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Loneliness, Psychological Models, and Self-Estrangement

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Abstract
Loneliness is often described as an experience that is about the absence of other people. But loneliness also has an important self-directed aspect: it is oneself one experiences as lonely. I begin by taking it that what the lonely person experiences as absent are not simply other people but rather certain kinds of social relationships with them. Loneliness then involves a disappointed self-relation, a form of estrangement from oneself. I substantiate this view by appeal to psychological model theory. Social agents operate with triadic models of their environments that they themselves, together with the other person and the environment, help constitute. Social models are formed on the basis of intersubjective interaction and enable the social agent to contribute to these interactions. Conceptually more sophisticated versions of social models are at play in the conduct of complex social relationships like friendships or partnerships. Participants in these relationships regulate their social activities by applying the model to concrete situations and then acting so as to adjust the social situation to the model they entertain of it. The self thus features twice in the social agent's experience, as a participant in the interaction and as an observing and regulating perceiver. Loneliness is the result of one way in which social reality can fail to be in tune with the model the person has of it. It involves a discrepancy between the model of her social life, including her own role in it, and how she perceives that social life to be.

Keywords Loneliness · Model theory · Self · Social interaction · Intersubjectivity

The Loneliness One dare not sound—
And would as soon surmise
As in its Grave go plumbing
To ascertain the size—

The Loneliness whose worst alarm
Is lest itself should see—
And perish from before itself
For just a scrutiny—

The Horror not to be surveyed—
But skirted in the Dark—
With Consciousness suspended—
And Being under Lock—

I fear me this—is Loneliness—
The Maker of the soul
Its Caverns and its Corridors
Illuminate—or seal—

(Emily Dickinson, 777)[1]

1 Introduction

Everyday descriptions of loneliness tend to focus on other people and their absence: when you are lonely, you are missing others. You don't have the kinds of social contacts you would like, either with particular others such as friends or partners, or in a more general sense. Definitions of loneliness in the psychological literature pick up on this; most practical research works with some variation of the description of loneliness as a painful experience of the perceived absence of satisfactory social connections (e.g., Hawkley and Cacioppo 2010, p. 7; Ma et al. 2020). But, strikingly, the experience (if that's what it is) described by Emily Dickinson in her unsettling poem has only indirectly do with other people. No particular other person gets so much as a mention; there's no lost love, no pining for companionship. What there is instead is the self: the brutally isolated self, "not surveyed" and "skirted in the dark".[2] Other people only

This paper develops thoughts first sketched in Seemann (2022a).

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[1] In: Johnson (1960).

[2] A reviewer suggested that it may be loneliness itself rather than the lyrical subject that is "not surveyed" and "skirted in the dark". Then loneliness itself would become a kind of conscious entity. The second stanza of the poem does in fact suggest this; loneliness there can be "alarmed" and "see". It's a fascinating (and disturbing) interpretation. The question that it raises is what the relation is between loneliness

occur abstractly and at a distance: as these surveyors, points of contact that would allow the lyrical subject to understand herself as being visible, out in the open and out in the light. Yet there are no such points of contact, no external perspectives: and so it's the depth of the caverns and corridors, a grave-like dwelling, into which the lonely self is thrown. An image arises of a fleeting, ghost-like apparition, forever just round the corner and just out of reach, haunting its own interior catacombs; and of a horrified observer of the shadowy existence to which the apparition is condemned, locked away as it is in the dark. And then, most disturbing of all, the final stanza: having laid out the horror of the experience, loneliness is fearfully declared the "maker of the soul"; something that is not a condition to be remedied but a constituent—ghostly, and oddly timeless—of the sufferer's identity.

