



CREATURES



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CREATURES DELIVERABLE

D2.8 Glossary of Terms and methodological processes (public)

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Abstract
<p>This deliverable is a public document containing the key terms used across the CreaTures project to invite consistency of language across cases of transformational creative practice, to offer a guide to the normative language of the project and to describe the activities that have contributed to the development of the CreaTures Glossary.</p>

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1. INTRODUCTION

1.1 About CreaTures

[CreaTures](#) (Creative Practices for Transformational Futures) is a three-year EU-Horizon 2020 funded project identifying those aspects of creative practice that contribute most effectively to positive eco-social transformation with the goal of producing an open-access framework to support practitioners and policy-makers in driving positive change. The project's process of identifying and evaluating the design of significant aspects (and the impact of different contexts) involves four interrelated components: an Observatory, identifying and mapping existing, fragmented and often hidden transformational creative practices; a Laboratory, supporting new experimentation; an Evaluation phase, testing new and existing creative practices in a systematic and concerted way for their impact, and; Engagement with diverse stakeholders, including the members of the public. The project combines insights from these undertakings into a transdisciplinary, evidence-based and practical framework to propose paths to achieving eco-social futures, social cohesion and peaceful co-existence at a time of rapid change.

1.2. Partners

There are 11 partners in the project, bringing together four universities: Aalto University School of Arts, Design and Architecture (FI) is the project coordinator and a frontrunner when it comes to artistic and practice-based research, with strong expertise in collaborative and co-creation projects. RMIT Europe (ES) as an extension of RMIT Australia bring considerable expertise in care-full design and engagement, and urban transformations. The University of Sussex's Sustainability Research Programme (UK) is designed to bring together expert interdisciplinary teams to tackle complex sustainability issues and the pilot work behind the CreaTures proposal was undertaken there. Utrecht University (NL) brings expertise on governance processes, pathways to sustainability and the use of simulation games. Alongside this research expertise, the project involves five main sites [Barcelona, Helsinki, Ljubljana, London, and Seville] with major creative organisations: Superflux (UK) and Hellon (FI) are design studios doing consulting and commissioning work for private and public organizations. Furtherfield (UK) and Kersnikova (SI) are arts practices that also act as cultural institutions and producers, reaching a wider network of artists located throughout Europe, while ZEMOS98 (ES) is a creative practice organized as a cooperative with extensive networks in activist circles and grassroots projects across Europe. This is complemented by two non-for-profit organizations with special domain knowledge: Sniffer (UK) brings expertise in brokering between creative practitioners and policy makers/implementers and evaluating change processes, and OKFI (FI) focuses on the application and development of open knowledge and systems thinking.

1.3. Stakeholders

CreaTures has five key stakeholder groups:

- **Creative sector:** individual practitioners, collectives, centres, service providers, small to major cultural organisations, institutions, and enterprises.
- **Public sector:** governments and policy makers at the EU/national/regional/local levels that both fund arts and can use it more.
- **Private sector and the third sector:** micro to corporate enterprises, foundations and businesses, which often provide products and services for, collaborate with, or fund creative practices. This

includes third sector/NGOs and impartial brokers who facilitate engagement between artists and publics.

- **Research initiatives and organisations:** EU-funded (or nationally-funded in the key project sites) programs and organisations.
- **Members of the public broadly across the international/EU/national/regional/local contexts.**

1.4 Background and Objectives of the Glossary of Terms and Methodological Processes

The *CreaTures Glossary of Terms and Methodological processes (Public)* is a public project deliverable, which addresses the necessity for consistency of language across cases and the importance of language as a resource for change. With plurality among the core values of the CreaTures project, the Glossary does not only compile terms and their definitions, but shows the range of ways we are using them. It also explores the normative aspects of language and offers some terms for addressing the kinds of change anticipated by our partners. Further, it aims to illustrate the opportunities and complexities of bringing creative practice into the research and dissemination process, presenting the methodological steps and engagement activities of the CreaTures team throughout the research process, and presenting the terms that have emerged as central in the exploration of the contribution of creative practice to eco-social futures.

The aim of the CreaTures Glossary is thus three-fold:

1. To ensure consistency of language across cases - with the aim to develop common discourses around transformational creative practices;
2. To present a vocabulary for different stakeholders – including creative practitioners and policy makers – to use and for adoption in the framework and the observatory, and;
3. To foster cross-disciplinary understanding of the research process across all work packages (WPs).

In compiling the glossary, we deliberately experimented with open and creative approaches to ensure a diversity of voices would be invited to contribute to, and reflect on, its contents.

This is the third glossary deliverable, so we have been building on work throughout the project to reach this public document. Here, we report on the research and activities that ground its development, guided by the following central question:

How can the CreaTures Glossary work to honour the multiple viewpoints and uses of its terms?

Subsequent sections (2-7) present the work that was undertaken to respond to this question. Section 2 and 3 present definitions of the project's key terms. Section 4 offers a conceptual analysis of the projects that have informed design of the Glossary, exploring the complexities of language in novel ways. Section 5 outlines the methodology, design, and findings of the *Dérive Drift*, a pilot creative research activity which asked participants to explore our current Glossary draft by examining the embodied experiences of the terms – specifically, how its terms were associated with their own experiences of place-making while under COVID-19 lockdown. Section 6 integrates the findings of these activities to suggest the core features of the Glossary as a public engagement tool. Section 7 describes an interactive installation eliciting definitions of terms in a public space, and the

commissioning of an Experimental Production (ExP). Finally, section 8 outlines next steps. The definitions of other terms that have been explored in the various activities throughout the project are listed in Appendix A.

2. Key Words of the CreaTures Project

In deciding which key terms to include in this glossary section, we considered which terms have become central to the project and present these. The terms here are chosen as significant to support the work of communicating new ways of being (and the futures that go with them). Other lists of terms appear later in this document, but they are definitional without a sense that those terms might also be normative. Here, we introduce the words that have become foundational and have a normative thrust. We present them as a substantive part of the work to come out of the CreaTures project.

2.1 Introduction to Keywords

A project concerned with transformation needs sensitivity to the words it uses because language is one of the major tools that can reinforce or alter norms. The CreaTures practitioner partners are concerned that they have the right language to reflect the subtleties of their change-making practice, especially as they go into uncharted territories. The research partners desire precise language to mark the achievements and tensions of future-oriented creative activity designed to make cultural and material moves towards sustainable futures. And, beyond this, the project seeks the terms that would succinctly convey what makes it unusual as a series of encounters and a framework. Further, these words need to hold authority in, and feel native to, a variety of different realms: art, design, policy, politics, social science, material science, climate science, government and business.

The first sections in this deliverable present a number of terms that are used by the project to talk of the particularities of the work we have been undertaking. The terms derive from a series of understandings of the worlds through which we move. They do not present exhaustive definitions, but offer a means of sharing what, despite these diverse positionalities and affiliations, we consider to mark the project in ways that are partly activist, partly analytic and always political.

To give an example of the politics of language and our partners' concern with it, it is also useful to address what this is not. Our framework (and glossary) is being published at a time when many in policy are turning to the term "net zero" to summarize what is needed to deal with climate change. However, there is much resistance to this adoption: 'Current net zero policies ... were and still are driven by a need to protect business as usual, not the climate' (Dyke, Watson and Knorr 2021), while 'Adding "net" to "zero" means a "get-out-of-jail-free card" for polluters that is increasingly used to avoid or delay reducing emissions altogether' (Not Zero 2020). Similarly, "net zero" is found to be problematic amongst consortium members for its explicit acceptance of trade-offs, which, at present, largely entail offsetting Global North carbon use with the manipulation of Global South land to act as carbon sinks (cf. Dyke, Watson and Knorr 2021, Not Zero 2020). This is one example of why the project takes the work of the Glossary very seriously. Alternatives that incorporate aspirations for social and environmental justice are important to the consortium members.

As one practitioner partner put it when asked about the glossary's role: "Net Zero is a term that:

1. allows people to clean their conscience and wash their brands with zero awareness of the harm they do;
2. uses quantification to prove virtue in a very narrow frame;
3. perpetuates and empowers extractive for-profit polluting processes and industries;
4. overrides what matters to communities in place.

"So maybe we need, in the glossary, vocabulary terms that:

1. resist and critique extractive processes, and create greater awareness around processes of flourishing;
2. point at, and contextualise, a range of methods and ways of being, feeling, knowing and proving in a variety of frames, scales and social contexts;
3. perpetuate and empower creaturely commons and future missions;
4. ALWAYS attend to what matters to human and more-than-human communities in place.

At Furtherfield, we would use this glossary to articulate our values and priorities in all future partnerships with other researchers, clients and funders. We would add it as an appendix to our Environmental Strategy."

(in a communication to Light, summer 2022).

This ambition is thus one we take to heart, for being radical, compassionate and useful (since the Environmental Strategy mentioned above is essential to securing funding). This glossary is therefore normative and definitional, as well as descriptive.

It is made from many parts reflecting the analysis of the project, caught in the sections below, which:

- reflect usage that researchers have observed in their cases – by the ExPs, which number 20, and the Observatory, which currently numbers 140 cases.
- list terms that parts of the project have assembled to analyse and summarize the work that research is revealing.
- offer insights from more general publics, where workshops and an ExP *Glossary* have invited contributions that amplify understandings of terms and show which terms are seen as relevant.

However, in the choice of terms and the way that the project chooses to use these terms to speak about its mission, there is also an aggregation of ideas and a stress that we see as particular to the project and which we explore here. In as far as the project team is learning that its role is to advocate with policy-makers and other governing actors for the importance of creative practice to transformed futures, it is also learning that the language in use is of critical importance. This has now reached beyond the need to understand colleagues across disciplines, which informed the previous deliverables in this series, to become part of the Open Creative Practice Framework (D 4.5 *Open framework for facilitating transformational creative practices* – due in December 2022).

2.2 The Language of our Constituent Projects and our Analyses

Linguistic reflexivity is high among CreaTures partners, whether principally researchers or creative practitioners. For instance, the Superflux team keeps a list of terms to contrast with the language of dominant narratives, going by the name of *A Lexicon for the Practice of Critical Activism*. It evolves as the team does; an early version can be found in Jain's "Calling for a More-Than-Human Politics" (2019), laying out Superflux' understanding of activism (<http://superflux.in/index.php/calling-for-a-more-than-human-politics/>).

And despite a focus on making productive change across our cases, in exploring the priorities of our Observatory and ExP research case studies, we learnt that the term ‘sustainability’ itself is mostly absent, even though the two most urgent sustainability challenges – climate breakdown and biodiversity loss – are central (see D2.4). In D2.4, we compared this with recent review articles in sustainability literature and found our examples of creative practice have a different focus. Our cases concern not just domains such as ‘energy systems, water systems, food systems, urban systems, and green jobs’ in line with sustainability scholars (Patterson et al. 2017, 2), but are more resonant with the subjects of transformation (Moore et al. 2021, 8), namely: Energy, Society, Governance, Urban/suburban, Economy, Technology, Ideas/narratives, Market, Infrastructure, Research/science.

We argued, in 2.4, that our cases are not problem-focused, but opportunity-focused and largely reflect the ways that creative practitioners are trying, not to highlight, but to resolve huge challenges. Unlike much sustainability science communication, this creative work is not dedicated to explaining and influencing people within frames of disaster and collapse but looks to possibilities and change. Rayner and Minns suggest in the EU HELIX project: ‘Communicators must be more than ‘narrators of doom’, but recognise the need for ‘active hope’, constructed from realistic goals, imaginable paths, doable tasks and a meaningful role in addressing the problems at hand. New, more dialogical forms of communication, with various audiences in a range of venues are needed, in which new high-end climate messages can be conveyed and processed with citizens and decision makers’ (Rayner and Minns 2015, 3). The topics and approaches recorded in our deliverables (D2.3, D2.4, D3.9, D4.6) demonstrate that our sample deals with this active hope, these realistic goals, imaginable paths, doable tasks and a meaningful role for ordinary people and this results in different themes - and the language that goes with them. For instance, in the first key cluster (D2.4, 25), the *climate change* topic is not merely represented as a problem but already has a *futures* element, connecting with *post-fossil futures*. We give this as an example of what we mean by a more positive and opportunity-focused approach (see also *futures* below).

This research process, of winnowing our cases through coding and constructing overall themes, is generative of terms – picked by particular ExP owners, but also by researchers making sense of the groupings that have appeared through aggregating practitioner activities. These cluster themes complement the terms found to be in use in the research project more broadly:

- In D2.4 clustering, we identified many terms in use related to the concepts underpinning the 140 cases of the Observatory and summarized them with this graphic:

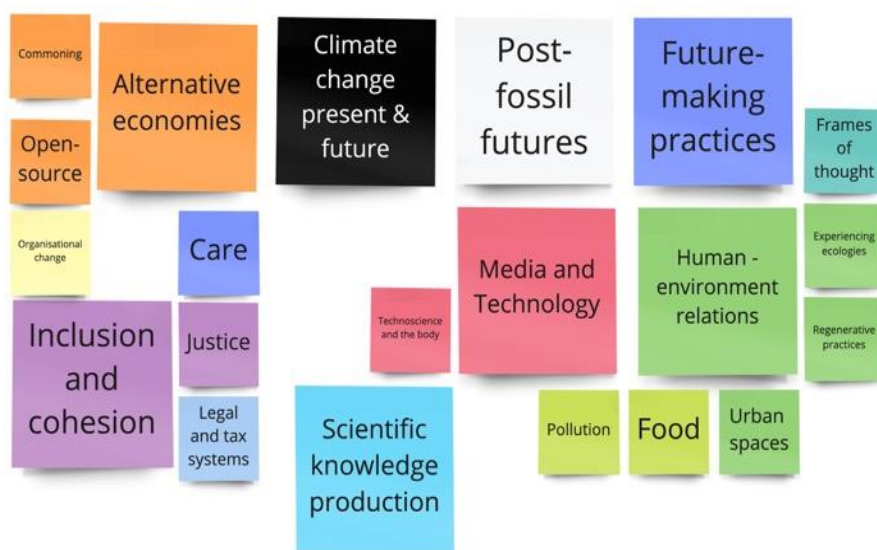


Figure 1: Individual case topics were clustered to create 21 overall topics

- Keywords were chosen for the ExPs by their stewards in coding the materials to come out of observing our chosen productions (see D3.9). The focus of the analysis was on the ExPs' engagement approaches and the experiences they enable for their participants and audiences, the eco-social themes they address, and the transformative strategies they embrace in their creative and research processes. They draw on transcripts of interviews conducted with ExPs' authors by stewards; stewards' observation notes from ExPs' co-creative events; key terms from transformation strategies compiled by the CreaTures Observatory (D2.4), ExPs' self-reported data available in the ExPs Documentation Template (D3.3), and materials collected for the deliverables D3.2 and D3.4-6:



Fig 2: the keywords for the Experimental Productions (ExPs) in the project

- In D4.6, a schema for evaluation appeared that is now being understood as a series of dimensions for considering change-making with creative practice. These 9 pairings and their (later) clustered structure as *Meaning*, *Connections* and *Power* tell us more about what work our language is doing in these practices.

Nine dimensions – ways to talk about creative practice and change



Fig 3: the nine dimensions that are developing as a way to talk about change-making

- For D5.3, creating the public *Audience Feedback Tool* involved practitioner partners participating in a workshop to explore notions of ‘engagement’, ‘feedback’ and ‘audience’, while related work with publics focused on the meaning of: *adaptation, art, capitalism, care, change, creative practice, design, environment, feral, futures, grassroots, mitigation, more-than-human, resilience, sustainability, transformation*. See also the Appendix of this deliverable for working definitions of these terms.
- A review of ‘creative practice’, ‘sustainability’ and ‘transformation’ is presented in D2.3 as part of a *Review of Transformational Creative Practices* and the terms ‘eco-social’ and ‘transformational strategies’ are presented in detail in D2.4. Both are elaborated upon below.
- Our understanding of the term ‘resources’ can be found in D2.5 and of ‘soft spaces’ in D4.6. An updated definition can be found below.

