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"Journey Making": co-creating impact by unpacking grand challenges as complex systems of interdisciplinary interdependencies

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**Abstract** 

As societies continue to recover from the shock of the Covid-19 pandemic and its ramifications, it becomes evident that academic research cannot wait but engage with today's complex and large-scale challenges. Such grand challenges (GCs) include, among others, climate change, sustainability, mental health, poverty alleviation, and gender inequality. As a result, interdisciplinary, participatory architectures need to be deployed, including opportunities for co-creation and testing new tools, ideas, and solutions to address GCs. However, past research shows that working across silos and organizational boundaries is not easy, and the GC agenda can become diluted with time as part of unfolding strategy implementation. Hence, despite these important existing contributions, the endeavour to understand GCs is still in its early stages. In this paper, we present the "Journey Making" (JM) methodology by Ackermann and Eden and adapt it for working on GCs research, as well as discuss its theoretical implications for understanding GCs. Building on a qualitative empirical study with mental health networks in Australia, we show how JM can substantiate GCs research by mapping GCs as complex systems of interdisciplinary mutual relations. The underlying 'journey' captures the ongoing pathway for impact as researchers and participants support one another in understanding what GCs are in practice and how they can be addressed effectively.

Keywords: grand challenges, journey making, causal mapping, strategy practice

1

#### Introduction

As societies continue to recover from the shock of the Covid-19 pandemic and its ramifications, it becomes evident that academic research cannot wait but engage with today's complex and large-scale challenges. Such grand challenges (GCs) include, among others, climate change, sustainability, mental health, poverty alleviation, and gender inequality. Characteristic to these meta-problems (Seidl & Werle, 2018) is that they require multistakeholder collaboration and interdisciplinary knowledge (Brammer et al., 2019; Ferraro & Beunza, 2019; Jarzabkowski et al., 2019). As a result, interdisciplinary, participatory architectures need to be deployed, including opportunities for co-creation and testing new tools, ideas, and solutions to address GCs (Ferraro et al., 2015; George et al., 2016). However, past research shows that working across silos and organizational boundaries is not easy (Langley et al., 2019; Siedlok et al., 2015), and the GC agenda can become diluted with time as part of unfolding strategy implementation (Wright & Nyberg, 2017). Hence, despite these important existing contributions, the endeavour to understand GCs is still in its early stages.

More recently, authors like Jarzabkowski (2021) and Wickert et al. (2021) have called for a new radical sustainability agenda, where 'sustainability' is used interchangeably with GCs. According to this agenda, sustainability needs to play a central role in reshaping organizational strategies and operations, what Jarzabkowski et al. (2021, p. 451) call "regenerative sustainability." They argue that understanding GCs and sustainability requires unpacking them as interconnected "multi-faceted, complex, and dynamic socio-ecological systems." These complex systems, in turn, are characterized by a high degree of interconnectivity and interdisciplinarity. At the same time, researchers call for "deep engagement" with the GCs (Williams & Whiteman, 2021), embarking on major public issues from a holistic perspective (Harley & Fleming, 2021). Meanwhile, such deep engagement demands to balance "field involvement in the writing up of research accounts" (Langley & Klag, 2019, p. 517) that allows for both reflexivity and rigor in empirical investigations that entail close participation or intervention in the field (Sharma & Bansal, 2020).

To address these debates, we set out with a research question: "How can GCs be unpacked as complex systems of interdisciplinary interdependencies to support the co-creation of impact through research?" To this end, we present a "Journey Making" (JM) methodology for working on GCs research. JM is grounded in the work of Ackermann and Eden (2011a), which has been applied extensively in such areas as strategic management (Ackermann & Eden, 2011b), risk management (Ackermann et al., 2014), city resilience against grand

challenges (Pyrko, Eden, et al., 2019) or the multi-organizational collaborative groups (Eden & Huxham, 2001). As seem in Figure 1, the principle of JM is to engage with multi-stakeholder teams or interdisciplinary groups through a series of workshops supported by a causal mapping technique and ongoing conversations as part of research that goes hand in hand with an intervention co-produced by the researcher and study participants (Eden & Ackermann, 2018). This way, problems can be structured, phenomena explored, and practical strategies discovered while allowing participants to build a sense of ownership of the study's result (Bryson et al., 2014).

