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Three Keywords: Debris, Hybrid and Nature

This essay aims to explore the three keywords: debris, hybrid and nature through the researching artists and key thinkers whose works embody this. The aim of this essay is to make connections and to explore deeper into the meanings behind these words. In relation to the book 'Conceptual Design- A polemic' by Brian Smith "We can play around with definitions, and trace links and connections between two or more words." (Bicknell and Mcquiston, 2014, p.111) The beauty of this essay is to have the creative freedom to explore and research further into vocabulary.

Debris can be defined as "scattered pieces of rubbish or remain" (Oxford Dictionary) However, debris can be a material in which purposeful sustainable art can be made which signifies the key components of waste reduction: reduce, reuse and recycle waste discarded debris.

The book 'Cradle to cradle' (Braungart & McDonnough, 2009) presents a call to action for environmentalists to consider the materials within sustainable design. The four R's 'reduce, reuse, recycle, regulate' is reinforced with the cradle-to-cradle support strategy, that consists of biological and technical nutrition. Biological nutrients refer to organic materials derived from nature and can be safely returned to the earth. On the other hand, technical nutrients are man-made materials that are designed to be managed, maintained, reused and recycled. The aim is to eliminate the concept of waste by means take, make, retake, remake, restore. The reason is, it creates a closed-loop system of production and consumption that supports regeneration of natural systems and long-term sustainability. This concept comes from cradle to grave thinking, trying not to let the technical world contaminate the biological world. Despite this, as humans "we enjoy the idea of ourselves as

powerful, unique individuals; and we like to buy things that are brand-new, made of materials that are “virgin.” (Braungart and McDonough, 2009, p.75) This results in the human consumerism of materials as a barrier to overcome.

In the book ‘A design handbook for reuse and recycling’ (Addis, 2012) explains that “the world of reclamation, reuse and recycling is almost like a parallel universe that is virtually invisible to those familiar only with new materials and components.” (Addis, 2012, p.7) This emphasises that people are missing out on a large portion of the world that exists through the processes of reclamation, reuse and recycling. The disconnection from the world concludes in failure to acknowledge the environmental crisis that we are faced.

The bold statement; “Waste is only waste if it cannot be used again” (Worrell and Reuter, 2014, p.5) challenges the idea and concept of waste disposals. Waste equals food, therefore it should be acknowledged as a resourceful option. In order to achieve this, makers can adapt and change to connect with local materials. A diversity of needs and desires is required in the making of design. “Respecting diversity in design means considering not only how a product is made but how it is to be used, and by whom.” (Braungart and McDonough, 2009, p.100). The focus is how it will affect our surroundings as these materials have many uses and many users over time and space.

The book ‘Handbook of Recycling’ provides the basis in terms of fundamental theories of recycling. Recycling can be defined as “the reprocessing of recovered materials at the end of product life, returning them into the supply chain.” (Worrell and Reuter, 2014, p.10) The purpose is to lengthen the service lifetime of a material and reduce environmental impact. The importance of recycling and material consideration reflects the issue within the quote “poor design on such a scale reaches far beyond our own life span. It perpetrates what we call intergenerational remote tyranny- our tyranny over future generations through the effects of our actions today.” (Braungart and McDonough, 2009, p.34) It is crucial that we reconsider our design and thinking choice in regards of materials

being put back into the environment. Principles of behaviour in terms of human value are to highlight visions for the future, to set goals, strategies and tactics.

An artist who portrays this well is, Aurora Robson as she highlights the importance of using discarded plastic debris in a way of transformation and useful waste materials.



Figures 1, 2 and 3 *Discarded Debris*

Aurora Robson is an environmental artist that works predominantly with plastic debris. Her artwork focuses on subjugating negativity and shifting trajectories. Drawing inspiration from her childhood nightmares, she uses them to create hybrid forms found in nature.

In her TED Talk, Robson works with debris as a primary material as she sees that “debris has so much poetry and tension, it is this poetry and tension that drives me to action.” (Ted talk, 2021, 0.37) The focus of her pieces is to work with promiscuous plastics; the plastics that has been around. She works with old shampoo and detergent bottles through sculpting and welding debris. The reason for this is because, “plastic debris has been accumulating in our wake; it’s a formidable accumulation. Only 9% of all plastics created to date have actually been recycled.” (Ted talk, 2021, 3.28) Robson’s

aim is to create a value with the culture of disposability and consumerism as she focuses on creating visual and conceptual harmony within her work.