Haiven (2014) says that concepts like value, imagination, commons, the public, and creativity have no purpose or reality outside how we use them ‘to reimagine our own circumstances and conditions’ (2014: 10). We have prepared this glossary in that spirit.

2.3 The Central CreaTures Words: The Project Title

We start with the key terms of the project title, now elided into its popular nickname *CreaTures* (from CREATIVE practice for transformative fuTURES), but turning out to be more apt than merely a neat elision, because a focus on the *more-than-human* has become apparent, both as a philosophical/political commitment and as a way to think about biodiversity and its protection.

Creative Practice

The definition of *creative practice* used in CreaTures involves the arts and other imaginative work in the fullest sense, defined as ‘work which uses personal and/or collective craft skills and ingenuity to make something new, renew or interpret some aspect of the world: from writing, art and theatre to designing, to participatory community development to storytelling’ (CreaTures bid, taken from Light et al., 2019). This broad construction was chosen to ensure an emphasis on practice, not discipline and form. However, we bounded this for the practical purposes of the project and focused on professional practices that seek to produce experiential outcomes. We note that this professional practice may be to create creative opportunities of a broader kind in inspiring imagination, reflection and speculation (see below).

Creative practice can bring an experiential quality to projects, which, at best, enables collaborators to learn together and provides them with the opportunity to see differently (Mäkelä, 2011); it structures experience so that meaning in the here-and-now can be related to bigger systems of understanding. Such interventions can lead to new ways of *feeling* and *being* as well as *knowing*.

The creative practices which interest the project are neither those labours that exist simply to transmit messages, nor those that maintain the status quo, despite the extensive creative work that keeps business-as-usual in place (cf the Hollywood myth-making machine or the green-washing of Net Zero, as above). Our concern is the work that is directed towards changed futures and sets its ambitions to developing designs that, while arts-based, are also transformation-oriented. In earlier documents, it was called ‘transformative creative practice’ (Light et al 2018; 2019).

Transformation (vs adaptation¹)

Transformation ‘appears increasingly attractive to articulate aspirations for significant and enduring change in human society towards more sustainable and equitable global futures’ which ‘reflects enthusiasm within global sustainability discourse for moving from ‘describing problems’ to ‘identifying solutions’, and for better understanding possible pathways of sustainable environmental and societal change within the looming Anthropocene’ say Patterson et al. (2017, 2). In an extensive review of emerging concepts about transformation, Feola (2015) finds that while the term *transformation* is becoming more widely used in sustainability literature and policy-making, it encompasses several distinct definitions and lineages. Transformation is generally regarded as being more than superficial or incremental. It refers to major shifts: ‘profound and enduring systemic changes that typically involve social, cultural, technological, political, economic and environmental processes’². In D2.3, we noted that Feola identifies two types of research within the sustainability transformation literature: descriptive-analytical research, which investigates existing change processes without defining a normative end point, and solution-oriented research, which works towards specific pathways and outcomes (Feola 2015, 384). Research on creative practice tends to be of the descriptive-analytic type, intended to ‘describe and understand the complexity of human-environment interactions, and thus provide the knowledge that would ultimately translate into practical solutions’ (Feola 2015, 384). We also noted that our practitioner

¹ In the way of a thesaurus, we point to where related words are subsumed in the description of something else.

² See NORFACE Network – Belmont Forum 2017 and its Transformations to Sustainability programme (2014-2019)

partners do not naturally use the term *transformation*, but orientate to *change* as a term. *Transformation* carries something longer-term and more structural with it, which is of interest to practitioner partners but often outside their reach. It is, further, salutary to be reminded that the term *transformation* does not translate well and is therefore a term with more meaning in English than most other partner languages (see Appendix B for words in other languages).

Our reason for choosing *transformation* as the direction of the project was the emergence of the *mitigation/adaptation* distinction in sustainability literatures. Whilst *adaptation* speaks to incrementalism, *transformation* implies taking a role in choosing and developing the planet's fate, or being 'an active player in the future of the community and world' as O'Brien and Hochachka put it (O'Brien & Hochachka, 2010). This opens the possibility that adaptation and mitigation need not be tackled separately, but that a motivated public will push hard for both. Thus, it has political dimensions, not only in seeking to promote alternative cultural norms, but in anticipating this as a necessary precursor or companion to the material transformations needed in dealing with climate breakdown and loss of biodiversity.

Transformation poses particular challenges for policy. 'On the one hand transformation implies a need for policies that may challenge existing ways of doing things. On the other the abstract nature of concepts like transformation and resilience make it difficult for policy makers to put such concepts into practice.'³ Nonetheless, a vision of ontological change – crudely, where we change what we are to change what we do – appears in different ways across different knowledge traditions, e.g. in terms of aesthetic response (Dewey, 1934/2009), affect (Deleuze, 2005) and the political economy of enchantment (Bennett, 2001) and it is this level of cultural change that the project anticipates and points to mechanisms for.

Futures (vs future)

We talk of *futures* in the plural⁴; this commitment to plural futures was already a feature of the bid. *Futures* are to be made, pointing to power relations but also multiple ontologies, both for understandings of the here-and-now and for what is possible. These ontologies, within CreaTures, include the more-than-human world(s)making of all lifeforms. This politics to futures is a commitment of the research team. For instance, Vervoort et al (2015) argue that the shift from settling on a single 'most likely' future (and a concomitant predictable world) to accepting the need for multiple plausible futures in the face of the future's fundamental uncertainty can be difficult, but such a shift colours all subsequent engagement with future scenarios. They suggest 'a further paradigm shift—letting go of any single present, even a present seen from multiple perspectives, and accepting the fundamental plurality and constructed nature of both present and future worlds' (Vervoort et al, 2015: 66). And Light (2021) argues that *futures imagined* are powerful if one controls these narratives: 'Futures are not remote, but actively participate in creating decisions now. It is therefore important that such speculation is not the preserve only of designers, futurologists and policy-makers. Navigating and extending the futures open to us is a basic right of democratized life' (Light 2021: 2). While futures are not made from scratch, but inherit from

³ <http://www.transformations2017.org/about>

⁴ Where we talk of 'the future', we are alluding to a point in time only, not what transpires then. Similarly, 'the past' is already lived, but we all have 'pasts' that differ.

current practices and infrastructures, we understand them to be various and open to transformation for the betterment of life for all lifeforms.

As we have noted, the transformative work of our partners is focused on opportunity as well as threat and looks past disaster narratives to the futures that are possible to make in a given situation. This is to align with those who recognize a ‘damaged planet’, but see openings based in changed relations and recognition of species interdependencies (e.g. Tsing 2015; Haraway 2016). For instance, at Superflux, the talk is of ‘precarious flourishing’.

2.4 The Central CreaTures Words: Big Themes

Two further terms have become critical to the work of the CreaTures project and how we talk about it: Eco-social (futures) and Creaturely.

Eco-social [futures] (vs sustainability)

The construction ‘eco-social’ that appears throughout CreaTures work is a recognition that there is no *ecological* without *social* because it is the massing of human intention and change (and the disproportionate impact of human activity) that affects all other life and possibility for life, partly played out through the Anthropocenic aspects of climate collapse. It is, further, a reminder that without social and environmental justice, mass mobilization for change will be unpleasant if not impossible. Last, it is an acknowledgment that the world we have is not the one that all people wish to sustain, but a planet damaged by extractivist and exploitative values and actions. Thus, working towards eco-social futures is a political undertaking, which involves bringing people together to see themselves as agents of change – not just as individuals asked to reduce their lifestyles or take a cut in living standards, but as groups embarking on a journey to make futures that evolve from different ontological starting points. Eco- social change means systemic change and that which needs to happen for a more eco-socially sustainable world.

Our definition of the eco-social borrows something from eco-social-ist politics, in that it recognises the significance of the historical rise of capitalism in the splitting of Man and Nature, and Civilized from Barbarian, for example in Moore’s arguments about the ‘geocultural’ trajectory of contemporary capitalism (Moore 2015). While our use of *eco-social* defies these artificial separations and links the political to the ecological, we are also indebted to broader movements within climate and social justice activism for this framing.

Our internal workshop on the theme of the eco-social (early 2022 – see later sections) involved many CreaTures partners defining the term for themselves. The result was satisfyingly coherent, pointing to group recognition of an important relation, also captured in the following CreaTures graphic (Fig 4. CreaTures bid, 2019).

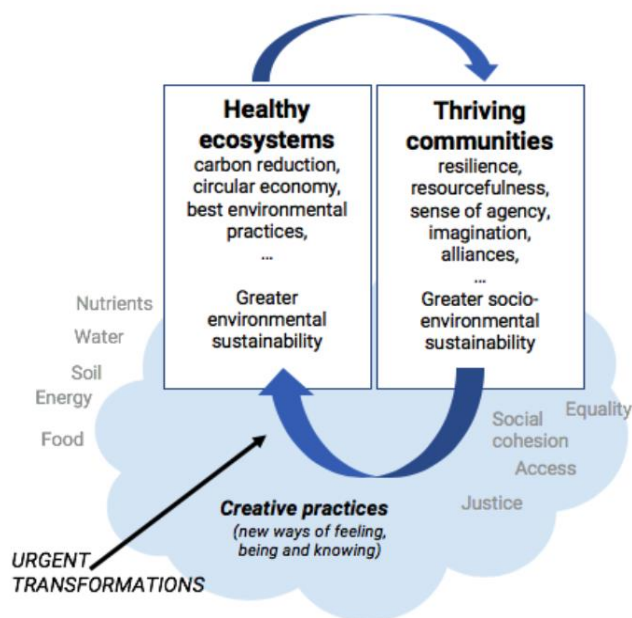


Fig 4: based on a diagram in Light and Miskelly (2019), the tight coupling of community and ecosystem underlies the term 'eco-social'.

The following are extracts from CreaTures partners' statements about the eco-social:

- Eco social change means systemic change that needs to happen to lead to a more eco-socially sustainable world. In our interdisciplinary group (combining all of creative practice, sustainability practice, social sciences research), the things that I really care about signalling to others are the importance of building and maintaining relations that defy the transactionalist paradigm. Only by embodying and enacting other ways of relating to one another and to all others we can see how these can extend beyond our little worlds, i.e. how to talk relationally beyond the personal. The power of stories that take something very specific and demonstrate its significance for the world.
- a way of living that is just, and does not privilege any person or group of people at the expense of other people, other beings or the planet, and that is multi-generational, multi scalar, relational, and pluralistic.
- a way of co-existing between species that is of benefit to all living beings, that attends to very fundamental questions about what it means to thrive in the world – and attends to the power dynamics that are implicit in who shapes and structures communal realities.
- there's two different political energies in this formation. We can understand sustainability as a discipline and therefore we're contributing the 'eco social' to the discipline of sustainability. Social sustainability is thus a powerful sub-discipline of sustainability in which we are acknowledging the Anthropocene and the dynamics that are required to move this somewhere better.
- stirring and laying down ALL things that it would really take to care for the current mess and thrive ... while still keeping key words that can be relatable to others: Eco- as in (and with) ecology and ecological argument(s) broadly and not simply as ecosystems; Social- as in political/collective/Anthropocentrically involved. Eco social change means urgent transformations that aren't happening fast enough.
- It brings into focus ideas of interdependence, justice, multiple agencies, getting hands dirty and doing things aesthetically (not only as in beautifully, but as in attending to details and composition; feelings and relations).
- to work together to create better futures in which all beings can thrive, based on an understanding of the interconnectedness and relationality of all life, and the power dynamics that are inherent in social, living systems. It also means dismantling and unmaking destructive systems and patterns.
- the change processes or transformation processes that are set in motion by CreaTures so that is a concrete process of and the concrete outcomes that CreaTures works towards.

- This is the most fundamental question of what it means to be human this on planet, which brings to the fore the deeper levels of values, myths and metaphors. There's an emphasis here on relational thinking, and this is also where we connect to the sustainability literature.
- All of this framing happens at the deepest level, but power dynamics and politics are where we negotiate: who gets to say what life should be – and who is excluded from that conversation. That is at the heart.

(workshop extracts, multiple speakers, early 2022)

We juxtapose this with *sustainability* and note Light (2022) deals with why the project has not more firmly associated itself with the language of sustainability, even while addressing the discipline of sustainability science/studies and wishing to interface with the community around it: 'this makes no appeal to *sustainability*, since we are not in the business of sustaining so much as asking what regenerative and respectful co-living looks like. Most of us only ever glimpse worlds we would like to sustain and see more that needs changing. (*Do we use our creative energy in fulfilling ways? Are we able to rest, play, and seek spiritual connection as we please? Are we able to support others as we would like?*)' (Light 2022).

Looked at etymologically, *sustainability* and *transformation* exist as opposite impulses. *Eco-social futures*, as a phrase, seems to bypass the deadlock between conservation and change by offering a goal that includes both.

The CreaTures project recognises the field of Sustainability and seeks to address it as a community of thinkers. Our understanding of the field of sustainability is, in Maggs and Robinson's words, that it develops new capacities for transformation in an increasingly unstable world (Maggs & Robinson, 2020). Thus, it is situated and relational. One of the CreaTures project's aims is to understand practical goals and limits, while acknowledging that these aspects of ecological sustainability will only be attained by addressing social change, as above. In Doughnut Economics (2017), Raworth argues that 'Humanity's 21st century challenge is to meet the needs of all within the means of the planet. In other words, to ensure that no one falls short on life's essentials (from food and housing to healthcare and political voice), while ensuring that collectively we do not overshoot our pressure on Earth's life-supporting systems, on which we fundamentally depend – such as a stable climate, fertile soils, and a protective ozone layer'. The Global North's use of multiple planets' worth of resources annually dictates that a major part of sustainable living is learning to operate collectively within affordable limits and developing corrective socio-economic processes for areas of wealth, as well as better energy policies. Adopting sustainability goals requires an inversion of the usual direction of development, where countries with lower energy footprints (and greater vulnerability to climate change) counsel the major polluters and consumer cultures. We see our work in this wider context and suggest that CreaTures' perspectives are oriented towards cultural change to these ends.

Creaturely

A further term that has become popular with the team (since a first use at an internal meeting in Utrecht in early 2022) is the neologism 'creaturely', to epitomize a way of doing research as well as to indicate a series of themes. Given the struggle for language to talk of changing/changed ways of being, we offer *creaturely* as a placeholder for a more gentle, connected, pluralist and life-focused way of working, being and making – in other words, a term to describe the changed orientation that CreaTures' transformations would lead to. We note positively that the term is an adverb, not a noun, which points to a way, not a state. However, we also understand that, in current usage, the

term from which it derives (*creatures*) throws attention on mobile beings such as animals rather than all lifeforms, despite our intentions. Ironically, its etymology points to a ‘something created [by God]’, whereas we are now pointing to something that has a spark of life of its own (and feels less created and more emergent).

With *creaturely*, we intend to capture the spirit of the comments above (in the eco-social section), yet also indicate that the research has been in that spirit too. We see that, in some ways, the doing of the project has had special characteristics: a tight intellectual weave; an interdependence between ideas, processes and members; an ambitious plan for co-creation of research between academic and practitioner partners; recognition of the whole person as researcher and as instrument of learning (and no expectation for emotional objectivity to accompany professional analytic objectivity); a rhetoric of care; a resistance to abstraction for the sake of it and to extractive practices that abuse the giver and give nothing back; attractor qualities where the aggregation of the consortium members and their action research leads to more than the sum of the parts. This is to do *creaturely* work. To draw on a comment above from the eco-social workshop, it is ‘to work together to create better futures in which all beings can thrive, based on an understanding of the interconnectedness and relationality of all life, and the power dynamics that are inherent in social, living systems. It also means dismantling and unmaking destructive systems and patterns.’ (CreaTures notes, early 2022).