Insert Figure 1 about here

In this paper, we demonstrate how JM can be utilized in GC research to capitalize on its key features, such as the ability to work with complex and interdisciplinary systems in which causal map representations are developed through study participants' joint efforts, and allowing anonymity and procedural justice in adding to the focused conversation. Building on a qualitative empirical study with mental health networks in Australia, we show how JM can substantiate GCs research by mapping GCs as complex systems of interdisciplinary mutual relations. The underlying 'journey' captures the ongoing pathway for impact as researchers and participants support one another in understanding what GCs are in practice and how they can be addressed effectively. The results of this paper thus contribute new insights to i) unpacking the complexity of GCs in a manageable way without reducing that complexity, ii) and offering a novel methodological option for researchers interested in the studies of GCs.

## The 'Journey Making' methodology for focused working with groups

"Journey Making" (JM) is an approach for facilitating focused conversations with groups about issues, strategies, goals, and any other items that matter to their present and future (Ackermann & Eden, 2011a). The typical use of JM (Figure 1) is to facilitate meetings in which participants are supported in building a shared causal map representing multiple accounts. Perhaps the most prominent application of causal mapping has been in the studies of strategy and strategy making with executive teams. In those studies, facilitated causal mapping workshops have contributed to a better understanding of strategy as a social process as part of which consensus about the firms' future needs to be negotiated effectively by the management team (Eden & Huxham, 2001). Practical contributions of these studies include mapping the management of

stakeholders (Ackermann & Eden, 2011b), exploring collaborative advantage (Bryson et al., 2016), or mapping distinctive competencies (Ackermann & Eden, 2011a), among other applications.

During the JM workshops, all of the participants' contributions are elaborated collectively and linked with one another by the group. Therefore, the resulting shared, causal map no longer represents any particular person's thoughts. Instead, the map becomes a device for negotiating a consensus as part of which different participants' contributions are synthesized into a new conceptualization of the future course of actions (Bryson et al., 2014). Importantly, the map becomes a transitional object that can be referred to by the group, making it possible to elaborate on particular contributions without addressing directly the person whose contribution is being elaborated. Throughout the process of building a casual map, by visually representing each person's thoughts on the map and by effectively separating a person from the problem, participants are supported in both talking and listening. And, as the group members come to appreciate one another's' individual understandings, it is easier for them to establish an intersubjective position on the problem in question (Eden et al., 1981).

However, causal mapping is not merely about producing 'word-and-arrows' diagrams, but it is governed by a set of formalisms which allows for analysis of rich and messy qualitative material (Bryson et al., 2014; Bryson et al., 2004). Particular attention is paid to actions and events and to how they may affect one another. This allows understand better the relationships between the different constructs in the causal map, and to explore possibly insightful patterns, dynamics, inconsistencies, or missing links (Eden, 1992a, 1992b). As a result, causal mapping has proved itself as an effective consultancy and research technique for working with teams. The process of casual mapping is additionally supported when a specialized computer program or a group support system are utilized for building and analyzing causal maps, which improves the efficiency of adding contributions, increases the speed and accuracy of analysis, and, importantly, ensures anonymity (Paroutis et al., 2015; Tavella & Franco, 2015).

Moreover, anonymity and causal mapping enables participants to move from divergence to convergence using the model as a transitional object and thus enabling multivocal inscription (Ackermann & Eden, 2011b), a second element of addressing GCs in addition to participatory architectures noted above. The ability to play with the captured material, explore it from different perspectives, analyze the maps, and continually refine and amend them was thought to also attend to the distributed experimentation strategy – thereby attending to the joint action strategies for addressing grand challenges (Ferraro et al., 2015).