She states, “every choice we make has consequences for the environment- art is a global language, the more I learn about plastic pollution, the more motivated I am to do something about it.” (WWF, 2017) This suggests that as makers and as a form of activism, we should realise the choice of materials we use and the long term affect it will have. Therefore, we should encourage ourselves and other to use discarded debris to build new materials and components, whilst respecting the world of reclamation and recycling.

This research leads to the second keyword of this essay, hybrid. Hybrids are a “combination of two or more materials in a predetermined configuration and scale.” (Ashby, 2016, p.22) Reading the book ‘Materials Selection in Mechanical Design’ led me into fully researching hybrid materials and how they are made up.

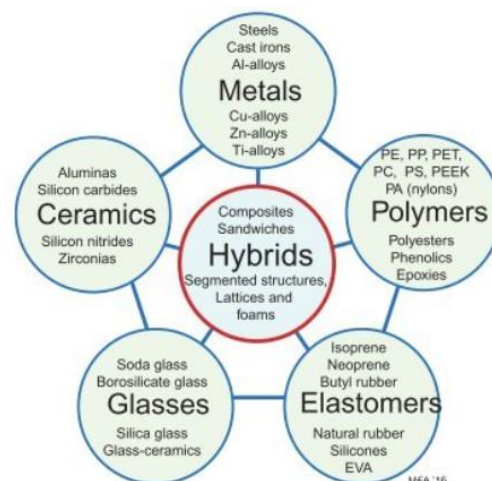


Fig 2- Hybrid Materials p.414

Words such as multilayer, combination, mixtures and hybrid stand out for myself, as it enables you to experiment and have fun as a maker. “A multilayer is a generalisation of sandwich with successive layers of different materials.” (Ashby, 2016, p.416) From the outer faces of other materials one can manipulate and bond other materials to create new innovative hybrid material. They can be optimised with fibres bonding and reacting together through their natural state of

property. Hybrid materials can be adapted through processes such as burning, folding, tearing. This is where I find joy in making, the challenges along the way, to see the process and adaptation of material properties.

Following research on hybrid materials, it led me to research further into experimenting with properties of materials such as mixed media- my way of designing hybrid materials. Focus on the application of materials.

During a lecture with Catherine Brown (March 2023) and her keywords of material, reflection and tension, I was inspired as she was urging us “to experiment, to test, sample, push the limits of the materials to fully understand the material.” This can be seen reading further into Serra’s verb list consisting of fifty-four terms compiled on a sheet of paper. “To split, to curve, to laminate” (Cooke, Serra and McShine, 2007, p.78) These verbs are so powerful and beautifully written to which one can be influenced by the action of making. “The relationship between material and its potential to construct, to apply a procedure to it, and see what evolves.” (Cooke, Serra and McShine, 2007, p.28) Evolves is a beautiful word that suggests a dynamic and ongoing process of material play, whereas the material is viewed as a malleable medium capable of being transformed and altered in a diverse range of ways.

Warren Seelig’s talk on ‘Materiality and Meaning’ explores the intersections between materiality, meaning and human experience from diverse sources that include philosophy, science and mythology. He highlights the approach of architect Peter Zumthor as he underlines the idea of “pushing an idea as far as it goes- elemental knowledge that materials contain” He thinks about the physical, not the intellectual aspects as he looks towards materials for the “elemental knowledge that materials contain.” (Seelig, 2012, 8.55-10.55) Seelig wishes to understand what motivates young material artists and seeks the mindset of the creative impulses driven by deep empathy for materials.

Warren Seelig is a sculptor and professor in fibres, mixed media and material studies.

