

Markus Endresen

## The Notions of the Valuable:

How Symbolic and Economic Value Discuss the  
Fragile Nature of Ecology in Frank Herbert's *Dune*

Bachelor's thesis in Language Studies with Teacher Education

Supervisor: Yuri Cowan

June 2024



Markus Endresen

## **The Notions of the Valuable:**

How Symbolic and Economic Value Discuss the  
Fragile Nature of Ecology in Frank Herbert's *Dune*

Bachelor's thesis in Language Studies with Teacher Education  
Supervisor: Yuri Cowan  
June 2024

Norwegian University of Science and Technology  
Faculty of Humanities





## Table of Contents

---

<i>Abstract</i> .....	1
<i>Introduction</i> .....	2
<i>The Value of Water and the spice in Dune</i> .....	3
<i>Conclusion</i> .....	11

## Abstract

---

What determines value? Value-theory is a complex field of study, but in Frank Herbert's sci-fi novel *Dune*, there are especially two categories of value that come to light: economic and symbolic value. In the novel, economic and symbolic value are demonstrated by the natural resources of the spice mélange – a strange substance which allows interstellar travel within the fictional Empire but only found on the desert planet Arrakis – and water, the building block of life which is almost non-existent on the planet. In this dissertation, these ideas are explored by using real-world theories of value and the different social groups within the novel to determine the value of water and the spice in *Dune*.

## Sammendrag

Hva avgjør verdi? Teorier om verdier er et bredt fag, men i Frank Herbert sin roman *Dune*, er det to kategorier av verdi som særlig kommer frem: økonomisk og symbolsk verdi. I romanen, er økonomisk og symbolsk verdi vist av de naturlige ressursene krydderet mélange – et mystisk stoff som tillater interstellar reise og handel innen det fiksjonelle Imperiet, men finnes kun på ørken-planeten Arrakis – og vann, livets byggestein som nærmest ikke finnes der. I denne avhandlingen, blir disse ideene diskutert ved å bruke teorier om verdi og de ulike sosiale gruppene skildret i roman til å bestemme vanns og krydderets verdi i *Dune*.

## *Introduction*

---

The two most important resources in Frank Herbert's sci-fi epic *Dune* are water and the spice mélange, and they serve as the catalysts for the plot on the desert planet Arrakis. A common history of living with nature is that to some outsiders, cultures and ecosystems are reduced to natural resources which can be exploited. Herbert dedicated the novel to the 'dry-land ecologists,' but the novel explores much more than ecology. (Herbert vi) *Dune* tackles themes such as the value of capital and power and the symbolism of resources, as well as imperialistic attitudes towards 'lesser' cultures. These themes can be categorized into two categories – economic and symbolic value, respectively. The former will regard especially the spice because it brings the most amount of economic wealth. The latter will focus on water on Arrakis, a necessity for life and virtually non-existent on the surface.

How can one then determine the most valuable resource on Arrakis? One resource permits interstellar trade and allows people to see into the future as well as prolonging life; and the other is the building block to life. While the spice mélange is a very practical and economically valuable resource in the fictional universe, it being integral to interstellar travel and trade, I argue that it is deemed so valuable because of its exclusivity and usage reserved primarily for the Great Houses. It is the most valuable resource to *them*. To the native the Fremen, however, the most valuable resource on Arrakis is water because their life surrounds its conservation and collection so they can ultimately terraform the entire planet. The two resources' value is determined by usage and the users' prospective power. Instead of focusing on what is the most valuable resource, we should attempt to determine the value of natural resources through the lenses of who deems them valuable, in the first place.