2.5 The Central CreaTures Words: Mood

A last pair of terms might be described as expressing the *mood* of the project and its outputs: Feral and More-than-human.

Feral

Feral has become a theme for events under the auspices of the project, but more than that, it has been a feeling in the project. Following particularly from Tsing et al’s (2020) work on *The Feral Atlas* (<https://feralatlantlas.org/>), as opposed to some other feral offerings, such as Monbiot’s (2013) *Feral*, CreaTures has taken *ferality* to heart. Within the project, this is sometimes used as a more radical synonym for *wild*. However, Tsing, Monbiot, etc. use it to mean something emerging out of tameness that coexists with human development, but troubles it. This seems apt for artists’ practices in particular, since they often resist definition but produce commentaries on social norms. We might see these creative practitioners’ work as ideologically feral, thriving on the detritus of capitalism, minded to undermine these corrupting influences (see also Light 2022). *Ferality* is an alternative formulation to the dichotomy of human/more-than-human, a different cut in a similar space.

More-than-human

(vs posthuman, nature)

More than human has become a rallying call for researchers and practitioners interested in more than merely biodiversity and climate crisis, but new ways to consider how all life evolves on the planet and the relations between living entities. *More-than-human* is also associated with *posthumanism*, but focuses less on technological futures and integration of human and machine that the *posthuman* may denote, and more on the relations that inform the interdependencies of life. Panelli (2009) argues the dynamism of a *more-than-human* world is portrayed in scholars’ attention to the processes of entanglement, conceptualized in notions of: ‘becoming, cosmopolitics, extension, friendship, hybridity, resilience, rupture and subversion’ (Panelli 2009: 82).

Attending to the *more-than-human* suggests an understanding of *sentience* that extends beyond human to different ways of knowing and experiencing across plant and animal worlds. *Worldbuilding* may include everything that has to do with culture, myths, rituals and other ways to create new understandings of the world and imagine the future – but can also be understood, more radically, to include the ontologies of other species (e.g. Galloway et al 2020).

We note that the term *more-than-human* (and variants such as *other than human*) centres on the *human* in its construction, which the term *multi-species* avoids. And all are prone to attract criticism for ignoring inequalities in human relations; at best, *more-than-human* approaches demonstrate that the issues are aligned: exploitative and extractivist treatment of life and land (by humans) reduces the space for care and empathy and only a cessation of these can usher in more respect for all life. Without this sensibility, there is increasingly an alignment with neoliberal values and a greenwashing of the structural abuse facing all species. However, as used in the project and the ExPs, there is a political sensibility as to how exploitation manifests across species. We argue that *eco-social justice* requires more rights for other species and their habitats, such as rivers and mountains (noting this legal change, particularly towards protecting river systems, is becoming enshrined in *rights of nature* legislation across an increasing number of countries, see Barkham 2021).

Another way that animals, plants and land are understood in relation to humans is as mediated by the term *nature*. This word is often found juxtaposed with constructions such as cities, humans, culture and technology, which can be problematic in its dualizing. Where we regard *nature* in the project, we often see it as a liminal term, either for a joined-up approach to world-making or as a stepping stone to a more inclusive perspective on non-human lifeforms. The project overall has tended to use the term *nature* in precise and targeted ways, for instance in its policy work ("*Nature: managed or out of control*" was the name of a policy gathering in mid 2022) and linked to culture, such as in the name of the *Art Technology Nature Culture* mailing list that the project established in 2020 as part of its legacy work.

In other words, although we recognize a multiplicity of uses for the term *nature* (see Pereira et al, 2020 and the IPBES website: <https://ipbes.net>, 2015) and have differing views ourselves, the project has understood the *more-than-human* to relate more to terms like the construction *nature-culture*, which doesn't recognize a separation between the worlds of beings and doings and indicates some of the complexity involved. Critically, the term *more-than-human*, while less familiar, is an attempt not to construct some species as desirable or cute and others as pests, or to stress other lifeforms' differences from humankind, since all life has interdependencies and a need for a cared-for planet. Coccia describes Earth as 'the site of a veritable metaphysical mixture' (Coccia 2018): one in which our atmosphere is rendered possible through plants and life perpetuates itself through the circle of consumption undertaken by plants. The term *more-than-human* helps us to keep this in mind.

3. Framework and Method Words

In this section, we offer a series of words that capture some of the learning from the project to be incorporated in the framework and explain how we are using these terms.

3.1 Cross-Cutting Processes of Transformative Creative Practice

We address here the terms for processes that are coming up repeatedly as part of the practices we have been fostering, analyzing and evaluating. While not an exhaustive list, we share key terms employed to

understand the work of our creative partners and the particular qualities that make engagement with creative practice useful for addressing cultural change.

Imagination

Acts of individual and collective imagining permeate all areas of social life, and it is important to acknowledge the expansive framing for this term. Moore and Milkoreit see the imagination as a necessary capacity ‘for securing ecological, social, economic and cultural well-being in times of rapid and often unpredictable global change’ (Moore and Milkoreit 2020, 1). As an individual cognitive capacity, imagination is crucial to how an embodied, sensing human, orders and understands (sensory) experience. Importantly for studies of transformation, Milkoreit argues that our imaginative capacity allows us to link past experiences into the present, and also to generate ideas in our minds about things that cannot be perceived with the senses – including alternative or fictional realities (Milkoreit 2017).

Despite concern about the failure of imagination, particularly as regards the end of capitalism (e.g. Haiven 2014), a quality of humankind is the power to dream and imagine how things might be different. We are not locked into the current moment, but can recall other situations and extrapolate into new ones. Whole emancipation programmes have been built around this quality.

Experience

Kelty writes that ‘we are always engaged in a constant and immediate updating of our values through a habitual and repetitive participation. We experience intuitions, emotions, affective reactive states that are trying to tell us something – something important – but which are institutionally and procedurally incinerated. The soft parts are burned away so that only the bones remain’ (Kelty 2020, 62).

This description captures something of the liveliness of everyday experiencing, and the tendency for aspects of this to fall away – specifically those parts that do not have coherence within procedural and institutional realms. Creative practices that seek to engage and influence people exist to make this sensitive space of inchoate experience meaningful and create new associations and salience. Where there may be burning away, there are also attempts to light sparks and ignite passions, sorting what is significant and attempting to capture more that might be less procedural and institutional, but instead generative of new ideas and values. Froggett et al. (2014) comment on the elusiveness of this potential site of transformation: ‘Between the metrics of participation and what some regard as the intrinsic nature of an artwork lies an area that poses particular challenges for research – that of audience experience in its sensory, emotional, aesthetic and cognitive aspects. This is the ground where individuals and communities can be moved or transformed by a process, object or concept’ (Froggett et al. 2014, 9).

Reflection

Understanding reflection and how it is interwoven with imagining future states means taking the full spectrum of human experience into consideration. Where individual experiences of artworks may involve reflective processes of sensing and sense-making, a sub-set of creative work opens up dialogic spaces to share the qualities of that experience. These are intended to bring the ‘not-yet- articulated’ more comprehensively into view as a shared object to be worked on collectively. Reflection is a supplement to experience that creative practitioners harness to ensure that experiences are not forgotten but committed to memory. Earlier research in a CreaTures vein describes how reflecting – and in particular reflecting as a group that has shared an encounter (with a practice and with each other) –

enables the experience to be reconciled into everyday life (e.g. Light and Welch 2018; Light et al 2018; Light et al 2019).

Light and Welch articulate how participants' experiences can move from temporary 'happening' to meaningful encounter in the course of collaboratively reflecting (Light and Welch 2018). A key part was engaging with others to reflect, hearing other people's ideas and responses, and learning that others could be moved by similar experiences. Looking more widely across creative fields, we can find similar instances of these intertwined processes of experiencing and reflection.

Reflection, then is a common technique used across creative fields to draw out aspects of sensing and sense-making that are part of experience and sharing these in a group setting to become part of a project of shared meaning-making from which learning can take place. There is, further, a clear distinction between participant reflection in the form of feedback that supports artists developing the effectiveness of their work (which we see in the design process of many of the practitioners we have been working with) and reflection built into the participation activities for the purpose of sharing experience and embedding it as learning. The same session might provide both functions, but they are not to be conflated for (particularly) the second function is where transformation takes root.

Participation (vs audience)

As project partners, we have repeatedly quizzed ourselves about our relationship to those who work with us, those we seek to influence and how we collaborate. We have problematized the idea of *audience* as a category, writing about the Audience Feedback Tool but instead talking about building connections and creating different types of spaces where more intimate and specific relations can be formed. The term *audience* feels distant because it is generalizing and passive. We have been making/observing transformation in defined groups with particular characteristics, such as visitors to events, participants, etc. They are very specific to the events or experiences on offer – which is part of our findings - and the meaning they make will always be personal. We are seeing a difference between a crowd that has no relation to one another, an individual and a cluster of people working together to make something more salient for themselves and others. All requires a degree of participation in meaning-making and often something more. The role of collective reflection has been crucial here to turn individuals into something more (see above). The Covid-19 pandemic (which ran through the project from the second month) acted as an alienation device in this context, separating researchers, artists and producers from the people that they sought to engage with and revealing the extent to which 'socially-engaged art' (and its cognate fields of place-based and community arts) is an act of collaboration. New forms of construction for influence, knowledge-making and communing were developed on the fly, but participation was significantly altered.

Relationality

Only by embodying and enacting other ways of relating to one another (and to all others) – and foregrounding this aspect of the transformations needed - can we see how these imaginative-experiential-reflective-participatory creative practices extend beyond our personal worlds, i.e. how to talk relationally beyond the personal. This gives a chance to produce collective wisdoms that are multi-generational, multi-scalar and pluralist and focus on the 'between space' that holds the changed relations. It introduces an aesthetic focus, in the sense that the *eco-social* means attending to details and composition, and to feelings and relations. While care work takes finite time and bodies (and may be invisible, exploiting and gendered), the relational aspects of a caring ethics offer an unbounded alternative to the limits of transactional encounter.

This focus on relations corresponds with a relational ‘turn’ in the humanities and social sciences more generally, which has enabled more complex understandings of the interactions of entities, beyond binary structures of thought – perhaps most notably for the CreaTures project, taking account of the agency of non-human entities and troubling the ‘nature-culture’ binary that has for so long existed in Global Northern thought. This relational perspective is increasingly being explored in sustainability transformations literature, for example in West et al.’s paper arguing for a relational turn in sustainability science (West et al. 2020). Rather than a single ‘one-world world’ that centres Euro-American ontology (Law 2015), we remain open and alert to how different (or multiple) ontologies emerge in our discussions of change processes, noting particularly where these relate to post-colonial and Indigenous perspectives. These perspectives – which have been systematically othered or excluded (Law 2015) – are increasingly being understood in their fullness as a wellspring for new patterns of relating.

D2.4 reports that, in our interviews, creative practitioners highlighted broad sets of relations that they felt were central to discussions of transformative change towards more sustainable futures including:

- relations of participation – for example working skilfully with power dynamics in creative settings;
- systems or infrastructures – for example, building networks inside and outside of the creative sphere, such as contributing to legal processes;
- practitioner subjectivities – for example, cultivating a radical openness to being personally changed in settings of high trust and care;
- societies – for example, by exploring the interface of what currently exists and what is possible.

There are, of course, relations between these sets of relations too. To understand our work through the lens of relationality is to see that, while it is possible to address any context or subject as discrete, the act of separation is an analytic construct, not a natural part of the world. In CreaTures, we separate to understand but also employ tentacular thinking (Haraway 2016), which finds *connections* as important as *nodes*.

There are then two forms of experience that we see repeatedly in the work that is offered in partner productions concerned with transformed futures.

Prefiguration

‘When “doing” prefigurative politics, we act out the social values and relations we want to see realized – we perform them into being.’ says DiSalvo (2016: 30). *Prefiguration* is a mode of organizing that aims to model and embed the desired change state in all of the everyday actions taken on the journey towards a central goal. To give examples from the Observatory (see D2.4), **Feral Trade** is an experimental arts project that has been trading goods through social interconnections (passing from friends to friends all around the globe): a commentary but also a living alternative to commodity chains. **The Bank Job** explores the issue of consumer debt and post-capitalist communitarism, building an alternative bank and literally exploding £1.2 million of local debt (which is captured in a film). These alternative modes of operation, however small, are what Cooper calls ‘everyday utopias’ (2013): they don’t place their energy on pressuring mainstream institutions to change, on winning votes or taking over dominant social structures, instead ‘they work by creating the change they wish to encounter, building and forging new ways of experiencing social and political life’ (2013: 2) and risking dismissal as bizarre or ludicrous for taking activities outside their usual parameters (2013: 4).

Speculation

Future-thieving (Lutz, 2020) offers a poetic description of *speculation* in the context of thinking creatively about designs that could happen: ‘stealing a dystopian artifact from a future that may never exist to prevent it from plaguing the world tomorrow’ (np). In this process, the aim is to inspire contemplation of alternatives and how life could be other. Speculative design finds its expression in things or narratives designed for response (e.g. Auger, 2013), rather than to fill a gap or solve a problem. Auger (2014) describes the role of speculative design in living with robots: ‘The aim is not to predict, sensationalise, politicise, demonise, or canonise specific technologies or agendas. Instead, to place emerging technologies into real-life contexts, communicating how these would be manifest through tangible evidence [to] allow the viewer to contemplate what life might be like in the depicted future or alternative present’ (p26). Dunne and Raby (2013), who also put fantastical designs into household contexts, say: ‘We rarely develop scenarios that suggest how things should be because it becomes too didactic and moralistic. For us futures are not a destination or something to be strived for but a medium to aid imaginative thought.’ (p2). Much speculation takes the form of narrative and scenario. Within CreaTures, some speculative work is designed with an experience in mind and then it is harder to tease this apart from *prefiguration*, for if one’s audience/participants can be given the experience of something that could exist (and we wish it to), one might argue that it is a prefigurative experience.

3.2 Terms for Explaining the Components of the Framework

Here, we describe how we are using certain terms for our framework. These terms are included here more briefly as explanatory notes, rather than normative contributions.

Resources

A part of the ongoing work in the CreaTures project has been to map and bring together diverse existing tools and resources that creative practitioners across multiple creative fields are using in their work. We have been looking specifically at those resources that hold the ambition to address social and ecological sustainability as interrelated issues. Tools and resources can be thought of as objects that extend one’s ability to transform features of a particular environment and can be reappropriated differently in different contexts.

Transformational Strategies

As explained in detail in D2.4 we use the term ‘transformational strategies’ to refer to the processes used by creative practitioners in their work to help connect people to sustainable futures. We have chosen the term *strategy* to denote somewhat stable processes that have resulted of practitioners’ design research in iterating and testing their processes until achieving the desired effect. These strategies are not always formally documented or even recognised as such by the creative practitioners themselves.

Soft Spaces

A feature of the CreaTures project is that creative practices are themselves considered to be at the core of collaborative engagement between decision makers, creative practitioners and researchers. We have used a term that bridges engagement between researchers and decision makers, using creative practices: ‘soft spaces’ (Hajer and Versteeg, 2019). *Soft spaces* can be understood as spaces in the widest possible sense (real virtual, contextual and so on) where societal actors can meet to explore futures, collaborations and actions – but that are not framed as spaces where ‘classic’ decision making takes place. Soft spaces take on issues that involve power and societal challenges

but they are framed differently - for instance, by engaging all participants with art projects and worldbuilding as a context for conversation about challenging policy issues. They are spaces where what is supposed to happen is consciously kept less defined than in normal decision-making settings. Soft spaces are also open to new groups of actors that would not be invited to 'classic' decision-making contexts. Exhibitions, performances, games and other creative engagements such as the experimental productions (ExPs) developed in CreaTures can serve as such soft spaces. This focus on a relaxed space for engaging with policy and governance actors distinguishes *soft spaces* from other workshopping, an engagement technique often used in design circles to progress ideas and artifacts.