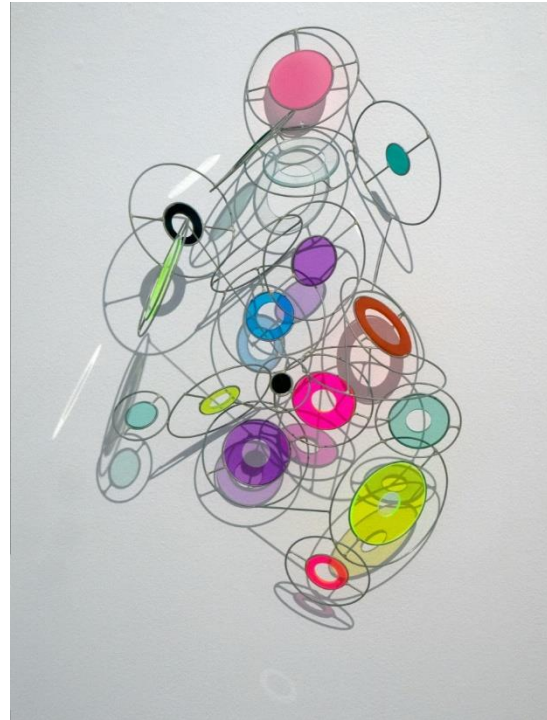
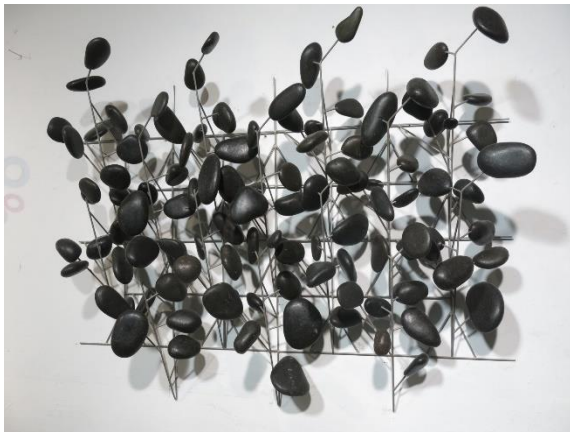
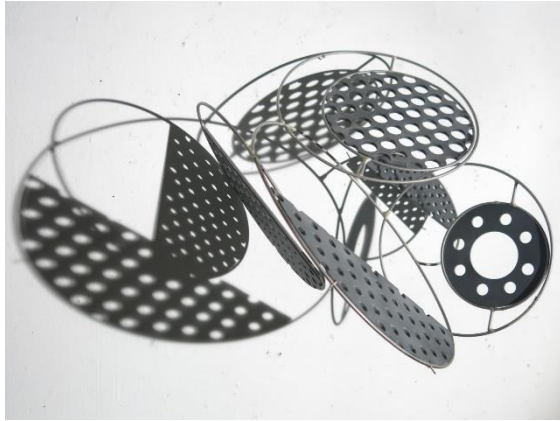


Fig 2, 3 and 4 *Warren Seelig*

The artwork above (Figs 2-4) portrays the materiality and the hybrid combination mix of different materials. “These materials are what he has to work with, and in the process of making he ‘joins forces’ with them, bringing them together or splitting them apart, synthesising and distilling, in anticipation for what might emerge.” (Garber, 2019, p.180) Each element gives its own force of nature to the piece. I wish to highlight the hybrid mix of materials such as silver stainless steel as a form of metal being malleable and ductile. Introducing coloured lucite which is a form of an acrylic plastic that works well with its transparency and flexibility. Black River Stone highlights the colour black whilst being smooth met finish as well as a shiny finish too. Natural materials are introduced with industrial traditional materials such as metal and plastics. Bonding different material types gives an interesting feel and look to a hybrid collection of work.

This hybrid collection casts another natural material of shadows, reflecting from each material. The material type shadows a unique form and shape that could be experimented with further. The

reflections could act as another standalone piece of artwork that has been formed just from experimenting with material properties of light.

My design thinking has always been, how can I push that material to the limit, to layer, to dismantle, to rearrange and to transform ordinary materials into extraordinary outcomes.

The last keyword to research is nature, following my research on sustainable design practices of recycling, I wanted to research into another concept of reducing our society's impact on the environment. This will be in the form of nature as art. The book 'The philosophy of sustainable design' aims to explore re-emerging science and philosophy of learning directly from nature. "We have only just recently begun to turn our thinking back to the source of all our innovations- nature itself" (McLennan, 2004, p.40) Nature is one of the greatest works of art as it evokes a sense of wonder and awe in those who experience it. "Nature has the power to teach us everything we need to know as designers." (McLennan, 2004, p.43) The concept of nature is that it is constantly changing and evolving, which makes it a dynamic canvas to work on.

In the book 'Biomimicry' 2009 by Benyus, describes science of nature having three components:

- 1- Nature as model -take inspiration from the designs of nature
- 2- Nature as measure- using an ecological standard to judge the rightness of our innovations
- 3- Nature as mentor-valuing what we can learn versus what we can extract

She describes nature's innovation on land and water with the emphasis on the importance of learning from nature and working with natural systems rather than against them. Nature is the core of life and therefore nothing can be better than to explore nature in all aspects.