I hasten to point out that there is no claim to expertise in Dickinson scholarship in these remarks. On any interpretation, there can be no denying of the power of the text's funereal Victorian imagery, its obsessive fascination with the uncanny aspects of the psyche's less-than-conscious crevices. I begin my paper with the poem because it brings out the vital and, as yet, insufficiently explored self-directed aspect of the experience of loneliness. It is of course true that loneliness is to do with other people and their absence: if it isn't thought of as involving some kind of desired-but-absent social connection, we lose all track of the term's meaning. But what is frustrated in loneliness is not the desire for other people *tout court* but for meaningful relationships with them[3]; and such relationships have at least two constituents, one of which is oneself. So the experience of loneliness is, in part, self-directed; it involves a disappointed self-relation. This relation is what Dickinson describes in her poem, and a philosophical account of it is the task for this paper. One point of this essay, then, is the broad attempt to steer the reader's attention to a thus far underexplored—but, as I hope to make clear, vital—aspect of the experience of loneliness. A second point is to make progress with an account of the phenomenal and conceptual role of the self in the experience of the lonely person. I think of loneliness as involving the sufferer's observational awareness of her lack of meaningful social, and itself experientially present, connections. The self features twice in this awareness: once as a constituent of the social connection that is experienced as absent, and once as the second-order subject of the awareness of that experience. Because the observing self is felt to be not appropriately attuned to the social environment that she helps constitute, loneliness involves a form of what I call "self-estrangement"—the painfully felt inability to align one's need or desire for social connection with the life one perceives oneself to be leading.

To substantiate these remarks, I begin with a brief survey of some recent takes on loneliness (2). Some views see loneliness as an essential part of the human condition, and in these theories the self plays a significant role (e.g., Mijuskovic 2012). Then there are other views that conceptualise loneliness, broadly, in terms of the painfully experienced absence of desirable social connections, or exclusion from social situations (e.g., Ratcliffe, 2022; Roberts & Krueger 2020). These views mention the role of the self but focus primarily on the "social goods" (Roberts & Krueger) that the lonely person experiences as absent or the "social situation" (Ratcliffe) from which she senses herself to be excluded. My account is not compatible with the first family of views, since on the theory I shall be developing loneliness involves the experience of oneself as failing to be appropriately socially connected, which entails the awareness of how things would be if one weren't alone.[4] It is, however, in line with and, as I shall argue, required for a full theory of loneliness on the second family of views. For a person to experience something as absent, she has to be operating with some kind of norm of how things should be, and she has to compare the perceived state-of-affairs with that norm. To explain the mechanisms that make possible this comparison, I begin with an account of the social self in its environmental context. The hypothesis of "social space" predicts that social agents operate with a spatial framework in which the places occupied by co-agents are presented as standpoints, relative to which third objects are singled out. On this view, sociality does not begin with an exercise in empathic understanding or mindreading but, more fundamentally, with the socio-spatial structure of the environment in which interaction takes place (3). In order to explain how social agents regulate their social interactions, I introduce an interactionist version of model theory as it is used in the debate about mindreading (4). I suggest that the model whose application enables agents to regulate their social activities has the person herself as one of its constituents, and that people who participate in complex social relationships operate with a dual conception of the self as, first, an agent in such relationships and, secondly, an observer and monitor of these relationships and their own role in them (5). This account then

Footnote 2 (continued)
and the lyrical subject; whether the two are perhaps the same thing. As I highlight below, I'm no Dickinson expert—the reader should feel free to disagree with my casual interpretive remarks. They don't affect the philosophical argument I develop in this paper.

[3] Consider the examples Roberts and Krueger (2020) give of what they call "social goods" that are experienced as absent in the lonely person's life: "companionship, moral support, friendship, physical contact and affection, sympathy, trust, romance friendship, and the opportunity to act and interact…" are almost all relational notions that involve the person herself.

[4] See Ratcliffe (2016) and Gallagher (this volume) for critical takes on the notion of existential loneliness.

allows me to substantiate the view that loneliness involves a kind of self-estrangement (6). I end by briefly showing how this view is complementary both to intentional accounts of loneliness as an experience of the absence of social goods and the proposal that the lonely person suffers from a sense of exclusion from certain social situations (7).