### Grand challenges research and the need to unpack the impact

As observed in the literature, the pursuit of GCs can involve different actors; including advocacy groups (Olsen et al., 2016), crowdsourcing contributors (Porter et al., 2020), whistleblowers (Whittington & Yakis-Douglas, 2020), as well as citizens and volunteers (van der Giessen et al., 2021). Similarly, George et al. (2016) reveal that addressing GCs requires joint action from multi-level stakeholders, including individuals, organizations, communities, and broader jurisdictions such as the UN or the European Union. To coordinate GC stakeholders requires a good understanding of their needs, goals, motivations, and reinforcing mechanisms. Ferraro et al. (2015) further elaborate this line of inquiry, who theorize "robust action" in tackling GCs, entailing building participatory architectures oriented toward mutual learning and collaboration. Nonetheless, deploying GCs participatory architectures is far from easy for organizations, especially when multiple institutions and professions must be involved. The tensions around diverse goals can lead to gradual misalignment of a shared purpose (Grodal & O'mahony, 2017), particularly when stakeholders become discouraged by the tradeoffs and short-term sacrifices that the GC and sustainability agenda can impose on business (Wright & Nyberg, 2017). Practitioners can also resist opening collaboration with external stakeholders in fear of increased scrutiny of the quality of their practices (Desai, 2018), thus reinforcing the difficulties of opening strategies (Seidl & Werle, 2018).

Consequently, it can be observed that while GC literature is in agreement regarding the general principles of working with GCs, the specific approaches to deploying or operationalizing "joint action strategies" remains under-researched (Jarzabkowski et al., 2021; Wickert et al., 2021; Williams & Whiteman, 2021). We address this theoretical and practical puzzle by adopting to GCs research the "Journey Making" (JM) methodology for developing emergent strategies through multi-stakeholder, engaged conversations. As mentioned above, the characteristic feature of JM is employing an advanced causal mapping technique, with maps co-created during meetings serving as 'transitory objects', which can be modified as participants change their minds about the discussed problems (Bryson et al., 2016). The maps help capture events, issues, and their mutual interdependencies, such as feedback dynamics and unintended consequences (Eden, 1992a, 1992b).

However, JM is not merely a mapping technique but an emergent and ongoing process of socio-political negotiation, attention to micro-change, and exploration of environmental and internal factors affecting joint action. Maps in such a sense serve as points of reference that need to be refined, developed in-between group meetings and interviews, and communicated

to a broader audience in the form of summary graphs and written reports. Therefore, JM offers potential for sharpening the understanding of deploying joint action strategies for GCs (Ferraro et al., 2015): participatory architectures (sustained multi-stakeholder engagement), multivocal inscription (joint exploration and negotiation of the possibles courses of action), and distributed experimentation (testing actions in practice for 'small wins'). In order to substantiate our claim about the relevance of JM to GCs, we now discuss a qualitative empirical investigation of mental health networks in Australia, where JM was used extensively and with good success.

#### An empirical study with mental health networks in Australia

The Australian Department of Health resourced our study of Mental Health Networks (MHNs) in Australia, and one of the two mental health network co-leads was part of the research team providing access to data and context. MHNs aim to serve as interdisciplinary networks that can help connect practitioners with different types of expertise, such as carers, nurses, GPs, or psychiatrists, to potentially help one another diagnose and treat mental health illnesses. Our empirical study was conducted in two stages: i) a series of exploratory interviews with MHN experts, and ii) facilitating and observing workshops with sub-networks within the MHNs followed by another series of reflective and consolidating interviews.

The goal of the first stage of the study was to interview senior managers, policymakers, peak body leads (e.g. carer and consumer representatives) and senior clinicians who led the development and design of MHNs in Australia. For this purpose, a careful review of those who had the experience of setting up and being involved in a MHN was conducted using snowball sampling. The interviewees were based in Western Australia, New South Wales, Victoria, Tasmania, and Queensland (5 of the 6 states in Australia). For the research data collection method, we used semi-structured interviews with questions structured to understand better the motivation, challenges, and practical actions and dilemmas that participants associated with making MHNs work well. During the 20 interviews, emergent themes began to appear, related to the general strategies and detailed actions for supporting MHNs – and the causal mapping of those themes indicated complex systems of interdependencies and tensions, for example, between deploying suitable governance structures and mobilizing active membership.

