



The Constellations of Dialogue and Design

An Explorative Study of Meanings, Value and Relations

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Thanks to the interviewees, who graciously shared their time and insights as I poked and prodded them to examine convoluted and sometimes personal concepts. Without their contributions this would have been a sterile and very boring undertaking.

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abstract

What is the relationship between dialogue and design?

How is dialogue used in design practices?

**What can it achieve?
What is its value?**

In this thesis I seek to investigate the relationship between design and dialogue.

Through theoretical exploration and interviews with six design practitioners, definitions of design and dialogue are mapped. Co-creative design practices are analyzed in the framework of the Four Fields of Conversation, developed by William Isaacs, and parallels are drawn between dialogue and co-creation. The nature of the relationship between dialogue and design is explored, and a constellation of design, including the space in which dialogue exists, is put forth. Additionally, three supports (emotional space, cognitive space, physical space) of dialogue are identified, examined and mapped within the theoretical frame of Isaacs' Four Fields.

Dialogue is identified as being uniquely equipped to serve the identified aims of design processes. Through further investigation, it is proposed that dialogue allows iterative design processes to go farther and deeper, to produce richer outcomes. The fallacy of completion in design is noted, and while design may not be considered a process with a point of completion, dialogue enables design to move further and deeper on a spectrum of maturity, in process and outcomes.

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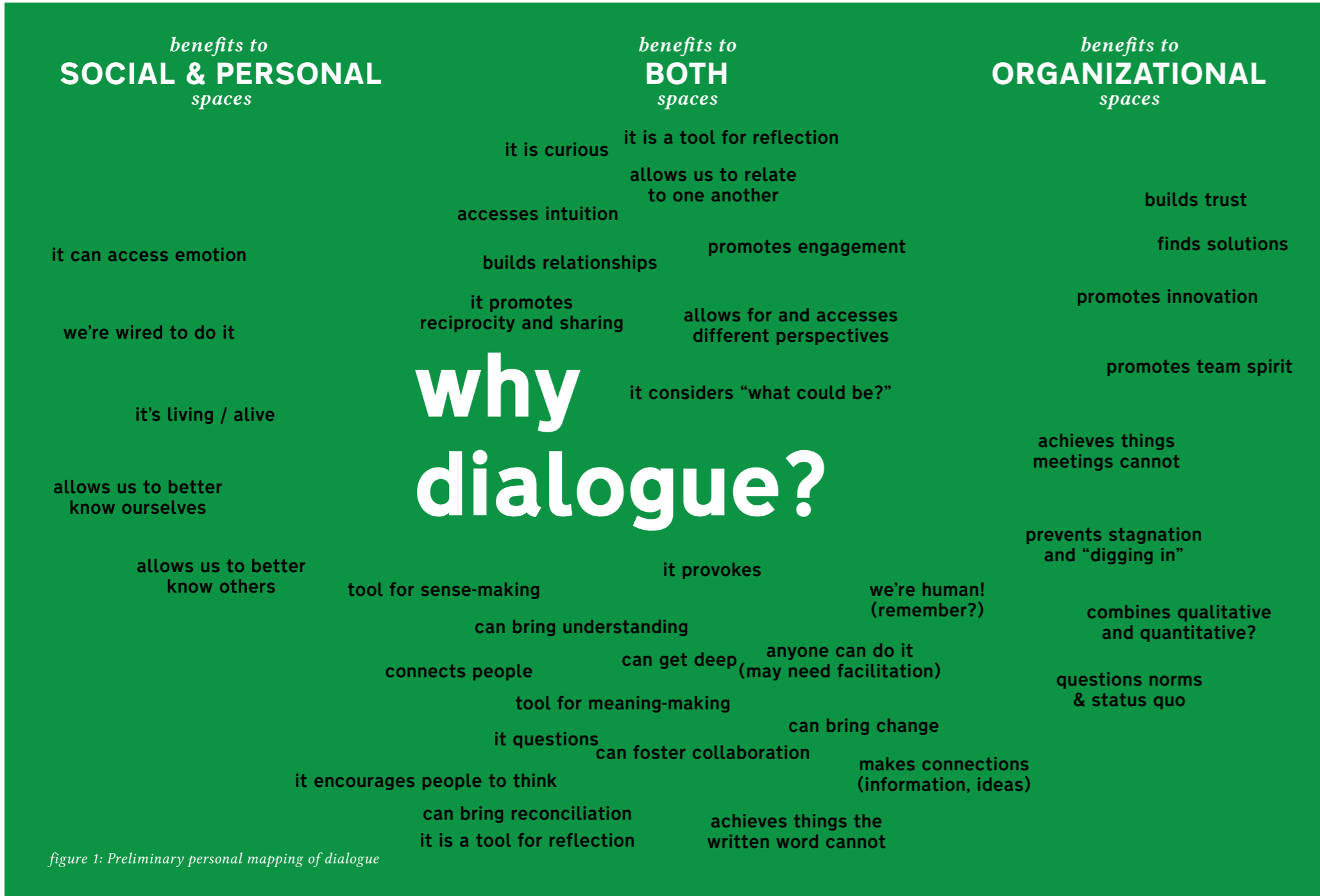
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0. preface

In my professional, personal and academic experiences, I have come to wonder what role dialogue plays in human interaction: specifically, in the realm of design. How might design processes and outcomes be changed by learning to leverage the uniquely human capability of dialogue?

This interest was born of personal experience. My professional background as a graphic designer necessitates dialogue on different levels on a daily basis: with clients and end-users and amongst dialogical elements in the artifacts generated. Communication is interwoven into every task associated with this practice, and the importance of true dialogue, listening, sharing and creating together, is undeniable. Additionally, moving to both China and Sweden within the last two years also greatly influenced my considerations of language and communication. When there was no common shared language, as was often the case in China, it

became impossible to have a dialogue, and situations devolved into pantomime and theatrical sounds. The effective transmission of simple information felt like a win, and the hope for much beyond that, let alone a true dialogue, was expecting too much.

But even when you remove barriers of language or culture, the way in which humans share and understand information is still very complex. Technology has become so intertwined in how we communicate, and it can be suggested that the means and methods have certainly changed the meaning and intent of messages.

Amid these complexities, the specific communicative practice I grew curious about was dialogue. I chose dialogue because I see it as somewhat of an endangered species. I find that less and less of human communication occurs face-to-face, in real time, in the same physical space. How does this impact

understanding? I chose specifically to explore dialogue within the realm of design because of my professional and academic pursuits, and also because I see commonalities in both practices.

At the outset of this project, I outlined some beliefs and assumptions drawn wholly from my own opinions and experiences, to set a course through the research and development stages of this thesis. It was a personal manifesto of sorts, written before I began to dig into the existing theoretical landscape. I share it here to give a bit of insight to the motivations and biases I brought to (and sought to challenge in) this project.

Dialogue has great power and potential
I believe dialogue as a tool has the capacity to shift perspectives, promote creativity, and lead to co-creation and meaningful experiences.

Dialogue is very human
I believe that dialogue is a crucial part of everyday life, and a critical, foundational part of design practice from the micro to macro level - amongst individuals, groups, inside organizations and communities. Dialogue requires willing and curious human participants.

Factors are making it harder to have dialogue
There are many reasons why humans struggle or fail to connect - technology, environments, personality, culture, etc. - and this is a growing trend. How do we face these challenges?

From this understanding, I went forward to explore the role and impacts of dialogue within the design process with an open mind, seeking to challenge my assumptions. This process, and an analysis of its outcomes, follow in these pages.

“It is said that 80% of communication is non-verbal. What does that tell us? That there are levels of substance, levels of connection that are subtle.”

figure 2: from Burkhardt, “Thinking Together, Part 1”, 2010

1. introduction

Here I introduce dialogue, design and the situated context in which I will explore their practices and relation. I also address my area of inquiry, and the purpose and relevance of this thesis.

1.1 DIALOGUE, DESIGN AND CONTEXT

Dialogue

The word dialogue comes from the Greek “dia” meaning “between or through” and “logos” means “what is talked about” (“Dialogue,” 2016). I’ll expand in the pages to come on definitions and details to properly situate the word, but for now, I will take dialogue to reference a reciprocal discourse amongst two or more people as a means of understanding or generating shared meaning.

Design

The definition of “design” varies: it’s one word that means many things, and in our current context, there is no single agreed-upon definition of

design. As with dialogue, I will delve further into definitions in the coming chapters, but for the sake of continuity, a definition to guide the reader is taken from Richard Buchanan.

“Design is the human power of conceiving, planning, and making products that serve human beings in the accomplishment of their individual and collective purposes” (Buchanan, 2001, p. 9)

The Current Context

It can be said that for both design and dialogue, things are changing quickly. Technology is enjoying an increasing influence over the way in which humans communicate (McLuhan, 1994), and with newer, better, faster methods, face-to-face interactions are replaced by texts, emails and voice messages. McLuhan famously claimed “The medium is the message” (McLuhan, 1994, p. 1) and modern thought accepts this acknowledgment that conveyed meaning is undoubtedly impacted by the way in which it is delivered. “While computer technology is helpful in

connecting all of us, it is very different from [all of us] knowing how to function together in a synergistic way” (Burkhardt, “Thinking Together, Part 1”, 2010). A simple communicative

exchange changes by the channel through which it is transmitted, and though communication amongst disparate groups and individuals has been enabled by communication technology, accessibility does not always equal understanding or efficacy.

As with dialogue, design is also experiencing a period of rapid change. In contrast with the historical approach of the designing of product, emerging design practices emphasize designing for a purpose (Sanders, Stappers, 2008). Designers “are no longer simply

designing products for users. [They] are designing for the future experiences of people, communities and cultures who now are connected and informed in ways that were unimaginable even 10 years ago” (Sanders, Stappers, 2008, p. 6). In addition to the shift of “designing of” to “designing for,” co-design has also given users a central role in the design process, shifting the characterization to “designing with” (Sanders, Stappers, 2008, p. 7). The design practices explored in this thesis involve many stakeholders, and co-creative approaches require effective communication amongst participants to reap the rewards and increase value in the process.

Additionally, society in the context of the modern world continues to grow more complex. “The late 1990s have brought a dramatic collision of new economic, social, and political forces, compelling many to believe we are in a time of both great peril and profound

promise” (Isaacs, 2008, p. 321). This complexity calls for a deeper level of engagement to examine intricacies and issues in order to gain a point of understanding from which to operate (Isaacs, 2008). And “as organizations and their challenges become more networked and complex, it will be harder work to help them to digest new ideas and build towards a better future” (Labarre, S., et al. 2016). With complexity “the noise also increases - and the harder it becomes to have the needed communication: dialogue” (Anonymous, personal communication, 29 March, 2016). Taken together, the setting and conditions “produce a context particularly ripe for dialogue” (Isaacs, 2008, p. 321).

This can be seen as a daunting challenge, in the realms of design practice, communication and society: the need for shared understanding and clear communication in a landscape with an increasing amount

of complexity and noise. Dialogue, an innately human capability, seems an appropriate tool for meeting the needs of understanding and alignment, but how do we support it in this messy environment?

between dialogue and design and uncover a symbiotic relationship in which dialogue is uniquely equipped to serve goals of design practices. By also exploring the elements that allow dialogue to flourish, I aim to provide

1.2 AREA OF INQUIRY

My research is built on the following questions:

What is the relationship between dialogue and design?

How is dialogue used in design practice?

What can it achieve? What is its value?

1.3 PURPOSE AND RELEVANCE

Through this thesis, I explore the relationship between dialogue and design to gain a better understanding of the role, importance and value of dialogue in the context of design practices. Through an examination of the existing academic knowledge base of both topics combined with interviews of design practitioners, I draw parallels

the reader with the beginnings of an idea of how dialogue might be used to support design process.

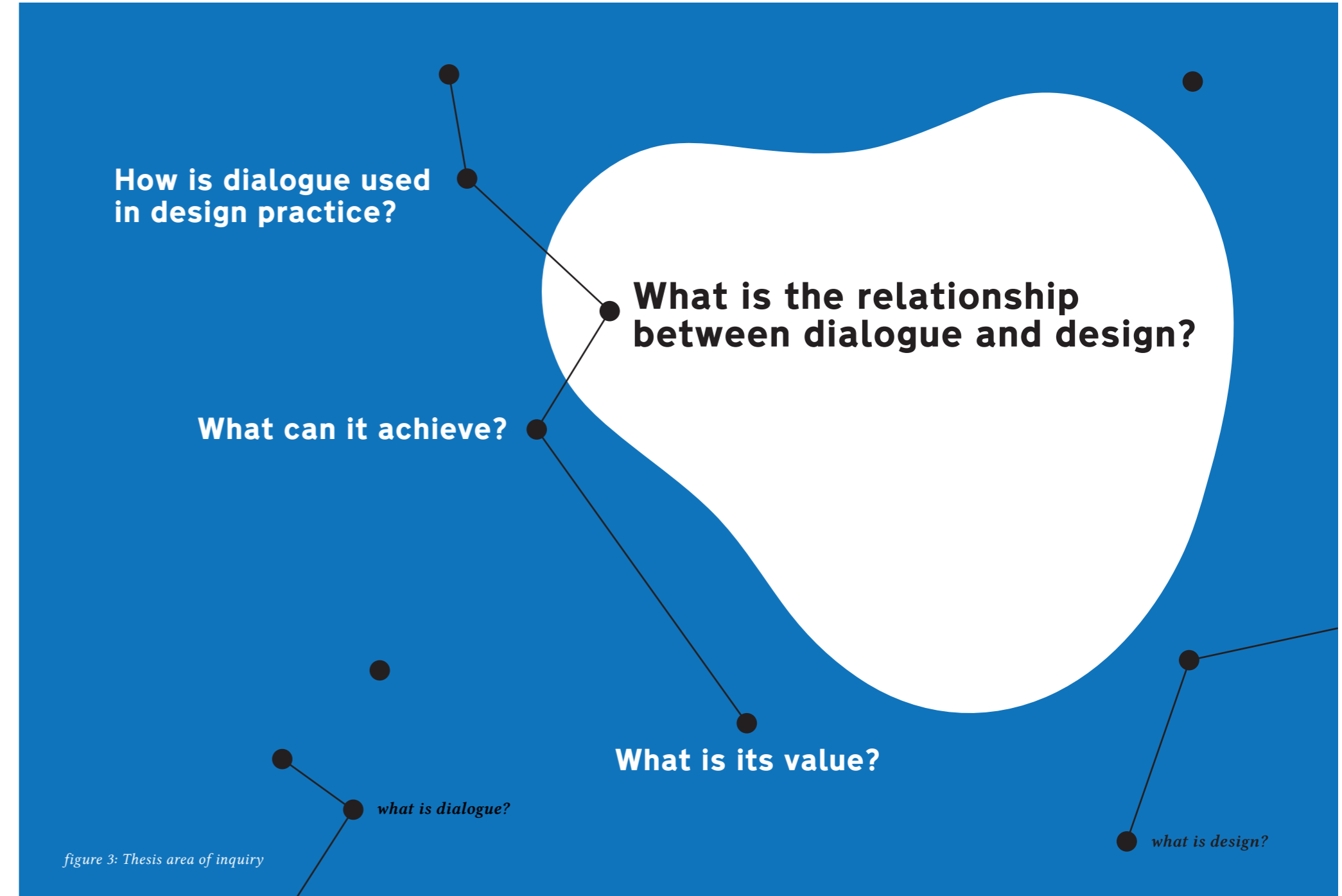


figure 3: Thesis area of inquiry

2. theory

In this section I define both design and dialogue, and put forth a theoretical frame for dialogue based on the work of Nicholas Burbules, David Bohm and William Isaacs. I explore in-depth William Isaacs' Four Fields of Conversation, in which the two most mature fields characterize his theories of reflective and generative dialogue.