2 Some Theories of Loneliness

Loneliness research in philosophy is something of a late starter. Prior to Roberts and Krueger's (2020) and Tietjen's and Furtak's (2021) still fairly recent engagements with the topic, there were only scattered attempts in philosophy to make sense of this widespread and puzzling condition since its treatment by the mid-century existentialists.[5] Two exceptions are Svendsen (2017) and Mijuskovic (2012). Svendsen's overview mentions the role of the self on several occasions, but the topic is not at the heart of his investigation. For Mijuskovic (2012, p. 1), by contrast, the self plays a vital role in the experience of loneliness. On his view, this experience is a central feature of the human condition:

> "…I wish to contend that the feeling—and reality—of forlornness constitutes the very essence of man's existence and that the "reflexive" awareness of radical isolation consists of a primordial and undeniable structure within human self-consciousness (reflexion, apperception; a mirror reflects, it merely passively doubles what is present; the mind, by contrast, actively transforms what it is thinking)."

At the heart of this view is the Kantian consideration that the spontaneity of conscious activity must always have a self-directed aspect: consciousness must be reflectively aware of itself or it doesn't exist, and this reflective awareness can only be of the self as distinct from all other things and therefore existentially alone. The view thus is based on a quite radically individualist theory of the self. There are good empirical and conceptual reasons to be sceptical of this theory (e.g., Davidson 2009; De Haan 2018; Kyselo 2014, 2016). But it is worth pointing out that even if you are beginning your account with the diametrically opposed consideration that the self is socially constituted—only social creatures can be reflectively conscious—there are elements of Mijuskovic's theory that are worth taking seriously and that will appear, in somewhat different form, in my own positive story. This is the idea that loneliness involves a self-relation in which the subject takes on an observational and regulating role towards its own activity. It is just that, on the view I shall be developing, this activity is of a social and therefore embodied kind.

The position outlined in Roberts and Krueger (2020) has become something of a default position for contemporary discussions of loneliness in philosophy. At the heart of their view is the contention that the experience of loneliness amounts to a frustrated "pro-attitude" towards a "social good" such as "companionship, moral support, friendship, physical contact and affection, sympathy, trust, romance, and the opportunity to act and interact..." (191). Even though interaction features on their list of social goods and even though they stress the lack of social interaction as one of the drivers of loneliness (Roberts and Krueger 2020, p. 194), the question arises how social interactions produce social goods and the lonely person's desire for them. Whatever shape such an explanation might take, it is hard to see how it could get off the ground without incorporating something like the following consideration. What is experienced as missing by the lonely person is not other people *tout court* but relationships with them. This is so regardless of whether what is experienced as missing are particular others or a more general good such as friendship or love. Social goods of the kind listed above are constituted in interaction with others and at least in part consist in actual or possible social relationships. Relationships always have at least two constituents, of which one is oneself. So it follows that what is experienced as absent by the lonely person is not just other people but also an aspect of oneself as standing in a relation to these people. Loneliness involves the absence of a particular kind of self-relation. Hence a full theory of loneliness will have to include an account of the nature of this self-relation.[6] Producing such an account is the task for the present paper.

The view I shall be developing is compatible with two quite distinct ways of thinking about loneliness. One of these ways is what you might call the "intentionalist" approach of Roberts and Krueger (2020). Another way is the suggestion of Ratcliffe (2022, 2023) that loneliness involves a lack of access to certain interpersonal possibilities that are presented as available to others but not to oneself. On such a view, loneliness is not intentionally characterized; nor is it an emotion. It is, rather, a mode of presentation of the lonely person's environment that presents opportunities for social involvement as unavailable to her while being available to others. These two approaches can seem to be quite starkly incompatible: Either loneliness has an intentional structure, or it does not; either loneliness is a general feature of the sufferer's experience, or it isn't. The model-theoretic account suggests that this incompatibility is only apparent. The self-relation that is part of

[5] E.g., Arendt (1976); Buber (2010); Jaspers (2011). For a Heideggerian approach to loneliness, see Spiegel (this volume).

[6] Krueger et al. (2023) stress the importance of the self-directed aspect of loneliness.

the experience of loneliness helps explain both how lonely persons suffer from a frustrated desire for a social good and from a sense of exclusion from future opportunities for meaningful involvement in the world. What unites both is the awareness of herself as a social agent whose experience of the environment is informed by interactions with other people in it and who on that basis comes to form the concepts of the social goods that enable her to reflectively access the experience.