In the second stage of our study, we extended the scope of participants from senior managers to a broad range of MHNs participants, including carers, psychiatrists, and mid-tier network leaders seeking to elicit a wider range of views. In addition, we were interested in exploring best practice 'in action' – extending the insights gained from the interviews potentially comprising more espoused views. For that purpose, we organized (with the support

of the two MHN co-leads) a total of 10 half-day workshops, which included 95 members of MHNs representing the full spectrum of different professions. 10 workshops were chosen as one of the mechanisms used to manage the breadth and scope of the MHN was the establishment of 10 sub-networks. These focused on age cohorts (e.g. older adult, youth), geographical cohorts (e.g. Peel, Rockingham and Kwinana) and clinical cohorts (e.g. development disorder), and enabled participants from different regions and professions to come together and chart a path through the entire mental health network landscape whilst focusing on a more manageable 'chunk'. The software used to allow for mapping facility was *StrategyFinder*<sup>1</sup>, although other, increasingly popular and widespread softwares can be used, such *Miro*<sup>2</sup>, *Mural*<sup>3</sup>, or *Kumu*<sup>4</sup>.

The application of JM methodology allowed for two features that were construed to be particularly helpful when activating robust action (Ferraro et al., 2015). Firstly, the GSS allowed each participant to enter their views anonymously (all were provided with laptops), thus reducing conformity pressures. In addition, direct entry increased productivity as it was possible for simultaneous contribution, potentially reducing the dominance of voices (and thus managing power considerations). The second feature was the causal mapping technique – which enabled the contributions to be structured in a means-end form – building chains of argumentation. Mapping helps participants gain a deeper understanding of their own thinking and build a shared language and understanding for the group (Bryson et al., 2004). The combination of anonymity and mapping enables participants to move from divergence to convergence using the model as a transitional object and thus enabling multivocal inscription, which is a crucial element of addressing GCs in addition to participatory architectures. Moreover, the ability to play with the captured material, explore it from different perspectives, analyze the maps, and continually refine and amend them was thought to also attend to the distributed experimentation strategy (Ferraro et al., 2015).

An example of causal map developed in the workshops, which captures the GC of mental health as a complex systems of interdisciplinary interdependencies, can be seen in Figure 2. The below figure is a fragment of the model (18 statements from a model of 138

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<sup>&</sup>lt;sup>1</sup> https://strategyfinder.pro/

<sup>&</sup>lt;sup>2</sup> https://miro.com/

<sup>&</sup>lt;sup>3</sup> https://www.mural.co/

<sup>4</sup> https://kumu.io/

statements) generated from one workshop, focusing on older adult mental health and involving 11 participants, including psychiatrists, carer-consumer advocates, senior managers, nurses, etc. As such, the workshop traversed different organizations, different discipline backgrounds and different knowledge bases. The workshop was one in a series that aimed at developing a strategy for ensuring effective and sustainable mental health care.

Insert Figure 2 about here

As can be seen from the fragment, managing mental health (a GC) is highly complex, with 16 feedback loops (red links) being identified by the range of participants in this area alone. The feedback loops capture dynamic behaviour, predominantly vicious cycles reflecting the challenges experienced and comprise statements from different participants (no one participant saw the full picture). This weaving together of the views helps those involved gain a deeper understanding of the challenge through learning about the system. In addition, the majority of the statements have a considerable body of material around them (shown by the small numbered arrows).

The map not only allows for an appreciation of the interconnectedness of issues but also reveals some of the many stakeholders needing to be engaged with, including policy makers, residential services, community services, private hospitals, general (public) hospitals, AoD services, GPs etc. As such, it demonstrates the need for a multi-stakeholder approach – both in terms of seeking input but also in terms of determining stakeholder management strategies resulting in increasing the chance of successful implementation of the nascent strategy.

JM is able to help manage the complexity by allowing for as much or as little to be shown at any one time, managing cognitive complexity but retaining a systemic view. Clusters can be considered, analysis carried out to determine centrality, potency, and, as noted above, feedback loops. The approach also allows for prioritization of statements to be undertaken. In Figure 3 below, the key issues (purple italic) were assessed according to urgency (Red votes) and long-term importance (Green votes), with the results appended to the end of each statement. It can be seen that the issue relating to transition between acute and other sectors emerged as the most urgent (8 Red - 8R) and the key issue noting the resource dominance on residential being the most important long term (8 Green - 8G). These key issues also begin to

give rise to an articulation of the goals – for example developing effective models of care helping to realize the goal of 'provide high quality care to all consumers'.

