



Blue Section, Recycled Blue Paper and Barley Pulp on Abaca Paper, 40 cms × 40 cms, 2020

Gallery of the Jožef Stefan Institute

JEAN DUNCAN In the Kingdom of Roots

We invite you to visit the exhibition, which will be open from August 2 to September 6, 2021.

In the Kingdom of Roots

The artworks of Scottish artist Jean Duncan – The Beauty of Roots and In the Kingdom of Roots – were created between 2017 and 2021. Initially in collaboration with Professor Philip J. White

of the James Hutton Institute and with the University of Dundee, Scotland, made possible by the Centre of Environmental Change and Human Resilience (CECHR). Within this framework. Jean Duncan was involved in research projects as an artist in residence, with a planned art exhibition and a travelling exhibition through Scotland at the conclusion of the project. The four fundamental pillars of the CECHR are food, water, energy and health security. CECHR also promotes interdisciplinary research, interaction and collaboration between all professional fields and university departments with the aim of studying how social groups can increase their resilience, adaptability and flexibility when faced with environmental change, and promote a sustainable future. The Centre for Knowledge Exchange and Impact, founded by the



Root Bundles, Leek Roots Stitched on Barley and Crocosmia Papers, 40 cms × 40 cms, 2021

Scottish Government and sponsoring the first Beauty of the Roots exhibition in 2017, was also involved in the project in addition to the above-mentioned organisations and participants. Jean Duncan has participated in many projects and various practical research processes: plant breeding, examining plants under a microscope, study of hydroponics and use of waste plant material from studies. which she used to make handmade paper according to new and improved recipes based on her previous experience and her own findings. Her process of research and work has adapted with the emergence of the new coronavirus, Covid-19, as she had to abandon her research in the Institute glasshouses due to general limitations, and the agreed exhibition at the Jožef Stefan Institute was postponed until 2021 due to specific circumstances. During this period, the artist studied plants from her garden and experimented with ideas and finding different ways to use them. In her research and making handmade paper, she used waste plant material from the Institute and her own garden, where bean stalks, maize and barley proved to be particularly well suited. She found that plants that produce a lot of cellulose grow quickly, do not need a lot of water and any pesticides, and can thrive in the same space along with other crops,

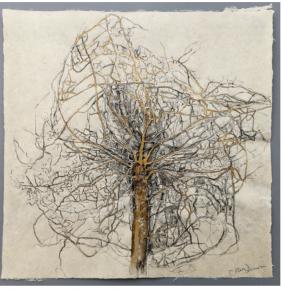
> so we can use them to help preserve available natural resources and protect the environment. The results of her research during this period was not only a more durable and resistant paper but also a series of drawings showing the complexity of the root system based on pictures of root sections (these and others were researched and recorded during the post-doctoral project on the importance of healthy roots for healthy agricultural system. in relation to healthy diets, in 2015-2017 at the James Hutton Institute by Dr Paula Pongrac, a biologist and researcher at the Jožef Stefan Institute and the University of Liubliana, who also takes care of the presentation of living plants and displays of root system at this exhibition, and who has invited the artist to Slovenia), as well as the free use of artistic inspiration, ideas of circular root sections as

artistic themes, structuring of colour shades, use of different colours of pulp, which is different for each plant, strengthening the pulp with fibres such as kozo and abaca, which have been known for centuries and which give handmade paper stability and firmness, artistic creation with liquid pulp on newly made paper, reducing its absorbency with specific recipes that allow coloured ink to dry on the surface rather than become absorbed into the paper. Handmade paper from barley, iris, maize husks, bog cotton ... and graphic techniques, such as etching, Japanese woodblock, collagraphy, watercolours, water transfer print, colour inks: sumi, walnut ink, golden ink are the techniques, procedures and materials that Jean Duncan used to create the works for this exhibition. Although they were often inspired by scientific findings, recordings and facts, the artist repeatedly artistically upgraded them. With her artistic interpretation, finesse and precise and open feel, receptive to ideas and inspiration, the artist synergistically connected, emphasised, arranged, and considered various and specific artistic and scientific factors, different texture and structure of paper, appearance, microcosm – the internal dynamics of individual fragments and the entire work of art, the uniqueness of the craftsmanship, the graphic structure of the visible plant material in the paper, which in itself co-