Researching further into nature, I wish to explore land art with the inspiration from Andy Goldsworthy. Land art can be defined as either 'Earth art', 'Land art' and 'Earthworks' that involves using *in situ* materials to create new forms in natural settings. (Curtis, 2017, p.20) One artist in particular: Andy Goldsworthy is known for his site-specific installations involving natural materials

and the passing of time. He uses natural materials such as pebbles, twigs, leaves, grass, ferns, snow and ice with the intention his art can disappear quickly and not last for generations.



Fig 6 and 7- Land Art Photography Andy Goldsworthy

In the article 'Objects and New Materialisms: A Journey Across Making and Living with Objects'. The quote: "It is 'made' in the present, out of the materials at hand, but its 'context' often calls for a subjectivity to come." (Garber, 2019, p.42) The work of Andy Goldsworthy portrays the concept of nature art, using the material he has at hand from nature. His art can be expressed as "playing with junk yards of the world" as he uncovers rotting materials in rural settings where he sees life renewing itself. (Taylor, 2012, p.159) His work is always interconnected and elegantly crafted by nature.

Professor of Philosophy Spinoza, Deleuze takes material bodies as a challenge to think through the physical dimensions of agency and states by establishing the body as a model, "we do not know what the body can do." (Deleuze, 1988, pg.17) Natural materials are alive, active and animate that will perform and react to different things thrown at them such as weather conditions. The beauty of nature is that weather can add a different element to the artwork that is a part of the natural systems. Andy Goldsworthy believes "all forms are to be found in nature" (Taylor, 2012, p.159) and it generates new ways of understanding the world. Energy and Growth.

After researching deeper into the three keywords debris, hybrid and nature I wish to undertake and conduct a research question for my independent inquiry. The keyword debris highlighted my aim as

a maker, to always use scraps, leftover materials to reduce waste. Researching into the concept of cradle-to-cradle strategy and reduce, reuse and recycle led me to appreciate the work of Aurora Robson, giving use to discarded shampoo and detergent bottles. Hybrid was one of my favourite keywords as it combined the terms of experimenting and multilayering approach to art. The hybrid can be undertaken as a combination of materials that is familiar or unfamiliar put together. Serra's verb list will always inspire makers to fully enhance the experimentation stages of art. The appreciation of process through experimentation will always give new ways of exploring and to create new innovated art. Exploring nature as a keyword was the pinnacle point for me, as it opened my mind to researching land art, that I had not explored before. This area of art has been an inspiration, as myself being brought up on a farm surrounded by nature. The beauty of even mole hills, crossover of trees to fall placement of leaves. I am truly excited to explore further into a wider land art community. My aim is to appreciate discarded debris as a material into our own practice as makers and transform into recyclable art. This recyclable art can be in the form of land art taking natural materials and weather conditions into consideration. Explore ways of designing hybrid materials, emphasising the choice of components or materials is an interest of mine. Researching further into land artists will give insight into their holistic approach and implications of sustainable design. What is the role of these artists and makers in promoting a shift in circular economy? Key land artists I wish to research into their work is Richard Long's 'A line made by walking', Michael Heizer's 'Double Negative' and Hans Haacke's 'Grass Grows'. Also, the work of Robert Smithson's 'Spiral Jetty' and Alan Sonnet's 'Time Landscapes' is truly inspirational. With the consideration of consumerism and the need to shift human behaviours, I wish to value and respect natural systems and reclamations of reuse and recycle approach. The inquiry wishes to give an insight and promote how makers can adapt and help contribute towards ending environmental issues.

Therefore, the question for my independent project inquiry is: How can the use of discarded debris in art promote sustainable practices, and what are the challenges in implementing such practices?

Bibliography

Addis, B. (2012). *Building with Reclaimed Components and Materials: A Design Handbook for Reuse and Recycling*. United States: CRC Press.

Ashby, M. F. (2016). *Materials Selection in Mechanical Design*. Netherlands: Elsevier Science

Benyus, J. M. (2009). *Biomimicry: Innovation Inspired by Nature*. United Kingdom: HarperCollins.

Bicknell, J, Mcquiston, L. (2014) *Design for Need, The Social Contribution of Design* Netherlands: Elsevier Science.

Braungart, M., McDonough, W. (2009). *Cradle to Cradle*. United Kingdom: Random House.