## The Value of Water and the spice in *Dune*

As stated, this dissertation will focus on designating value to the spice and water in *Dune*. To do that, value must first be defined in the economic and symbolic dimensions. The former has had the most ink spilled over it with the most varied, readily defined theories on the matter. Economists Johnathan Nitzan's and Shimshon Bichler's theory, their 'power-theory of value,' is perhaps the most relevant to *Dune*. They propose economics and politics are inseparable, and capital is used as a method of dispersing power – much like how the spice drives the conflict of power in the novel. Bichler and Nitzan reject the 'market economy' as something real, nor do they accept economics as a science. Instead, they claim the market is a fictitious method designed to maintain power. (Bichler, and Nitzan) Bichler explained in their 2013 interview with Piotr Dutkiewicz that economics is more similar to religious dogma than science:

'[Science] relies not on static ritual and unchanging dogma, but on seeking novel explanations for ever-expanding horizons. It tries to understand, not to justify. Now, none of this could be said about economics. If anything, we can say the very opposite: the latent role of economics was not to explain capitalism, but to justify it.' (Bichler, and Nitzan)

This is vital for understanding my view of economic value in *Dune*. Firstly, the spice serves as an enormously powerful currency and is what allows interstellar commerce and travel. Without the spice, there would be no empire and no trade. With this in mind, it is then easy to understand why the Great Houses fight for directorship of the CHOAM company, the state-sponsored monopoly on interstellar trade. Secondly, Bichler's and Nitzan's views helps the reader understand how the spice and other natural resources are reduced to bartering pieces in a political game, again demonstrating its attributes to power. This is how Paul Atreides manages to ascend the imperial throne by essentially keeping interstellar trade hostage when he threatens to destroy spice production forever in the novel's climax. (Herbert 514) The spice is then so valuable because it is attributed a great power. To define something as economically valuable in this view is to make the economy and power synonymous terms, which is exactly what the spice grants the Empire.

Symbolic value, on the other hand, is more difficult to properly define mainly because of how little literature I could find regarding the subject, let alone in relation to *Dune*. One article on the subject I found was by philosopher Andrew Sneddon. A central question he posed is what makes something a symbol? (Sneddon 2) For one, a symbol can be a word, a name, an item, a place, a resource. Relating this to a symbol's symbolic value, Sneddon also makes clear that "it is inherent to the nature of a symbol that it stands for something else." (Sneddon 4) A rather important aspect of a symbol is that it must be interpreted by an audience, which can be how its symbolic value is ultimately determined.

Perhaps the most powerful symbol in *Dune* is water. Water was cruelly used by House Harkonnen on Arrakis before the plot of *Dune* begins. As nobles, they have it in abundance and they make mockery of its scarcity on Arrakis. This is displayed in the banquet scene where it is exposed to Duke Leto that it is customary for guests to throw wash towels onto the floor, letting beggars collect the remaining moisture later. Duke Leto notes his disgust towards this custom because he understands how much water is worth on Arrakis. (Herbert 137) Duke Leto and the reader are also made aware of the servant later selling the moisture to the beggars after the dinner, establishing water as currency as well as a symbol:

'Her leathery face displayed shifting emotions. Dismay, anger...

With sudden insight, Leto realized she must have planned to sell the water squeezings from those foot-trampled towels, wringing a few extra coppers from the wretches who came to the door. Perhaps that also was a custom.' (Herbert 137)

Every droplet of water on Arrakis counts, and while water is a symbol to the Fremen, water is also a currency and a form of power on the planet. The Fremen's terraforming project is why they accumulate and store their water in their great caches, but Herbert's addition of the servant demonstrates that not everyone who is not a noble on Arrakis has dedicated themselves to that cause. The Fremen preserve water obsessively not only because its scarce, but because water is how they will terraform the planet into a habitable world in the future and make it into a home. Water is made symbolic for a cause greater than them.

There is then a big difference in how the Fremen relate to natural resources compared to the Empire. This is mainly because it is not the *harvest* of water, unlike the industrial and greed-driven harvest of spice, but the *accumulation* of water that makes it a symbol to the Fremen. Part of water's symbolic value comes from the established context that it is a communal struggle towards a greener planet on the Fremen's part. Since that is a gargantuan task on a planet where there is almost no water on the surface, its rarity makes it even more significant and thus all the more insulting to the Fremen when the Great Houses make

mockery of its scarcity. While the spice is practical for interstellar commerce and other things, it is not something which is needed for survival on the planet nor life itself.