Snowball sampling

When we gathered ideas for what transformation means, we managed the act of gathering data by asking those interviewed to recommend some person or thing in their circle, thereby ensuring a degree of separation from the researcher. This is known as snowball sampling as 'the snowball' (i.e. the data collection) gets bigger as it rolls and collects. This method fed into graphs of connections and reflected the interest we have in relatedness, but also ran the risk of creating a cluster of views that were very like our own (rather than surveying the extent of the whole field). On the one hand, we knew we needed to understand this cluster of creative practices and the types of production that support a particular, cultural, understanding of transformation. By sampling in this way, we created a consistent method of data gathering and acknowledged that the partners were involved in circles (as researchers and/or practitioners) that would be able to draw on professional judgment as to what is happening and what is most inspiring among that. However, there also has to be a corrective to this form of sampling, even in such a nascent context where it is hard to determine what the 'field' may be or whether there are boundaries to recognize. So, after a period of analysis, WP2 commissions at the University of Sussex deliberately reflected where we saw gaps. This has resulted in additional research specifically into *place-based* creative practice, for instance.

4. METHODOLOGY

4.1 Methodology

The development of the Glossary took advantage of the multi-disciplinary backgrounds of the CreaTures consortium. The collection began initially with the terms which were suggested as significant in their domains of work by consortium members at various points in the project, such as internal workshops and plenary meetings. This approach took into account how key terms – for example, 'transformation' – are perceived, used, and interpreted in different ways by different stakeholder groups, but also invited direct participation in determining the meaning/use of language surrounding creative transformational practices.

To understand how to treat these terms in ways that would enable the CreaTures Glossary to pay close attention to the politics of language, its temporalities, its situatedness, and its omissions, we used five methodologies, leading to equal types of interrelated activities:

1. Engagement activities internal to the CreaTures consortium: Such activities consisted of peer interviews and workshops where specific terms were debated and definitions were collected;
2. Contextual review of 18 curated case studies of glossaries, vocabularies, lexicons and creative projects that deal with language;

3. Public facing co-creative activities, namely an online design research activity and a situated participatory, interactive installation;
4. A sub-contracted Experimental Production (ExP) focused on the glossary and related engagement activities;
5. Literature review to define the terms not addressed through the other experimental or participatory activities. English dictionaries of international reference such as the *Cambridge International Dictionary of English* or other topic-specific such as the *Oxford Dictionary of Environment and Conservation* were reviewed to provide initial definitions for the most general concepts, which were later either evaluated and developed further by the consortium or removed from the CreaTures Glossary (see appendix). For the technical and scientific terms an integrative review approach was applied to combine perspectives to find definitions that align with CreaTures' understandings and ways of working. Books, scientific publications and other relevant sources were reviewed, focusing on the fields of social and environmental sciences.

4.2 Timeline

Exploration of the content and design of the CreaTures Glossary started at the project kick-off meeting at the University of Sussex in February 2020 and has continued to include the creative integration processes conducted in assembling the keywords section in summer 2022 (since any act of synthesis is also an act of creation).

During the first meeting, terms that were used frequently and/or raised interest for discussions among the consortium members were noted and compiled. Following this, a contextual and literature review guided the design of several creative research activities to gain nuanced insights into how some of these terms may be interpreted and communicated in different ways by different stakeholders. As a result, we selected a creative research activity, the *Dérive Drift*, to be used for internal enquiry within the consortium. A modified version of this exercise was presented publicly at the Uroboros Design-Art Festival in early May 2020. The data gathered from these two activities informed the first submitted version of *D2.7 Glossary of Terms and Methodological Processes (Internal)*. After the submission of this document in June 2020, we continued to expand the contextual and literature review and initiated additional iterative creative engagements and research to explore design possibilities and refinement, most notably a temporary installation called *Glossary Games* installed in the Baltic Seal Lab, at A bloc (Otaniementie 12, Espoo, Finland) from January to February 2021 and the sub-contracting of an experimental production on the CreaTures Glossary in January 2021, which led to an ongoing process of developing a set of tools to explore and gather diverse definitions and meanings of terms related to creative practice and transformational change, as well as a series of public engagements and interactions with these tools. Simultaneously, specific terms were explored, defined and refined in various research-driven activities within the consortium, in line with the project development. These activities enabled the CreaTures Glossary to evolve until this final version, publicly released in 2022 with the addition of an expanded keywords section at the front.

Table 1: Timeline of activities contributing to the development of the CreaTures Glossary

	2020				2021				2022			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Initial selection of terms	X											
Contextual & Literature Review		X							X			
Dérive Drift		X										
D2.7 Submission(s)			X				X		X			
Glossary installation at A-Bloc				X								
Commissioning of Glossary ExP					X							
Participatory activities related to the Glossary ExP						X	X	X	X	X		
Iterative creative engagements and workshops within the consortium				X	X		X	X	X	X	X	
D2.8 Submission											X	

5. CONTEXTUALIZING AND COMPILING THE GLOSSARY

5.1 Contextual Review

This section presents a review of 18 curated case studies which have informed our understanding of how to approach the Glossary. These were selected for their unique attempts to explore language, and their uses of digital technologies and creative approaches to do so. Informed by the literature and contextual review undertaken for D2.7, they have been organised according to five thematic categories, as shown in the subsequent sections: Alternative vocabularies, alternative indexes, unpacking a term, unexpected relations and diversified topographies.

5.1.1 Alternative Vocabularies

The following examples illustrate how a vocabulary can be constructed in collaboration with a community of practice (ranging from hackers and activists to creative professionals) in ways that alternative perspectives and viewpoints are highlighted.

- [A Dictionary of the Revolution](#): An online dictionary compiling 125 texts and the semiotic relationships between them. This was a result of conversations with around 200 individuals in Egypt, who reacted to a set of vocabulary cards showing frequently used terms used in political conversations about the Egyptian revolution.
- [Sideways Dictionary](#): A crowdsourced tool that offers explanations of difficult technological ideas through a series of analogies, which are assorted by up-votes.
- [The Jargon File](#): The first 'hacker dictionary' aimed at reframing negative public discourse around hacker practices by revealing contestations within terms like 'hack'.
- [An Eco-topian Lexicon](#): Thirty "loanwords" that reimagine environmental challenges and ecological relations in alternative ways to those dominant in Western cultures.
- [UrgentCity - Towards a New Vocabulary of Terms](#): A rethinking of the buzzwords commonly used in creative professions to describe contemporary urban experiences.

While the vocabularies used in the above cases range from technological terms to revolutionary language, central to all of them is a sensitivity to the semiotic and contextual relationships between terms. The projects also address the need to rethink the role of language, by employing various creative and exploratory approaches to identifying and communicating such relationships. This process can be both complex and challenging. For example, the Sideways Dictionary and Dictionary of the Revolution are crowdsourced, asking for direct participation from assorted publics; the Jargon File and Eco-topian Lexicon have been carefully curated according to the aims and values of their editors; UrgentCity, meanwhile, constructs its new vocabulary through workshops and public panels.

5.1.2 Alternative Indexes

Other projects seek to highlight the perspectives of communities whose discourses have been marginalised or erased from dominant narratives:

- [Unerasable Characters II](#): An exploration of the temporality of erased political voices, which presents a dataset of erased tweets from the Chinese social media platform Weibo according to their original duration on the web before they were censored.
- [Cyberfeminism Index](#): A collaborative web-based archive and categorisation of forgotten and/or intersectional cyberfeminist initiatives between 1990-2000.
- [Feminist Data Set](#): A critical design project that interrogates every step of the AI development process by unpacking biases and determining how to address them.

All of the above projects emphasise the value of paying attention to the temporal aspects of language, especially the ways it is used differently by different groups at different moments. They invite users in the process of critical reflection, unearthing obstructed discourses as an exercise in unveiling the community histories and negotiations that brought those dialogues into being.

5.1.3 Unpacking a Term

Another category of projects focuses on the analysis and exploration of a singular term instead of a set of terms, honing in on the multiple perspectives and contexts which frame its relations.

- [Cyberfeminist Manifesto](#): An introduction of the term 'xenofeminism' by the working group Laboria Cuboniks, along with related concepts to explore in further depth.
- [Critical Making](#): Handmade zine project that explored the term 'making' as a form of hands-on productive work through the perspectives of 70 contributors.
- [Library of Change](#): UK-based digital platform that hosts personal stories which rethink the term 'change' and people's many different relationships to it.

The projects above are notable in their illustration of the heterogeneity of widely used – or what may be described as banal – terms like ‘making’ and ‘change,’ emphasising the complexities of how these terms are used across different languages. The projects also demonstrate how commonly-used terms like these will continue to evolve over time according to the needs of their users.

5.1.4 Unexpected Relations

Other projects focus on the evolving relationships *between* terms by highlighting their connections:

- [Alt-text as Poetry](#): Project that rethinks alt-text as an essential part of web accessibility code, asking how it can be approached creatively, as a type of poetry.
- [The Flavour Thesaurus](#): An organisation of the unexpected relationships between 99 flavours used in food, with 16 categories made up of cross-flavour assemblages.
- [Curator Table](#): An advanced visual gallery that uses curatorial practice to experiment with connections between artworks, in ways that unearth unexpected connections.
- [Vocable code](#): A work of software art which embodies "queer code" by examining notions of queerness in computer coding through collective statements and voices.

These examples demonstrate how the taxonomies used to classify the relationships between terms matter, as they are arranged according to the values, logics, and priorities of their curators. This highlights the importance of understanding for whom the glossary is actually organised, and why.

5.1.5 Diversified Topographies

The last group of projects the glossary is informed by experiment with diverse topographies or embodied terrains, to locate and amplify the presence of alternative ontologies.

- [Laika's Dérive/Dog's DeTour](#): A psychogeographic exploration for “dogs and their human companions” which encourages new modes of interspecies communication, by providing dogs with a customised digital kit that enables them to photograph their favourite vistas and objects on location, selected by sniff and interest level.
- [Feral Atlas](#): An (in-progress) web platform compiled by a multidisciplinary group of over a hundred researchers and practitioners which highlights the un-designed impacts of human infrastructures through an assortment of visual approaches.
- [Exhausting A Crowd](#): An in-situ surveillance camera runs continuously for 12 hours, asking web users to click on people, animals, the street, garbage cans and various other elements of it and post comments on what they believe is happening.

The projects above also extend our thinking on other kinds of exchanges, by prototyping new technologies and infrastructures that highlight the myriad relations between human and other-than-human actors.

Each of the 18 case studies presented in this section take a considered approach to addressing the complexities of language through new approaches and tools, with a common priority for “amplifying”

or giving voice to underheard groups. This highlights three critical points of consideration for the CreaTures Glossary:

1. Openness towards the forms the design outcome may take: The inclusion of different voices and interests in the process of compiling data through crowdsourcing and co-creative approaches range from up-voting objects and open spreadsheets to community workshops and public exhibits. As a result of their diverse modes of experimentation, the curation, cataloguing, and display of objects also takes on many different forms, from self-printed zines to technically-advanced digital visualisations.
2. Recognising the complex interrelationality between terms: All projects highlight the semiotic relationships between terms and their impacts on how terms are imagined differently over time according to the evolving needs and interactions of their communities of practice, as illustrated in the Dictionary of the Revolution.
3. A consideration for inclusivity in even the most diverse narratives: In “giving voice” to underheard and/or marginalised perspectives, whose voices are actually called for and used, and how are their interests represented? Which groups might have and not have the power to control the message, and in what ways? For example, in Laika’s Derive, digital technologies are deployed to enable dogs to speak “for themselves.” In the case of the Critical Making project, meanwhile, the perspectives of a closely curated group of individuals deemed ‘experts’ in the field of maker culture are amplified, as they manage the discourse around how and where the term ‘making’ should be situated.

These findings suggest that there is much value in building a glossary that offers not only the meanings of terms, but also the semiotic mechanisms by which those meanings have been constructed, in ways that pay close attention to the politics of language, its temporalities, its situatedness, and its omissions.

5.2 Internal Engagements

This section outlines the number of activities that have been undertaken with and by the consortium members to further develop and identify relevant terms.

5.2.1 Transformation interviews

In an effort to establish the conceptual and methodological foundations of CreaTures, WP2 researchers carried out a series of 8 internal interviews, with the non-native English-speaking researchers in CreaTures, inquiring on the connotational differences that the term transformation might have in different languages, and specifically how these differ from the English term ‘transformation’. Interviewees included native speakers of Spanish (n=2), Czech, Finnish (n=2), Slovenian, Dutch and Ukrainian. Transcripts of these interviews are presented in APPENDIX A.

5.2.2 Workshop: Prototyping Audience Engagement

10 August 2020, online

The workshop, was primarily intended for the ExP authors, and aimed to map the audiences the ExPs were expecting to interact with, and the feedback collected from these audiences. The focus was on establishing a common understanding of terms such as ‘audience’ and ‘feedback’, and identifying current and desired methods and tools for collecting audience feedback during the planned ExPs.

5.2.3 Workshop: Prefiguration as a transformative strategy

13 January 2022, online

5.2.4 Workshop: Defining Eco-social sustainability

8 March 2022, online

Structure of the workshop:

Collecting a round of definitions from everyone for our scrapbook, using key questions:

- Eco social sustainability / change means.....
- The term that I use in my field is.....
- It means something to me because.....
- The things that I care about signalling are.....

The results of this workshop are included in the section on eco-social futures above.

5.2.5. Workshop: Audiences

24 March 2022, in person during the CreaTures Plenary meeting in Utrecht

5.3 Public facing co-creative activities

5.3.1 Dérive Drift: a pilot

The Dérive Drift was a design research activity that we created to build a deeper understanding of how users of the Glossary might interpret its terms according to their own contexts. We had originally intended to embed it into in-person workshops and ExPs organised by the CreaTures network. However, the unexpected restrictions resulting from the COVID-19 outbreak necessitated us to revise the activity to be more suitable for online distribution and to be more relevant and mindful of particular conditions participants may experience during self-isolation.

For the revised Dérive Drift, we sent personal invitations to the members of the CreaTures network to participate. We provided an open document to participants which included a guide to the activity and its materials, and asked them to undertake a tour or “drift” of their flats with three terms in mind from the glossary. Two of these terms, ‘uncertainty’ and ‘adaptation’, related directly to the COVID-19 situation, and we also asked participants to choose a third term from the glossary that they wanted to explore. With these terms in mind, we lead participants through three creative, paper-based activities, which asked them to explore a local place (such as their flat or a nearby park) by reflecting on how each term was associated with their own experiences, memories and senses of it. In particular, we asked them to think about the differences between the ‘typical’ or common definitions of each term, and the personalised definitions of that term as related to their own lives. These activities culminated in the creation of a map in a psychogeographic tradition, with an emphasis on playful and contemplative spatial exploration. We finished by asking participants to summarise how

their understanding of the places they had roamed through and the terms they had used to do so was associated with their own personal ecologies. Participants were asked to return their completed Dérive Drift, along with further reflections and suggestions, to us by email within a month of receiving the invitation.

