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Co-design of the pluriversal Commons Model Canvas

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- Are you engaged in a commons-related project past, present, or future -- or do you want to integrate commoning into a project? This workshop is a supportive space for conference participants engaged with the commons to explore how they conceptualize and communicate the commons internally and externally. The workshop will focus on critiquing and
- adapting the Commons Model Canvas, an adaptation of the Business Model Canvas created by the workshop organizers
- to validate their own commoning practices. Participants are invited to complete a Commons Model Canvas for their project,
- share this work with the group for discussion, and to participate in adapting the Commons Model Canvas for future use.
- 19 Based on our own research through design, participants can expect: to expand their knowledge about the commons and
- 20 pluriversal design, to gain insightful peer feedback on their commoning projects, and to forge a potential peer network for
- 21 future collaboration.
- 22 **CCS CONCEPTS** Networks ~ Network architectures ~ Network design principles Social and professional topics
- 23 ~ User characteristics ~ Cultural characteristics
- 24 Additional Keywords and Phrases: relational commons, pluriversal design, more-than-human design,
- 25 communities of flourishing

1 context

- This workshop builds on emerging trends in design research asking how design research can both benefit from and shape commons research [1]. In particular, this workshop begins to answer some of the questions raised at the "Commoning
- design and designing commons" workshop for PDC'20 [2]. The three questions from this previous PD workshop that are
- most directly addressed in the Commons Model Canvas are:
 - How can we design better infrastructures and frameworks that enable, mediate, protect, and foster and proliferate the emerging and increasingly complex commoning practices?

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- What new design vocabulary, principles, policies, guidelines, and practices are needed to contribute to co-designing commons? How to connect this vocabulary with the one of feminism, environmentalism, indigenous movements, and the other transformative movements populating our common world?
- What other, pre-existing commons-based practices can we learn from, Indigenous knowledge, sharing traditions?

In response to these questions and to support the PDC participants' commoning practices, the workshop organizers created the Commons Model Canvas (Fig. 1). The Commons Model Canvas has been adapted from the Business Model Canvas [3], a respected and widely-cited business development tool also used in applied design [4]. The Business Model Canvas visually represents an overall business model, or business logic, on a single page. The success of the Business Model Canvas is rooted in the reframing of business modeling as a collaborative, interactive, and visual process. In our own design practice and research, we asked not only how to adapt the Business Model Canvas to support commoning but also how to support pluriversal commoning [5]. That is, commoning practices that account for diverse cosmologies, ontologies, and epistemologies within and connected to the commoning community. Figure 1 shows the current version of the Commons Model Canvas. The objective of this Commons Model Canvas is to transform commoning frameworks, namely the Institutional Analysis and Development (IAD) framework [6] and the Socio-Ecological Systems (SES) framework [7], from scholarly, analytical frameworks into accessible, generative frameworks. To address pluriversal design, the Commons Model Canvas incorporates Indigenous wellbeing frameworks [8, 9] and social practice architecture [10, 11] in its visualized form and discourse. Figure 2 shows a draft Commons Model Canvas for Soil Trust, a commoning project implemented by one of the recovery in Hong Kong, Soil Trust is building a soil commons around recovering food scraps that brings food consumers

workshop organizers as participatory action research. Responding to the absence of household-level organic waste and producers together for mutually invigorating local soils. At the bi-weekly Farm Care Mornings, households are invited to produce their bokashi bedding, tend to compost, mulch the soil, and raise the vegetables grown out of it. At

their homes, households source-separate, collect, and bokashi-ferment their kitchen scraps, as well as self-document their 26 experience. Here, the Commons Model Canvas research responds to the organizer's need to justify this fledgling, soil-27 28

building commons to insiders and outsiders, find ways to sustain its care practices, secure new funding, and tailor followup interventions with the insights gained. The Commons Model Canvas was developed to evaluate and stimulate the self-

enabling processes involved for equipping people with agency to self-manage place-bound, pluriversal commoning. This illustrative canvas reflects a number of themes in the PDC conference, including: designing between worlds,

31 sentipensar, and relational commons. Developing the Commons Model Canvas at this early stage remains an iterative 32

33 and collaborative process. In this workshop, we wish to invite other design researchers to use this tool within their 34

project or praxis context and co-design a revised version that responds to their experiences.