Does this mean that scarcity is what determines value? Not necessarily. Water is a symbol for survival and life on Arrakis, and the most integral part in an intergenerational struggle. The spice is indigenous to Arrakis and it is used for space travel, a longer life, visions of the future and etc., but it is not necessary for life itself. What dictates value is what someone needs from it, and in *Dune*, these needs can vary widely. The Greater Houses need the spice to remain valuable and in production so they can ensure their profits, and the Fremen need water to keep a high symbolic value so their plight can be completed. Sneddon explains that symbols and symbolism are relative to their respective audiences:

‘Symbols stand for something particular to particular audiences, either potential or actual. The present suggestion is that the putative moral significance of symbolic value should be understood as lying in contributions to relational aspects of human life and well-being.’ (Sneddon 9)

We can ascertain that an individual sense of value of does not grant the same value to all parties. The spice is regarded as the most important and valuable resource in the universe because the political system and rulers deem it so, while the Fremen place much more value to their collective survival and thriving on their planet. To give water is a sacrifice towards a greater intergenerational plight.

As claimed earlier, political power is synonymous with wealth in *Dune*. The spice allows everything from prolonging life to permitting safe interstellar travel through the known universe, so it is very easy to see why it is so sought after. It is at the core of the grand political games over control of Arrakis and drives the entire plot, the liquidation of House Atreides and acts as powerful bartering piece in the novel’s climax. (Herbert 170-214; 514-16) Paul Atreides tells the representatives of the Spacing Guild:

‘The power to destroy something is the absolute control over it. You’ve agreed that I have that power. We are not here to discuss or to negotiate or to compromise.’

...

‘He means it,’ said the shorter Guildsman. And Paul saw the fear gripping them.’ (Herbert 515)

If Paul were to go through with destroying spice production, he would essentially end the Empire’s only means of travel. Every world within it would become isolated and Arrakis would neither have symbolic nor economic value anymore in the Empire. But since the spice

maintains the status quo of the economy and power within the Empire, the Guildsmen comply to Paul's demands.

With the Spacing Guild having what is essentially a state-approved monopoly on interstellar travel, there is also a strong mercantile and proto-capitalistic attitude towards interstellar economy and commerce. The spice's existence is ubiquitous on Arrakis but non-existent elsewhere in the universe. The wealth it can bring to the Great Houses is hard to articulate, but how much wealth can a resource bring for it to justify mass murder? Perhaps reducing the spice to just an economic product unravels its notion of value. What the spice and the control of Arrakis brings, besides its practical attributes, is power and prestige. Power is the central term in how we can use this to analyze the value of the spice. Firstly, it is because of what control over Arrakis' spice production represents to the Great Houses and the empire. Utilizing economists Johnathan Nitzan's and Shimshon Bichler's views of capital and power again, we can argue that "capitalism is not a mode of production and consumption. It is a mode of power." (Bichler, and Nitzan) They are convinced that capital is a way of utilizing and power and influence, distancing from the traditional liberal and Marxists views that capital is means of production or labor, and this reading helps clarify one notion spice's value. Secondly, the spice is also the link between every system and every planet; without the spice, there is no Empire. To the Empire, its clearest advantage is that it makes navigation across the universe safe and reliable, which is obviously helpful regarding trade and communication. Therefore, it might be viewed as a great honor and prestige to control the only planet which ensures the Empire's function. The prestige of controlling this planet of wealth it is the central key of understanding the spice's value. It is not just highly valuable in what it can offer economically, but much like capital in our reality, to control the spice is a symbol of something more than wealth and power. The spice is power and is integral to maintaining the status quo of established political order within the Empire.

A common consequence of imperialism is that the culture and ecology of the colonized is altered. Herbert was fascinated and inspired by messianic stories, and he thought that the consequence of any struggle to maintain power would be war. (Parkerson 405) War is exactly what happens all because of the spice and the control of it and the journey of Paul Atreides to Paul Muab'dib happens as a consequence. A familiar trope which Herbert subverts with Paul's character is quite like what historian Phillip Deloria wrote about, where 'an old Indian person who, for whatever reason, turns, not to other Indians, but to a good-hearted white writer to preserve his or her sacred knowledge.' (qtd. in Immerwahr 195) In a reversal of roles, instead of the native Fremen seeking the imperialist to preserve their knowledge, Paul