The next three sections sketch a theory of the constitution of social environments that I have developed in more detail elsewhere (Seemann 2019, 2021, 2022c). Since they cover a lot of ground, they skip over much detail that would be required for a fuller exposition. Their aim is to present an overview that says just enough about such environments and the kind of self-awareness enjoyed by agents who constitute them in their interactions with others to prepare the ground for the account of loneliness I shall be introducing in section (6). It may be useful for the reader to be given, at the outset, a broad sketch of the position I am developing. At the heart of it is the view that social relationships are based on interactions and that these interactions help shape the environment in which they take place. Social interactions play out over time and require their participants to regulate their contributions by applying models of their activities to particular social situations as they perceive them. These triadic models have oneself, one's co-agent, and environmental objects or scenes as their constituents. The self thus features both as a constituent of the social interaction that is being modelled and as the agent that regulates their contributions to these interactions by way of the application of the model. When the agent fails to attune a social relationship as they perceive it to the model they entertain of it, they suffer what I call a "stunted emotion". These emotions can be classified according to which constituent of the model fails to be attuned to perceived social reality. Loneliness can then be understood as a stunted emotion in which one's model of oneself as a particular kind of social agent (such as a friend or a partner) is at odds with one's perceived role as such an agent.

3 Interaction Theory and Social Space

Many embodied and enacted approaches to mentality take it that the conscious mind is constituted in interaction with other people as well as the environment (e.g., Fuchs & De Jaegher 2009; Gallagher 2020). But there is relatively little work to-date that examines how exactly these two aspects of the interactive relation of the social agent with the environment in which she operates come together to inform the world-directed aspect of her experience.[7] This is a vital question for a theory of loneliness, however.[8] It is not, after all, that social creatures interact with the external world, as all bodily agents do, and also, independently, with other people. The lonely person feels bereft of social contact in actual environments, and these environments themselves are in a significant sense socially constituted. So the question of what this social constitution amounts to matters when thinking about loneliness. You can try to address the question by considering the way in which humans form meaningful connections with others, for instance by drawing on the rich literature on intersubjectivity in developmental psychology (e.g., Hobson 2002/2004; Reddy 2011; Trevarthen 1980). But this literature, important as it is, does not quite answer the question at hand. It does not, at least not unless more is said, have the resources to explain how environments get imbued with social meaning, and thus how they can cease to be meaningful to the lonely person. An alternative approach is to begin by taking seriously the close connection between perception and action and ask how the experience of perceptual environments is informed by agency. As Schellenberg (2007) points out, only agents are perceivers, and enactivist views such as Noe's (2004) capitalize on this insight by conceiving of perception as a kind of activity. There is an important connection between enacted theories of perception and recent empirical and philosophical work about the spatial frameworks that underwrite motor action. Agents operate in a spatial order in which information in various sensory modes is integrated so as to make purposive movements on perceptual objects possible (e.g., De Vignemont et al. 2021; Rizzolatti et al. 1997). Action (or "peripersonal") space is an area in allocentric space that extends around the agent and in which action is possible. It is organized around the body's axes that are relevant for a particular action. Unlike egocentric space, it does thus not have a fixed centre, such as the body's trunk; its organization differs depending on whether you are walking or reaching for an object, for instance. You can thus think of peripersonal space as a "standpoint" whence aspects of the environment are presented to you as available for action.[9] This is an important consideration for a theory that seeks to explain how perceptual objects acquire meaning, as it prepares the ground for the view that such objects are presented as affording opportunities for action (e.g., Chemero 2003; Gibson 1979).

There is some evidence for a social kind of action space (Costantini and Sinigaglia 2011; Maister et al. 2015; Pezzulo

[7] One proposal can be found in Brincker (2015).

[8] Ratcliffe's (2022, 2023) proposal that loneliness presents the person's environment in a particular way is very much aligned with this consideration.

[9] For a closely related idea see Grush (2001).

et al. 2013; Teneggi et al. 2013). You can make it quite plausible that there should be a socio-spatial ordering of the environment in which social interaction is possible.[10] Actions are carried out by minded creatures who occupy standpoints, origins of perception and action, in allocentric space. Social interactions are thus carried out in environments in which more than one creature occupies a standpoint. Since these environments are necessarily shared, it follows that objects that are experienced as available for joint action are presented to each perceiver and agent relative to the standpoints occupied by the involved agents. On such a view, sociality does not begin with an exercise in mindreading or empathic understanding. It begins with the spatial ordering of the environment, accounting for which requires reference to the agency of two people and their mutual sensitivity to each other's contributions to the interactive process that they help constitute. It is then because of this ordering that objects can afford particular kinds of joint actions to their perceivers and thus be experienced as being imbued with a primitive form of social meaning.