2 **GOALS**

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Are you engaged in a commons-related project – past, present, or future -- or do you want to integrate commoning into a project? This workshop is a supportive space for conference participants engaged with the commons to explore how you conceptualize and communicate the commons within the community and to external audiences.

The primary workshop goal is to co-design a revised version of the Commons Model Canvas through its applied use with participants. Participants are invited to complete a Commons Model Canvas for their project, share this work with the workshop group for discussion, and participate in adapting the Commons Model Canvas for future use. Based on our own research process, participants can expect to expand their knowledge about the commons and pluriversal design, gain insightful peer feedback on their commoning projects, strengthen their sensibility for decision-making processes, and forge a potential peer network for future collaboration.

3 Pre-workshop activity

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- 2 Participants who would like to present their Commons Model Canvas will be asked to perform schematization work prior
- 3 to the workshop. Participant-presenters (presenters) will be given the Commons Model Canvas along with guidance
- 4 (questions and sample answers) to complete it. Presenters need not budget more than one hour to complete their draft
- 5 Commons Model Canvas; however; as this workshop will support their work, presenters may choose to spend more time
- 6 on this pre-workshop activity. Presenters will submit preliminary versions of these draft Commons Model Canvases to
- 7 the organizers and bring the presentable version to the workshop. In the process of completing their draft Commons
- 8 Model Canvas, presenters are asked to trace their thought process, obstacles, and observations. Participants unable to
- 9 draft their Commons Model Canvas are asked to complete a short questionnaire regarding their commoning work or field
- of application to help organizers integrate their expertise and needs into the workshop. All participants will be issued
- 11 with an optional reading list, which will be particularly useful to participants who are newer to the commons field.

4 FORMAT AND METHODS

Derived from the workshopping or critique format, this workshop is a space for participants to share their work for feedback. This workshop is directed primarily at conference participants wishing to present their commoning projects, whether these are completed, current, planned, or envisioned. Participants who are interested in this work but do not have a commoning project to share are also welcome to attend.

The workshop is comprised of three parts: (1) introductions, (2) participant presentations and discussions, and (3) Commons Model Canvas revision. The objective of introductions is to build trust and empathy across the group, so we will use ice-breakers and a round of one-to-one breakout sessions.

The objective of participant presentations and discussions is to learn through doing how the Commons Model Canvas might change to support participants' practices. Each participant will have 10-15 minutes to present their Commons Model Canvas followed by 15-20 minutes of discussion. The discussion results will be documented in two ways in parallel: on the participants' Commons Model Canvas and on the template Commons Model Canvas. Some comments may be specific to the presenters' case, while other comments may also apply to template Commons Model Canvas. Some presenters may come to the workshop with changes they have identified based on their experience of completing

the Commons Model Canvas.

| Knowledges | Members | Practices | Challenges |
|--|---|--|---|
| What types and sources of know-how do Members draw on? Traditional Indigenous Scientific Thinking Feeling | Who is most involved in the commons? Who is most affected? Member group Households Kinship groups Nonhuman species Nonhuman ecosystems | How do Members sustain our commons across generations? Preparation Production Distribution Storage Care | What conflicts might arise in Practices? Shirking Cheating Stealing Destruction Competition Uncaring |
| Assemblages What tangible and intangible inputs do Members rely on? | | | Customs What shared beliefs do Practices rely on to work? |
| Materials Tools Workshops Community groups | Shared Purpose Why does our commons need to exist? How will our commons benefit future generations? | | Norms Rituals Rules Policies Laws |

Figure 1: Commons Model Canvas.