and Lady Jessica approach the Fremen for advice and ultimately gain favor with them. This is not out of respect for the Fremen or their culture but for the remaining Atreides to enact vengeance and make claim to the imperial throne. As Lady Jessica observes, the “[Fremen] could be wielded like a sword to win back Paul’s place for him.” (Herbert 343) Since Paul is believed to be the prophesized messiah of the Fremen, they follow him and Lady Jessica to enact vengeance against the Empire. The spice, and the entire Fremen people, for that matter, is a form of power which can be used to harbor political influence and this is possible because the Fremen shared intimate knowledge of how their world functions both politically and ecologically. Paraphrasing Bichler and Nitzan again, it seems that the spice and Arrakis itself is a form of power instead of a part of it, much like capital. (Bichler, and Nitzan) All of the Great Houses fight for control over Arrakis and the spice not only because of what the spice presents economically, but also the vast amount of power the spice has over the universe and empire.

There is a strong imperialistic attitude regarding Arrakis among the rest of the Great Houses, as well. Early in the novel, the Harkonnen mentat Pitir refers to Arrakis as ‘the spice planet.’ (Herbert 15) While this brief quote is only a House Harkonnen designation of Arrakis, it does relegate a point of the Great Houses’ general attitudes towards Arrakis. The consensus among several of the Great Houses is that the spice is the only thing that matters on Arrakis. The Fremen, Arrakis’ fragile ecology, and etc., are rescinded concerns. Again, we must look to the role of power in the economic system of *Dune*. To the Harkonnens and Great Houses, Arrakis is solely the place of spice, but the reader and remaining Atreides is made aware that the planet is a delicate and fragile system. Probably the most striking example of this how the Harkonnens greatly undervalue the abilities of the Fremen survivability and combat-prowess. The Great Houses’ ignorance, willful or the result of hubris, pursue capital and power in the simple-minded understanding of resource extraction that if there is supply, there is a demand. However, in light of the field ecological economics, this fails to consider the limitations imposed by nature – even more-so the harsh desert landscape of Arrakis. This is one of the tenets of a field called ‘ecological economics.’ As Bergh explained,

‘The core of ecological economics can be associated with the goal of sustainable development, interpreted as both intra- and intergenerational equity; the view that the economy is a subset of a larger and local ecosystem which sets limits to the physical growth of the economy...’ (Bergh 13)

A distinct negativity put against the status-quo of capitalism and endless resources is clearly displayed in ecological economics. To accept that there is a limit and impact of nature

regarding spice-harvesting, one challenges the flow of spice and thus the flow of capital and power. The value of spice is than both greatly economical and greatly symbolic, which the Great House prioritizes over the inconvenience of admitting the limitations of resource extraction. The spice's ultimate value is that it is mode of power, the goal being harvesting, gaining and utilizing it, like a form of capital.

The spice is then a resource with both enormous economic value and also high symbolic value in *Dune*, with control of it bringing great political power. This is not the case for every resource, however, chief among which is water. Water on Arrakis is incredibly scarce and in Fremen culture is imbued with a profound symbolism. Every aspect of Fremen life surrounds water. The Fremen's stillsuits are designed to contain every bit of moisture the human body produces, creating an endless loop of containing and recycling the moisture produced by their bodies. As we learn later in the novel, however, they are not doing this to hoard the water on their persons for survival on the harsh desert landscapes. The Fremen instead measure all the water they gather in enormous sub-terranean caches and work towards a goal of terraforming Arrakis. Giving water to the tribe from the desert, accumulated by people and wherever else, is a religious ritual. Once he brings Lady Jessica and Paul Atreides into their local cache to demonstrate what they do with their water, Stilgar leads the Fremen in prayer, proclaiming,

“We will make a homeworld of Arrakis – with melting lenses at the poles, with lakes in the temperate zones, and only the deep desert for the maker and his spice.”

‘Bi-la kaifa.’ [Amen.]

‘And no man ever again shall want for water. It shall be his for dipping from well or pond or lake or canal. It shall run down through the qanats to feed our plants. It shall be there for any man to take. It shall be his for holding out his hand.’