A total of 11 responses were received for this pilot, which formed a case study of how participatory activities can be facilitated in digital and/or other limited circumstances. The insights arising from the data during this distinctive moment were especially rich, full of careful observations of the impacts of COVID-19 and lockdown on people’s daily lives. These experiences were both collectively-felt, and at the same time distinct to each person. The terms participants chose to work with, and the many different ways they worked with them, reflect this duality:

Table 2: Sample terms

Term	Typical definitions	Personalised definitions
Uncertainty	<p>“Not knowing enough to make meaning out of something.”</p> <p>“Conditions remain unknown to be sure of what will happen.”</p> <p>“A variable to consider and account for in decision-making. Something to minimise and/or learn to live/be with. The absence of certainty.”</p>	<p>“The word uncertainty implies the existence of ‘certainty’, but I doubt (see the uncertainty?) that certainty actually exists!”</p> <p>“Enjoyment of an adventure. Playing around with options.”</p> <p>“Will it hold? Will it survive the winter? Will it survive the storm?”</p> <p>"The space is white, waiting for its next use. The objects have an uncertain future, will they be kept or go? Uncertainty leads to need to be open to adaptation."</p> <p>"Front door feels like a main entrance to uncertainty now. Is it safe to go out? Will I put some in danger if I do? What’s out there?" “It can be both frustrating and exciting to not know.”</p>
Adaptation	<p>“Aligning with the circumstances.”</p> <p>“Darwin.”</p> <p>“Using something for another purpose, being flexible.”</p> <p>“The way societies or communities change to adjust to environmental change.”</p> <p>“The changes made to better suit an</p>	<p>“Time! Adaptation takes time!”</p> <p>“Let’s consume less. Adaptation as a tool for degrowth.”</p> <p>“Creative joy of playing, messing around, inventing, being resourceful.”</p> <p>“Adaptation as movement in multiple directions and forms.”</p> <p>“Lack of clarity about upcoming change, or</p>

	<p>environment / situation / context.”</p> <p>"A process of adapting to the changing environment. It is usually a directed process. Directed towards living well in/with the changing environment."</p> <p>“Adjustment to habitat.”</p>	<p>if there is going to be change.”</p> <p>“The ‘spare room’ of the house has to be the most malleable - its contents, use, layout changing and adapting to new people, new moments in time...”</p> <p>"Missing recognition of the layerings of *historic* adaptation processes, that are constant, really."</p> <p>“How much is this adjustment voluntary?”</p>
Care	“It’s not economy.”	“It’s crucial for economy.”
Transition	“From A -> B.”	“Does transition really have a direction?”
Community	<p>“People who belong together or are dependent / connected to / of each other.”</p> <p>"A group connected by time / geography / identity / ideals / other characteristics."</p>	<p>“Permanent, temporary, drifting in and out, virtual or for real.”</p> <p>“There is a community of people joined by use of this room, sharing a common geography but different time.”</p>
Coping	“Response.”	<p>“Abilities, struggling</p> <p>But with some degree of success.”</p>
Collaboration	“Working together.”	<p>“Collaborative effort to get it here, Neighbours save each other’s furniture when they fall in the water.”</p> <p>“Collaboration as taking care together.”</p>
More-than-human	<p>“Forms of life, often, less important/precious than human.”</p> <p>“Not-human.”</p>	<p>"Acknowledging that human is more-than-human itself, and intertwined history/world-making between various forms of life, including human."</p> <p>"I welcome some more-than-human life more than other..."</p> <p>"This place is suddenly full of various-previously less recognised- companion species."</p>

		“Why ‘more?’”
Future	“That which hasn’t happened yet”.	“Good future... vs. worse future.” “Not certain - buds should open - but maybe not.”

Some of the terms which participants chose to work with, like ‘more-than-human’, inspired them to offer alternative definitions which explored the term’s complexities and nuances. Other terms, like ‘community’, led to personal reflections on the participant’s own relations during COVID-19. Participants offered especially thoughtful insights on how the terms ‘uncertainty’ and ‘adaptation’ had become associated with their experiences of the pandemic (pseudonyms used):

Mei: "I choose to work with my house, on one hand because I haven’t been going out unless absolutely necessary [...] I have been thinking a lot about what a house can mean for feeling at home anyway, and how much of ourselves we invest in the spaces we inhabit. [...] Experiencing this ‘becoming a home’ while being homebound has been a process of adaptation, uncertainty and transition (and emotional roller coasters) [...] sometimes I regret that I’m not able to ever be certain about anything.”

Haruto: "While I was having the walks, I was thinking all the time both of positive and negative things: 'How good we were making the quarantine' vs...'can we really sustain this for more time?', 'we adapted very well to uncertainty' vs 'are any of us going to carry mental health issues after this', 'we have been caring each other a lot' vs 'what if this is a way to destroy any careful system we knew from before' [...] So, hating a bit the war metaphors and specially the ones used with the COVID-19 situation, the truth is that in our case there is an ongoing battle [...] Every day is a forth and back between order and chaos."

Akari: "There are concrete tangible elements, such as baskets, brooms, carpets, and funny conversations around them. And suddenly the size of imaginative elements, feelings, connections, moods took over. What I once dreamt about before buying this flat – a house in Provence in the middle of the herbs and scents. And how did I end up in this arctic little harbor town? [...] We decided this will be our oasis. Suddenly, we are working here and the work stress and negative uncertainty fills the air. Back to the joyful adventures, funny combinations and creative what ifs.”

Yui: “I found it [exploring the term ‘uncertainty’] quite hard (probably due to high levels of anxiety inhibiting creative or deep thought right now) and I’m not sure it’s 100% right. Quite hard within this space - forced me to deeply think about use of words. The words are very personal, they can evolve (adapt!) to different circumstance for different people.”

The visual maps created by participants below to accompany these insights further illustrate the complexities in how commonly-used terms like ‘uncertainty’ and ‘adaptation’ will be differently perceived and integrated according to the personal contexts of their users. Participants living near oceans, rivers and lakes, for example, featured bodies of water prominently alongside their chosen terms, while other participants chose to associate their relationship to the terms alongside companion species like plants, birds and pets cohabiting their home environments:

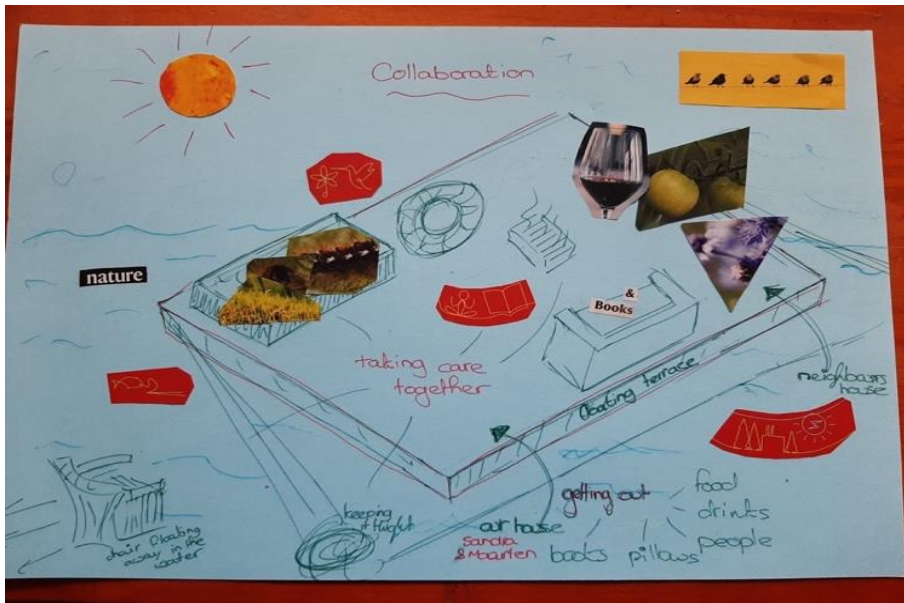
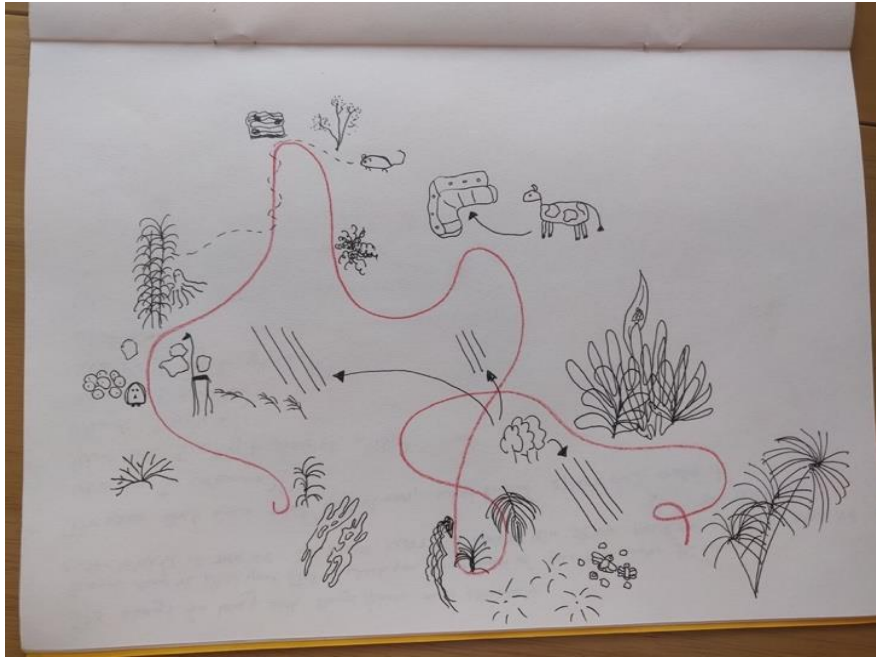




Fig 5: Sample maps

Regarding the use of future activities like these to explore the project's use of language, we received helpful feedback from participants around 3 main themes:

- First, we found that the time it took to undertake a creative and reflective activity of this kind can take longer than might be expected, and this should be better post-marked in future activities: "What a wonderful way to assemble CreaTures glossary! It took me slightly longer than 15 minutes - more of 2 hours, spread across 2 days to do this - that included conversations and long thinking pauses - and I've thoroughly enjoyed every bit" (Yutsuki).
- Participants described how the hands-on and creative nature of the activity inspired them to think differently, highlighting the value of enabling other ways of interpreting and using language. "The collage making was fun, and a bigger paper would have been even more fun" (Akari). "Although I was annoyed at points the same annoyance made me think harder about the words and gave me good personal insight" (Riko). "It's always fun being with things/places more attentively. Even if they're in your flat in which you spend most of your time in during lockdown. ESPECIALLY IF THEY'RE IN YOUR FLAT IN WHICH YOU SPEND MOST OF YOUR TIME DURING LOCKDOWN" (Yutsuki).
- Lastly, we found that participants with limited attention spans, reading difficulties and other needs found the word-heavy aspect of the exercise especially difficult to engage with. This speaks to the value of using visual or other sensorial guides alongside text to explore language.

As the Derive Drift was the first internal engagement activity led by WP5 in collaboration with the CreaTures consortium, these findings provided us with rich insights on how to organise future creative activities that explore abstract concepts with diverse views in mind. We can also see the impacts of creative practice in action – not only as the CreaTures project's topic of empirical inquiry, but also as a broader mechanism for project members, and eventually publics and communities associated with the project, to engage with its developments more directly in ways that are

meaningful to them. Based on the conclusions drawn from the contextual review and the Dérive Drift activity, we have continued our ongoing engagement with the language of the project.

5.3.2 Glossary Games at A-Bloc

Glossary Games was an interactive installation that invites passers-by to engage in a dialogue around their understanding of some of the terms of the CreaTures glossary. From November 2020 to February 2021, the CreaTures ExP Baltic Sea Lab hosted a temporary working and exhibition space at an empty shop, within the A-Bloc shopping mall in Espoo, Finland. We were invited to use one of the shopping windows to engage with passers-by, transiting through the mall. In line with the ongoing Covid-19 restrictions, the activity had to be asynchronous and individual.

We selected a number of terms from the Glossary, wrote them on the glass wall and attached paper

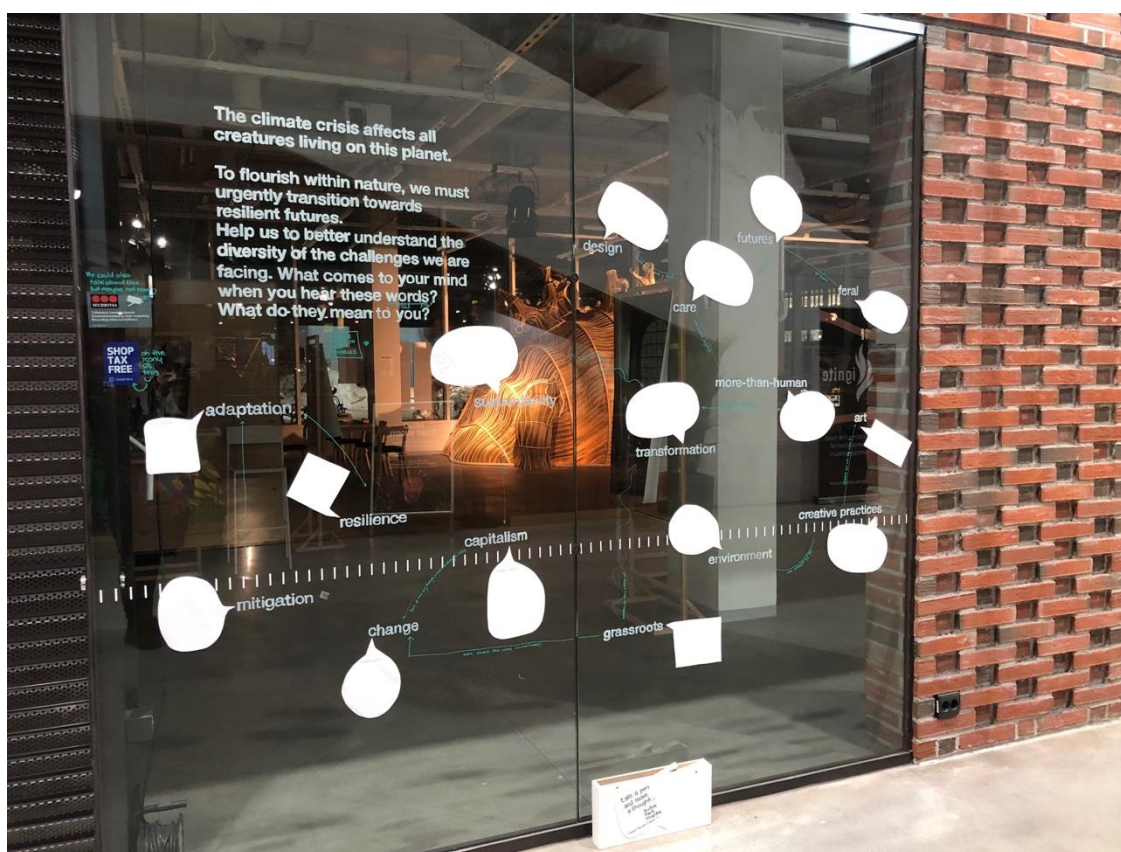


Figure 6 - Overview of the Glossary Games interactive installation at A-Bloc.

speech bubbles pointing to these terms. The selected terms were: adaptation, art, capitalism, care, change, creative practice, design, environment, feral, futures, grassroots, mitigation, more-than-human, resilience, sustainability, transformation. Markers were provided along with a text encouraging people to write their own definitions and thoughts about those terms on the paper speech bubbles. Pre-drawn lines between the terms indicated our particular interest to explore the connections and nuances that appear between terms.

Table 4: Definitions and comments provided in the speech bubbles of the Glossary Games interactive installation

Adaptation	Being flexible
	Embracing uncertainty, bravery!