#### Findings of the study of the grand challenge of mental health

The causal mapping technique's ability to capture and reflect the complexity of mental health was not always easy for participants to engage with. In one workshop, one of the participants, who was finding the mapping process cognitively challenging, noted it was too messy and requested the return to lists – reducing the complexity and returning to a familiar approach. The facilitator requested that they persevere with the mapping until the coffee break (where upon the emergent map could be 'tidied') and was given grudging acceptance. However, after the coffee break, with a tidied version of the map in the front, the participant began to feel more confident in the process and, by the end of the workshop, specifically commented on how initially he felt very uncomfortable, but now he felt that for the first time they were beginning to be able to manage the really messy space and whilst it was uncomfortable opening up Pandora's box, it was really important to do so if they were going to be able to make effective change. Capturing the interrelationships and taking a holistic view can be, at least initially, quite discomforting to participants, however as they were gaining familiarity with the modelling technique, and were able to explore, detail and gently move towards a wider but also convergent appreciation, and as a result, gain a deeper engagement with the material resulting in a higher degree of confidence in the outcomes.

JM pays particular attention to both procedural justice (Kim & Mauborgne, 1998) and procedural rationality (Simon, 1957). By allowing participants all to contribute via laptops not only assists with ensuring productivity but also enables anonymity. Thus participants felt more comfortable opening up about the issues that were of concern to them, resulting in more material being captured. This additional information helped with procedural rationality as a more holistic consideration could take place – and thus a greater degree of robustness. Cycling between procedural justice and rationality not only enabled members to 'speak truth to power' (J. Detert, 2021) but move toward actions illustrating not only multi-vocality but also distributed experimentation (Ferraro et al., 2015). Options could be generated, examined against the emergent strategies and goals, and considered through different organizational and disciplinary lenses. As such, the mapping process enabled participants to learn at their own speed, helping them to enhance their mental models, co-create the outcomes and thus attend to both cognitive and social/psychological negotiation (Edmondson, 2019). Starting with issues recognizes where participants are 'at' – the pain points. Enabling participants to share issues

not only helps them see that they are often not alone in struggling with a particular challenge but also appreciate other stakeholders' issues and as such, seek to find ways forward that work for all.

As touched on above, and displayed in Figure 2, the ability to open up (entering a divergent phase) and capture a wide range of views alongside harnessing the mapping technique to connect these views together (moving towards convergence) allowed workshop participants to make progress through the participatory architecture (Ferraro et al., 2015; George et al., 2016) – attending to both cognitive challenges (managing the complexity) and socio-political challenges (managing different world views, aspirations etc). In addition, when appropriate, using the embedded prioritization processes to test degrees of consensus enabled the prioritization process to act as a dialectical device – testing out options and further supporting an experimentation strategy.

In addition, the approach enabled the mapping models from each workshop to be examined together, enabling decision makers to see how the issues of one group compared with another. From this basis, senior managers could explore how the agreed actions could be further leveraged as actions carried out by one sub-group, if done in a particular manner, could also assist other groups and avoid potential conflicts. Furthermore, it was possible to review the aspirations of each sub-network and begin the process of developing a shared direction (a common set of goals). As such, they were engaged in managing the waft and weave, helping make the open strategizing processes robust as well as owned.

The series of workshops not only enabled each sub-network to design their own strategy but additionally, it enabled the network leaders to integrate the different strategies gaining further sustainability for the outcomes. The work also strongly influenced policy making with the review of the mental health network recognizing and adopting the material.

#### Discussion: adapting Journey Making to address the grand challenges

Based on our investigation of Mental Health Networks (MHNs) in Australia with the application of Journey Making (JM) methodology, in this section, we present our theoretical framework of adopting JM for addressing the grand challenges (Figure 3). The framework is separated into four parts: i) *content* (on the left side of the diagram), ii) *context* (at the bottom of the diagram), iii) *process* (on the right side of the diagram), and iv) *joint strategic action aimed at the grand challenge* (at the top of the diagram).