2.1 DESIGN, DEFINED

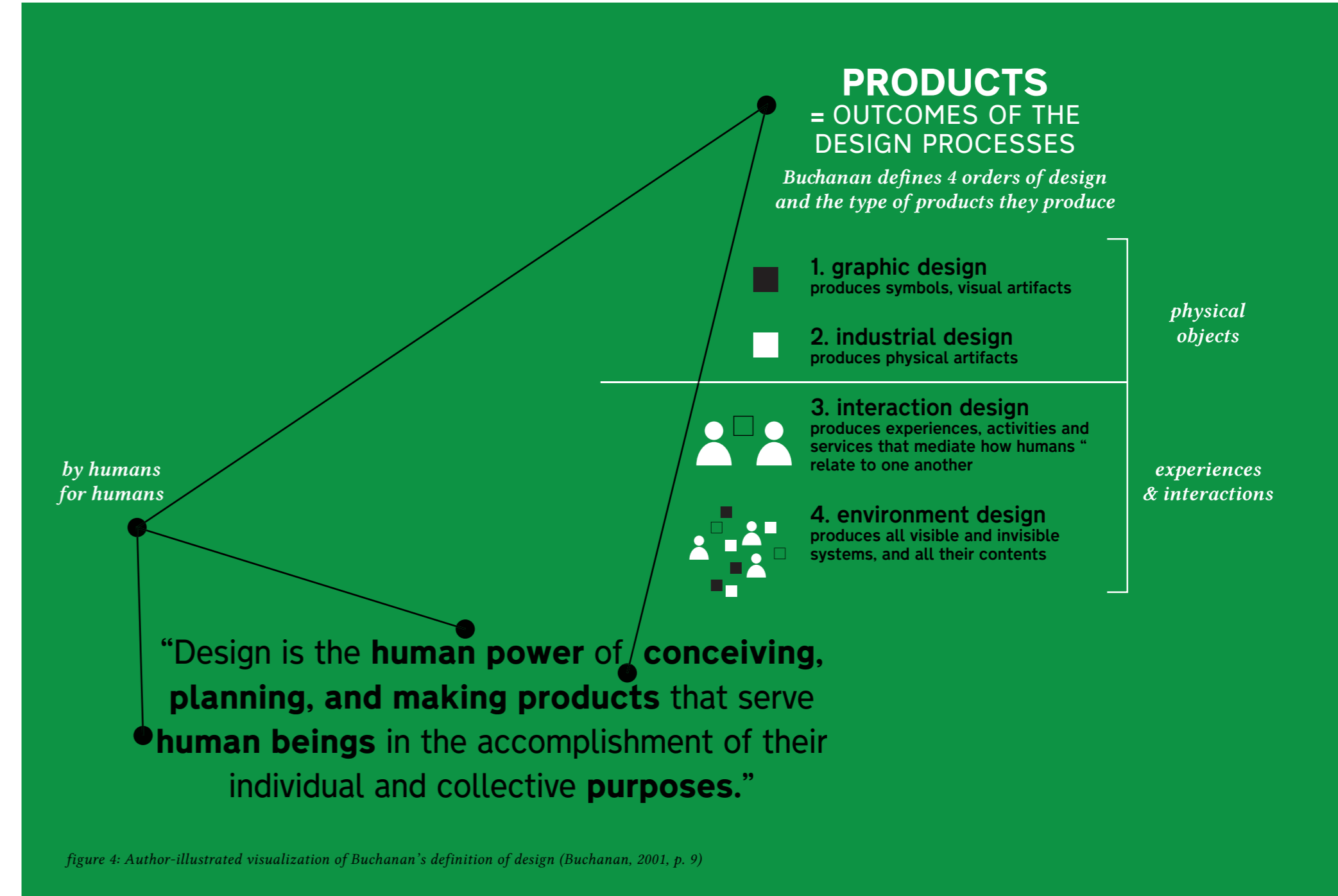
The meaning, practice and understanding of design has shifted rapidly, and in turn the term has become a bit arbitrary in meaning without proper context. Historically, design was concerned with the act of making physical items with mechanical tools and processes. Buchanan characterizes historical design as a "servile activity, practiced by artisans who possessed practical knowledge and intuitive abilities but who did not possess the ability to explain the first principles that guided their work" (Buchanan, 2001, p. 5).

In the current context, a new approach to design has emerged. This approach is marked by an emphasis on cognitive methods and processes. "Because a designer is a thinker whose job it is to move from thought to action, the designer uses capacities of mind to solve problems for clients in an appropriate and empathic way" (Friedman, 2003, p. 511). In addition to the practical evolution, new meanings of design have emerged, and Buchanan argues this to be an indicator of the dynamic nature of design, suggesting continued evolution. "One of the great strengths of design is that we have not settled on a single definition. Fields in which definition is now a settled matter tend to be lethargic, dying, or dead fields, where inquiry no longer provides challenges to what is accepted as truth" (Buchanan, 2001, p. 8).

In the pursuit of this research, I explored many different definitions of design. In the definitions I found

most apropos to this work, there were some common themes: a.) design as a strategic process that is b.) concerned with giving order that c.) serves humans. Kolko emphasizes the capacity of design process to bring order to complexity, when he states "Designers, as well as those who research and describe the process of design, continually describe design as a way of organizing complexity or finding clarity in chaos" (2010). Papanek agrees that design is capable of giving structure, and he states "design is a conscious and intuitive effort to impose meaningful order.... Design is both the underlying matrix of order and the tool that creates it" (1985, p. 4). Mau acknowledges the shift and expansion of design, while also characterizing design as a human process when he states "no longer associated simply with objects and appearances, design is increasingly understood in a much wider sense as the human capacity to plan and produce desired outcomes" (Mau,

2007). While Kolko, Papanek and Mau together frame the approximate space in which a definition of design exists for the purposes of this thesis, Richard Buchanan sums up the important points in his definition of design as "the human power of conceiving, planning, and making products that serve human beings in the accomplishment of their individual and collective purposes" (2001, p. 9). He continues "that design is an art of invention and disposition, whose scope is universal, in the sense that it may be applied for the creation of any human-made product" (Buchanan, 2001, p. 9).



theory says

DESIGN IS:

**practiced by and for humans /
conscious and intuitive / a method /
a relational process / a tool /
individual and collective / driven by
purpose / capable of solving
challenges / intent on creating or
improving conditions / an outcome /
able to bring clarity or order /
a means of understanding / value-adding**

figure 5: Theoretical characterization of design

2.2 CO-CREATION

With this understanding of design, it is also important to address shifts in the aims of and participants in design processes. Stappers and Sanders characterize the focus shift from traditional to emerging practices as designing of products to designing for a purpose (2008, p. 7).

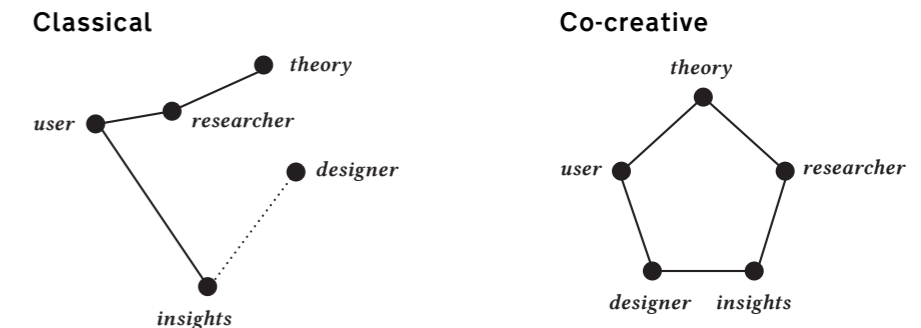
Emerging design practices center around human or societal needs “and require a different approach in that [designers] need to take longer views and address larger scopes of inquiry” (Sanders, Stappers, 2008, p. 7). This shift indicates a change not only in what is designed, and how it is designed, but also who designs (Sanders, Stappers, 2008, p. 8). In addition to an expansion of intention, the scope of stakeholders involved in the process has also grown and given rise to practices such as co-creation and co-design.

Co-creation is defined as any act of collective creativity shared amongst two or more people (Sanders, Stappers, 2008). Trends of co-creation have invited many stakeholders to the table, most notably users. Co-creation allows users to act as an “expert of his/her experience....playing a large role in knowledge development, idea generation and concept development” (Sanders, Stappers, 2008, p. 8). Co-creation throughout the course of design process is referred to as co-design, and through this model the roles of users, researchers and designers are intertwined, leading to more inputs, necessitating a different type of communication model to support this unique participatory environment. In order to leverage the potentials of the many stakeholder inputs in this new design ecosystem, it becomes necessary for the role of the designer to expand to include skills that develop and support the frame for communication and dialogue (Sanders, Stappers, 2008).

figure 6:
TRADITIONAL AND EMERGING DESIGN PRACTICES
The traditional design disciplines focus on the designing of products... while emerging design disciplines focus on designing for a purpose

<ul style="list-style-type: none"> visual communication design interior space design product design information design architecture planning 	<ul style="list-style-type: none"> design for experiencing design for emotion design for interacting design for sustainability design for serving design for transforming
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figure 7:
CLASSICAL VS. CO-CREATIVE DESIGN APPROACHES



figures 6 and 7: Sanders, Stappers, 2008

“If we cannot talk together
we cannot work together.”

figure 8: Isaacs, 2008, p. 327

2.3 DIALOGUE, DEFINED

The word dialogue comes from the Greek “dia” meaning “between or through” and “logos” means “what is talked about” or “speech, reason” (“Dialogue,” 2016). Drawn from the origins of Socratic dialogue, a means of exploring meaning through inquiry, questioning and exchange, modern usage of the term denotes a higher-level of purpose than that which would be referred to as a “conversation” (“Dialogue,” 2016). Common understanding of the word “dialogue” references a collaborative face-to-face exchange of information amongst a group as a means to share ideas and form a common understanding. The goal in dialogue is to learn and create.

The Oxford English Dictionary defines dialogue, a noun, as “a conversation carried on between two or more people; a verbal exchange, a discussion” (“Dialogue,” 2016). Comparatively, conversation is defined as “[an]

interchange of thoughts and words; familiar discourse or talk; to make conversation: to converse for the sake of conversing” (“Conversation,” 2016).

At first glance, these two seem quite similar, though the contrast lies in the defining words of “exchange” versus “interchange.” The same source defines exchange as “the action, or an act, of reciprocal giving and receiving” (“Exchange,” 2016) and interchange as “the act of exchanging reciprocally” (“Interchange,” 2016).

Through the examination of these words, a slight difference can be inferred. The idea of exchange is understood as having a free and fluid quality of giving and receiving, whereas interchange is understood as firmly structured and expected reciprocity. Interchange feels transactional, while exchange is generous and freely giving, with hopes for reciprocity but not requiring it in equal measure.

2.4 BURBULES AND DIALOGUE

Nicholas Burbules, a widely-published scholar of education and dialogue, characterizes dialogue not as a method but rather a social relation that willing participants engage in (Burbules, 1993). Burbules sees dialogue’s power in that it can foster understanding and improve knowledge, insight or sensitivity of its participants so they can gain a richer appreciation of themselves, one another, and the world (1993). Participants in dialogue must be mindful of the emotional forces at work in humans: emotional commitment and traits of mutual concern, trust, respect, appreciation, affection and hope help dialogue to thrive in Burbules’ model (1993). Threats to dialogue are related to power and hierarchies and include monologue, manipulation, privilege and authority (Burbules, 1993).

In Burbules’ view, participants in dialogue should exhibit traits of patience, tolerance of and openness to criticism, self-restraint and careful listening, willingness to consider views of others, and clear self expression (1993). Overall, Burbules stresses the willingness of participants to be open and submit to a process that does not guarantee fixed outcomes (1993). He believes dialogue is capable of discovery and new kinds of understandings (1993).

2.5 BOHM AND DIALOGUE

David Bohm, a prominent theoretical physicist who proposed dialogue as a method in management practice, was compelled in his later years to explore dialogue to address societal challenges. He characterized dialogue as an exploratory and organic process that leads participants and whose essence is learning (2003). A dialogue is a conversation between peers that allows participants to first become aware of any misalignments in belief within themselves or with others (Bohm, 1996). "In a dialogue, when one person says something, the other person does not in general respond with exactly the same meaning as that seen by the first person. Rather the meanings are only similar, not identical" (Bohm, 1996, p. 2). Bohm calls this phenomenon incoherence of thought (Bohm, 1996).

Once this incoherence of thought is revealed and different opinions are shared, it is then possible, through dialogue to "[share] a common content even if we don't agree entirely.... And if we can see [all the opinions], we may then move more creatively in a different direction" (Bohm, 1996, p. 26). Examining discrepancies in belief and sharing them amongst a group allows for the development of a shared meaning, which though not fixed or static, still creates a point of departure towards collaboration and, hopefully, creativity within the group (Bohm, 1996). Different viewpoints and understandings do not lead participants to settle on a fixed definition (making something common) but instead lead to making something together, or in common (Bohm, 1996). Further emphasizing its fluid nature, Bohm characterizes dialogue as "a stream of meaning flowing among and through us and between us" (Bohm, 1996, p. 6).

In alignment with Burbules, Bohm stresses the importance of process in dialogue, and the suspension of participants' need to control or direct it, though it may be unpredictable (Bohm, 1996). He states that "no firm rules can be laid down for conducting a dialogue because its essence is learning... as part of an unfolding process of creative participation between peers" (Bohm, Factor, Garrett, 1991). This group of equals must be capable of listening without agenda, share a pursuit of coherence (rather than truth) and a willingness to set aside their historical views (Bohm, 1996). Bohm cautions about a preoccupation with truth, and states that "dialogue may not be concerned directly with truth - it may arrive at truth, but it is concerned with meaning. If the meaning is incoherent you will never arrive at truth" (Bohm, 1996, p. 37).

Essential of participants in dialogue is "the ability to hold many points of view in suspension, along with a primary interest in the creation of common meaning" (Bohm and Peat, 1987, p. 247). Bohm believes that "the softening up, the opening up of the mind" is the value of dialogue - there is no fixed outcome or answer (Bohm, 1996, p. 337). He also identifies collective participation, "an idea growing and changing and evolving in a group" as a product of dialogue in which trust is present (Bohm, 1996, p. 26).

According to Bohm, threats to dialogue include prejudice, dominance, hierarchy, authority, the need for purpose, and also anxiety and holding back (1996). Bohm stresses "[participants] must give space for each person to talk," listen and reply in due time (1996, p. 324). A defensive attitude is incongruous to dialogue "because intelligence requires that you don't defend assumptions" (Bohm, 1996, p. 34).

Echoing Burbules, Bohm identifies emotion as an important factor that must be considered, as participants often feel the need to defend opinions and assumptions (Bohm, 1996). He warns "very often people get into problems where they don't know what the other person's assumption is, and they react according to what they think it is" (Bohm, 1996, p. 335). Bohm puts forth dialogue as a process that allows participants to "get people to come to know each other's assumptions, so they can listen to their assumptions and know what they are" (Bohm, 1996, p. 335).