	Being human. Evolution
Art	Hopeful alternatives
	Is the only way of gods to tell us how beautiful life is
	Inspiring! Hope! Love! Shows the way!
	Expression of emotions
	Everything except Aalto University
	Soul
Capitalism	Life is terrible without lots of modern conveniences, so keep buying unless you want to be a sad loser.
Care	It's not the economy – but it's crucial for economy.
	Repair
	Keep your eyes open when you walk outside to all those organisms around you.
Change	Constant movement
	Must reduce consumption of low-quality goods. No to fast fashion and short lifespan products!
Creative Practices	They have transformative potential
	Necessary!
	Hacking everyday life
	Make things your own and support small companies and makers
	A way to let your mind guide you
Design	Plays a crucial role in the challenges and solutions to social challenges with a human-centered approach.
	God so loved the world that he gave his only begotten son, that whoever should believe in him shouldn't perish but have everlasting life.
	Activism, cultural change
Environment	Would it be fun to live on a wasteland?
	Very important!
Feral	Experimental, willfully wild

Future	What we should work towards together
	Plural futureS to dream and make together.
More-than-human	Existence precedes essence.
	Animal rights?
	Now we are less than what we could be potential
	Humbleness
	Empathy, love and care
	Capitalism
Resilience	Antifragility
	Stop pursuing maximum efficiency
	Healthy lifestyle makes body resilient
Sustainability	Meeting the needs of the present without compromising the ability of future generations to meet their needs.
	Carefulness
Transformation	Transformation plays a substantial role in design and effective parameters!
	To top the big multinational producing shit! Stop consuming shit food!
	Not all who wander are lost.

The installation directly answers to the need to enable a variety of interactions and views for different kinds of users, as well as to provide space for personal definitions of terms. Participants used both text and drawings in their contributions, often responding to the definitions or comments that others wrote before them. The outcome highlighted the positive potential of and the need to further expand engaging with diverse people to enrich and refine the language used in/about creative practices for transformational futures.

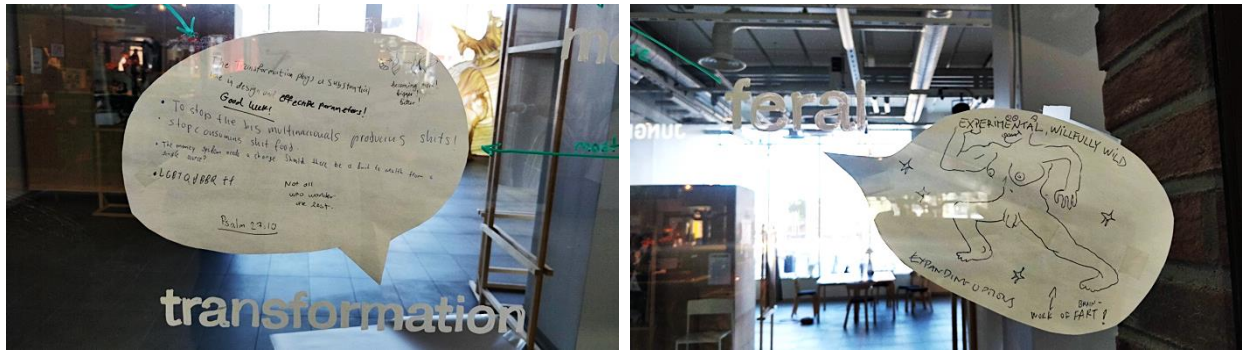


Figure 7 - Examples of the input provided for the terms 'Transformation' and 'Feral'.

5.4 The CreaTures Glossary ExP

Building on the outcomes of the Glossary Games, and to create a systematic way of collecting and organising material and broaden participation, we subcontracted an Experimental Production that would respond to the insights we had gathered, integrating digital and network technologies.

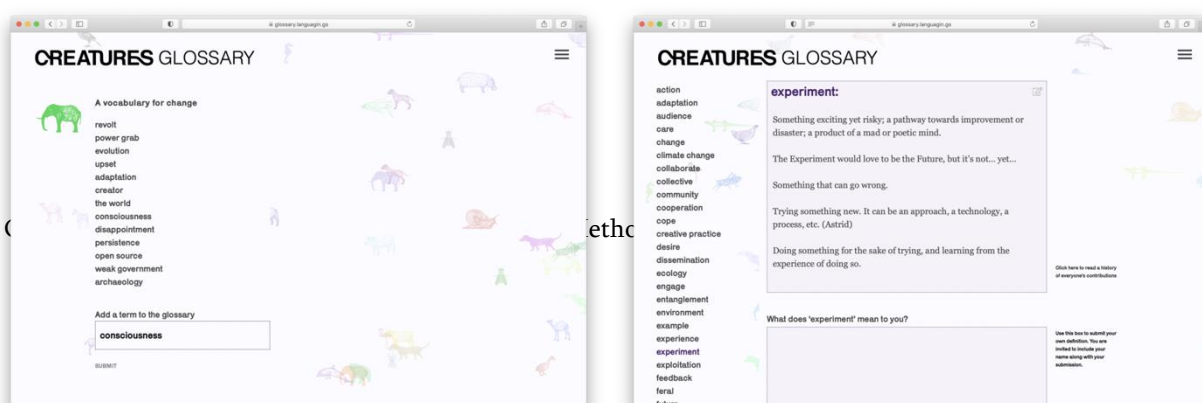
The process followed an open call leading to a contract awarded to Egyptian-American artist Amira Hanafi. Hanafi's proposal aimed to create a radically open, fluid and changeable, interactive interface for giving meaning to a lexicon of terms related to creative practice and transformational change.

The CreaTures Glossary ExP is a set of tools for giving meaning to a lexicon of terms related to creative practice and transformational change. The project includes games, a website (<https://glossary.languagin.gs>), workshops, and other interactions that facilitate language as a social practice. The Glossary ExP aims to give meaning to a lexicon that is particular to the field of creative practice and eco-social transformation, but which might also work more broadly to describe transformational change. The Glossary ExP tools – games, a website, workshops, and person-to-person interactions – capture the drama of everyday acts of linguistic co-creation. These tools are built to facilitate and document continuous linguistic interaction: Meaning becomes plural and fluid, and the lexicon is constantly changing. The tools are also metaphors, which enact some of the processes of change that the lexicon is meant to describe. More information about the project is available on the CreaTures website: <https://creatures-eu.org/productions/glossary/>

5.4.1 The CreaTures Glossary ExP website

The website includes open-source, real-time text editors and games that request input from users who can contribute words or definitions, edit existing ones, or remove definitions entirely. Every contribution is meticulously documented via a real-time database, and users can witness each other making meaning simultaneously. Equally important, histories of these interactions remain freely accessible to any user on the site. The database feeds into the interconnected parts of the site, creating a hidden web of linguistic interaction that resembles real-life language acts. The games included in the website are:

Build vocabulary: A game played in workshops and on the website, adapted from the Rapid Word Collection method developed by linguist Ron Moe. Moe's method is intended to assist language



communities in capturing the words and meanings of their languages. It uses a series of semantic domains and related questions. This project utilizes the semantic domain of change and associated prompts, such as, “*What is a word used to describe a big change?*” The game also generates questions that align with the research aims of the CreaTures project, about the practices, tools, feelings, and impacts associated with transformational change. The terms generated by the online game feed into the *Playground* feature of the site – a free space where users can organize words and create word communities, which later appear elsewhere on the site as ‘related terms.’ Users can click on words in the communities to navigate through the glossary. The user-generated vocabularies can also be read as short narratives.

Interview with a word: This game asks players to become words, to embody and speak as them. When played in person-to-person interaction, an interviewer asks the word questions, becoming a collaborator in making meaning. In digital play, the computer asks interview questions selected from an array of questions that were developed during interpersonal play.

Print the glossary: A function to allow users to produce a text version of the glossary, containing definitions as they exist on the site at a particular moment. The glossary is open, fluid and changeable, both in its definitions and in the set of terms that it defines.

Real-time collaborative text-editing: The website dynamically produces a real-time collaborative text editor for each term that is added to the platform. Users can see the existing definition for a term;

Figure 8 - Enabling collective meaning-making with real-time collaborative editing of term definitions

they can also choose an ‘edit’ button that allows them to add to, change, or erase part or all of the existing definition. For users who are hesitant to disturb existing text, a box asking “*What does this*

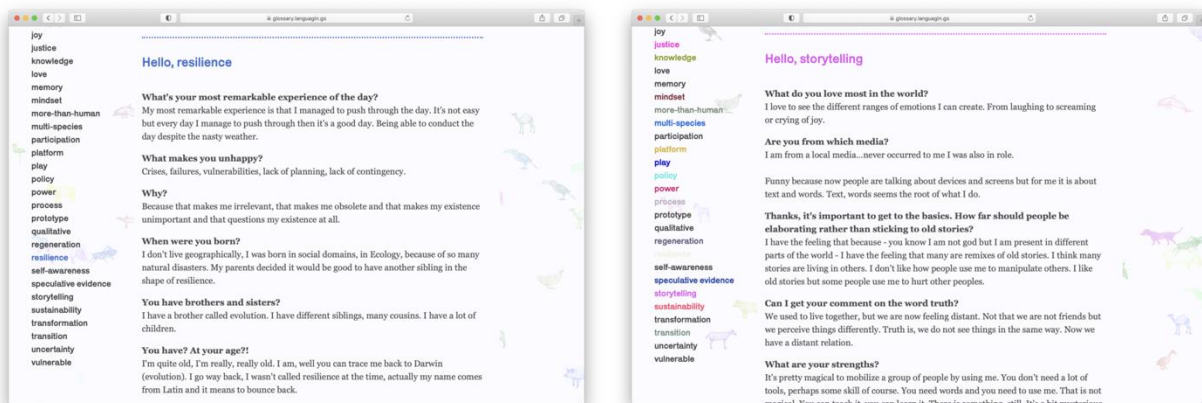


Figure 9 - Examples of Interviews with Words as registered on the CreaTures Glossary website

term mean to you?” offers a way to make a contribution.

5.4.2 Public Engagements with The CreaTures Glossary Exp

The games that exist on the site are also played in a hands-on public program. The project has included a series of co-creative workshops (all held online and facilitated via Zoom). The first public interaction with the Glossary took place in the Feral Design Track at the Uroboros 2021 Festival in May 2021. Participants played language-generating and meaning-making games in an open, collaborative online space. It also provided a chance to receive feedback on the interface, which continues to evolve. The complete list of public engagements of the CreaTures Glossary Exp includes the following facilitated sessions:

05/05/2021 - Presentation of the project in development at Uroboros Opening & Lightning Talks Program, Uroboros Festival

10/05/2021 - Workshop in the context of Uroboros Festival, a public festival of design research and practice

28/09/2021 - Workshop in the context of CreaTures Plenary, including researchers from the CreaTures team

18/11/2021 - Workshop with a small group of experts in climate change and sustainability organized by RMIT Europe

03/03/2022 - Presentation of the project in the context of the College Art Association (CAA) Annual Conference, as part of the panel 'Designing with communities for social justice'

19/04/2022 - Workshop with the public organized by the artist

22/04/2022 - Workshop with the public organized by the artist

23/04/2022 - Workshop with high school students organized with Deena Larsen, Lyle Skains, and Samya Brata Roy in the lead-up to the Electronic Literature Organization Annual Conference (ELO 2022)

30/05/2022 - Presentation of the project in the context of the Electronic Literature Organization Annual Conference (ELO 2022)

29/08/2022 - Workshop in the framework of PeatFest 2022 (forthcoming)

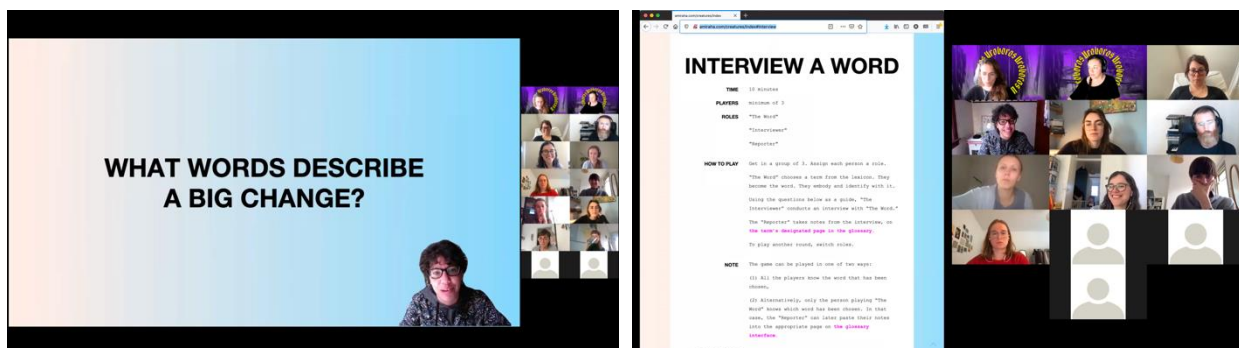


Figure 10 - Exercises at the workshop Building a Vocabulary for Change at Uroboros Festival 2021: Rapid collection of terms and Interview a word.

7. CONCLUSIONS

The construction and exchange of language is also a form of sense-making, or the process by which people give meaning to their own experiences. As Beth Bechky argues in her exploration of the boundary objects of occupational communities: 'Given that we each construct our understanding of the world on the basis of our experience and interaction in it, the constructions we create will be different, and sometimes unclear to others. It will take some work to reconcile these differences'

(2003, p. 328). The activities described in this deliverable illustrate the value – and also the necessity – of paying attention to the many different constructions that were involved in the process of compiling, using and disseminating the CreaTures Glossary. The Glossary document has evolved as a constellation of explorations about the language of and about creative practices for transformational futures, extended through continued creative engagements with the project’s diverse stakeholders.

By paying close attention to the heterogeneous meanings and perceptions of language which constitute each term, the relationships between them, and the ways those relations evolve over time, it is our hope that the CreaTures Glossary can become a valuable living resource for the multiple communities of practice who come to it from across creative, academic and policy-making backgrounds. As such, our intention is for the Glossary to exist as an ongoing public resource, which not only functions as a reference for outlining the definitions of commonly-used terms in the specialised domain of transformative creative practice, but also explores their reflexive potentials to aid in imagining, understanding, and generating the impact of transformational creative practices.

8. APPENDICES

The collection of major terms was gradually refined by adding, removing and defining words as the project and research activities progressed throughout the project’s lifetime (Table 6).