Catherine Brown- Visiting Lecture 23 March 2023

Cooke, L., Serra, R., McShine, K. (2007). *Richard Serra Sculpture: Forty Years*. United Kingdom: Museum of Modern Art

Curtis, D. (2017) *Building Sustainability with the Arts: Proceedings of the 2nd National EcoArts Australis Conference*. United Kingdom: Cambridge Scholars Publishing.

Deleuze, G. (1988). *Spinoza, practical philosophy*. San Francisco: City Lights Publishers

Dowling Walsh Gallery- (2023) Artist- Warren Seelig. Available at:

<https://www.dowlingwalsh.com/artists/warren-seelig2> (Accessed 14 April 2023)

Garber, E (2019) *Objects and New Materialisms: A Journey Across Making and Living With Objects*. Studies in Art Education

McLennan, J. F. (2004). *The Philosophy of Sustainable Design: The Future of Architecture*. United Kingdom: Ecotone.

O'Sullivan, S. (2005). *Art Encounters Deleuze and Guattari: Thought Beyond Representation*. United Kingdom: Palgrave Macmillan UK

Oxford Dictionary. Available at: <https://languages.oup.com/google-dictionary-en/> (Accessed 1 April 2023)

Taylor, M. C. (2012). *Refiguring the Spiritual*: Beuys, Barney, Turrell, Goldsworthy. Germany: Columbia University Press.

Worrell, E, Reuter, M, A (2014) *Handbook of Recycling*: State-of-the-art for Practitioners, Analysts, and Scientists. Netherlands: Elsevier Science.

WWF (2017) *Gallery: Artwork by Aurora Robson*. Available at: <https://www.worldwildlife.org/magazine/issues/summer-2017/articles/gallery-artwork-by-aurora-robson> (Accessed 13 April)

Video

American Craft Council (2012) *Warren Seelig: Materiality and Meaning*. Available at: https://www.youtube.com/watch?v=dq8LK83Shbk&ab_channel=AmericanCraftCouncil

(Accessed 1 April 2023)

TED Talks Art made from materials we discard- Aurora Robson (2021) Available at: https://www.youtube.com/watch?v=hRFw0F7ihAk&ab_channel=TEDxTalks (Accessed 12 April)

William McDonough: Cradle to Cradle (2021) Available at: https://www.youtube.com/watch?v=QlFFElvSaMo&ab_channel=TheBeautifulTruth

(Accessed 10 April 2023)

Imagery

Figure 1- Aurora Robson (2023) Website. Available at: <https://www.aurorarobson.com/> (Accessed 12 April)

Figure 2- Hybrid Material- Ashby, M. F. (2016). *Materials Selection in Mechanical Design*.

Netherlands: Elsevier Science. Available at: <https://r2.vlreader.com/Reader?ean=9780081006108>

Figure 3, 4 and 5: Warren Seelig- Dowling Walsh. Available at:

<https://www.dowlingwalsh.com/artists/warren-seelig2> (Accessed 14 April 2023)

Figures 6 and 7: Andy Goldsworthy (2017) Land Art Photography. Ignant. Available at:

<https://www.ignant.com/2017/06/12/andy-goldsworthys-land-art-photography/> (Accessed 16 April)

Books I would like to access for independent inquiry:

Addis, W and Schouten, J. (2004) *Design for Deconstruction: Principles of Design to Fascinate Reuse and Recycling*. Report C607. London

Abram, D (1996). *The spell of the sensuous: perception and language in a more-than-human world*. Pantheon Books.

Donger, S, Shepherd, S and Orlan: (2010) *ORLAN: A Hybrid Body of Artworks*. Ukraine: Taylor & Francis

Kary, N. (2020). *Material: Making and the Art of Transformation*. United Kingdom: Chelsea Green Publishing

Petry, M. (2012). *The Art of Not Making: The New Artist/artisan Relationship*. United Kingdom: Thames & Hudson.

Sennett, R. (2009). *The Craftsman*. United Kingdom: Penguin Books Limited

Land Art Artists to look into for dissertation:

Richard long's a line made by walking

(Kastner & Wallis, 1998)

Michael Heizer's Double Negative

Hans Haacke's Grass Grows

Robert Smithson's Spiral Jetty

Alan Sonsfit's Time Landscapes

Possible Questions:

- To what extent do land artists incorporate natural debris and hybrid materials in their works and how does this effect the interpretation and reception of their art within the context of environmental sustainability?
- What is the role of the makers in promoting a shift towards a circular economy, and how can they effectively communicate the importance of sustainable materials to consumers?