4 Model Theory

One question for enactivist theories of social understanding is how to explain the temporally extended aspect of social interaction. Interactive processes extend over time and their participants do more than just automatically react to sensory information: they bring to bear their social skills to participate in the interaction and enable others to do their bit to keep it going. To deploy these skills, agents must be able to anticipate what others are going to do in order to competently respond to their doings, and in order to put them in a position to respond to what they are doing themselves. My suggestion is that the socio-cognitive development of children from early joint attention to the acquisition of the concept of belief can be made sense of if you take it that the kind of interaction that plays out between the young child, their caregiver, and perceptual objects in the environment gives rise to a model of the socio-spatial arrangement in which joint perceivers operate (Seemann 2021).

Model theory is at home in the philosophy of science. It is sometimes invoked also as a less cognitively demanding way of explaining social agents' capacity for making sense of others' behaviour than traditional "Theory theory" approaches to mindreading (Godfrey-Smith 2005; Maibom 2003, 2007). Models are unlike theories in that they do not amount to sets of laws, or lawlike generalisations, that make possible the explanation or prediction of a target event. They do not, by themselves, have accuracy conditions: they do not aim at correspondence with states-of-affairs. They are useful only because they can be applied in particular contexts so as to make possible "comparisons" with the target. There thus is a distinction between the model, which in itself does not have accuracy or success conditions, and its applications, in which modellers fit the model to particular situations.

Psychological models are usually argued to underwrite the capacity for explaining and predicting behaviour by facilitating comparison with a target (Maibom 2009). The "mindreader" is thought to be able to explain and predict what others do because he operates with a model of mind whose application allows him to infer what mental state concept explains or predicts the observed agent's behaviour. Psychological model theory, traditionally conceived, thus has in common with Theory theory (e.g., Gopnik and Meltzoff 1997) that the mind modeler is an observer whose explanatory or predictive efforts are carried out from the third-person perspective. But you can also think of models as forming part of a second-person, participatory theory of sense making (e.g., Fuchs and De Jaegher 2009). The hypothesis of social space has it that social agents operate in a spatial order in which locations occupied by co-agents are presented to them as standpoints. While the most primitive kinds of models may enable agents simply to know how they have to move to point out an object relative to standpoints other than their own (and thus maintain episodes of basic joint attention), more sophisticated versions that have been enriched by mental state concepts acquired on the basis of previous experience can be applied to complex social situations and enable the interpreting agent to assign explanatorily and predictively useful mental states to their co-agent. Social agents, on this view, are first and foremost interacting creatures who develop increasingly sophisticated models of the social environment that they share with others; these models allow them to act competently and predict and explain others' actions in that environment.

5 The Self as a Constituent of Social Models

In order to act in social space, agents have to be operating with a model of the social environment that has three constituents: the perceiver herself, the co-perceiver, and the target object or scene. Because this environment contains the perceiver herself, it also is a model of the perceiver in that environment. In the simplest case, this may be nothing more than a model of the referent of "here" in social space that makes it possible to deploy the know how necessary to participate in

[10] For extended discussion, see Seemann (2019).

the intersubjective process of joint attention.[11] This primitive form of social self-knowledge could only be enjoyed in interaction with others. You could not know how to move so as to participate in the interactive process of joint attention if you did not interact with others; and you could thus not know what "here" means in social space if you were acting solo. The same is, of course, true vice versa. Social agents, on the present view, thus always enjoy a primitive, practical form of spatial self-knowledge that enables them to participate in interactive processes and that presents perceptual environments in the nearby environment as available for joint actions.