Table 6: The gradual refinement of the CreaTures Glossary, documenting the addition, removal and definition of terms

	20_06	21_09	22_03	22_06
Total terms	59	72	75	60
Newly added	-	14	3	1
Edited/ better defined	-	18	30	
Deleted	-	1	0	16
Pending definition	41	44	10	0

8.1 Appendix A: A Definition of project terms

List of terms and definitions collected throughout all the activities described in this document for the <i>CreaTures Glossary of terms & methodological processes</i>		
Term	Notes on the context in which the term was elaborated	Definition
Adaptation	Explored by	"Aligning with the circumstances." "Adjustment to habitat." "Using

	Derive Drift participants	something for another purpose; being flexible." "The changes made to better suit an environment / situation / context."
		"The way societies or communities change to adjust to environmental change."
		"A process of adapting to the changing environment. It is usually a directed process. Directed towards living well in/with the changing environment."
		"Let's consume less. Adaptation as a tool for degrowth."
		"Creative joy of playing, messing around, inventing, being resourceful." "Adaptation as movement in multiple directions and forms."
		"Currently missing recognition of the layerings of *historic* adaptation processes, that are constant, really." "How much of adaptation is voluntary?"
	Defined at Glossary Games at A-Bloc	Being flexible
	Embracing uncertainty, bravery!	
	Being human. Evolution	
Art	Defined at Glossary Games at A-Bloc	Hopeful alternatives
		Is the only way of gods to tell us how beautiful life is
		Inspiring! Hope! Love! Shows the way!
		Expression of emotions
		Everything except Aalto University
		Soul
Audience	Explored in D5.3 Audience Feedback Tool	Audience as a term was perceived to be rather generic and broad; different entities form the audience depending on the context in which creative practice manifests. Several of the creative practitioners indicated that they actively avoid the use of the term, as it denotes passivity and spectatorship, instead of active involvement; thus they prefer alternative terms such as "participants" and "communities" instead. In the case of Hellon and Sniffer, "stakeholders" would be a more appropriate term for their practice involving working together with policy makers and public organisations as equal collaborators. For ZEMOS98, the term "communities" better represent the peer-to-peer, multidirectional connections and mutual exchange that they aim to develop with the people and organisations they collaborate with.
Capitalism	Defined at	Life is terrible without lots of modern conveniences, so keep buying

	Glossary Games at A-Bloc	unless you want to be a sad loser.
Care	Explored by Derive Drift participants	"It's not economy - but it's crucial for economy."
	Defined in D2.3 Review report of transformational strategies v1	An embodied ethics—of working together to make situated ethical judgements about the best course of action
	Defined at Glossary Games at A-Bloc	It's not the economy – but it's crucial for economy.
Repair Keep your eyes open when you walk outside to all those organisms around you.		
Change	Defined at Glossary Games at A-Bloc	Constant movement
		Must reduce consumption of low-quality goods. No to fast fashion and short lifespan products!
Climate Care	Literature	“To care for something” goes beyond problem-solving. (...) to care is to notice, to pay attention to, to get involved in, and to be engaged with. Care can also be about having concerns—to be cautious, worried, and emotionally entangled with. Climate care is therefore not an issue we need to “address” but rather something we need to be engaged in (Wiberg <i>et al.</i> , 2022)
		Climate care is a journey to remake cultures, find justices, and regenerate habitats (...) climate care is not separate from care of ourselves—not because we are more important than other living creatures, but because respect for all life must emanate from the creature destroying the habitats on which all life depends (Light, 2022)
		Climate care actions are not related to just, or possibly decoupled from, awareness but also other dimensions such as influence, empowerment, universality, and resilience, as stated earlier. (Blevis and Blevis, 2022)
Climate Imaginary	Literature	A shared socio-semiotic system of cultural values and meanings associated with climate change and appropriate economic responses (Levy & Spicer, 2013, p. 662)
Co-Design	Literature	Co-design is a specific instance of co-creation. Co-design refers, for some people, to the collective creativity of collaborating designers... the creativity of designers and people not trained in design working together in the design development process. (Sanders <i>et al.</i> , 2018).

Collaboration	Explored by Derive Drift participants	"Working together"
		"Taking <i>care</i> together"
Collective	Literature	The collective method is defined as an integrated, reflexive process of research design and implementation in which a diverse group of scholars studying a common phenomenon-yet working on independent projects-engage in repeated theoretical and methodological discussions to improve (1) research transparency and accountability and (2) the rigor and efficacy of each member's unique project (Pardee <i>et al.</i> , 2017)
Community	Explored by Dérive Drift participants	"People who belong together or are dependent / connected to / of each other."
		"A group connected by time / geography / identity / ideals / other characteristics."
		"Permanent, temporary, drifting in and out, virtual or for real."
Communication	EC Definition Note the EC definition of this (for Deliverable D5.1 for example) is distinct from other definitions.	Article 38 of the model grant agreement : promote the action and its results, by providing targeted information to multiple audiences (including the media and the public), in a strategic and effective manner and possibly engaging in a two-way exchange
	Literature	The discipline of communication focuses on how people use messages to generate meanings within and across various contexts, cultures, channels, and media. The discipline promotes the effective and ethical practice of human communication" (National Communication Association, 1995). The process by which one person transmits information (new knowledge) to another person (or persons) (...) a sender, a receiver, a channel, the message itself, and some effect or impact resulting from the message exchange (including feedback) (Shannon and Weaver, 1949)
Coping	Suggested by Dérive Drift participant	"Abilities, struggling... but with some degree of success."
Creative practice	Defined in bid.	Creative Practice here is understood to involve the arts in their fullest sense, including related practices, such as design. We use this broad construction to ensure that an emphasis on practice, not discipline and form comes through this proposal. Specifically, the term is used here to include all professional and non-professional work which uses personal and/or collective craft skills and ingenuity to make something new, renew or reinterpret some aspect of the world: from writing, art and theatre to

		designing to participatory community development to storytelling. Creative practice can bring an experiential quality to projects, which, at best, enables collaborators to learn together and provides them with the opportunity to see differently. Such interventions can lead to new ways of feeling and being as well as knowing. [...] Through an initial analysis of existing practices, Light et al distinguish transformational creative practice from other types of arts intervention (namely, illustrative, practical and responsive) to draw attention to practices that change participants' orientation to the world, their sense of agency and sense of potential. [...] Light et al give an example from pilot observations with participants from the Creative Carbon Scotland's Embedded Artist project: "Starting to use a bike is good for the environment. But collaborative projection and reflection transforms this into considering the city layout and how to get others to leave their cars." This is an approach that acknowledges the need for social sustainability as part of a move to ecological sustainability, which is now also seen as core by environmental science.
	Defined at Glossary Games at A-Bloc	They have transformative potential
		Necessary!
		Hacking everyday life
		Make things your own and support small companies and makers
		A way to let your mind guide you
Curating	Literature	<p>"Recent conceptions of curating shift emphasis from caring for objects and collections to producing and managing social networks, collective energies and professional relationships"</p> <p>"Link between curating and care, and the etymological roots of 'curating' in the Latin word curare for caring" (Reckitt, 2016)</p>
Dissemination	EC definition of dissemination	Sharing research results with potential users - peers in the research field, industry, other commercial players and policymakers). By sharing your research results with the rest of the scientific community, you are contributing to the progress of science in general. Source: https://bit.ly/2VpPt5k
Design	Defined at Glossary Games at A-Bloc	Plays a crucial role in the challenges and solutions to social challenges with a human-centered approach.
		God so loved the world that he gave his only begotten son, that whoever should believe in him shouldn't perish but have everlasting life.
		Activism, cultural change
Ecology	Literature	"scientific study of the distribution and abundance of organisms and the interactions that determine distribution and abundance" (Begon <i>et</i>

		<i>al.</i> , 2006)
		“Traditional biological ecology is defined as the scientific study of the interactions that determine the distribution and abundance of organisms” (Jelinski <i>et al.</i> , 1992)
Engagement	Explored in D5.3 Audience Feedback Tool	Engagement was largely understood as a mutual exchange, a collaborative process of building relationships and shared understanding. Most participants emphasised the need for inclusivity and its politics, raising important questions about who is invited, agency, whose voices are heard / not heard. Participants expressed that engagement is often implicit but not specifically accounted for by the creative practitioners and can even be uninviting / uninvited. The complexity and diversity of its form and scale further presents challenges to defining engagement. More specifically, there are blurred boundaries between engagement as a way of working and as a way of understanding the impact of their work, which could benefit from further research and experimentation within the CreaTures project; further, feedback was generally considered as a directed and smaller form of engagement, a request from the creative practitioner to their audiences, but engagement is broader and calls for multiple forms of participation, agency, and commitments.
Environment	Defined at Glossary Games at A-Bloc	Would it be fun to live on a wasteland?
		Very important!
Experience	Literature	Experience, in its fundamental sense, is that which, by putting us in play ourselves, modifies us profoundly in a way that after having crossed, endured, traversed it, we will never be the same again: undergo an illness, mourning, joy, loving, traveling, writing a book, painting are “experiences” in the first philosophical sense, surely simple, but nevertheless trivial. (Romano, 1998)
Experiment	Literature	An artificially created situation that allows the researcher to manipulate variables (Schaefer, 2017)
		An experiment is any study in which the conditions are under the direct control of the researcher. This usually involves giving a group of people an intervention that wouldn't have occurred naturally. Experiments are often used to test the effects of a treatment in people, and usually involve comparison with a group who don't get the treatment. (NHS Health News Glossary- Harvey, L., 2012-22)
Exploitation	EC definition of exploitation:	Exploitation is the use of results for commercial purposes or in public policymaking. Source: https://bit.ly/2VpPt5k
Feedback	Explored in D5.3 Audience Feedback Tool	Many participants used the term “insight” to define feedback. Essentially, feedback was perceived to be the information collected from the audience and stakeholders with the purpose of evaluating and improving their work, and building further relationships. The issue of time was raised:

		while some feedback is direct and immediate, some take longer to manifest. Despite this temporal difference, feedback was considered to be clearly defined sets of mechanisms allowing creative practitioners to think through some of their assumptions and impact of their work.
Feral	Literature	Emerging within human-sponsored projects but are not in human control (Tsing, Deger, Keleman, & Zhou, 2020)
	Defined at Glossary Games at A-Bloc	Experimental, willfully wild
Feral Science	Literature	Feral science contains its own rules; it is 'beyond domestication' (Michael, 2017)
	Literature	Feral science may be seen then as a strategy for the use and collection of information by alternative means and may be considered as a productive approach for thinking about design and design intervention. (Haines, 2017)
Future	Explored by Derive Drift participants	"That which hasn't happened yet"
	Literature	'probable', 'plausible', 'pluralistic' or 'performative / critical' (Muiderman, Gupta, Vervoort, & Biermann, 2020)
	Defined at Glossary Games at A-Bloc	What we should work towards together
Plural futureS to dream and make together.		
Futures Literacy	Literature	'Literacy' originally referred simply to the ability to read and write, but today, the term covers a much broader range of both competencies and knowledge in specific contexts such as 'financial literacy' and 'digital literacy'. For futures literacy the specific context is the human imagination, as the future can only be imagined. The ability referred to by the term 'futures literacy' is therefore the capacity to know how to imagine the future, and why it is necessary. Futures literacy enables us to become aware of the sources of our hopes and fears, and improves our ability to harness the power of images of the future, to enable us to more fully appreciate the diversity of both the world around us and the choices we make (Larsen <i>et al.</i> , 2020)
		Futures Literacy, a universally accessible skill that builds on the innate human capacity to imagine the future, offers a clear, field tested solution to poverty-of-the-imagination. FL is a capability. It is the skill that allows people to better understand the role of the future in what they see and do. Being futures literate empowers the imagination, enhances our ability to prepare, recover and invent as changes occur. (2022, UNESCO)
Futuring	Literature	The act, art, or science of identifying and evaluating possible future

		<p>events.</p> <p>Futuring is a very broad term and can be used in future-oriented discourse in both professional and personal affairs. It is less popular currently in academia than future studies, which tends to be misleading in nonacademic settings. Other terms used include futures research, futuristics, futurics, futurology, prognostics, etc (Cornish, 2004)</p>
Intersectionality	Literature	The interconnected nature of social categorizations as they apply to a given individual or group, which overlaps creating unique systems of disadvantage and discrimination (Crenshaw, 1989)
Imagination	Literature	Possibility thinking (Greene, 1995)
	Literature	A way of seeing, sensing, thinking, and dreaming that creates the conditions for material interventions in and political sensibilities of the world. (Yusoff & Gabrys, 2011, p. 516)
Indicators	Defined in D4.1 Prioritised indicators and baseline v1	An 'indicator' is a unit of analysis, operationalized for evaluation. So for instance, if individual behaviour is the unit of analysis, the indicator may be 'individuals' willingness to participate in local decision making'
Installation	Literature	large-scale, mixed-media constructions, often designed for a specific place or for a temporary period of time (2022, TATE)
Inventive Methods	Literature	[...] Inventive methods are ways to introduce answerability into a problem. Further, if methods are to be inventive, they should not leave that problem untouched. (Lury & Wakeford, 2013, p. 3)
Justice		
Method	Literature	"Method," refers to specialized "techniques" in the sciences and problem-solving "approaches" in the humanities. (Tsing, Deger, Keleman, & Zhou, 2020)
More-than-human	Explored by Dérive Drift participants	"Forms of life, often less important/precious than human"
		"Not human"
		"Acknowledging that human is more-than-human itself, and intertwined history/world-making between various forms of life, including human."
	Defined at Glossary Games at A-Bloc	Existence precedes essence.
		Animal rights?
		Now we are less than what we could be potential
		Humbleness

		Empathy, love and care
		Capitalism
Multi-species	Literature	Multispecies investigations of social and cultural phenomena are attentive to the agency of other-than-human species, whether they are plants, animals, fungi, bacteria, or even viruses, which confound the species concept (Locke & Muenster, 2015)
		Multispecies thinking applies beyond the realms of social science and the humanities. It provides a powerful frame for developing an improved sustainability concept built on the interdependence of life, not the supremacy of a single species (Rupprecht et al., 2020)
Ontology	Literature	The theory of the nature of being or existence (Harvey L, 2012-2022)
Participation	Literature	A person's involvement in activities that provide interaction with others in society or the community (Levasseur <i>et al.</i> , 2010)
		Authentic participation in research means sharing in a way research is conceptualized, practiced, and brought to bear on the life-world. It means ownership, that is, responsible agency in the production of knowledge and improvement of practice (McTaggart, 1994)
Participatory action research	Literature	PAR involves collaborative research, education and action oriented towards social change, representing a major epistemological challenge to mainstream research traditions. (Kingdon <i>et al.</i> , 2007)
		Action research is described as proceeding in a spiral of steps, each of which is composed of planning, acting, observing and evaluating the result of the action – (McTaggart, 1994)
Perform	Literature	(Art - performance) Artworks that are created through actions performed by the artist or other participants, which may be live or recorded, spontaneous or scripted (2022, TATE website)
		'performative' refers and relates to in social science is the communicative powers of research and the natural involvement of an 'audience', whether that be a group of peers or a group of students, a physical audience or a cyber audience, even an individual reader of a journal or a book (Roberts 2008).
Policy	Cambridge Dictionary	a set of ideas or a plan of what to do in particular situations that has been agreed to officially by a group of people, a business organization, a government, or a political party:
Power	Literature	the ability to control others, events, or resources; to make happen what one wants to happen in spite of obstacles, resistance, or opposition – Max Weber
		Power rests in a social class's position in the relations of production(...)

