe* (1952), in which he proposed electricity as the force which God used to create the universe. Specifically, Russell wrote of 'electric spiral vortices', wielded in pairs by God. His vision of a cosmos based on opposing electromagnetic vortexes anticipated the 'space-time vortexes' theorised by Albert Einstein, and which NASA found evidence for in 2011.

Camplin's drawings are accompanied by recent UFO reports and extracts from the US Department of Defence's study, 'Warp Drive, Dark Energy, and the Manipulation of Extra Dimensions' (2010). This paper describes advanced aerospace technologies, such as the 'warp drive', which would crack the mysteries of 'dark energy' and other unseen dimensions. The 'warp drive' is a speculative spacecraft propulsion-system, which appears in various works of science fiction, notably *Star Trek,* and the writing of the popular American sci-fi author Isaac Asimov (1920–1992).

Annie Goh (b. 1984, UK) *Myths of Echo*, 2021 Sound installation in three parts Courtesy of the artist

Annie Goh is an artist, researcher and performer working with sound, space and electronic media. Titled 'Sonic Knowledge Production in Archaeoacoustics: Echoes of Elsewhere?', her PhD thesis focused on 'archaeoacoustics', or sound archaeology, which is the study of acoustic properties of archaeological sites.

The three-part sound installation *Myths of Echo* draws on Goh's extensive research into the practices of archaeoacoustics researchers, and combines voice, narration, field recording and synthetic sound. Combining theoretical reflection with creative processes, Goh questions the neutrality of science and philosophy, using what she calls 'sonic cyberfeminism' to question the relationship between sound, gender and technology.

Part 2: The myth of 111Hz

2.1 channel audio track, 9 minutes. Plays twice an hour.

The frequency of 111 Hz is believed to have healing effects, triggering the production of endorphins, which relieve pain. This practice is evidenced by thousands of YouTube videos where the 'divine frequency' can be heard, aimed at evoking its powers. The myth of 111 Hz has its origins in archaeoacoustics research. All spaces vibrate at particular frequencies, depending on their size, shape and structure. Chambered mounds, such as those found at Newgrange in Ireland and Chun Quoit in Cornwall, have a resonance frequency of 95-120 Hz, often 110 Hz. Archaeoacoustic researchers have linked these mounds with ritual activity, suggesting a connection to the frequency of an average male voice. The same frequency range was also used in a neurological pilot study in 2008, which suggested that 111 Hz prompted a positive shift in emotional states, as evidenced in recordings of brain activity. Despite this research being contested, the myth around 111 Hz as a healing frequency has persisted.

The sonic material of this installation is produced by a Yamaha FS1R digital synthesiser. Released in 1998, the Yamaha FS1R was one of the first commercial synthesisers to offer 'formant shaping', a synthesis technology that could simulate human vocal sounds. In *The myth of 111Hz,* the synthesised and non-gendered human voice is at the centre of the composition, refuting the conclusions drawn by archaeoacoustics researchers about the specifically male vocal frequency. The use of the audibly artificial voice alludes to the work of the feminist theorist Sophie Lewis, whose book *Full Surrogacy Now* (2019) argues for new forms of queer kinship and forms of technological reproduction beyond the gender binary.

Mastered by AGF.

Annie Goh (b. 1984, UK) *Myths of Echo*, 2021 Sound installation in three parts Courtesy of the artist

Part 1: Cyber-quetzal

Ultra-directional loudspeakers, oscillating mechanism, generative sound synthesis code, Mac mini, motion sensor

The El Castillo pyramid is a site of archaeoacoustic interest, found in the centre of the Mayan city of Chichén Itzá in Yucatán, Mexico. This installation takes inspiration from the archaeoacoustic phenomenon of a 'chirping echo', where a handclap is reflected by the pyramid's steps into an echo that resembles the sound of a bird. In *Cyber-quetzal,* Goh re-creates the fleeting sound of a quetzal in-motion. The quetzal is important to Mayan and Aztec culture. The small, strikingly coloured bird is connected to Xochiquetzal, an Aztec goddess of fertility, beauty and love, who is emblemised by flowers and bright feathers. In this installation, Goh has imperfectly replicated the chirping echo in sonic virtual space. Instead of a human handclap at the pyramid steps, a simple computer-generated impulse is digitally echoed against the number of steps of the pyramid – ninety-one – and the resulting cyber-chirp is correspondingly artificial.