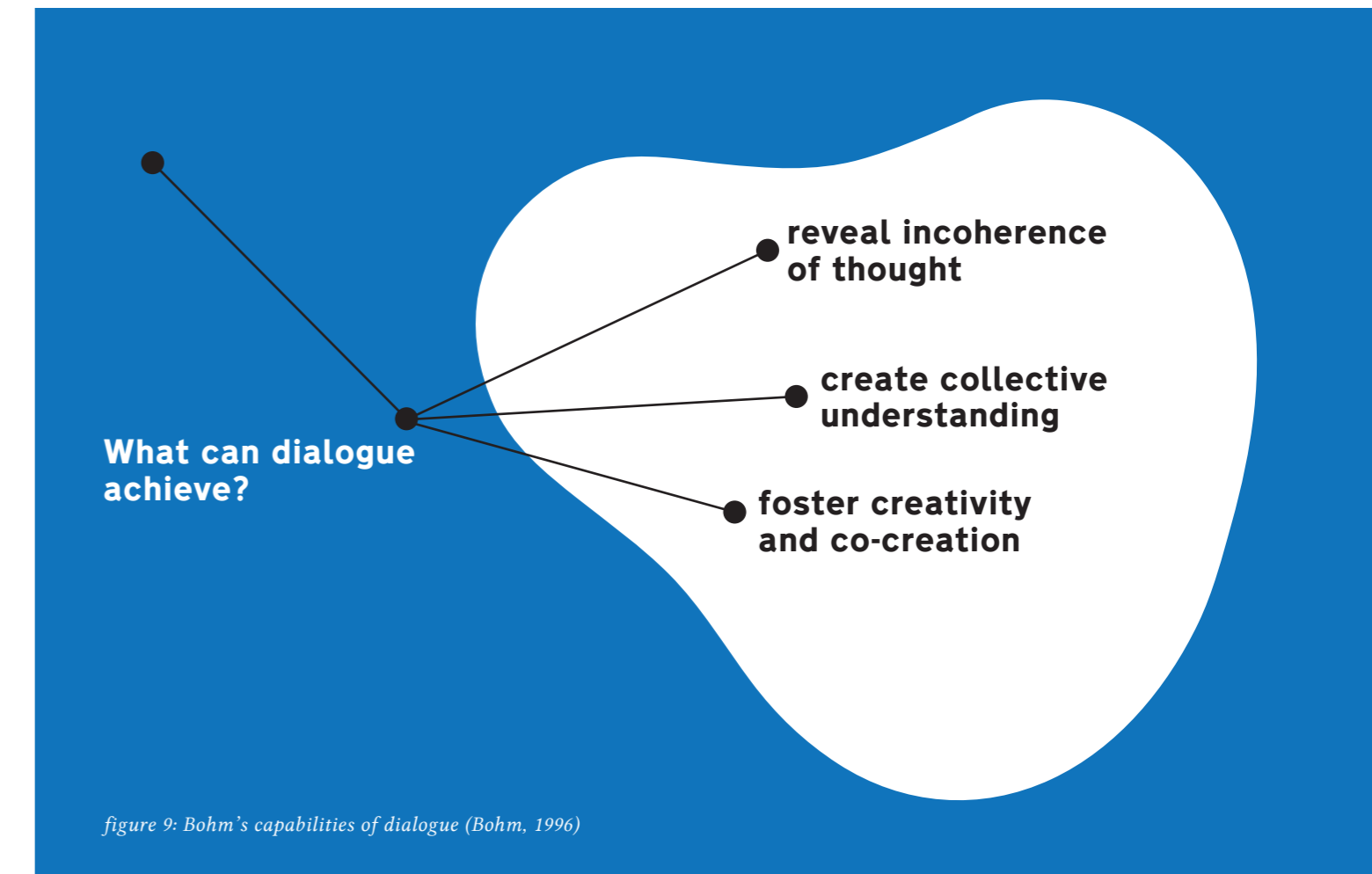


figure 9: Bohm's capabilities of dialogue (Bohm, 1996)

Conversation

“The roots of this word mean to ‘turn together...you take turns speaking’ You hear what you want, paying attention to some things and not others. Usually, you react by defending your position or point of view.”

Dialogue

Conversation transitions to dialogue when instead of reacting to defend your point of view, you start to suspend what you think, acting in a way that creates space for ideas that are incongruous with your current beliefs to be considered.

figure 10: Isaacs, 2008, p. 38

2.6 ISAACS AND DIALOGUE

In “Dialogue: the Art of Thinking Together” academic and practitioner William Isaacs expands on Bohm’s foundational definition of dialogue and explores it in methods and practice. Isaacs defines dialogue as “a conversation with a center, not sides” (2008, p. 19) amongst willing participants and reiterates Bohm’s characterization of dialogue as a flow of meaning (Isaacs, 2008). As proposed by Burbules and Bohm, Isaacs sees dialogue as a human process capable of uncovering and considering differing views in order to access the creativity of the group (Isaacs, 2008).

Isaacs identifies the capability of dialogue to “[lift] us out of polarization and into a greater common sense, and is thereby a means for accessing the intelligence and coordinated power of groups of people” (Burkhardt, “Thinking Together, Part 1”, 2010). Dialogue, to Isaacs, is a living process

able to facilitate the sharing of differences of individuals in order to harness the energy of the group to move forward, generatively.

listen deeply and respectfully, without conviction of pre-understanding is needed to support dialogical process (Isaacs, 2008). Isaacs cautions that “you

ISAACS’ KEY PRACTICES FOR DIALOGUE

Listening *to others, to ourselves and our own reactions*

Respecting *a sense of honoring or deferring to someone - to see others as legitimate*

Suspending *displaying thought in a way that lets us and others see and understand it*

Voicing *revealing what is true for you regardless of other influences*

(Isaacs, 2008)

“Dialogue not only raises the level of shared thinking, it impacts how people act, and, in particular, how they act all together” (Isaacs, 2008, p. 22). A flow of meaning from all views being voiced allows alignment and forward movement (Isaacs, 2008).

Prerequisites for dialogue are both an understanding of what it is and an intention to create it (Burkhardt, “Thinking Together, Part 1”, 2010). In addition, the ability of participants to

can’t get to dialogue if you cling to what you think and why you think it” (Burkhardt, “Thinking Together, Part 1”, 2010) and stresses listening, respect, sharing of one’s true voice, and suspending of judgment as the building blocks of dialogue (Isaacs, 2008). Curiosity about differing views and the ability to abstain from judgment support dialogue as well (Isaacs, 2008).

2.7 THE FOUR FIELDS OF CONVERSATION

Drawing from Claus Otto Scharmer, Isaacs proposes that there are four fields of conversation that can arise when a group of people sets out to have dialogue. Integral to the understanding of this model are the notions of the container and the field. The field of conversation is the space that indicates who and what is included. It is comprised by the people in the conversation and all of their complexities: their experiences, energy, relationships and ideas, and all of the interactions between these complexities (Isaacs, 2008). Isaacs defines a field as “the quality of shared meaning and energy that can emerge among a group of people” (Isaacs, 2008, p. 242). The field can be understood as the two-dimensional borderline drawn to delineate the included component parts.

The features of each field are what Isaacs calls the container. The container refers to the “characteristics, patterns and pressures” of the particular conversation field (Isaacs, 2008, p. 257). The container is the space in which the interactions and experiences of all the moving parts of the field can coexist and it is wholly influenced by the nature of the relationship of its contents. To be effective, the container must cultivate emotional intimacy, shared meaning and the exposure of internal contradictions (Isaacs, 2008). The container limits how far the conversation can go in breadth and depth: who and how much can be included and what levels of complexity can be considered without threatening its structure. If the field can be thought of as a two-dimensional borderline, the container can be thought of as a sphere within which all of the complexities of the field interact as a larger whole.

Isaacs proposes that the container is strengthened and expanded as the group faces crises, which he defines as “significant changes evoked by participants in the dialogue” (Isaacs, 2008, p. 257). He defines a specific crisis at the border of each conversation field that must be addressed by the group in order to grow the container and evolve into the next field. By transitioning through the crisis at the border of the field, the group is more able to coexist in a space that is less harmonious and homogeneous: that space, Isaacs’ container, is also more equipped to handle and support the a variety of divergent views, and also the unknown. In that way, fields include all of the actors and components in the exchange you are having, and containers are the expansiveness of the space in which the exchange can be held. As the container grows, the group progress through the conversational fields.

Dialogue, then, is a “process by which we can create containers that are capable of holding our experience in ever more rich and complex ways, making legitimate many approaches and styles” (Isaacs, 2008, p. 256). Dialogue is a process of inclusion, of growth of the container and evolution between the conversation fields. Isaacs defines it as “conversation in motion” (Isaacs, 2008, p. 254) an evolving process that is neither linear nor static, and he notes that the transition is not always as uncomplicated as one would like. “It’s a cycle. It’s not always whole, complete, and powerful. Sometimes it’s incomplete and bumpy. That’s part of the creative process. It goes from empty to full, from incomplete to complete.” (Burkhardt, “Thinking Together, Part 1”, 2010).” At its best, dialogue evolves through the fields of conversation as the container grows, and the group becomes more adept at accessing their creativity.

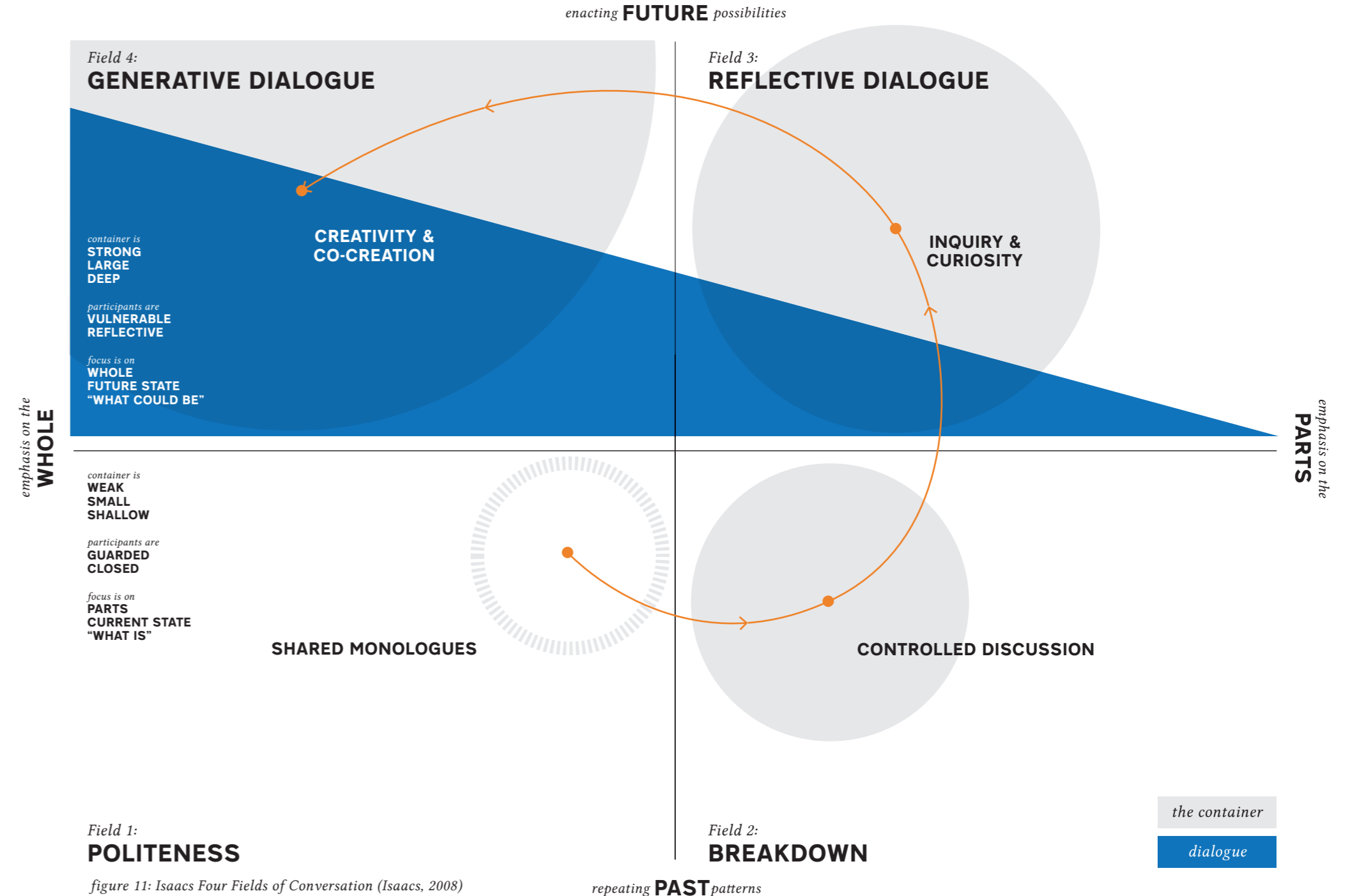


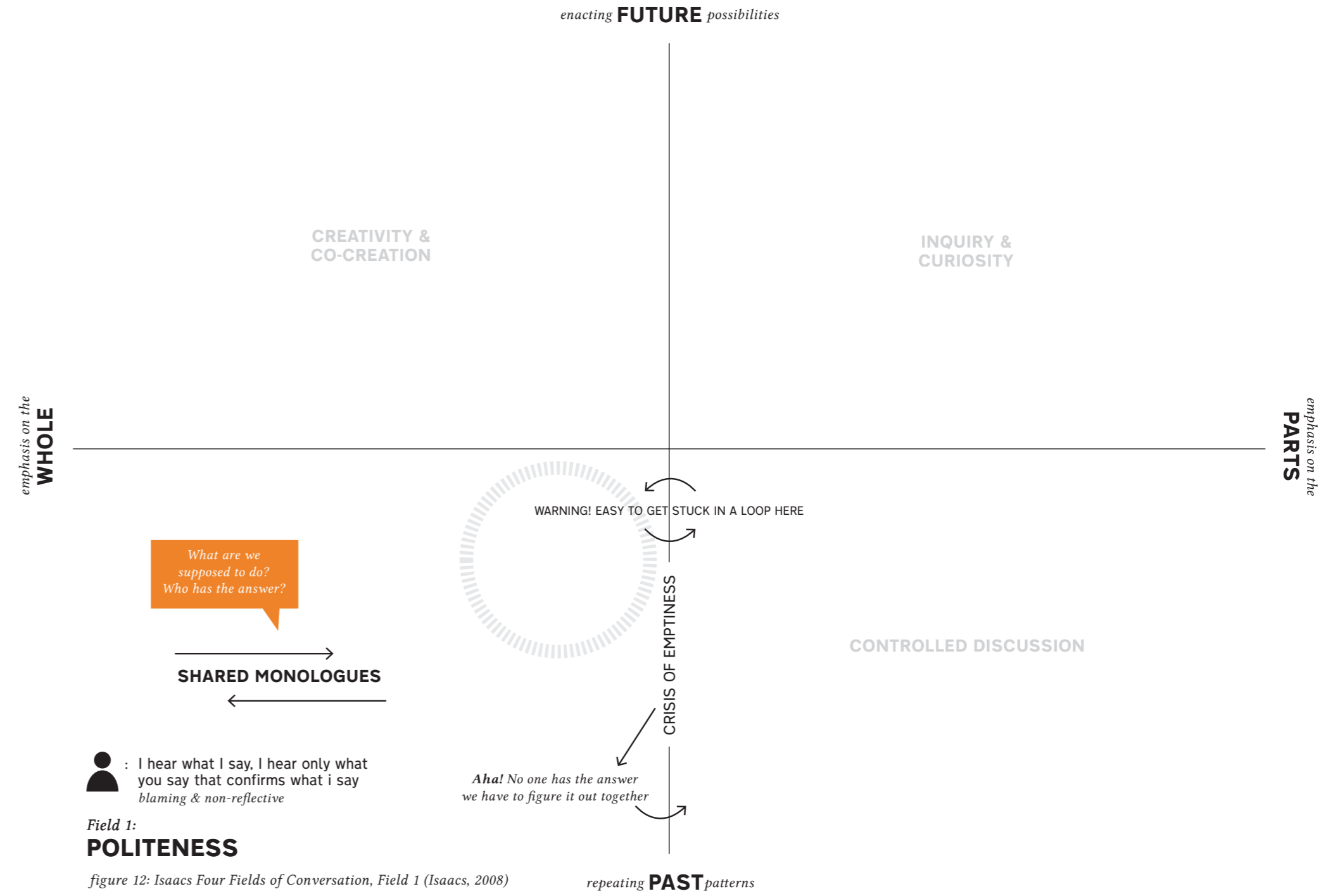
figure 11: Isaacs Four Fields of Conversation (Isaacs, 2008)

FIELD 1
Politeness:
Shared Monologues
Superficiality and niceties

Field one is characterized by the sharing of monologues by participants. Politeness and civility are valued by the group, and opinions that might provoke or cause conflict are withheld. In this field, it is common that participants believe that there is something that should be done, that there is a norm in the situation, and they are motivated to find this structure and follow the rules it proposes (Isaacs, 2008). Silence is uncomfortable and the group is driven by fear of the unknown.