‘Bi-la kaifa.’ (Herbert 341-2)

If we compare the Great Houses's attitudes towards spice and the Fremen's towards water, the latter display something entirely different from the former. While the harvest of spice is a very mechanical, industrial and financially costly affair, the accumulation of water is connected delicate and precise, ‘perfectionist.’ The Fremen, according to Stilgar, do not intend on ending spice production altogether but make it a secondary concern of regarding the planet's future. They take an approach akin to the ideals of ecological economics. Paraphrasing Bergh, distribution is the most important aspect of the economy rather than the need for efficiency in ecological economics. (Bergh 15) With this in mind, the Fremen think in a more collective way than the Great Houses do and their accumulation of water is a reflection of that. It is to the betterment of the ecologic well-being of the planet and Fremen's

survival instead of economic gain. House Harkonnen and the Emperor, on the other hand – while in this universe are almost uniquely evil – commit egregious atrocities to reclaim fiefdom over Arrakis and attempt to liquidate House Atreides in secret. Spice-production is driven by greed and lust for power, while the collection of water is driven by an almost religious collective plight to terraform the world.

There is more to suggest that water is holy to the Fremen. The conflict over the spice is depicted as entirely selfish and in a hunt for power and capital, while the equally obsessive collection of water is entirely for the preservation of several peoples. Chani tells Paul that ‘the flesh belongs to the person but the water belongs to his tribe...’ (Herbert 333) To accumulate water and the value of water becomes symbolically significant because water is vital for the collective Fremen on Arrakis. Another great example of how much the Fremen value water is when Paul weeps after killing Jamis and the Fremen view it as a great sacrifice on Paul’s part, that he ‘gives moisture to the dead.’ (Herbert 338) Lady Jessica immediately observes that ‘[Tears] would be sacred beyond a doubt.’ (Herbert 338) This is a telling sign that to survive on Arrakis now, in the scarce and brutal state of its current ecology, one cannot even weep for the dead or display tears of joy because every drop of moisture is sacred for the cause.

Water is essential for life, but when its lacking removes the ability to display emotions how is that life any good? With water barely existing on the surface, and where *survival* is possible, the next stage for the Fremen is then *living* as people were meant to – emotionally complex beings where one can display oneself freely. When something so vital to life such as water is taken from you, survival is what matters. Collecting water and designating such a sacred value to it is how Fremen allow themselves the sacrifice of a lesser life to grant better lives for future generations. The symbolic value of water is then that of a religious one and for life itself in that it is used to hopefully bring a dream of better life into fruition. However, its value is also understood to outsiders, i.e., House Atreides and the other Great Houses. Both parties understand quite plainly that water is so valuable to the Fremen due to its scarcity. This is demonstrated numerous times, and to name a few events there is when Stilgar spits at Duke Leto (Herbert 100); when Paul explains the concept of drowning (Herbert 153); the Harkonnen custom of wasting washcloths onto the floor (Herbert 137); and others. All of these demonstrate the model of symbolic value which Sneddon explains as the insult/compliment model. (Sneddon 11) Sneddon exhorts that regarding religious artifacts and beliefs, insults towards the symbol can be deemed an insult to the person who values it. ‘Although the content of the insult is about the symbol and the way of living, it will be

experienced by individuals who care about these things.’ (Sneddon 18) This is why the Harkonnens insult the Fremen so deeply with their attitudes towards water. The aforementioned custom is probably regarded by the Fremen as a form of iconoclasm and the Harkonnens waste the water insidiously because they know that the Fremen can barely get ahold of it. They mock something that is sacred to them, to a people where single every droplet is a part of the equation.

Concluding this section is probably the best summation of what water is on Arrakis. It is more than a resource, more than the most important ingredient to life. To the Fremen, it *is* life. Everything revolves its collection and terraforming the planet and to give water to the tribe. Everything in their existence is about the scarce ingredient to life, water. This passage of Lady Jessica reveals to us and to her just how devout they are about their cause:

‘Nothing on this planet had so forcefully hammered into her the ultimate value of water. Not the water-sellers, not the dried skins of the natives, not stillsuits or the rules of water discipline. Here there was a substance more precious than all others – it was life itself and entwined all around with symbolism and ritual.’ (Herbert 338)

Water’s value then is to the Fremen everything. Nothing on Arrakis is more precious. The spice is harvested on an industrial scale where the only regard from the Great Houses is that it continues to flow and it bring further riches and power. But water represents something more than wealth and power in *Dune*, at least the sort of imperialistic power displayed by the Empire. It is a collective fight towards a dream and goal, where every single droplet is part of a great equation.