Starting from the context, practitioners representing possibly different professions try to understand the continuously changing and complex landscape of their practice. For example,

mental health diagnosis and treatment are always changing, and their understanding needs to be revised by practitioners. JM provides opportunities for practitioners trying to address GCs to 'think together' about the shared problems faced and so interlock their indwelling on the problem and indirectly share tacit knowledge (Hadjimichael & Tsoukas, 2019; Nicolini et al., 2022; Pyrko et al., 2017). However, as can be learned from the works of Polanyi (1962, 1966), indwelling, which is a tacit knowing process, can be usefully supported by pointing peoples' attention to the explicit cues — maxims, rules, guidelines, abstractions, or propositional knowledge. To that end, JM, with its causal mapping facility, allows practitioners to interlock their indwelling on the explicit cue of the changing map — the transitional object — and this way are supported in 'thinking together' (Pyrko, Dörfler, et al., 2019; Pyrko, Eden, et al., 2019).

Insert Figure 3 about here

Continuing to the left side of the diagram in Figure 3, with the aid of the mobilization of interlocked indwelling of participants contributing to the session, participants can explore the content of the GC. More specifically, they are able to unpack the grand challenge as a network of interdependencies that cross disciplinary boundaries (Pyrko, Eden, et al., 2019). An example of such unpacking of a GC can be seen in the segment of a causal map from one of the workshops shown above in Figure 2. With the aid of mapping, in turn, it becomes possible to study the tensions, inconsistencies, and feedback dynamics which are represented via the captured causal arrow relationships (Ackermann et al., 2014; Eden, 2004; Shaw et al., 2017). Such focused exploration of the content of a GC then enables the developing of an inter-disciplinary strategy for GC mitigation and organizational renewal. As participants think together about their shared understanding of the unfolding causal map, they develop consensus about the possible mitigating actions and practical courses of action.

In addition, the strategy-making for GCs, seen in Phase C at the top of the diagram, is also explored through the social *process* of the session: facilitating a zone of psychological safety and keeping a focused conversation (seen on the right side of the diagram). JM methodology, supported by causal mapping technique and a group support system such as *StrategyFinder*, allows making conditions for everyone to contribute and to talk about jeopardy and failure freely and constructively. This is possible with the provision of anynomity and the ability to add contributions and navigate their own screen in their own time (Ackermann, 2020). This, in turn, supports the sense of psychological safety when working together on strategy

making (Detert, 2018; Edmondson, 2011, 2019). On this basis, the facilitated JM process allows the group to acknowledge the emotional and identity-based aspects of thinking together about complex GCs as participants may have opportunities to 'speak truth to power' who may be in the room (Detert, 2021). It must, however be noted that the entire process can be characterized by 'muddling through' and so it typically involves continual trying and testing for small wins — which can entail additional conversations with group members after the session and even organizing further JM workshops depending on the needs.

In addition, it can be argued that JM supports three elements of joint robust actions strategies needed for addressing GCs outlined by Ferraro et al. (2015) – participatory architectures, multivocal inscription, and distributed experimentation. All three joint action strategies are supported by the anonymity provided by JM thus reducing conformity pressures In addition, direct entry increased productivity as it is possible for simultaneous contribution in the form of anonymous statements and causal links signifying 'may lead to' relationships, potentially reducing the dominance of voices (Bryson et al., 2004). As a result, following Ferraro et al. (2015, p. 374), the JM workshops include participatory architectures, the first element of joint robust action strategies for tackling GCs, allowing "diverse and heterogeneous actors to interact constructively". The JM design also seeks to attend to the fact that "actors with divergent interests require a structure where they can interact and engage". This approach aligns with the requirement of GCs related to coordinating stakeholder goals, needs, and motivations, as discussed by George et al. (2016). Moreover, anonymity and causal mapping enable participants to move from divergence to convergence using the model as a transitional object and thus enabling multivocal inscription (Ackermann & Eden, 2011b), a second element of addressing GCs in addition to participatory architectures noted above. The ability to play with the captured material, explore it from different perspectives, analyze the maps, and continually refine and amend them was thought to also attend to the distributed experimentation strategy – and so attending to the third type of GC joint action strategies (Ferraro et al., 2015).