creates and participates in the creation with its own unique and one-of-a-kind compositional design and a different character every time. Contemporary works of art by Jean Duncan are supported and fuelled by her strong personal intention to explore the field and materials in terms of substance. art and technology, and she continues to explore her métier, despite her existing great skills and mastery. She is discovering and giving meaning to spaces, areas and fields, opening them up substantively, symbolically and artistically. Although her artwork Leek Root Bundles, stitched (1) on barley and Crocosmia papers, may seem almost like a herbarium at first glance, the roots, due to their importance for providing nutrients for the visible part of the plant, are accordingly presented artistically - wrapped with thread,

stitched on paper, and with their compositional and characteristic presence arranged in indents or a list on barley and Crocosmia papers – as flowers with great symbolic value. In Greek mythology, Iris was a messenger of the gods, communicating gods' will to the chosen ones, accompanied the souls, especially women, to the afterlife, while in our immediate and wider environment it is a symbol of new life, immortality, and faith in rebirth and eternal life, which can act as an iconographic connection to this work as well. As we know, the iris was also used by our ancestors for medicinal purposes, and its flower is one of the established symbols of royal dignity and the coat of arms of many ruling families in Europe, symbolising, amongst other things, strength, excellence and royalty.

The predominantly round, spiral and spherical shapes of the artworks are seen in the forms of cells and cellular structures, originating in root sections, as confirmed by examples of documentary footage at the exhibition, made by examining root sections with a focused ion beam microscope in the Department of Low and Medium Energy Physics (F2) of the Jožef Stefan Institute. At this point in fine arts, we also encounter the iconography of the symbolism of the circle and circular movement, which in European



Tomato Root, Ink and Watercolour on Bean Stalk Paper, 40 cms × 40 cms, 2021

traditional culture is still strong and tied to the movement of the sun (2), and not only in Europe but also elsewhere in the world. The mandala, meaning 'circle' in Sanskrit, originally represented completeness and a model of the organisational structure of life, and could be compared – in the case of scientific and artistic collaboration in this exhibition – with documentary representations of root sections as mandalas, as well as the artist's artworks – mandalas, maps of spiritual configuration.

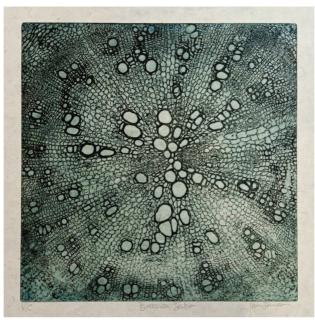
Being rooted also means being grounded and realistic. According to the Slovenian saying, the Herald of Spring holds the keys to the roots. He who cuts roots, waits for fruit in vain (purportedly a Latin saying), and he who forgets or destroys his roots, will grow no more (purportedly a Celtic

saying). If we stand still and take root, we remember two gifts that we received – or should have received – as children: the first are roots and the second are wings. Jean Duncan certainly has both. Furthermore, through her artwork, she symbolically connects us with the archetypal root system, which also gives us wings.

Nuša Podgornik

Mirjam Mencej, I Was Wandering in Circles the Whole Night Long, The Symbolism of Circular Movement in European Traditional Culture, Symbolism of a Spindle, Spinning, Spinning Material and Thread as a Bridge to the Otherworld, p. 45, Series Studia Mythologica Slavica – Supplementum 7, ZRC and ZRC SAZU, 2013

² Mirjam Mencej, I Was Wandering in Circles the Whole Night Long, The Symbolism of Circular Movement in European Traditional Culture, ZRC and ZRC SAZU, 2013



Brassica Section, Etching on Maize Paper, 40 cms × 40 cms, 2017

Jean Duncan (1957) attended the Glasgow School of Art (1976-1981), Scotland, where she earned her BA Hons Art and Design and also completed her postgraduate studies and specialisation in mural design, for which she was highly commended. Since 2010, her artwork has also been linked to scientific collaboration in various projects: Shifting Sands Montrose Museum, highlighting coastal change on the north-east of Scotland, 2014; Fieldwork experience in South-east Iceland, measuring ice melt on the Virkisjökull glacier, collaboration of University of Dundee and BGS scientists, 2014; CECHR Conversations, Lamb Gallery, University of Dundee collaboration with PHD students and plant scientists at the James Hutton Institute, 2011; Diatoms, Wellcome Trust, University of Dundee work developed from making SEM images of diatoms used in tsunami research, for medical studies to improve the health of people and animals, 2010. During this time, Jean Duncan received two national awards: RSA William Littlejohn Award 2010 and JD Fergusson Arts Award 2007. Since 2015, Jean Duncan is an elected Professional Member of the Scottish Society of Artists. She also exhibits regularly with the Royal Scottish Academy and the Aberdeen Arts Society. Her artworks are included in collections of private and national galleries. She has prepared many solo exhibitions and participated in many selective group presentations.

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