Eventually, the group must face what Isaacs calls the “crisis of emptiness” as it becomes clear that no member has the answer or approach that can be adopted by the group; instead, this knowledge will come from shared experience (Isaacs, 2008, p. 263).

In this field, the newly formed container is small, unstable and cannot handle much intensity (Isaacs, 2008). The participants do not know one another well enough to be vulnerable, but as they move through the field towards the crisis, they realize politeness must be traded for a measure of authenticity in order for the conversation to progress.



Field 1:
POLITENESS

figure 12: Isaacs Four Fields of Conversation, Field 1 (Isaacs, 2008)

FIELD 2
Breakdown:
Controlled Discussion
Fighting for your side

In field two, participants tentatively begin to share what they think and feel, and conflict arises (Isaacs, 2008). Participants allow themselves to become more vulnerable, exposing their personal thoughts and values, and expressing an individual point of view is more the focus than challenging it.

In this space, it is common for the group to come to a conflict and then cycle back to field one, as staying in the conflict and breakdown is uncomfortable (Isaacs 2008). An ongoing loop between politeness (field one) and breakdown (field two) is the pattern that most groups experience in conversation. In order to break the cycle and progress to field three, participants must face a “crisis of suspension” (Isaacs, 2008, p. 265), the awareness that participants are more than the points of view they hold (Isaacs, 2008). From this realization comes the opportunity of individuals to make space for other inputs without “jeopardizing their own internal stability” (Isaacs, 2008, p. 270).

In this field, the container is small and still unstable, but it has grown enough to allow for this conflict to exist within the field. The container can handle the increased pressure brought by differing views, but there is not yet room for reflection or inquiry (Isaacs, 2008).

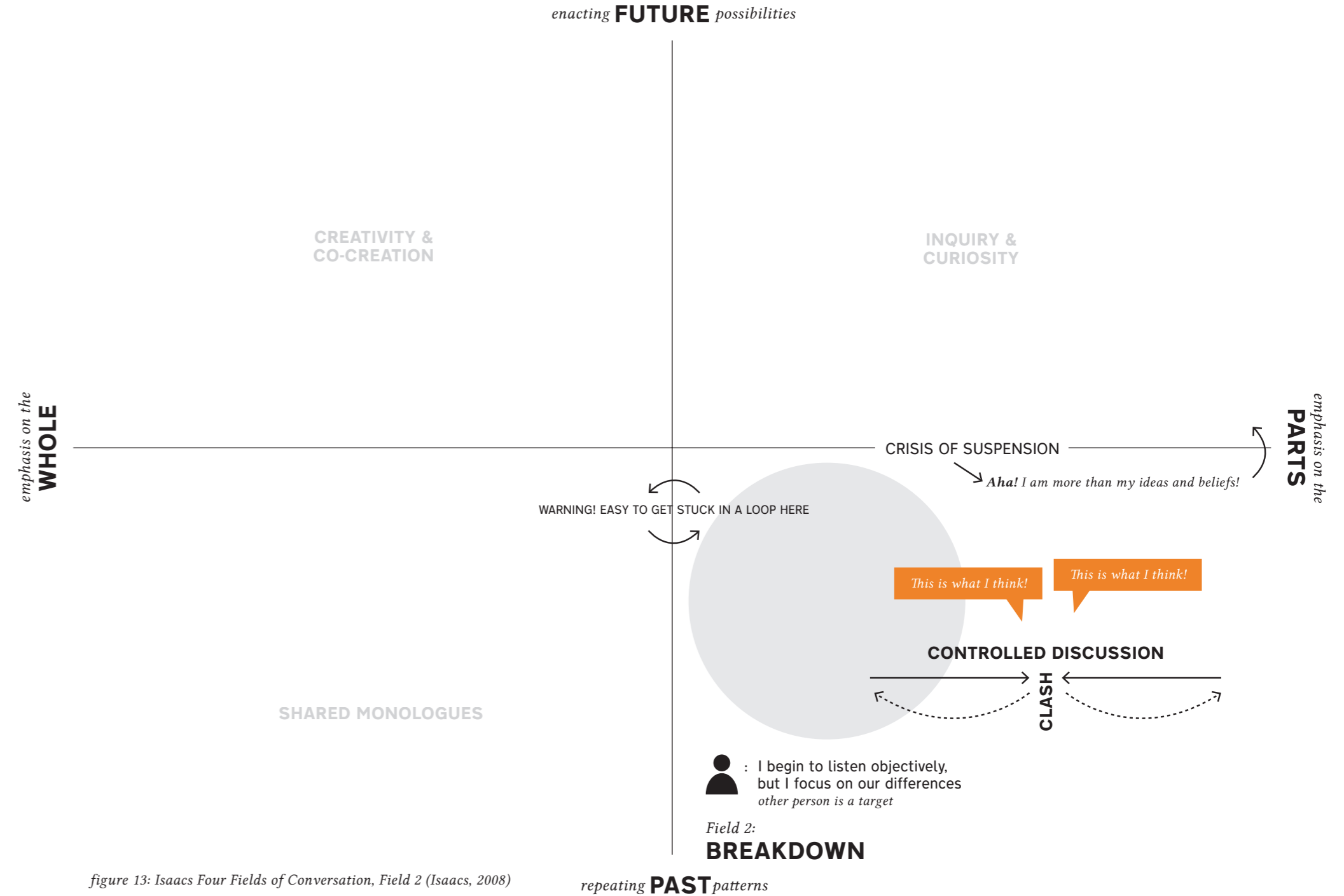


figure 13: Isaacs Four Fields of Conversation, Field 2 (Isaacs, 2008)

FIELD 3
Reflective Dialogue:
Inquiry & Curiosity
Opening to the views of others

To evolve as far as field three, it is necessary for participants to suspend their belief that they know what is supposed to happen (Isaacs, 2008). Here, it is possible for a spirit of curiosity to grow, and participants slow down and think. Acts of reflection and sharing are more valued than agreement. It is in this field that Isaacs' idea of dialogue begins, and ideas flow freely (Isaacs, 2008). Silence is thoughtful, and the group explores their beliefs, behavior and actions on individual and personal levels (Isaacs, 2008).

In this field, there is a key shift from focus only on the individual to focus also on the group (Isaacs, 2008). The participants face the "crisis of fragmentation:" an admission that the group is not solely comprised of the individual points of view of the participants, and that together, the group can see more than would be visible individually (Isaacs, 2008, p. 279). The idea of the group as an entity beyond its component individual parts is born.

In this field, the container expands as members of the group admit what they do not know. Curiosity and inquiry grow as well as the space for the sum of the parts to be considered over the individuals (Isaacs, 2008).

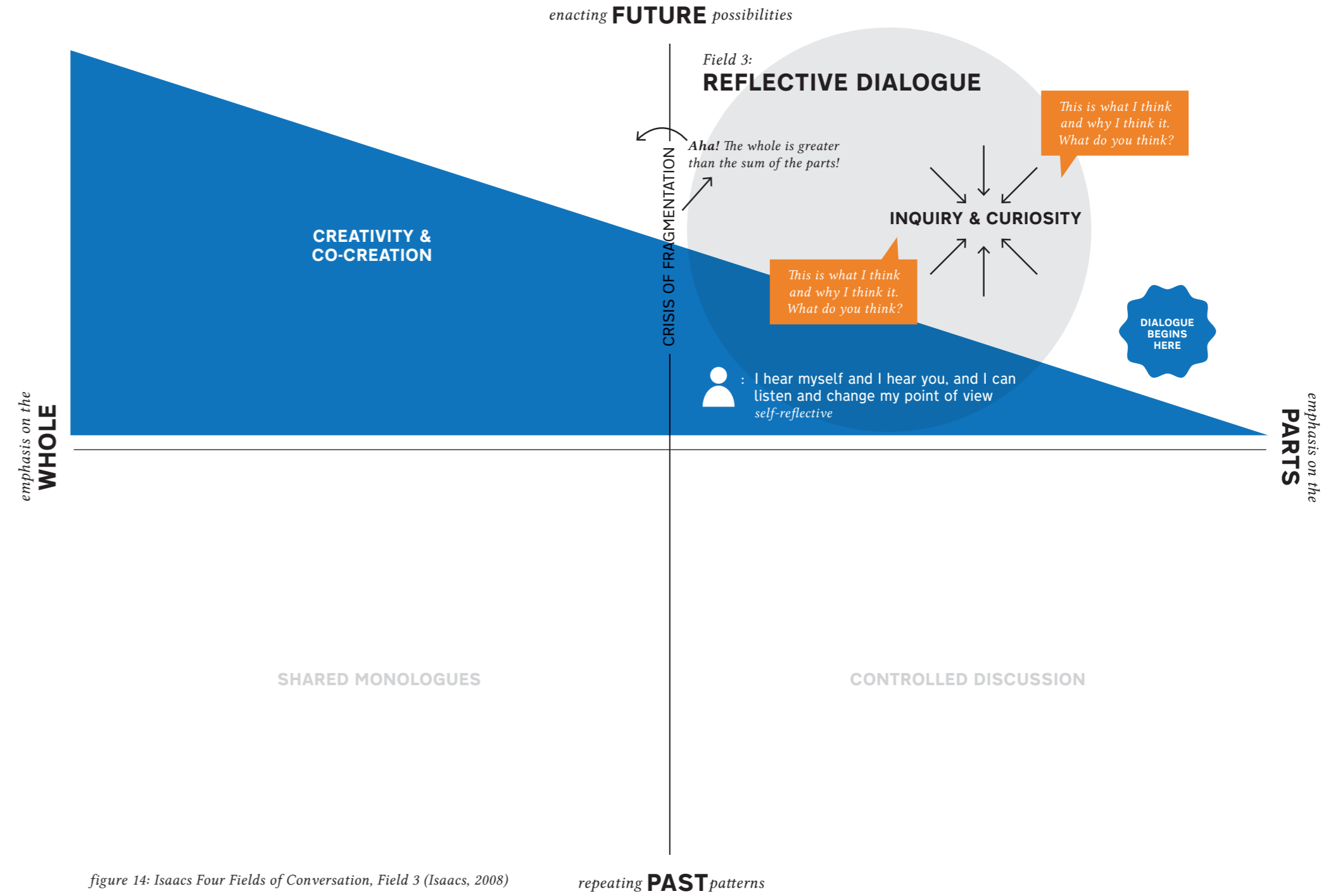


figure 14: Isaacs Four Fields of Conversation, Field 3 (Isaacs, 2008)

FIELD 4
Generative Dialogue:
Creativity and Co-Creation
Collaboratively developing
shared meaning

In field four, the group has reached synchronicity and generative dialogue is possible (Isaacs, 2008). The participants have developed the capacity to connect the interactions among ideas and people in the group with their inner workings, effectively letting go of barriers that might limit the flow of meaning (Isaacs, 2008). Interactions can follow new rules, and participants access a space in which “they are personally included but also fully aware of the impersonal elements of their participation” in the dialogue (Isaacs, 2008, p. 279).

The container in field four has been expanded to a profound level such that many participants “simply do not have words to describe what emerges” (Isaacs, 2008, p. 282). Participants come to an understanding of the larger group, and the way in which their participation affects it (Isaacs, 2008, p. 283). The container provides “an atmosphere large enough to accommodate radically different points of view without requiring any of them to change” (Isaacs, 2008, p. 280). Collective flow and co-creation, as characterized by Sanders and Stappers, is achieved.

The crisis in field four is that of reentry, the “return to the world from which you departed” (Isaacs, 2008, p. 285). Isaacs characterizes this as a challenging transition, but notes that the ability to access field three and four is now more developed. One has gained the ability to reflect on one’s own actions and impacts on both micro and macro levels, and has understood the notion of dialogue as motion rather than as a linear or end-point driven process (Isaacs, 2008).

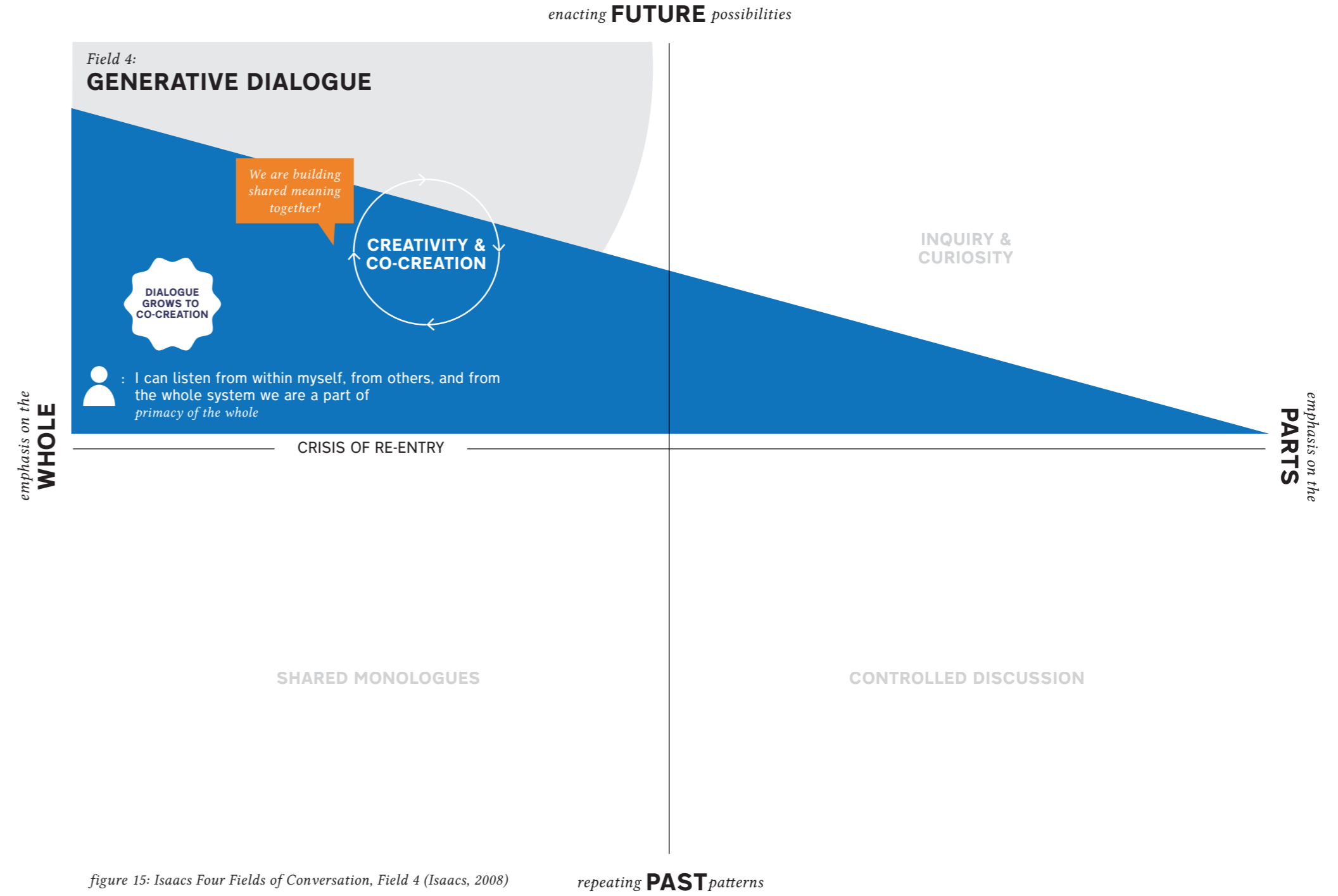


figure 15: Isaacs Four Fields of Conversation, Field 4 (Isaacs, 2008)

2.8 THEORETICAL OVERVIEW

Through the theoretical frame, the specific areas of design and dialogue examined in this thesis are given boundaries and explored in both breadth and depth. Definitions and characteristics are identified to provide the reader with a foundational understanding of the existing knowledge in these areas, in order to approach the forthcoming insights gathered with an appropriate point of departure.