Knowledges Members **Practices Challenges** SOIL ECOLOGY SOIL ECOLOGY SOIL ECOLOGY SOIL ECOLOGY Chinese farmers calendar Fungi and bacteria Dig-in bokashi application Fertiliser overrun Chronic calcium deficiency Permaculture principles Earthworms Compost bokashi Short-term productivism FARM Insects Multi-layer mulching Soil science FARM Enzymatic drip irrigation FARM Pollinators Asian Natural Farming FARM Storage capacities Climate-farming methods Tenant farmer Nurture seedlings Labor distribution Urban farming hacks Farm staff Cultivate crops Weather/predators mitigation Co-purchasing directors Produce bedding HOUSEHOLDS Environmental literacy HOUSEHOLDS CSA-Drivers Manage bokashi bins Storage capacities Time commitment Fermentation recipe GMO Birds, buffaloes, wild boars Facilitate harvest in lockdown HOUSEHOLDS blacklist HOUSEHOLDS Trust reproduction Material literacy Single households Recover kitchen scraps Media literacy Couple households Create enzyme catalyst Layer-collect bokashi Households with children Domestic workers Document process **Customs Assemblages** Coffeeshop staff Reproduce trust SOIL FCOLOGY SOIL FCOLOGY Biochemical science trial Perpetual soil cover FARM Non-GMO and local inputs Organic resources FARM Farm Care Mornings (FMC) Short farm lease terms Public workshops/demos Reinvest proceeds HOUSEHOLDS Keep good rappor **Shared Purpose** Whatsapp group HOUSEHOLDS Aversion to waste collection Explore citizen-led agriculture innovation for regenerating resources Marginalized homecooking and mitigating climate change in the local food system. Co-curated documentation

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Figure 2: Commons Model Canvas for Soil Trust nutrients-cycling collective in Hong Kong.

The objective of Commons Model Canvas revision is to consider how the feedback across the presenters affects the template Commons Model Canvas. Based on the comments prior and during the event, we may be able to incorporate these changes at the workshop. If the changes exceed what we can do during the workshop, the workshop organizers will continue to make changes and continue to engage participants who wish to remain involved through online collaboration platforms, text messaging group, and personal correspondence.

We have designed the workshop format to be scalable as a half-day workshop. There is a limit of eight presenters and no limit to general participants. In the unlikely event that there are more than eight presenters, we could extend to a full-day format or create two half-day workshops. In the event that we have fewer than eight participants, the workshop may conclude early or participants may agree to spend more time on each project.

This workshop will be a hybrid workshop. One organizer will be physically present at the conference in Newcastle and the other organizer will be remote due to ongoing Covid restrictions. Participants may, therefore, join for in-person or remote participation. The time of the workshop will be based on participant interest. If there is sufficient interest in disparate time zones, we are happy to run this workshop twice. To accommodate in-person participants, we will need a room with a whiteboard with capacity for 4-8 people

To keep the hybrid format simple, we have designed this workshop as an online workshop while accommodating inperson dynamics. In practice, this means that all Commons Model Canvas presentations will be shared online, and we will use Miro or Google Jamboard to support participant interaction. We will, if possible, project the template Commons Model Canvas in the room for in-person participants as revisions are made live. We expect in-person participants may use the whiteboard, and the job of organizers will be to transform this whiteboard work into a live digital shared format so remote participants can collaborate.

OUTCOMES AND OUTPUTS 5

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2 There are several planned outcomes and outputs of this workshop. For participants, there are three key outcomes:

- 1. Presenters will gain valuable peer feedback on their commons projects that will support their ongoing research and practice.
- 2. All participants will deepen and widen their knowledge about the commons/commoning field and pluriversal design.
- 3. Participants will grow their awareness for contextual decision-making processes and inclusive governance strategies in (more-than-human) community building.

For presenters, the key output will be the Commons Model Canvas they create, share, and revise with the group. The workshop will generate several other important outcomes and outputs:

- 4. Revised Commons Model Canvas. The workshop will produce a revised Commons Model Canvas based on group discussion. This revised Commons Model Canvas will be made public and useable by PD scholars and practitioners.
- 5. Journal paper. Workshop participants are invited to co-author a journal paper if there is interest. This paper will capture their individual cases, the results of the workshop, and the revised Commons Model
- 6. Cohort/Network. This workshop is offered as a seed for a potential cohort or network, based on participant interest in designing commons. There is a need for peer support among design researchers working on commons.