## Conclusion

---

What is then the most valuable resource on Arrakis in *Dune*? Like most things, it depends. On the one hand, the spice is the most versatile in that it allows space-travel, prolongs life of its users and can alter the mind. The spice is most fervently discussed as the most valuable one but that is only to the Great Houses, the ones that actively benefit from its use and value as a form of capital and power. As Bichler and Nitzan said, “capital is power, and only power.” (Bichler, and Nitzan) This is again why Paul wins in the end of the novel when he threatens to destroy spice production. (Herbert 514) The spice is not only a resource but a mode of capital and thus a mode of power over the universe. The spice is more than an economic and political prospect, also. To control Arrakis and the spice production is a sign of prestige within the Great Houses.

However, on the other hand, water is an important symbol of Fremen life representing something hopeful and something to fight for. Symbols can be incredibly valuable to someone. As Sneddon wrote, symbols require an audience to determine its symbolic value. To the Fremen, water is akin to a religious symbol because as an integral part of their great plan of terraforming, it is the most important aspect of their great dream of a homeworld. Arrakis and the Fremen surround water in a great mysticism and mythos. Their struggle to collect every drop of moisture is not driven by greed and power, but in hopes of a worthy life for their descendants, one where worry of survival is no longer necessary. Water is so valuable to the Fremen because it is in their mind how they can go from surviving in the desert to live a worthy life, where tears are no longer a great sacrifice.

I go back to one of the preliminary questions of this dissertation, in that value is determined by need and interpreters. The Great Houses need the spice to be the most valuable so they can still maintain the status quo, where they keep most of the profits garnered from interstellar travel and trade. The Fremen need water to be the most valuable because it is their life, their way of living surrounding it in every aspect. Without the spice, interstellar travel ceases but without water, life itself ceases. The value of water and the spice on Arrakis is then determined by their users. The spice is the most valuable resource insofar its use for interstellar trade is reserved for the Great Houses, the powerful elite in the universe, but water is life itself to the Fremen living within the desert and rolling dunes of Arrakis.

## Works cited

---

### Primary Sources

Herbert, Frank. *Dune: 50th Anniversary Edition*. Hodder & Stoughton 1965.