Through the lens of academics and practitioners, design is characterized as a purpose-driven, conscious and intuitive human process, intent on generating outcomes, such as understanding or order, and value-creation of varied measures.

Through the theories of dialogue put forth by Bohm, Burbules and Isaacs, dialogue is understood as a means of communication that allows a group of willing participants to express disparate views in order to create a common meaning or shared understanding. The Four Fields of Conversation, taken from Scharmer and developed by Isaacs, is used to illustrate a means of achieving dialogue, and set the frame for the relation of dialogue to design process.

Design is a purpose-driven, conscious and intuitive human process, intent on generating outcomes, such as understanding or order, and value-creation of varied measures.

Dialogue is a means of communication that allows a group of willing participants to express disparate views in order to create a common meaning or shared understanding.

3. methodology

3.1 DESIGN RESEARCH

As with the term design, design research also can be ascribed many meanings. This thesis adheres to that of Norman and Verganti, who define design research in two manners, a.) one involving processes of exploration and experimentation aimed at advancing knowledge, and the other b.) activities of data collection and analysis, with the shared aim of knowledge advancement (2012). I would attest that the process of this work has fallen into both categories over the course of study and textual generation. For practical purposes of gathering empirical data, analyzing and synthesizing, my approach would fall neatly under the latter definition: data was gathered through semi-structured interviews. Conversely, the generation of both the interview frame and also the complete text was a much more iterated process, full of revisions and direction-changes, aligning more with the exploratory and experimental characteristics of the former definition.

The interview questions were developed and iterated alongside the interviews and also the literature review. The text itself has certainly shifted directions, expanded and contracted as new insights and experiences were introduced. Operating within both definitions has allowed for the space and flexibility necessary to support the development of my research and its written record as a thesis.

3.2 SENSEMAKING, SYNTHESIS AND ABDUCTION

Design strategist Jon Kolko defines sensemaking as “an action-oriented process that people automatically go through in order to integrate experiences into their understanding of the world around them” (Kolko, 2010, para. 1). Sensemaking happens internally, while synthesis can be seen as the following step in a design process: the act of extracting these insights and findings from the cognitive realm so that they may be examined collaboratively by a group (Kolko, 2010). In this thesis, though the synthesis was not performed collaboratively, the method of externalizing the findings to identify patterns and draw connections was utilized. The raw data was organized and examined, meanings were identified and abductive logic was applied, allowing for the creation of new knowledge or insight (Kolko, 2010).

In support of design as a process of bringing order and simplicity, synthesis is a clarifying process aimed at identifying patterns and drawing connections. Abduction then creates a most-likely hypothesis based on the sensemaking and synthesis of the data (Kolko, 2010). Sensemaking, synthesis and abduction are the methods by which the gathered insights (drawn from the recorded and transcribed interviews) were analyzed to identify the nature of dialogue, design, their relationship and value.

Sensemaking of the first-round analysis of each transcribed interview led to synthesis and visual mapping of responses under the heading of each question. This mapping was undertaken with responses from all interviewees, to allow for response patterns to become apparent. A second round of analysis involved the reorganization of the responses and categories, as common meanings were illuminated through abductive reasoning.

3.3 HERMENEUTICS

A Hermeneutic research approach supports the meanings ascribed to both dialogue and design in this explorative study. It puts forth a continuous looped model of interpretation in context and also embraces ambiguity, mirroring the iterated processes of design examined here (Gadamer, 1975). Hermeneutics also proposes dialogue as a tool of interpretation, as meaning is not always readily accessible (Gadamer, 1975). The Hermeneutic process of interpretation requires similar participatory openness that Bohm, Burbules and Isaacs, as presented in the theory chapter, also request from participants in dialogue.

Through iterated processes of interpretation and dialogue, understanding is created (Gadamer, 1975). Hermeneutics emphasizes the importance of context in this interpretive process, making clear that the parts cannot be divorced from the whole, echoing David Bohm’s concern with the fallacy of fragmentation (Bohm, 1996). Considering only the component parts, for both Gadamer and Bohm, removes layers of richness and also the context required to gain a broader understanding.

3.4 DOUBLE DIAMOND

To chart the course of my research, I utilized the Double Diamond model, which divides convergent and divergent phases into four parts: discover, define, develop and deliver (Design Council, 2005). It is heavily adapted for my purposes (as illustrated in figure 13) but the structure functioned as a support for my inquiry, allowing me to trust the process of converging and diverging.

The discovery phase functioned as a time of informal exploration in my research: I read literature in the broader research landscape, observed situations of dialogue in design, and began the iterative process of mapping the landscape of dialogue and design.

During the define phase, I narrowed in on my research questions, began to define the theoretical frame in which my research would be situated, and also developed and tested my interview frame and questions. At the end of this phase, I held the interviews.

In the develop phase, I used the tools of sensemaking and synthesis to organize and analyze the insights generated in the interviews. There was also the opportunity here to follow up on any answers from interviewees that may have been unclear.

In the deliver phase, I synthesized my findings into the visual and written insights found in the Analysis and Discussion sections of this research. I acknowledge the fallacy of completion, and propose points of departure for the next divergent part of this process, which I suspect could continue on in a great many directions.

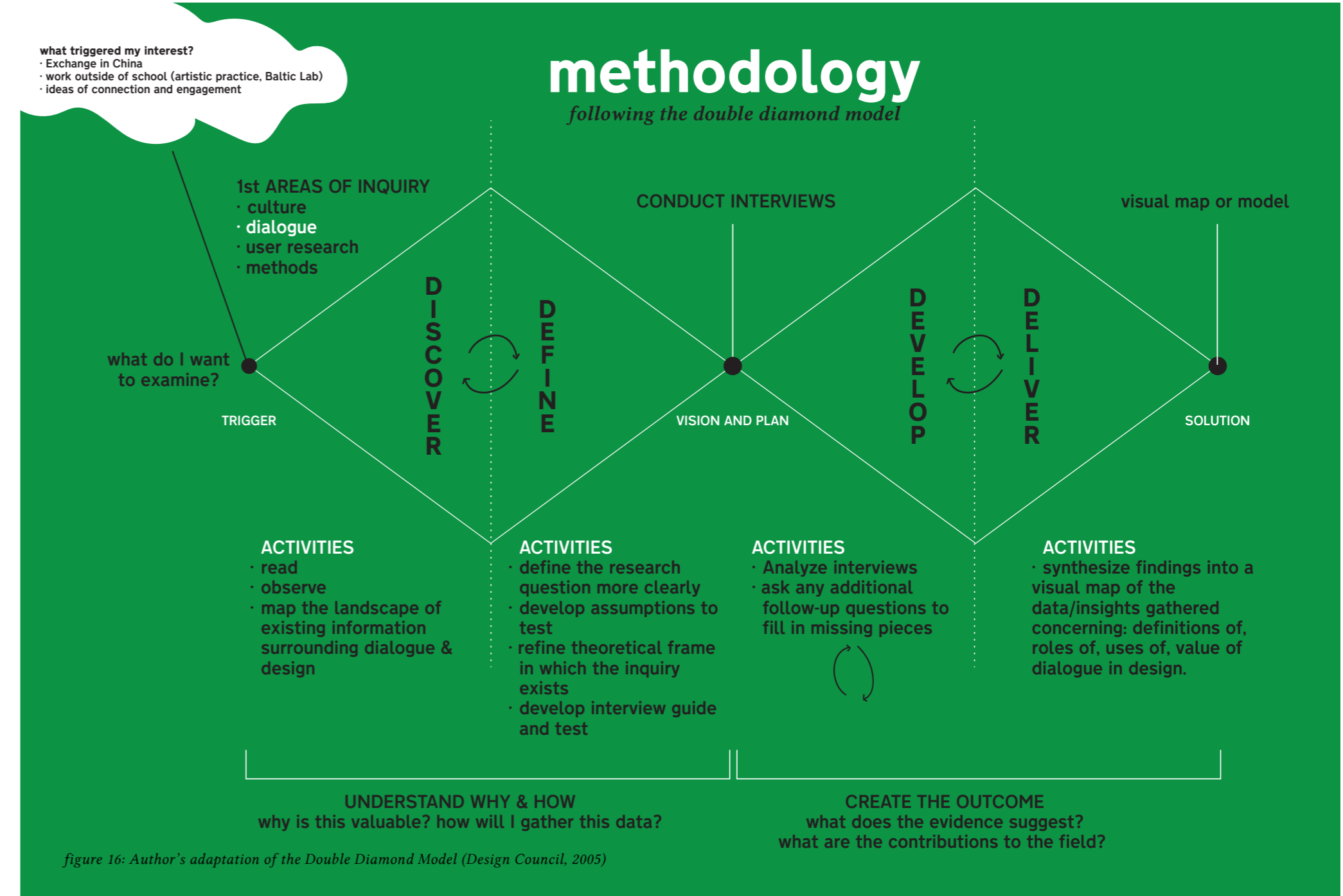


figure 16: Author's adaptation of the Double Diamond Model (Design Council, 2005)

3.5 QUALITATIVE, SEMI-STRUCTURED 1-ON-1 INTERVIEWS

Qualitative research indicates an approach that places emphasis on interpretation over quantification in the gathering and analysis of empirical data (Bryman, 2008). Instead of finding value in broad statistical data, it has the capability to produce deeper insights that can be analyzed in relation to their specific context. As with a Hermeneutic approach, qualitative research is highly subjective, and cannot be divorced from the researcher or the context in which it was obtained. Qualitative research is exploratory and relational in nature (Hammersley, 2013) and these characteristics combined with its human quality and reliance on interpretation support the subject matter, research area and approach.

A common choice for qualitative research, the empirical data was gathered via semi-structured interviews, following a loose frame of interview questions (Bryman, 2008).

This flexibility afforded the opportunity to pursue in-depth detail as needed, and follow the conversation through interesting diversions initiated by the interviewee, allowing for additional insights (Bryman, 2008).

Qualitative research indicates an approach that places emphasis on interpretation over quantification in the gathering and analysis of empirical data (Bryman, 2008).

For my empirical data, six interviews in total were conducted; two in person, three via video skype and one via telephone. All were audio recorded, and all lasted approximately 60 minutes. One interview involved two interviewees, but the remainder were held in a one-on-one environment. I provided very little introduction, beyond stating that my area of inquiry was concerned with the role of dialogue in design. It was a challenge in some cases to avoid questions from interviewees that further elaborated on my research, and when confronted with those I promised to answer any

remaining questions at the end of the interview, so as to avoid sharing any of my biases. Interviewees were assured their answers would be used only for the purposes of my academic research, and they had the option to be

anonymized if they wished. The interview guide was built around ten questions, found in the appendix, that aimed to uncover beliefs and understandings about design, dialogue, and the relationship between the two.

3.6 CHALLENGES AND LIMITATIONS

This is an academic work that is limited by myriad elements, especially time and resources. It should be understood as the preliminary examination of very deep and broad topics. As a writer, I seek to challenge and minimize my biases, though I am certainly influenced by them and by my interpretation of the existing knowledge in this field. I have done my best to critically examine different perspectives and give light to areas of research on design and dialogue which I find relevant, but by no means is my intent to portray this work as comprehensive.

The challenge of presenting raw empirical evidence in this type of research without interpretation must be noted: one may argue that by simply viewing the responses as a larger group in order to uncover patterns and common themes, the process of analysis has begun. My sampling was limited to six interviewees, and though I sought to cover a broad spectrum of design practice, it must be understood as a small snapshot of large and complex area. This sampling was composed of four men and two women, which also has potential to bias the information provided. This sampling was limited to those people with whom I had a means to contact, and who were willing to participate.

As an interviewer, I must assume that the information provided to me is truthful, but I have no way of verifying the veracity of the majority of the answers. The language in which the interviews were conducted was English, and although all interviewees were fluent, it was not the mother tongue of three interviewees, which could be understood as a potential limitation in terms of communication. Finally, the interviews were held in three different ways: in person, via telephone call and via video call. I made every attempt to exclude meanings inferred from body language, facial expression, or other information that comes from being in the same physical or visual space, but some bias and further understanding was certainly conveyed.

3.7 INTERVIEWEE PROFILES

Over the course of nine weeks, I held interviews with a total of six design practitioners working in different practical and geographical contexts of design. The interviews followed a semi-structured framework of questions that sought to investigate the definitions of design and dialogue, the nature of their relationship, and the characteristics of dialogue in relation to design.

Anonymous

Mid 30's, American female, working in the United States
Master and advanced education and research in design. Previous experience as a research fellow for industry in the U.S. and for academia in Europe, worked as the director of innovation learning at a Fortune Global 500 company, fostering development and support of global design thinking program. Currently, Design Officer at a multinational conglomerate corporation with \$30 billion in annual sales and more than 80,000 employees, working directly under the Chief Design Officer in a leadership position as a head of one of the five business groups of the greater global organization.

Skype (video) 29 March, 2016
Context in which interviewee situated their answers:
Inside the organization (amongst designers and teams in the global organization)

Ashlea Powell

Mid 30's, American female, working in New York City for IDEO
Background and education in creative writing, working at IDEO for 9 years in a number of roles. Currently leading a portfolio of work in the area of service technology and brand. Interested in an area of work called intervention design: how designers might create the conditions for an organization to support ongoing innovation.

Skype (video) 8 April, 2016
Context in which interviewee situated their answers:
Inside the organization (amongst designers and teams in the local organization)
Crossing boundaries of the organization (amongst designers, clients and customers)

Erik Widmark

Early 40's, Swedish Male, working in Stockholm, Sweden as a Service Designer and co-founder of Expedition Mondial
Education in industrial design at Konstfack University. Grew disillusioned with industrial designs inextricable ties with capitalism which led to an exploration of a process of designing and solving problems that would go on to form the ideas of Service Design. Founded a design firm that merged with Transformator Design and built their Service Design capabilities over 10 years, until Expedition Mondial was founded, along with two partners, to pursue future applications of design thinking and service design.