ORGANIZER EXPERTISE

- The workshops organizers are both published scholars in design and commons, and they have previously collaborated to 21 produce the Commons Model Canvas that will be used in this workshop. 22
- Justin Sacks is a PhD researcher in design at Lancaster University. Justin's research focus is pluriversal commoning and 23
- the transformation of commons frameworks and concepts into design tools to support commoning. Justin is an active 24
- member of the International Association for the Study of the Commons (IASC). Justin has led several workshops 25
- exploring design tools for commoning [12, 13] and published papers to develop tools for pluriversal commoning [14, 15, 26 27
- Markus Wernli is a Research Assistant Professor at PolyU School of Design in Hong Kong. Markus' research focuses 28
- on communities of flourishing—the prototyping of social arrangements, that explore more regenerative, ecologically 29
- entangled ways of living, householding and designing. His ongoing research draws connections between food systems 30
- 31 and ecosystems on social and communal level to forge healthier relationships between what we breathe, eat, expel, wear,
- 32 and grow. Markus has led workshops exploring food commons [17, 18, 19, 20] and published multiple papers that
- 33 articulate previous explorations in relational commons as participatory design [21, 22, 23, 24].

REFERENCES

- 36 <bib id="bib1"><number>[1]
 /number>Gerhard Bruyns and Stavros Kousoulas. 2022. Design commons: Practices, processes and crossovers. Cham: 37 Springer.</bib>
- 38 39 Sib id="bib2"><number>[2]</number>Andrea Botero, Sanna Marttila, Giacomo Poderi, Joanna Saad-Sulonen, Anna Seravalli, Maurizio Teli, and
- Frederick M.C van Amstel. 2020. Commoning design and designing commons. In Proceedings of the 16th Participatory Design Conference 2020 -
- Participation(s) Otherwise Volume 2 (PDC '20), Association for Computing Machinery, New York, NY, USA, 178-180. DOI:
- 10.1145/3384772.3385162</bib>
- 40 41 42 43 44 45 <bib id="bib3"><number>[3]
 /number>Alexander Osterwalder and Yves Pigneur. 2010. Business model generation: A handbook for visionaries, game changers, and challengers. John Wiley & Sons. </bib>
-

- doing: Applying service design thinking in the real world. O'Reilly Media, Sebastopol, California.</bib> <bib id="bib5"><number>[5]</number>Arturo Escobar. 2015. Commons in the pluriverse. In Patterns of commoning, David Bollier and Silke Helfrich
- (eds.). Commons Strategies Group. Retrieved from http://patternsofcommoning.org/commons-in-the-pluriverse/</bib
-
sib id="bib6"><number>[6]
 /number>Elinor Ostrom. 2010. Beyond markets and states: Polycentric governance of complex economic systems. Am. Econ. Rev. 100, 3 (June 2010), 641-672.</bib>

```
<br/>

1
2
                                                                      continuing challenges. Ecol. Soc. 19, 2 (June 2014). DOI: 10.5751/ES-06387-190230</bib>
```

- 3

 4 5 capability approach to assess the role of ecosystem services in the well-being of Indigenous Australians. Global Ecology and Conservation 4, (2015), 445-458. DOI: 10.1016/j.gecco.2015.09.001</bib>
- 6

 < Indigenous well-being: an integrated framework. Global Ecology and Conservation 4, (July 2015), 197-206. DOI: 10.1016/j.gecco.2015.06.008</bd> 8

 Bristol. 2014. Changing practices, changing education. Springer, Singapore. DOI: 10.1007/978-981-4560-47-4</bi>
- 10 <bib id="bib11"><number>[11]
 /number>Kathleen Mahon, Stephen Kemmis, Susanne Francisco, and Annemaree Lloyd. 2017. Introduction: Practice 11 theory and the theory of practice architectures. In Exploring education and professional practice: Through the lens of practice architectures, Kathleen
- 12 Mahon, Susanne Francisco and Stephen Kemmis (eds.). Springer, Singapore, 1-30. DOI: 10.1007/978-981-10-2219-7 1</br>
- 13 <bib id="bib12"><number>[12]
 [12]
 In IASC 2021 General 14 Conference.</bib>
- 15