		Power does not lie in the relationship between individuals, but in domination and subordination of social classes based on the relations of production – Karl Marx
		Power is not a matter of social coercion and domination(...) potential to coordinate human activity and resources to accomplish goals. Power is not constant or fixed but capable of increasing or decreasing. – Talcott Parson
Prefiguration	Literature	The embodiment, within the ongoing political practice of a movement, of those forms of social relation, decision-making, culture, and human experience that are the ultimate goal (Boggs, 1977)
		Prefiguration is something people <i>do</i> (Maackelbergh, 2011)
		Pre-figuring potential futures through direct action Develop and perform direct intervention, experimentation and re-designing in daily situations and social systems (Galafassi et al.,2018)
Public	Literature	An unrecognized aggregation of persons who are bound together by common opinion and desires. But are too numerous for ach to maintain personal relations with each other – Morris Ginsberg
		A group of people who are confronted by an issue, divided in their ideas as to how to meet the issue, and engage in discussion over the issue – Herbert Blumer
		Inclusive interest groups, usually with divergent opinions concerning social issues – W.F: Ogburn
Qualitative	Literature	Qualitative refers to research that primarily relies on approaches that attempt to gather detailed evidence of social processes, activities and events rather than attempting to measure or enumerate social phenomena (Harvey L, 2012-2022)
Reflective	Literature	Reflective practice is the capacity to reflect on action so as to engage in a process of continuous learning. In its simplest form it involves thinking about, or reflecting on, what you do. It is closely linked to the concept of learning from experience ... is a process by which you: pause and think about your practice; consciously analyse your decision making; and draw on theory to relate it to what you did (or didn't do) in practice (2022 Learning for Sustainability)
		Reflective Practice is where a person reflects on what they have learned and how they can apply it or learn from it (2022 Eval Academy)
Reflexive	Literature	Reflexivity is finding strategies to question our own attitudes, thought processes, values, assumptions, prejudices and habitual actions, to strive to understand our complex roles in relation to others. To be reflexive is to recognise we are active in shaping our surroundings, and begin critically

		to take circumstances and relationships into consideration rather than merely reacting to them, and help review and revise ethical ways of being and relating in our world. (2022 Learning for Sustainability)
		Reflexive Practice is where a person reflects on what they have learned and considers how the implications of their learnings can impact the broader context they work in. The scope to which the person applies their learnings is broader in reflexive practice (2022 Eval Academy)
		Reflexivity is a state of thinking and being in which we strive to understand ‘the ways in which one’s own presence and perspective influence the knowledge and actions which are created (Bolton, 2009)
Resilience	Defined at Glossary Games at A-Bloc	Antifragility
		Stop pursuing maximum efficiency
		Healthy lifestyle makes body resilient
Sociotechnical imaginary	Literature	Collectively imagined forms of social life and social order reflected in the design and fulfilment of nation-specific scientific and/or technological projects. Imaginaries, in this sense, at once describe attainable futures and prescribe futures that states believe ought to be attained. (Jasanoff & Kim, 2009, p. 120)
Speculative evidence	Defined by Superflux.	In our work we think a lot about evidence, and “make, create, and construct” evidence that is speculative in nature. These speculative forms of evidence are created not only from deductions taken from data, but from weak signals, ethnographic observations, and the stories of people’s experience. Based on this rich tapestry we create “speculative evidence” from multiple futures, that people can see, touch, listen, and even breathe. Source: https://superflux.in/index.php/speculative-evidence-inform-decision-making/#
Stakeholder	Literature	Stakeholder theory is widely accepted but elementary aspects remain indeterminate as the term 'stakeholder' is an essentially contested concept (...) review of 593 different stakeholder theory definitions. As an essentially contested concept, the solution does not lie in a universal stakeholder definition, but in debating the boundaries of stakeholder identification. (Miles, 2017)
Sustainability	Defined in bid.	Sustainability has many emphases. Here we base our work on practical goals and limits, while acknowledging that these aspects of ecological sustainability will only be attained by addressing social sustainability. Here, ecological sustainability refers to that of the Earth’s planetary health. The UN Sustainable Development Goals (SDGs) point to 16 aspects in need of balance, including decent work, social equity and economic development, and a 17th that is ‘Partnership for the Goals’. In Doughnut

		Economics, Raworth argues that ‘Humanity’s 21st century challenge is to meet the needs of all within the means of the planet. In other words, to ensure that no one falls short on life’s essentials (from food and housing to healthcare and political voice), while ensuring that collectively we do not overshoot our pressure on Earth’s life-supporting systems, on which we fundamentally depend – such as a stable climate, fertile soils, and a protective ozone layer.’. Climate change and related socio-ecological uncertainties require flexibility and resilience. The world’s use of 3 - 5 planets’ worth of resources annually dictates that a major part of sustainable living is learning to operate collectively within affordable limits and developing corrective socio-economic processes, as well as better energy policies.
	Literature	‘sustainability is not a scientific principle or set of expert-derived practices that can be bestowed upon publics, but something that must be forged by and through those publics as a space of possibility; it is itself emergent from such processes’ (Maggs & Robinson, 2020, p. 25)
	Defined at Glossary Games at A-Bloc	Meeting the needs of the present without compromising the ability of future generations to meet their needs.
		Carefulness
Threshold	Defined in D4.1 Prioritised indicators and baseline v1	A ‘threshold’ is a state of an indicator to which the researchers or evaluators assign some significance.
Transformation	Defined in bid.	Transformation is generally regarded as being more than superficial or incremental. It refers to major shifts: ‘profound and enduring systemic changes that typically involve social, cultural, technological, political, economic and environmental processes’. Whilst ‘adaptation’ has a sense of adapting as a passive subject to external change, ‘transformation’ implies taking a role in choosing and developing the planet’s fate, as ‘an active player in the future of the community and world’. Transformation poses particular challenges for policy. ‘On the one hand transformation implies a need for policies that may challenge existing ways of doing things. On the other hand, the abstract nature of concepts like transformation and resilience make it difficult for policy makers to put such concepts into practice.’ Transformation means not only changing what we do, but who we are and how we do things, alone and together. A vision of ontological change – crudely, where we change what we are to change what we do – appears in different ways across different traditions, e.g. in terms of aesthetic response, affect and the political economy of enchantment. The UoS-based STEPS centre has focused practically and theoretically on transformations, asking: ‘What does it take to make sustainability transformations emancipatory, diverse and caring, rather than repressive or controlling?’.

	Defined at Glossary Games at A-Bloc	Transformation plays a substantial role in design and effective parameters! To top the big multinational procuding shit! Stop consuming shit food! Not all who wander are lost.
Transformational change (or evaluation)	Literature	Evaluations that help us learn, understand and support the transformational and systemic changes needed in our countries and the world (...) International Development Evaluation Association (IDEAS, 2019)
Transition	Explored by Derive Drift participants	"From A->B". "Does transition really have a direction?"
Uncertainty	Featured term in Derive Drift	"Not knowing enough to make meaning out of something." "Conditions remain unknown to be sure of what will happen." "A variable to consider and account for in decision-making. Something to minimise and/or learn to live/be with. The absence of certainty." "The word uncertainty implies the existence of 'certainty', but I doubt (see the uncertainty?) that certainty actually exists!" "Enjoyment of an adventure. Playing around with options." "It can be both frustrating and exciting not to know"

8.2 Appendix B: Transformation across languages

Glossary definitions: Transformation in other languages	
Spanish	Lara Houston: We've been asking everybody who speaks a language other than English about this word transformation which is in our project name... how does it work in Spanish, or does it work in Spanish?
Interview with Andrea Botero 22 October 2020 By Lara Houston	Andrea Botero: In Spanish it works very well because it's a Latin language. Transformación...it's the Latin roots... that you can feel in Spanish, so it works in Spanish. Lara Houston: What's the... cultural meaning for you? Andrea Botero: Well...you always have to go to the...form. And then, of course, then I'm very biased by professional deformation of what this form means... giving form, in-forming. Those work very similarly in Spanish and in English because...English has got them from French and French also got them from Latin.

	<p>You have... professional deformations about form-giving when you are an industrial designer, trained by people that thought the Bauhaus and the Ulm school were the epitome.</p> <p>To transform something... [that] something has to have a form already so we can transform it into something else. I'm talking now from my professional deformation here, which I'm very aware of and try to avoid. If you've got the form, then you have all these: form, formation, information informing, form-giving, form shaping, reshaping...</p>
<p>Spanish</p> <p>Interview with Felipe González Gil</p> <p>14 October 2020</p> <p>By Lara Houston</p>	<p>Lara Houston: So we're in Creatures “creative practices for transformative or transformational futures”. So how is this word in English versus in Spanish—do you use it in Spanish, or how does it translate? We'd love to hear your thoughts.</p> <p>Felipe Gonzalez: It's a very interesting word even in Spanish because...we probably use it more for applications—but our slogan is an organization...is “mediation for social change,” so you could basically replace change and put there transformation and it will it will mean the same thing.</p> <p>In left wing and progressive environments—there are many people talking about social transformation: <i>transformación social</i>, which is...how we can make society more progressive, whatever that means. And in Spanish, depending on where you are, “progressive” is not that cool because it's more connected to the Socialist Party, which is centre left wing and sometimes they are (when it comes to the economy) they are nearly neoliberal. Sometimes you could find different words to distinguish what is progressive from what is radical, for example....but transformation is probably a word in between. So if you say “social transformation” no one will know if you are from the Socialist Party or from a very committed activist group. That's interesting, because it's a word which is sometimes acting as a glue of these two political environments.</p> <p>I think [the phrase] <i>transformación social</i> is used, especially in academic environments— probably less [in activist circles] because that doesn't sound that strong as a statement. You don't say “we need social transformation” it's more “we need social justice,” <i>justicia social</i>. for example... [but] transformation, is being used.</p>
<p>Finnish</p> <p>Interview with Tarmo Toikkanen</p> <p>19 November 2020</p> <p>By Lara Houston</p>	<p>Lara Houston: Tarmo before we go, we wanted to ask everyone who speaks a language other than English to tell us a little bit about how the term transformation works in that other language. Because we're aware that this it's a synonym for change and we're kind of specifically talking in English about this term and we wanted to do some really active inquiries into well, you know, what - does that make sense in Finnish? Are there better or different terms, is that a loaded term? Does it come with different baggage?</p> <p>Tarmo Toikkanen: Well, most people, most probably in Finnish would talk about <i>transformaatio</i> to so just it just you know an English term with a</p>

	<p>Finnish pronunciation, as if you translated directly. We do have the word for change, <i>muutos</i>.</p> <p>But then, now that you mention it, I'm thinking about how alteration, change, transformation... all sort of turn into this one word in Finnish, <i>muutos</i>... it's maybe a bit problematic. If we were to translate [transformation] to proper Finnish, then it might lose something.</p> <p>You could use the word <i>mantua</i> which is sort of like something that's transforming—not something that is being transformed from outside, but [that] is transforming. A changing landscape of politics...that's the...word for that.</p> <p>If we're not talking to very senior people we would probably use the word <i>transformaatio</i> and that's fine—most people will sort of get the correct connotation.</p> <p>So...something to pay attention to when.. giving the tagline of the project, if we if we highlight what kind of transformation—what kind of change, we are talking about? Who is changing, or being changed by whom...? Who's the subject and [what's] the object; what's changing?</p> <p>Having those clear will help [to] be precise in in when communicating in Finnish.</p>
<p>Finnish</p> <p>Interview with Tuuli Mattelmäki</p> <p>9 November 2020</p> <p>By Lara Houston</p>	<p>Lara Houston: We're asking people to say how does transformation as a term... how does it work in their language-does it have the same meanings...as a synonym for change?</p> <p>Tuuli Mattelmäki: In Finnish you would say <i>transformaatio</i> which is the same as transformation. It includes this “form-ation”... changing form.</p> <p>Sometimes these words like transformation, or change—they are huge, they're like you should see something happening while oftentimes we're talking about these small tiny shifts. And I think we should have more, different kinds of words for smaller and bigger [changes].</p> <p>[<i>Transformaatio</i>] is not a local Finnish word. <i>Muutos</i> is a word that means change, yet change is different because transformation means that there's something that moves into a new format... but <i>muutos</i> means just that it shifts or develops.</p> <p>I need to look into the dictionary, whether we have a Finnish word for <i>transformaatio</i>.</p> <p>[9 December, 2020 via email:]</p> <p>I actually checked the dictionary for alternative wordings for transformation. <i>Muutos</i> is one, as already mentioned, <i>muodonmuutos</i> is another term and it refers to changing form (form=muoto, muutos=change). However, it can</p>

	easily lead to thinking natural sciences – water transforms to ice, rather than changing habits, lifestyles.
Dutch	Lara Houston: This term transformation that's so central in our title and in our bid. What does it mean in your language—does it work, does it translate? If it doesn't, what [are] other words? What kind of links and connections does it have?
Interview with Joost Vervoort 15 October, 2020 By Lara Houston	<p>Joost Vervoort: I think transformation <i>transformatie</i> would be the word...it's the same word. It doesn't get used that much to describe what we're talking about.</p> <p>It sort of makes sense in Dutch, <i>transformatie</i>; the associations I have with it in English...all kinds of theoretical baggage comes up [that's] not there in Dutch. I think <i>transformatie</i> sounds more like the classic word for something like an animal transforming or the Transformer robot or something.</p> <p><i>Transitie</i>, transition is really the word in Dutch, and it's very much associated with... I would say, with a specific political agenda and a sort of style... [with] really energetic activist researchers who...roll up their sleeves and [say] "let's make the transition happen". There's a very specific Dutch archetype of [a] person who sees no limitations and who's pushing everyone towards energy transition. I think that's sort of the vibe.</p> <p>I think it's a very Dutch thing which sort of combines active energy and urgency with...that bouldering compromise model that we have as a form of governance where everybody gets to be heard.</p> <p>Other terms are maybe <i>kantelpunt</i>, tipping points; <i>kanteltijd</i>, tipping time...<i>urgenda</i> which is an urgency agenda.</p> <p>There's a big influence of the transitions people and the DRIFT people on the language in the Netherlands, which is great... I think that their discourse and along with that the Dutch discourse has probably shifted from more technocratic thinking about transition to a more cultural, social, sort of like "movement-style" thinking about transition, which fits a little bit more with the CreaTures ideas about transformation. So they have opened up and it's become a more human activity...and more explicitly political as well.</p> <p>[<i>Transitie</i> is] very much about energy and sustainability transition but energy, more than anything else I would say. People do...use it for food as well.</p> <p>I think if you talk to people about <i>transformatie</i>...I'm not sure if it would land as clearly as transition, just because people haven't been prepared...it's not really in the discourse.</p>
Ukrainian	Kat Braybrooke: How is the term transformation differently or similarly articulated in English versus Ukrainian?
Interview with	

<p>Iryna Zamuruieva</p> <p>7 October, 2020</p> <p>By Lara Houston and Kat Braybrooke</p>	<p>Iryna Zamuruieva: I think they started using [the term] recently, I come across...“трансформації the word which you can hear probably “трансформації” transformation, it's similar etymologically... But...it sounds quite clunky when you use it in Ukrainian. There's a lot of talk about changes and change is a huge thing as it is; transformation being a permanent state in a place that has a massive, “shifting everything” revolution every 10 years... The notion of stability is something unknown. So it's [change as] transformational becoming or change as a constant; that is a place where I'm coming from as well. So that shapes my sense of it way before I engage with all the assemblage theory, that's is so much about becoming and seeing processes rather than stable entities.</p> <p>There is also a word I haven't thought of during the interview, which is перетворення/ peretvorennya, which literally means transformations, but and doesn't have latin origin as transformations and for some reason is less used in the political contexts compared to a more 'sophisticatedly-sounding' transformatsiyi.</p>
<p>Slovenian</p>	<p>Kat Braybrooke: So my, my last question is more general and is to ask you how the term transformation itself is articulated in Slovenian versus English like I'm wondering, whether there's a difference in the ways that these different cultures percieve of transformation and and describe it in society.</p>
<p>Interview with Simon Gmajner</p> <p>17 November 2020</p> <p>By Kat Braybrooke</p>	<p>Simon Gmajner: from what I can say - transformative is in Slovenia, it's not, let's say, a native Slovenian word, word, you know. It is it is something that can be translated and it can be used, and it can it also be used as a foreign word, a word which means that it is transforming something from something to something, no?</p> <p>I would say that the closest that in Slovenia, we could come with translating or having the same meaning as transformative is in English, would be change or as a word that is similar to change, meaning that it has the ability to change something, um not – but - when we're talking about transformative potentials, technologies, artworks - I'm not sure that the notions are very present in our society.</p> <p>Maybe more with technologies than anything else. It was quite a challenge for us when we were talking about even the beginning of the project about the transformative potential of art - you know and creative processes. This is something that I believe very, very few people in Slovenia are thinking about, or maybe even acknowledging that there is an impact, that there is this transformative potential through transformative manifestations, so to speak of an artwork or some kind of creative processes.</p> <p>I would say that in English language, the word itself, or it's, it's very much more used, utilized from what I'm - let's say reading or where I'm finding the word itself than, than in Slovenia. It is, it is a question of the environment within which we are living in and it shows, maybe a culture that is ready and</p>

	open to change and other realities that are possible.
Czech	Marketa Dolejsova: If I translate the word transformation into Czech it sounds...too big, it sounds too complex.
Interview with Marketa Dolejsova 5 October, 2020 By Lara Houston	[T]he same actually applies to the “socio-ecological”... these two words together in Czech... sound so weird; it doesn't make much sense. If I would be Googling for socio-ecological transformative project in Czech I don't think I [would] find anything...but there are other words you can use to search. And having these words at hand... would be useful.

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