Skype (video) 30 March, 2016
Context in which interviewee situated their answers:
Primarily as service design professional, gathering insights from and with users, but also between designer and client

Erik Hernandez

Early 30's, American male, working in Portland, Oregon as a Design Director at Adidas
Education in industrial design in the United States. Working for ten years in the footwear industry for international brands such as Vans, K-Swiss and Adidas. Design Director at Adidas in the Basketball footwear global business unit based in Portland, Oregon. Manages a team of four to six designers, reports to the Vice President of Design in the basketball unit, comprised of footwear, apparel, team uniforms and accessories.

Skype (audio) 4 April, 2016
Context in which interviewee situated their answers:
Inside the organization (amongst designers and teams in the global organization)

Nicolas Arroyo

Mid 30's, Chilean male, working in Copenhagen, Denmark
Chilean born and educated designer, now living in Copenhagen. Education in architecture and creative leadership at Kaospilots. Previous work experience in fashion design, creative management and process consulting. Currently co-founder and foresight strategist at Bespoke in addition to duties as guest lecturer for design and innovation programs throughout Sweden and Denmark.

Interviewed with Toldham, in person, 30 March, 2016
Context in which interviewee situated their answers:
Inside the organization (amongst designers and teams in the local organization)
Crossing boundaries of the organization (amongst designers, clients and customers)

Rune Toldham

Mid 30's, Danish male, working in Copenhagen, Denmark
Educated first in graphic design and later in creative leadership, alongside Arroyo, at Kaospilots in Denmark. Previous work experience as a graphic designer, photographer and art director. Currently Creative Director and co-founder of Bespoke, a strategic design and innovation firm based in Copenhagen. Concurrently working as a guest lecturer in for design and innovation programs throughout Sweden and Denmark.

Interviewed with Arroyo, in person, 30 March, 2016
Context in which interviewee situated their answers:
Inside the organization (amongst designers and teams in the local organization)
Crossing boundaries of the organization (amongst designers, clients and customers)

The interviews followed a semi-structured framework of questions (see appendix) that sought to investigate the definitions of design and dialogue, the nature of their relationship, and the characteristics of dialogue in relation to design.



figure 17: Characteristics of design, based on the insights

4. the insights

The empiry is presented here as direct quotes under common headings in an effort to remain as close to the raw data as possible while also providing accessibility. The format aims to allow the reader to examine the information and draw their own conclusions in the most functionally appropriate way for this research. This author's intention is to create space for readers to explore and analyze before coming to the formal analysis and discussion in the following chapters.

4.1 DEFINING DESIGN

After introductions, I began my interviews by asking all interviewees for their definition of design, whether self-generated or from an academic source. It was a bit of a weighty question to begin with, but the interviewee answers uncovered the following five themes.

Design is a process of thinking and doing, that is often iterative and collaborative, and also thrives in the exploration of unknown and uncertain territory

At IDEO, we have a saying, that we think to build, and build to think.
- Ashlea Powell, IDEO

In design processes, you work together, you don't have a known and fixed end, making mistakes allows you to learn and progress. Design is a tangible, explorative way of coming up with new systems, services or processes.
- Erik Widmark, Expedition Mondial

Design involves identifying challenges or problems, and proposing improvements, solutions or alternatives

Design is a process / tool / methodology to define challenges with stakeholders and solve challenges with stakeholders. My role in the process is to create and support situations for people to verbalize challenges and also help them to come up with possible solutions.
- Anonymous

Design has intention and is purpose-driven

Design is purpose-driven not just consumerism-supporting
- Erik Hernandez, Adidas

Design is concerned with decisions made intentionally for product / service / experience to better serve the people involved
- Anonymous

Design processes have the power to bring order and organization and create value

We like the characterization of design as being capable of bringing simplicity to complexity
- Nicolas Arroyo, Bespoke

Design's purpose is to enhance the human experience
- Rune Toldham, Bespoke

Design brings form and function together in the most seamless manner to give a product a reason to be purchased
- Erik Hernandez, Adidas

4.2 DEFINING DIALOGUE

I continued the interviews by asking interviewees to define dialogue. A few asked for confirmation if their response was “correct” but I abstained from a direct answer to avoid bias, instead encouraging them to convey to me what it meant to them, in their context and practice.

Dialogue involves sharing, listening and reflecting, in a reciprocal exchange among two or more people

[Dialogue is a] two-way, productive, exploratory, inquisitive, reflective exchange between interested parties
- Anonymous

A conversation between two or more people that allows the parties involved to bring their whole selves to the conversation
- Ashlea Powell, IDEO

[Dialogue is a] force of the village to create change
- Ashlea Powell, IDEO

Dialogue is a purposeful exchange
- Anonymous

It is a process of making sure voices are heard
- Erik Widmark, Expedition Mondial

Dialogue is used to diverge (uncover, expand, explore) or converge (align, gain understanding) on different perspectives and voices

Exchange of information that gives every party involved a deeper understanding of the topic
- Erik Widmark, Expedition Mondial

Through dialogue, we can get to much more generative and productive collaboration and teams
- Ashlea Powell, IDEO

At its best, dialogue is a lubricant for a bunch of people trying to make change
- Ashlea Powell, IDEO

As long as there is dialogue, you will find successes...and everyone can gain the same understanding
- Erik Hernandez, Adidas

Dialogue invites people to comment and also build on ideas of others or change them completely
- Erik Widmark, Expedition Mondial

Promoting a shared level of appreciation and respect for different perspectives
- Anonymous

Dialogue is a means of interaction - not only among people, and with words but also creating space for ideas to interact

Dialogue is not only verbal - it's the interaction of ideas, opinions and perspectives
- Nicolas Arroyo, Bespoke

It's a way to simplify and articulate powerful exchanges
- Anonymous

It can question, provoke, involve, engage
- Erik Widmark, Expedition Mondial

Dialogue allows you to go broad and go deep to capture the unquantifiable (qualitative & meaning)

An iterative process that allows you to get deeper and get confirmation
- Erik Widmark, Expedition Mondial

Allows people to explore not only what they did, but also why they did it...their motivations
- Erik Widmark, Expedition Mondial

Dialogue allows the unexpected to come out
- Anonymous

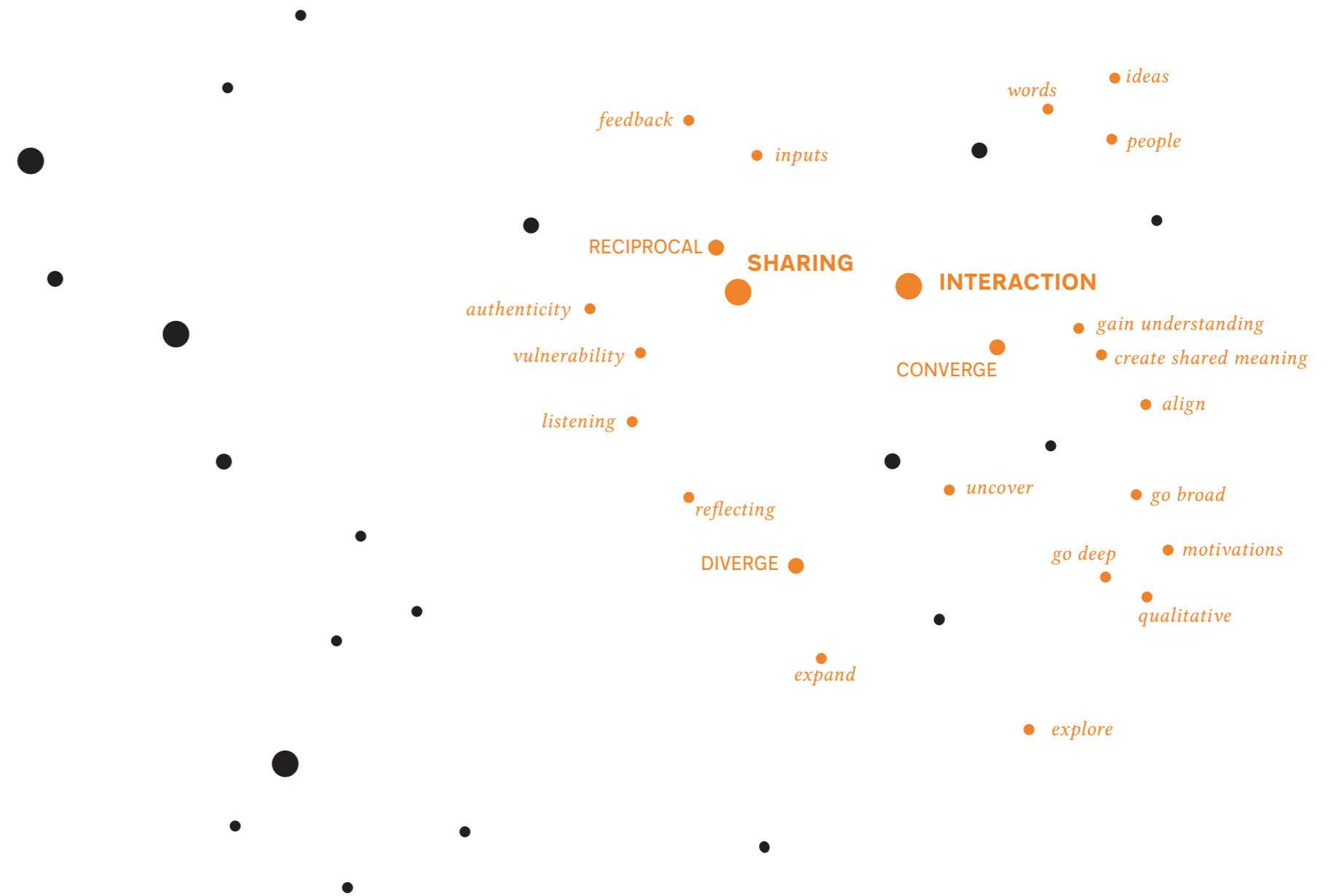


figure 18: Characteristics of dialogue, based on the insights

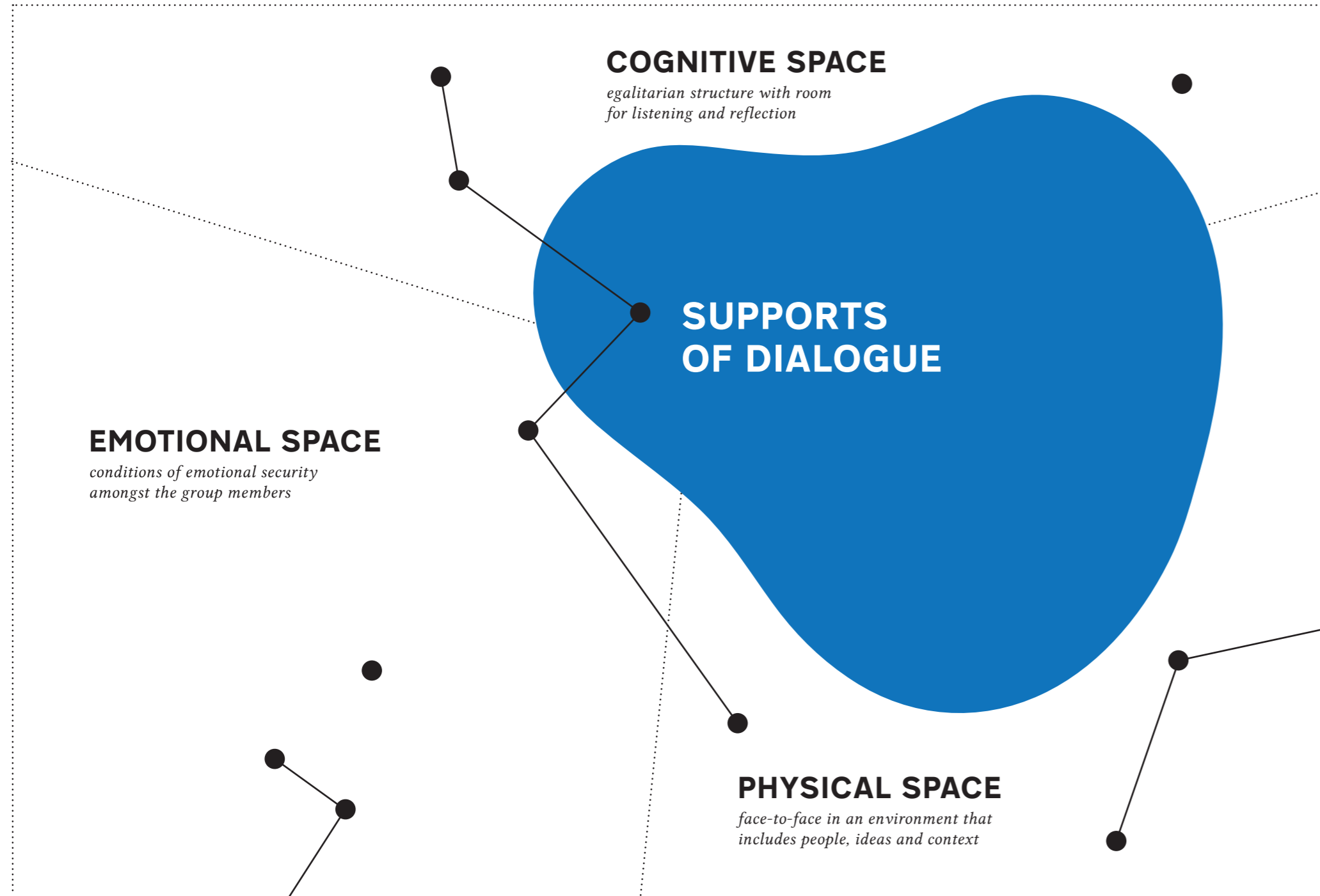


figure 19: Dialogue's need for cognitive, emotional and physical space

4.3 SUPPORTS OF DIALOGUE

In response to questions of factors that support dialogue, the interviewee answers seemed to suggest an overall frame of the necessities of preparation and support in the design of events of dialogue. Creating the space for dialogue (cognitive, emotional and physical) and anticipating and tending to the needs of the interviewees were identified as crucial supports of the practice of dialogue.

Emotional Space

One approach included creating the conditions of emotional security help to foster dialogue-supporting feelings such as safety, presence, willingness to contribute, and curiosity. In addition to promoting good feelings, one interviewee also characterized friction and conflict as supportive of dialogue, so long as it was addressed, discussed, and moved forward from.

I think there is something inherently emotional about being a creative person, and this has to be considered
 - Anonymous

When you have to work through something, you know a team is getting deeper than they might if people withheld views that cause conflict
 - Ashlea Powell, IDEO

You need to make people feel safe enough that they can say what needs to be said
 - Ashlea Powell, IDEO

Presence, mindfulness, openness, willingness to be open, willingness to be challenged
 - Anonymous

Create the conditions for people to feel safe, open, generative
 - Ashlea Powell, IDEO

Curiosity, trust, respect
 - Ashlea Powell, IDEO

Making them understand there is no right answer - and that they don't need to be an expert to contribute
 - Erik Widmark, Expedition Mondial

Conversely, the following were identified as threats to the emotional space necessary for dialogue.

Lack of buy-in
 - Erik Hernandez, Adidas

Dictatorships, marching orders, directives
 - Erik Hernandez, Adidas

Hierarchies
 - Erik Widmark, Expedition Mondial

Ego, insecurity, fear
 - Anonymous

Fear of being impolite or holding back to avoid conflict
 - Ashlea Powell, IDEO

Physical Space

According to interviewees, an ideal dialogue is face-to-face in the contextual environment, with the “right” people. This notion of physical space considers the people, ideas and context - the borderline that frames all that is included in the dialogue.

You need to be able to gather the right people in the right place at the right time
- Erik Hernandez, Adidas

Face-to-face in the same space
- Erik Hernandez, Adidas

In context, when possible
- Erik Widmark, Expedition Mondial

Conversely, the following were identified as threats to the physical space necessary for dialogue.