 16 management of shared urban green space. In IASDR 2021: '[_] with Design: Reinventing Design Modes. https://doi.org/10.1016/j.jcp.ncm.nih.gov/
- 17 <bib id="bib14"><number>[14]</number>Rosendy Galabo and Justin Sacks. 2021. A commons creation framework for co-designing new commons. In 14th International Conference of the European Academy of Design, Safe Harbors for Design Research, Blucher, São Paulo, 467-474. DOI:
- 18 19 10.5151/ead2021-135IASDR</bib>

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- 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 commoning infrastructure. In IASDR 2021: '[_] with Design: Reinventing Design Modes.</br>
 did="bib16"><number>[16]</number>Justin Sacks. 2022 (forthcoming). User research for a more-than-human food commons. In DRS 2022,
- <bib id="bib17"><number>[17]
 /number>Markus Wernli. 2021. Designing reflexive spaces with human waste. In 14th International Forum on Urbanism.
- Delft: TU Delft. DOI: 10.24404/61729a5c7e18910008ca2929 </bib>
-

 Pluriversal Design. New Orleans: Tulane University</bib>
- Sib id="bib19"><number>[19]
 /number>[19]
 /number>Markus Wernli. 2017. Nurture-via-nutrients: Choreography of the precarious in urine upcycling for ecological
- enablement in Hong Kong, in: Catalyses, interventions, transformations. Aalto: The Art of Research VI Conference. Aalto University. </bib> <bib id="bib20"><number>[20]
 /number>Markus Wernli. 2016. Cultivating more-than-human lifeworlds. In Cultural R>evolution. Hong Kong.
- International Symposium on Electronic Art, ISEA2016.</bib>
- Sibi id="bib21" \(\text{number} \) number \(\text{Paramonal Symposium on Electronic Art, ISEA2010.} \) Oblig id="bib21" \(\text{number} \) number \(\text{Paramonal Symposium on Electronic Art, ISEA2010.} \) Oblig id="bib21" \(\text{number} \) number \(\text{Paramonal Symposium on Electronic Art, ISEA2010.} \) Oblig id="bib21" \(\text{number} \) number \(\text{Paramonal Symposium on Electronic Art, ISEA2010.} \) Oblig id="bib21" \(\text{number} \) number \(\text{Paramonal Symposium on Electronic Art, ISEA2010.} \) Oblig id="bib21" \(\text{number} \) number \(\text{Paramonal Symposium on Electronic Art, ISEA2010.} \) Oblig id="bib21" \(\text{number} \) number \(\text{Paramonal Symposium on Electronic Art, ISEA2010.} \) Oblig id="bib21" \(\text{number} \) number \(\text{Number} \) oblig id="bib21" \(\text{number} \) number \(\text{number} \) oblig id="bib21" \(\text{number} \) number \(\text{number} \) oblig id="bib21" \(\text{number} \) number \(\text{number} \) oblig id="bib21" \(\text{number} \) number \(\text{number} \) oblig id="bib21" \(\text{number} \) number \(\text{number} \) oblig id="bib21" \(\text{number} \) number \(\text{number} \) oblig id="bib21" \(\text{number} \) number \(\text{number} \) number
- <bib id="bib22"><number>[22]
 /number>Markus Wernli. 2021. Bringing home recursions: Co-crafting environmental self-implication in adult design 35 education. Cubic Journal, 1(4). DOI: 10.31182/cubic.2021.4.040</bib>
- 36

 < 37
- 38 14(1), 175-186. DOI: 10.4013/sdrj.2021.141.15</bib>
- 39 <bib id="bib24"><number>[24]
 /number>Markus Wernli. 2017. Adventurous upcrafting ventures. Cubic Journal, 1(1). DOI:
- 40 10.31182/cubic.2018.1.013</bib>

41 42