### Secondary Sources

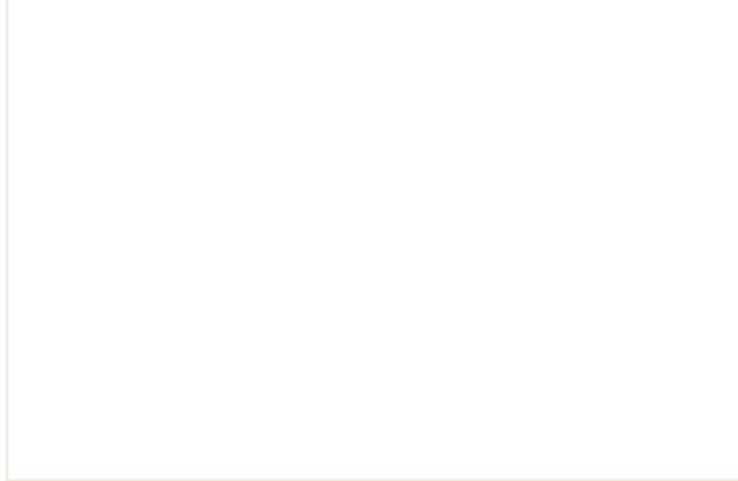
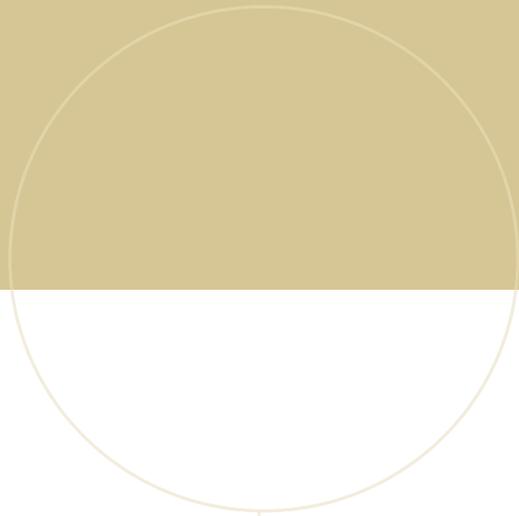
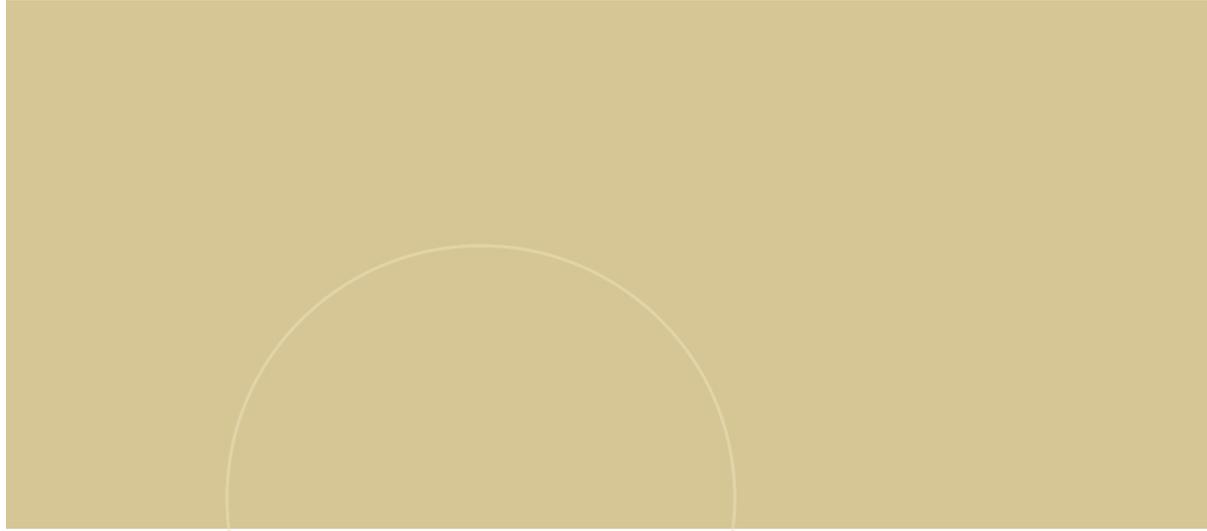
Bergh, Jeroen C.J.M. van den. "Ecological Economics: Themes, Approaches, and Differences with Environmental Economics." *Regional Environmental Change* vol. 2, no. 1, 2001, pp. 13-23, doi:10.1007/s101130000020.

Bichler, Shimshon and Jonathan Nitzan. "Capitalism as a Mode of Power." Interview by Piotr Dutkiewicz, Creative Commons 2013, Jerusalem, Ottawa and Montreal  
[https://bnarchives.yorku.ca/364/1/20130700\\_bichler\\_nitzan\\_dutkiewicz\\_cmp\\_intervieu\\_web.htm](https://bnarchives.yorku.ca/364/1/20130700_bichler_nitzan_dutkiewicz_cmp_intervieu_web.htm).

Immerwahr, Daniel. "The Quileute *Dune*: Frank Herbert, Indigeneity, and Empire." *Journal of American Studies*, vol. 56, no. 2, 2022, pp. 191-216, doi:<https://doi.org/10.1017/S0021875821000591>.

Parkerson, Ronny W. "Semantics, General Semantics, and Ecology in Frank Herbert's *Dune*: A Review of General Semantics." *et cetera; Concord* vol. 55, no. 3, 1998, pp. 317-28.

Sneddon, Andrew. "Symbolic Value." *The Journal of Value Inquiry*, vol. 50, 2015, pp. 1-19, doi:10.1007/s10790-015-9519-4.



 **NTNU**

Norwegian University of  
Science and Technology