In the simplest, developmentally early kinds of cases, the application of the triadic core model that makes possible participation in intersubjective interaction is not conceptually mediated in any elaborate sense. One year-old infants who begin to jointly attend to objects with others do not yet have sophisticated concepts of themselves and others as agents on objects in their shared surroundings. By contrast, grown-up social agents operate in sophisticated environments in which they maintain intricate relationships with each other. People become friends, fall in love, fall out and reconcile again. On the interactionist model-theoretic picture I am sketching, humans build on their early interactions and the knowledge they acquire in these interactions (as well as, of course, elsewhere) to conceptually enrich the models they use to conduct, steer and regulate their social lives. Perhaps you and I are friends and going walking together is something we enjoy. Then we each operate with a model of that activity that we use to guide what we do. Some aspects of this model may not be reflectively present in our conscious lives: we may have learned, on the many walks we have gone on together, how to adapt to the pace of the other, when to take the lead and when to fall back, that we could never quite articulate. Other aspects are very much conceptually mediated and open to articulation and reflection: we know, and can think about, what is required for our shared walks to go well. We may know, for instance, that given your penchant for hot weather and mine for cool we are well advised to choose a temperate location for our walking holidays, and we then each know something about our respective social selves. We use this knowledge to plan our activities: we decide not to go to Sicily in August or Switzerland in January, for instance.[12]

Since triadic models feature the social agent herself as one of their constituents, using such models in the conduct of a relationship means working with a model of oneself as a participant in such relationships. The primitive model of oneself as an embodied social agent gives rise to a conceptually rich self-understanding as a friend or partner that informs how one acts in order to maintain the friendship or relationship. My sophisticated social self-model may include a view of myself as enjoying the intimate company of close friends but detesting large gatherings of loose acquaintances; as being a good listener but bad at talking about my own emotional life; as loving parlour games but hating team sports; and so on. This social self-understanding is used to form and cultivate the kinds of social relationships I like and avoid those I dislike; to improve how I conduct these relationships; to seek out Scrabble evenings but avoid tennis matches. When I manage to align my social activities and relationships with my model of these activities and relationships and my role in them, and when these models are well-formed,[13] I thrive; when I fail in the attempt at alignment, I suffer. Humans are deeply social creatures and social contact and interaction meets a fundamental human need. We seek human eye contact (Senju and Johnson 2009) and bodily touch from birth; we seek friendships and other relationships; many people need partners to conduct a life they experience as meaningful. The social models whose application enable us to know, practically and propositionally, how to conduct these relationships thus perform a vital role in human sociality. The absence or loss of a partner or friend can have profound consequences for the well-being of a person. One way in which it may manifest itself is loneliness, as I shall explain in the next section.

6 Loneliness and Self-Estrangement

The theoretical background I have been sketching in the previous sections situates the experience of loneliness in a larger context than a standard conception of the condition as an experienced lack of social connection allows. On my view,

[11] See De Vignemont (2021) for the idea that peripersonal space underwrites agents' sense of "here". She is not concerned with its social version though.

[12] Not all facts that one of us knows and uses to regulate what we are doing is shared between us: you may know that I'm not as good at climbing hills as I think and discreetly steer us towards flatter terrain. The idea is not that all items of knowledge in a person's model of a social relationship are shared between its participants. The idea is that each person's model is constituted in interaction and thus shared in its primitive, socio-spatial aspects (if it weren't the interaction would break down) and gets subsequently enriched by facts that often are shared but need not be. Two persons' models of their relationship will thus significantly overlap but not be identical even when the relationship is going well. The bigger the discrepancy between their models, the more difficult it will be to maintain the relationship, up until the point where more or less completely divergent models lead to its breakdown.

[13] The model one has of a meaningful relationship, and of oneself as part of that relationship, may not in fact be such that its successful application leads to a satisfying social life. You may be fantasizing about life as the partner of a fashionable socialite but be miserable when that life, improbably enough, comes to pass. Discussion of this point is beyond the reach of the present paper, however.

the lonely person's suffering involves being painfully separate not just from other people but from the environment that she co-creates with these people; loneliness goes so deep because it really can pull the (social) rug from under one's feet. The self is, on this picture, what holds together one's perceptions of how things should be in friendship, love and other relationships, and how they are. It is the connector that allows for the creation of a well-lived social life. When the connection fails, one's social self crumbles: the lonely person craves, but is disappointed in this longing, not just social connection but an experience of herself as being socially connected. If you are lonely, you miss not just your friends or partners but also your experience of yourself as a friend or partner.