Inappropriate frame / focus / structure
- Erik Hernandez, Adidas

Arbitrary terminology and buzzwords - you need clear, understood language
- Erik Hernandez, Adidas

With too little information or people - the dialogue is hazy; too much information or too many people - it's unfocused
- Erik Hernandez, Adidas

Cognitive Space

Interviewees noted the importance of an egalitarian structure, inclusion and space to listen and reflect in dialogue. The idea of speaking the same “language,” referring to a shared understanding of the basic contextual vernacular, was also identified as an important component. In addition, dialogue was proposed as incongruous with debate or rhetoric: when one party is intent on winning, dialogue becomes impossible.

Understand what they are trying to achieve and speak to them in their language
- Anonymous

Given time and space to share and reflect without pressure
- Anonymous

Flat structure, no hierarchy
- Erik Hernandez, Adidas

Ownership, inclusion, a stake
- Erik Hernandez, Adidas

Reflection is as important as speculation, depending on context
- Ashlea Powell, IDEO

Conversely, the following were identified as threats to the cognitive space necessary for dialogue.

Rhetoric and not listening, the need to ‘win’
- Erik Widmark, Expedition Mondial

Too many voices, too much ‘noise’
- Erik Hernandez, Adidas

The more complex our systems and organizations become, the more noise enters, and the more difficult it is to have a dialogue
- Anonymous

4.4 OVERVIEW OF INSIGHTS

Interviewees defined design as a process of thinking and doing, that is often iterative and collaborative, that thrives in the exploration of the unknown. They indicated design involves identifying challenges or problems, and proposes improvements, solutions or alternatives. They proposed that design has intention and is purpose-driven, and that its processes have power to bring order, organization and create value.

Interviewees characterized dialogue as a reciprocal exchange between two or more people involving acts of sharing, listening and reflecting. They proposed its usefulness as a divergent or convergent means to consider varied perspectives and voices. They described dialogue as a means of creating space for the interaction of people and ideas that allows interviewees to go broad and deep, beyond just data, to capture the unquantifiable.

Interviewees identified three categories that support dialogue: emotional space, physical space and cognitive space. Emotional space considers the range of human emotions present in individuals and in a diverse group. Physical space includes the borderline that frames who and what is included in the dialogue. Cognitive space incorporates space for reflection and the absence of persuasion.

5. analysis

Through analysis, the insights gathered from the interviews generated definitions of design, definitions of dialogue, and supports for dialogue as articulated here. In the majority of the cases, theory and practice were in agreement, and oftentimes the interviewees further clarified the meanings this author identified from the theory examined.

5.1 DESIGN: INSIGHTS AND THEORY

According to interviewees, design is:

A process of thinking and doing, often iterative and collaborative, that thrives in the exploration of the unknown

Involved in identifying challenges or problems, and proposing improvements, solutions or alternatives

Has intention and is purpose-driven

Capable of bringing order, organization, or value

Viewed through the theoretical lens

In alignment with theoretical frame, the interviewees identified design as a strategic or purpose-driven process, concerned with giving order, in the service of humans. They echoed the view of design as a process of thinking and action (Friedman, 2003) and reinforced the notion of design as capable of bringing order (Papanek, 1985). Design was characterized as a process by and for humans that can be used in the service of creative practice, in agreement with Buchanan (2001). The consideration of design beyond styling, as a process in service of “desired outcomes” as put forth by Mau (2007) was reiterated throughout the interviews.

Further Interpretations

There were no major misalignments in the definition of design between the theoretical and interviewee contributions, however the interviewees extended the scope of the definitions of design in a few key areas. They collectively emphasized the collaborative and iterative nature of design processes in their practice. Interviewees also noted design’s unique qualification as a tool for the exploration of the unknown. Finally, they expanded the understanding of design as order-bringing to also include value, in terms of monetizing, but also in a less quantifiable sense.

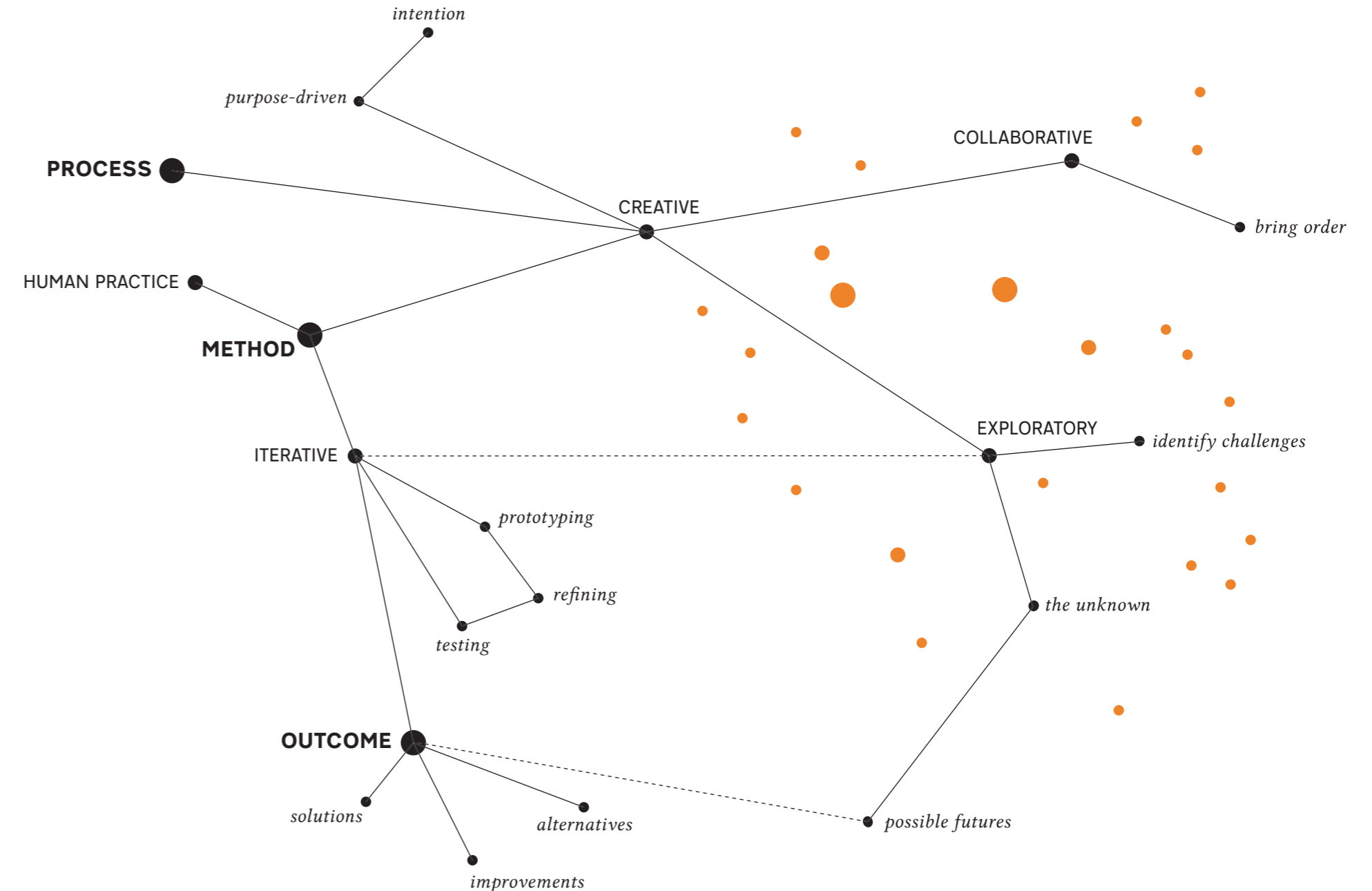


figure 20: Characteristics of design, based on the analysis

**5.2 DIALOGUE:
INSIGHTS AND THEORY**

According to interviewees, dialogue is:

A process of sharing, listening and reflecting reciprocally among two or more people

Used to diverge (uncover, expand, explore) or converge (align, gain understanding) on different perspectives and voices

A tool of interaction; creating space for people and ideas to engage

Capable of going broad and deep, capturing things that are beyond the reach of hard data

*Viewed through
the theoretical lens*

In support of the theoretical frame built with Bohm, Burbules and Isaacs, interviewees indicated dialogue’s convergent and divergent capabilities. They identified dialogue’s capacity to explore differing perspectives and indicated it can create shared meaning and align diverse thoughts. They supported the theory’s claim that dialogue is a collaborative way to obtain a common point of departure towards creativity (Isaacs, 2008). Interviewees emphasized the need for a spirit of egalitarianism and goodwill towards one another and the process, and their insights categorized dialogue as a relational activity (Burbules, 1993).

Further Interpretations

The interviewee contributions expanded upon dialogue’s unique capability to tap into deeper insights not so readily accessible by quantitative methods and hard data. Dialogue was understood as adept at handling the qualitative insights and the “soft” complexities of human needs, emotions, and motivations. This capability was found to be increasingly valuable in the current societal context, full of complication and noise alongside more complex design challenges and difficulties in communication.

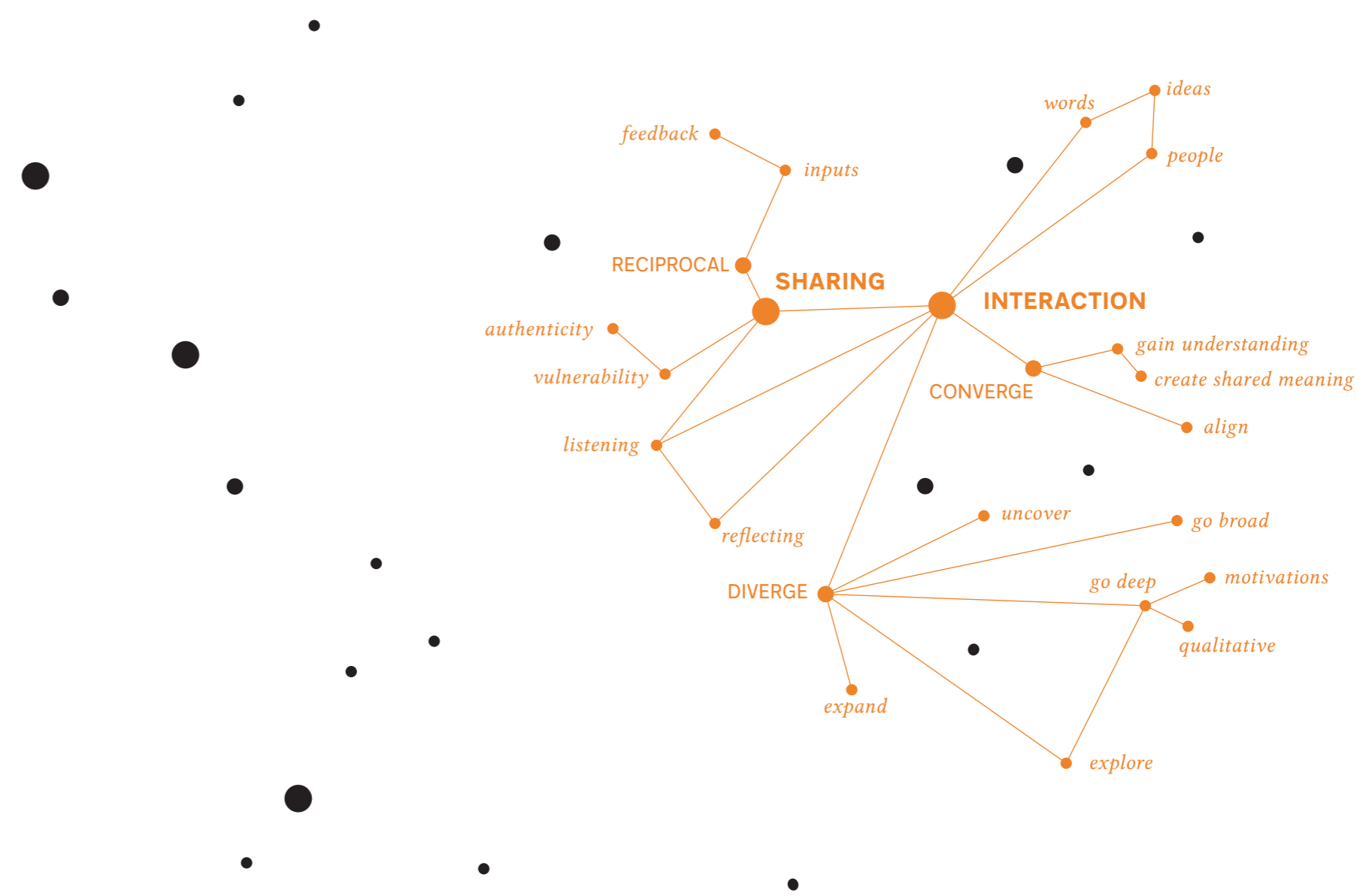


figure 21: Characteristics of dialogue, based on the analysis

5.3 DIALOGUE FOR CO-CREATION

As shown in the theory and practical responses, dialogue is capable of creating the space to explore differing viewpoints; it can also bring alignment and understanding without necessitating compromise or agreement. It functions to generate convergent or divergent thought. It supports the areas of inquiry and collaborative creativity, characterized as co-creation (Sanders, Stappers, 2008).

Isaacs emphasizes the creative power of dialogue when he characterizes it as a process of inquiry, of expanding or extending a space to see what might be there that might not have been thought of previously (Isaacs, 2008). Interviewees echoed this thought, characterizing dialogue as a means to develop generative and productive collaboration (Ashlea Powell, personal communication, 8 April, 2016). Isaacs sees dialogue as a means to grow creativity (Burkhardt, “Thinking Together, Part 2”, 2010) and as a tool of creativity, dialogue “allows there to be a pattern of listening to the underlying flow, the underlying music, and it is at this level that creativity happens” (Burkhardt, “Thinking Together, Part 1”, 2010).

This practice of collaborative creativity, defined as co-creation (Sanders, Stappers, 2008), is delineated as present in Isaacs’ fourth field of dialogue (Isaacs, 2008). Isaacs emphasizes the importance of action in dialogical process and states “The intention of dialogue is to reach new understanding and, in doing so, to form a totally new basis from which to think and act” (Isaacs, 2008, p. 19).

In addition to its ability to foster creativity, dialogue also supports the parallel force of inquiry. Dialogue can “question, provoke, involve and engage” (Erik Widmark, personal communication, 8 April, 2016) and allows for the consideration of not only actions, but also motivations. In the march towards the creation of shared meaning, a willingness to examine one’s own ignorances in the pursuit of inquiry is crucial. Isaacs states “The power of dialogue emerges in the cultivation, in ourselves, as well as in others, of questions for which we do not have answers” (Isaacs, 2008, p. 148). Both inquiry and creativity, as supported by dialogue, serve co-creative design processes.

5.4 SUPPORTS OF DIALOGUE: INSIGHTS & THEORY

According to interviewees, dialogue is supported by emotional, physical and cognitive space. Dialogue needs a space of generosity of spirit, curiosity, willingness to embrace the unknown, willingness to show oneself and work through conflict, trust, safety and faith in the dialogue.

Viewed through the theoretical lens

As indicated by the authors examined in the theoretical frame, interviewees also identified generosity of spirit, curiosity and trust as important ingredients to dialogue. Lack of hierarchy and a willingness to open oneself and one’s ideas to opposing forces, including that of the unknown, were also critical elements. Interviewees emphasized the need for clear communication, the ability to withhold or challenge assumptions, and the space for listening and reflection in dialogue.