Consequently, while JM is an established method in strategy and management research, it offers unique advantages for studying GCs. JM provides opportunities for conducting indepth research as one of the researchers can facilitate the sessions while another can take detailed field notes for observation-based study. In our project, such an approach led to over 100 pages of field notes. At the same time, with its focus on building a sense of ownership and strategies with a high degree of practicality, JM also offers new vistas for achieving impact in qualitative research and a form of action research where intervention is kept separate from the exploratory research inquiry (see: Eden & Ackermann, 2018). On this basis, aligned with the

numerous present calls for more impact in the studies of GC, our paper invites researchers interested in GCs to engage with JM and test its possible application in their own research designs. The benefits are considerable as beyond impact; researchers can use the opportunity or highly engaged practitioners to learn more about their views on GCs, while also studying the situation of the facilitated workshop as a form of focused observation.

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Figure 1: The 'Journey of strategy making' approach.

Reconstructed from (Eden & Ackermann, 1998, p. 30).

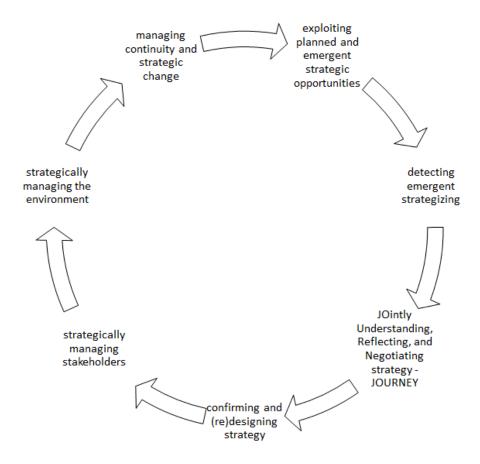
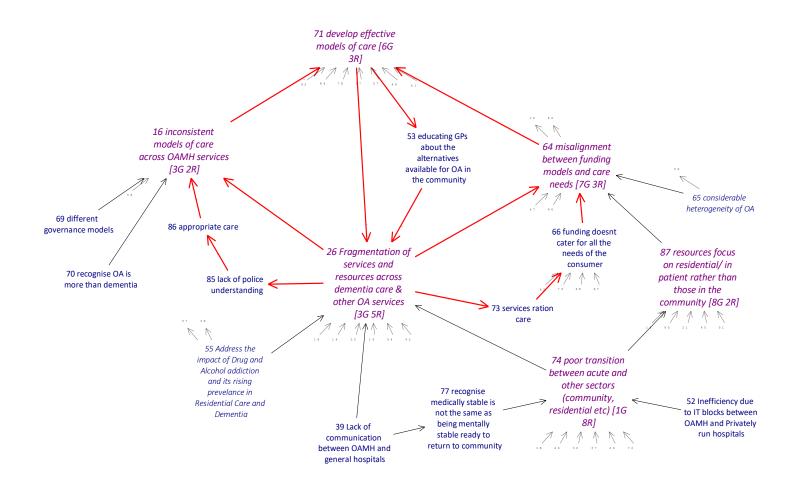


Figure 2: A segment of the map from the workshops with mental healt networks in Australia



JOINT STRATEGIC ACTION AIMED AT THE GRAND CHALLENGE Phase C: Developing an inter-disciplinary strategy for grand challenges mitigation and organizational CONTENT: renewal **PROCESS**: facilitating a zone of exploring grand challenges as psychological safety and keeping complex systems of mutual Phase B: Addressing Phase B: Addressing a focused conversation. interdependencies. Focusing on tensions, trade-offs, emotions, identity, Separating a person from the understanding the priorities. and prioritizing the MUDDLING 'speaking truth to problem. key dynamics THROUGH: power' continual trying and testing for small wins Phase A: Making Phase A: Exploring the grand conditions for everyone challenge as a network of to contribute and to interdependencies that cross talk about jeopardy and disciplinary boundaries COGNITION: INDWELLING: failure freely and "Hints" – managing trying to 'hit' on constructively the journey – time the emerging to think on many patterns levels CONTEXT: continuous changes to the landscape of grand challenges.

Figure 3: 'Journey making' for addressing the grand challenges