As Roberts and Krueger (2020) point out, there are several kinds of "emotions of absence" in which the sufferer is cut off from a desired social and environmental connection. Apart from loneliness, grief, homesickness, heartbreak and perhaps some cases of nostalgia are examples. I call them "stunted emotions" to highlight the often quite brutally felt separation of the person from other people or places with whom and at which she would want to interact, live and be. On the present view, stunted emotions are brought about by agents' inability to meaningfully interact with others in shared environments, and this lack or loss of connection is theorized in terms of a discrepancy between a person's model of a relationship, including her own role in it, and how she perceives her social life to be.[14] There are different ways in which such a discrepancy can make itself felt. The past time the nostalgic person is missing is painfully absent because—at least in the sufferer's memory—it conformed to the person's model of a well-lived life, including its social dimension, that is not matched in the present. The sufferer of homesickness is in thrall of memories of a place where she felt at home that underwrites her model of a good life and that the present, in a different place, fails to live up to.

Because all stunted emotions are the painfully felt result of a discrepancy between one's model of a satisfactory social life and perceived social reality, model theory can explain what various such emotions have in common. But because the social model has three constituents that include the environment and oneself as well as the other person, it can also explain what differentiates them: different stunted emotions involve focusing on distinct constituents of the social model with which the sufferer operates. Heartbreak is, essentially, about other people: the person you are missing is taking on an outsize, dominating role in your mental life. Homesickness is, primarily, about the place you've lost and the people that populated it. The qualifier matters: since all stunted emotions are relational, they all involve the sufferer and have a self-related phenomenal dimension. But the self is not what is mainly present in the heartbroken or homesick person's experience. Loneliness is different. In the frustration of the lonely person's attempts to adapt her perceived social environment to the model she has of how things should be with her socially, the balance between self and other that underwrites well-formed social relationships is thrown off kilter: now there is only the self that thus takes on a disproportionate size in the sufferer's experience. It is a lonely self precisely because the person is presented to herself as lacking in the social interaction, or capacity for interaction, that would connect her to other people and the environment in which the interaction takes place. She is presented to herself as a spectator *malgré lui*, as cut off not only from other people with whom she desires social interaction but thereby from the world and her own participatory place in it.[15]

It is this lack or loss of opportunities for participation that plays a huge role in the experience of the lonely person. The particular intertwining in ordinary experience of being part of an external world in which one has a stake and that one helps shape by way of one's actions and interactions is replaced by a disconnected self that should be meaningfully participating in these interactions but isn't. The self looms large in the lonely person's experience, and the social world that is unavailable for interaction retreats: things still happen on the outside, people meet for parties, go for walks, and make love, but the lonely person feels that she has no stake in these activities even if she continues to participate in them.[16]

Moreover, she knows that she doesn't: because the present explanation of the psychological mechanisms that underwrite loneliness appeals to a monitoring self that models the social environment and regulates participation in it, the lonely person who fails to match what she perceives to be the case with her social model experiences the bitter knowledge of isolation not only from others but from herself as a social agent. There is a claustrophobic, entombment-like aspect of the sufferer's experience that Dickinson's poem captures so well: the self becomes a prison that retains and

[14] This is not to suggest that the relationship in question has to involve a particular person. You can feel lonely because you. are missing having a partner, even though there's no particular person you'd want to be your partner.

[15] In this vein, Ratcliffe (2022) describes being lonely as a sense of exclusion that is "integral, not just to a passing experience of whatever duration, but to the structure of one's life, to *who* one is" (12).

[16] Ratcliffe (2022) suggests that having an intersubjective experience that is characterized by "a sense of comfort, ease, spontaneity, and sharing" (6) entails that the person who has this experience is not lonely. I think that's right and thus take it that a person cannot be enjoying social connections that are meaningful in the sense of having these phenomenal characteristics and still feel lonely. What can make someone suffer from loneliness despite having many social contacts is precisely that these contacts do not have the kinds of phenomenal characteristics Ratcliffe mentions in the above quote. They are then not meaningful in my sense. Thanks go to both my reviewers for pushing me to clarify that point.

constrains its lonely inhabitant. The prison is of a strangely disembodied kind, a nightmareishly solipsistic headspace that cuts off the sufferer not just from other people but from the embodied part of herself that would make meaningful interaction with these people possible. Loneliness involves, on this picture, a loss of grip on oneself: because the participatory self that connects the person to other people and the environment vanishes in the experience of loneliness, the helpless observer has nothing to latch on to anymore and thus is left spinning in her own sealed-off mind.