Further Interpretations

The interviewee assessments showed a pattern of three different areas into which the supports of dialogue could be categorized: emotional space, physical space, and cognitive space. The requirements of emotional space supported the theoretical findings, but parts of the physical space requirements were defined in further detail. Interviewees identified sharing physical space as a necessity for dialogue, but they also spoke about the participants in that space: an idea of the right people in the right place at the right time arose. In terms of the cognitive space, interviewees stood in contrast with the theoreticians from the perspective that they believed that some preexisting understandings must be in place in order to achieve dialogue: whether it be commonly understood terminology or alignment on a basic level, this stood in contrast to the more fluid forms of dialogue proposed by Bohm and Burbules.

5.5 THE FOUR FIELDS AND NOTIONS OF SPACE

In Isaacs’ Four Fields model, he emphasizes the idea of the field and the container. The field is the borderline drawn to delineate the component parts included in the group pursuing dialogue, and in it are people in the conversation and all of their complexities: their experiences, energy, relationships and ideas, and all of the interactions between these complexities (Isaacs, 2008). The field is comprised of what is included in the dialogue.

This characterization is echoed in the interviewees notion of physical space. Physical space, as defined by the interviewees as necessary to support dialogue, includes people, context and proximity. It is necessary to set the bounds of this field, or physical space, in order for dialogue to occur.

Isaacs’ container refers to the “characteristics, patterns and pressures” of the particular conversation field (Isaacs, 2008, p. 257). It is the space in which all the complexities of the elements in the field may coexist and interact, and it limits how far the conversation can go in breadth and depth: how much complexity and conflict may be included and how much uncertainty can be supported, without threatening collapse. Interviewees’ characterization of the need for emotional space and cognitive space echoes Isaacs’ notion of the container. All three necessitate trust and emotional intimacy, egalitarian structure, inclusion, and willingness of interviewees to listen and reflect.

Fields, or physical space, include all of the actors and components in the exchange you are having. Containers, which include emotional space and cognitive space, are the expansiveness of the space in which you can have the exchange.

6. discussion

6.1 MAKING SPACE FOR DIALOGUE

From the interpretation of the theoretical and empirical material, I propose that cultivating the space in which dialogue can be attained is a crucial role of the designer in the modern context. This space must address emotional, cognitive and physical considerations of the participants, as delineated in the analysis, in order to access the collective creativity and co-creative potential of the group. This practice includes “facilitating creative conversations, framing unexpected questions, and navigating the uncomfortable” (Labarre, S., et al. January 2016). Enabling conflicting parties to access deeper layers of individual and group meaning creates the environment in which dialogue can occur.

This space of dialogue is evident in field three and four of Isaacs’ model of the Four Fields of Conversation. While not exactly a how-to guide, Isaacs describes the characteristics of the fields and containers necessary to bring about reflective and generative dialogue, also known as co-creation.

6.2 RELATION OF DIALOGUE TO DESIGN: A CONSTELLATION

In addition to identifying the need for three kinds of space to support dialogue, I also propose a mapping of dialogue within the broader context of design (figure 22). Developed from the theoretical and empirical insights, this constellation maps characteristics of dialogue and was developed from an analysis of the theory and empiry. Within this larger frame of design, dialogue is situated. This map is proposed as a means of understanding not only the relation of the two, and their elements, but also to suggest the ways in which dialogue can be used to support design.

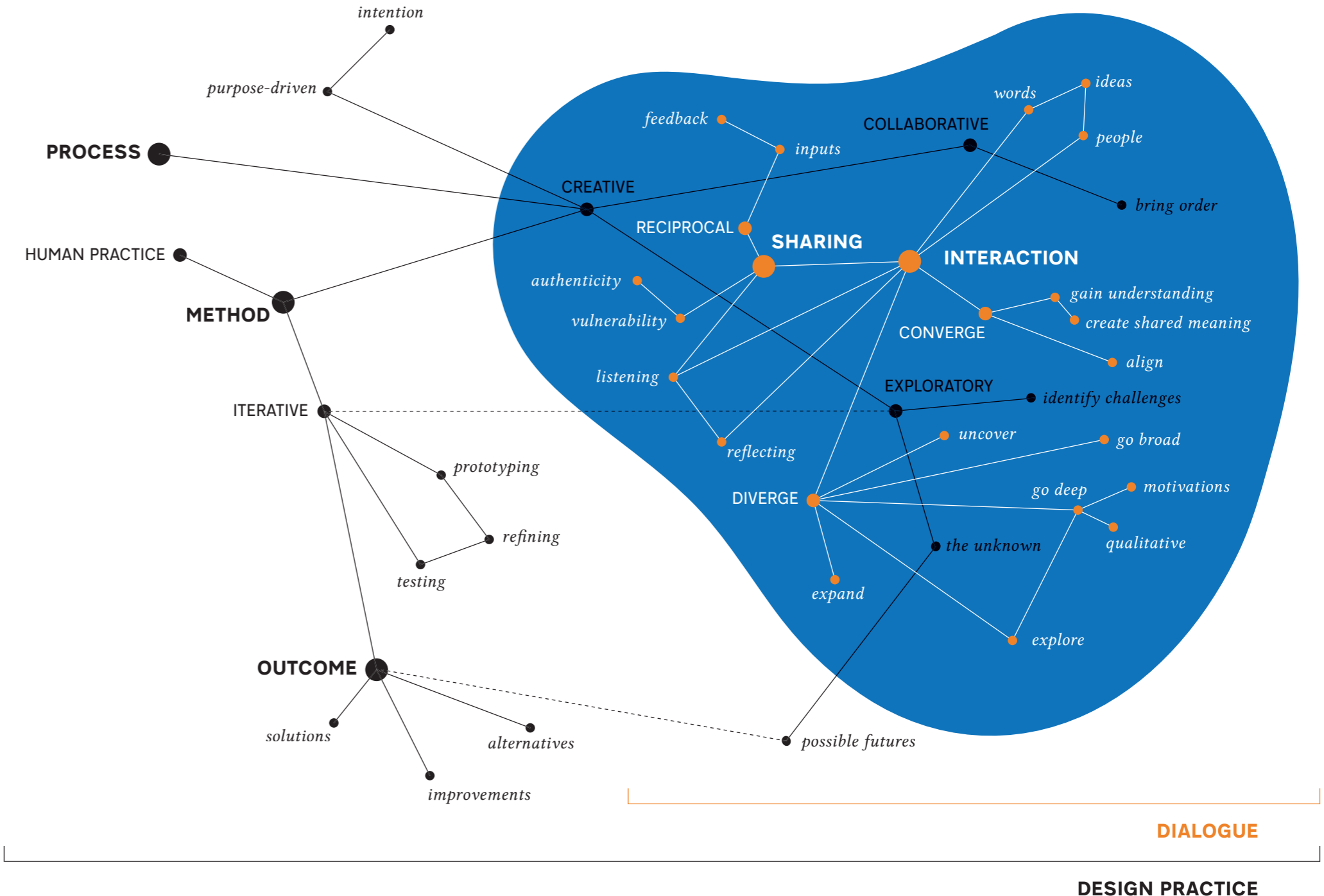


figure 22: Constellation of dialogue in design of dialogue, generated from the analysis and insights

6.3 VALUE OF DIALOGUE IN DESIGN

Depth:

Dialogue can help design probe deeper
As a group moves through Isaacs' conversation fields beyond politeness, through conflict, into reflective inquiry and towards creativity, deeper insights are accessed. If a design process is commenced from field one, in which stakeholders are simply sharing monologues, it is certain that the end result will be shallower than a team that traveled through conflict and into reflective inquiry, effectively accessing the creativity of the group prior to beginning the design process.

At the outset of a design process, dialogue can help to open up the problem or challenge area. Oftentimes, the challenge that a designer is tasked with addressing isn't actually the root problem: dialogue can help at the outset of the process to open up this space and explore, in order to determine the actual problem.

This depth of insights serves design at the outset, but also at all points of the process. Design's nature is convergence and divergence, and there are many opportunities for these insights to be considered throughout the process.

Breadth:

Dialogue can create space for exploration
Dialogue as defined in this thesis can create space for reflection amongst a diverse group of stakeholders in an organization or amongst a design team tackling a "wicked problem" through co-creative methods. Its practice can allow for participants to hold their views in suspension, allowing them to separate who they are from what they believe in order to create space for other voices and eventually generate shared meaning. Dialogue can also support the processes of divergence to widen the field and continuously expand to allow more the ideas, people and influences to coexist, and eventually co-create, in design process.

Shared meaning:

Dialogue can be a means of creating shared meaning, of seeing the importance of the whole over the parts. In addition to testing the limits with breadth and depth, dialogue can be used as a tool of convergence to help create shared meaning amongst all the findings. This is not only the point from which design practice should depart, but also a point that should be revisited repeatedly in iterative processes. Alignment and realignment is key in order to accomplish the "individual and collective purposes" of design (Buchanan, 2001, p. 9). Realignment and shared understanding are crucial to push design process forward and deeper. Dialogue is one practice of generating shared understanding among a group of disparate people and opinions. Dialogue supports the consideration of the whole over the parts, creating an environment in which ideas, contexts and people might all be considered and incorporated to create a shared meaning.

6.4 THE FALLACY OF COMPLETION

Per Isaacs, dialogue is not a linear process with a beginning and end; it stops when participants intervene, but completion is a social construction. As with dialogue, I would argue that the idea of completion is also a fallacy in design processes.

Design is not complete when it produces a product, service or experience; its development has merely gone dormant. Iterative design practices of prototyping, testing, editing, and refining enable it to produce outcomes, bring emergent challenges to light, and iterate more mature outcomes. But outcomes do not equal completion. Rather, the designed product, service or experience can now be accessed by its intended audience, and can get feedback to bring back to the process. This feedback can be used to push the development forward, if design cycles from dormant back to active. I would argue that outcomes may be

placed on a spectrum of maturity, but true completion is a fallacy. A value of dialogue is that it can push design processes further along this spectrum of maturity. Through sharing, alignment and understanding, dialogue can support practices and outcomes that are more whole and rich, but completion is still unattainable. As is the case with dialogue, the notion of completion is a fallacy for design as well. Design and dialogue are never "done."

6.5 DISCUSSION SUMMARY

At the conclusion of this thesis, in addition to the capabilities put forth by theory and insights, dialogue can be understood as a point of alignment and also a point of departure, a means for creating shared understanding amongst disparate people and ideas. When interwoven in a creative process such as design, dialogue functions as a means to iteratively align and realign, to diminish the in-between spaces. A key capability of dialogue is its ability to move from the in-between to embodied understanding in order to move forward and deeper in design processes. As with design, dialogue is never truly "done," but partaking in dialogue can help to push design process and outcomes further along a spectrum of maturity.

7. conclusion

Today, design processes are being tasked with addressing increasing levels of complexity, both in the nature of challenges and in the considerations of the design space. Information and computer technology makes gathering and characterizing hard data very easy - but accessibility does not necessarily equal value. Dialogue is a process that can serve both qualitative and quantitative design inquiry.

7.1 FINDINGS

As defined and explored in this thesis, dialogue and design have a symbiotic relationship. Through theory and practice, it has been determined that design is purpose-driven, it is iterative and can help navigate the unknown. Design is concerned with identifying challenges and proposing solutions: it operates from the space of what is to work towards what might be. Design is a process by and for humans that is capable of bringing order, organization or value.

In comparison, dialogue is a tool for exploration that supports acts of divergence and convergence. It seeks inclusivity (but not necessarily agreement) among disparate views and voices, and is practiced among humans, and thus emotion must be considered. Dialogue is neither outcomes-driven, nor purpose driven, exactly: the purpose is to achieve dialogue. It can be used to gain understanding, insights and alignment, to provide a frame for the examination and consideration of varied perspectives

Both dialogue and design need inputs, reflection and space to mature. Empathy and curiosity are crucial to both design and dialogue. Design is capable of creating value, and dialogue is capable of creating shared meaning and fostering creativity among groups.

For these reasons, dialogue is uniquely equipped to support design. When employed in the service of design processes, dialogue can help achieve many of design's aims. It can push design process further along the spectrum of development or maturity. It can also go deeper, to examine complexities such as human thought and motivation, and other qualitative issues not easily accessed by hard data and quantitative inquiry. Design is a very human process; it could be argued that dialogue is the most human of design processes. Through sharing, alignment and understanding dialogue can support design practices that produce outcomes that are more whole, rich and better equipped to serve human needs.

7.2 FURTHER RESEARCH

Having spent nearly five months exploring this topic, it is apparent that this thesis is a mere scratch on the surface of the examination of dialogue in design. Though it marks the end my formal studies, this thesis also provides a point of departure in a multitude of directions, and it would follow that explorations could be made in many different realms.

Going Farther

To further this research, much more study and practice could be undertaken in order to illuminate the value of dialogue in design. The interviewee pool could be extended to include a larger and more diverse sampling. A quantitative approach could be attempted in measuring hard value (though this author would argue that might be incongruent with the qualitative nature of dialogue). Best practices for creating dialogue in design processes could be developed and tested.

Going broader

One adjacent area worth examination is the influence of technology on human communication, from a design perspective. The ethics, implications and impacts of technology in dialogue, in and beyond design, could be explored from a number of perspectives. The ways by which technology is utilized to compliment unique human capabilities, rather than dull or retrain them, is a complex realm worthy of examination in tandem with this thesis. There is much complementary study that could be undertaken in the surrounding space, and it is the author's hope that the topic has sparked a bit of curiosity, and possibly inspired dialogue.

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8. figures

figure 1: Preliminary personal mapping of dialogue

figure 2: from Burkhardt, "Thinking Together, Part 1", 2010

figure 3: Thesis area of inquiry

figure 4: Author-illustrated visualization of Buchanan's definition of design (Buchanan, 2001, p. 9)

figure 5: Theoretical characterization of design

figure 6: Traditional and emerging design practices (Sanders, Stappers, 2008)

figure 7: Classical vs. Co-creative Design Approaches (Sanders, Stappers, 2008)

Figure 8: Isaacs, 2008, p. 327

figure 9: Bohm's capabilities of dialogue (Bohm, 1996)

figure 10: Isaacs, 2008, p. 38

figure 11: Isaacs Four Fields of Conversation (Isaacs, 2008)

figure 12: Isaacs Four Fields of Conversation, Field 1 (Isaacs, 2008)

figure 13: Isaacs Four Fields of Conversation, Field 2 (Isaacs, 2008)

figure 14: Isaacs Four Fields of Conversation, Field 3 (Isaacs, 2008)

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figure 16: Author's adaptation of the Double Diamond Model (Design Council, 2005)

figure 17: Characteristics of design, based on the insights

figure 18: Characteristics of dialogue, based on the insights

figure 19: Dialogue's need for cognitive, emotional and physical space

figure 20: Characteristics of design, based on the analysis

figure 21: Characteristics of dialogue, based on the analysis

figure 22: Constellation of dialogue in design of dialogue, generated from the analysis and insights

8. appendix

INTERVIEW QUESTIONS

I used the list below as an interview guide and in most cases, diverged a bit after the first two questions, allowing the interviewees to lead as common in semi-structured interviews. Throughout the interview, and before completion, I consulted with the frame to make sure all necessary areas had been addressed.

0. What is your definition of design?
1. How do you define dialogue?
2. How do you use dialogue in your work?
3. How do you design experiences that support dialogue?
4. What conditions and components support dialogue? What conditions kill it?
5. What compels people to participate in dialogue?
6. What role does dialogue play in design? How do you use dialogue as a design tool?
7. What functions can dialogue serve? (outcomes / process) What can it achieve?
8. What is its value? Is that quantifiable?
9. What is successful dialogue? (why does it succeed)
10. And what is a failed dialogue? (why does it fail)