El Castillo is also a site of astrological significance: at both spring and autumn equinoxes, crowds gather at sunset to observe the sun cast a shadow that ripples down the steps like a snake. As a nod to this ritual, the chirps increase in frequency as the exhibition nears the winter solstice on 21 December.

With thanks to Alberto de Campo for sound programming in SuperCollider.

Annie Goh (b. 1984, UK) *Myths of Echo*, 2021 Sound installation in three parts Courtesy of the artist

Part 3: The Echoing Mother

Engraved mirror, audio track, media player, headphones.

The drawing on the engraved mirror depicts an imaginary archaeological site, bringing together three different locations the artist has visited, which are sites of sonic significance and goddess or matriarchal worship. The audio composition weaves together different voices: one that represents a sobering, scientific approach to the archaeological site; one that represents a romanticised view of female-icon worship; and one that meditates somewhere between these two poles. The composition features original improvisations on a Moog synthesiser, an analogue model aptly-named the 'Matriarch', as well as recordings of an improvised performance of audio feedback that took place at Art-Villa Garikula, Georgia, in 2018. The interwoven narratives bring into question different interpretations of history – and constructed truths – that co-exist when it comes to the distant past. It also raises questions around the romanticised, and often conservative, narratives around the figure of the matriarch, particularly in relation to kinship, reproduction and parenthood.

Jackie Karuti (b. 1987, Nairobi) Site specific installation (dimensions variable)

The Planets, Chapter 32, 2017 video, 05:11 minutes, HD video color

There are worlds out there they never told you about, 2016 video animation, 1:06 minutes

Ramani, 2016 A1 print + 6 A4 scans on film & wax paper

Drawing, Untitled I Drawing, Untitled II Drawing, Untitled III mixed media on watercolor paper (set of drawings developed for the exhibition; 'There are worlds out there they never told you about' 2016)

All courtesy of the artist

Jackie Karuti's experimental practice spans a variety of media, including drawing, animation, video, installation and performance art. Her work explores ideas around knowledge production and accessibility, radical imagination, migration and queerness.

In her travelling interactive performance, *The Case of Books,* first performed in Nairobi in 2013, local residents were encouraged to travel to different libraries in the city, and engage in the process of dusting, and restoring life to, books on forgotten shelves. Resisting traditional education systems, Karuti's work asserts the transformative power of reading and the speculative worlds that books can build. She states: 'I'm most keen on the possibility of alternate worlds, which defy normalcy, dogma and conventional living.'

In her videos and animations, Karuti explore histories of technology, space exploration and the rise of artificial intelligence. Depicting the world at a time of great anxiety, *The Planets, Chapter 32* opens with a voice-over explaining that much of the African continent will be submerged in the coming year; a crow and a black silhouette wander in search for a new world. The video is presented alongside a wooden structure, which merges a surveillance watchtower with a cross, offering a critique of dominant religious narratives around the origins of the universe.

Installed within the wooden structure is the animation, *There Are Worlds Out There They Never Told You About,* which deliberates on worlds that exist only in the imagination, in particular, underwater realms. The animation alludes the Afrofuturist myth of Drexciya – the story of an underwater civilisation formed by the many thousands of slaves thrown overboard during their passage across the Atlantic. The ocean is a site of imaginary potential in many ancestral systems of knowledge, utopian and speculative fiction and even in science: a place to consider the origins of the universe and its future alike.