It is this enlargement of the self, at the expense of what's outside of it, that is specific to the experience of loneliness, as opposed to other stunted emotions.[17] As becomes evident when surveying the recent philosophical literature on the topic, it is not at all obvious whether there is a unified core experience that is shared by all, or even most, lonely people.[18] The widespread but vague notion of an "absence of desired social connection" is not remotely specific enough to serve as a description of the lonely person's experience. The sufferer's sense of loneliness may, on occasion, be tied to a general sense that she does not have enough friends in her life, or that she would like a relationship. Yet it can also be provoked by the absence or loss of quite specific people: your partner who is away on a work assignment, or a friend who has moved abroad. It can arise in the context of bereavement and grief (Ratcliffe, 2022) and can, in complex ways, be part of homesickness and even, you could think, nostalgia. The view presented in this paper is that what singles out loneliness phenomenologically is the sufferer's direction of focus on herself. All stunted emotions are phenomenally relational, involving an experience of oneself relative to something or someone that ought to be there but isn't. In grief, nostalgia, and heartbreak the sufferer's main focus is on the object side of the relation. In loneliness, it is on the subject side: on the person herself, as the one who is desirous of connection but does not, or cannot, have it. It is oneself that one experiences as being excluded from connection to others, even if the sense of the desired connection and its objects can take many shapes and may, on occasion, remain hazy.

7 Model Theory, Social Goods, and Sense of Exclusion

To sum up: on the view I have been developing, the experience of loneliness involves a disappointed self-relation; the painful inability of the observational self to connect to and regulate its enacted social counterpart that can be described as a form of self-estrangement. This disconnect is explained by appeal to a triadic model of the environment with which social agents operate and that features oneself as a constituent. The failure to successfully apply one's social model to perceived situations underwrites stunted emotions quite generally. What distinguishes loneliness from other such emotions is an experiential focus on the self as a constituent of the model of absent social relationships, rather than the other person, the past, or aspects of the physical surroundings.

Social models are first applied in infancy in the conduct of episodes of joint attention, simple deictic interactions that enable their participants to maintain intersubjective world-involving processes. These interactions get by without requiring the deployment of sophisticated social and other concepts. Grown-up persons operate with concepts such as "acquaintance", "friend", "partner", "lover", "enemy", that underwrite not only how they think of other people but also of themselves as participants in their relationships with these people. These concepts suffuse participants' experiences of their relationships and are used in their conduct: sophisticated reasoners are able to think of friendships and partnerships as such and can reflect on what is required to maintain and develop them. At the same time, social models retain their core function of regulating social motor activity. They thus have two functions, motoric and conceptual, that inform each other in the conduct of mature social agency. Adult persons are capable of differentiating between many social emotions; the primitive positive valence of early joint attention gives rise to the experience of social connectedness, sympathy, affection, love, jealousy, and many more.

This account of the genesis of nuanced social relationships and the concepts that are used to differentiate between them helps explain how social goods in Roberts' and Krueger's sense are rooted in social interaction. It thus diffuses the concern that their theory presents desirable kinds of social connections as abstract commodities divorced from the intersubjective processes in which humans first find social meaning. On this picture, concepts like "friendship" and "relationship" designate social goods that are developed on the basis of participation in intersubjective processes and that form part of mature agents' conceptually sophisticated social models by way of whose application they reflect on and steer their relationships.

The theory can accommodate also Ratcliffe's (2023) view that loneliness consists in a sense of being excluded from social situations. The social model is forward-looking: it helps regulate social interaction by way of an anticipated desirable state-of-affairs. If the application of the model fails, the future is therefore presented as not providing the possibilities for meaningful interaction contained in the model. The anticipation of the future is then of a world in which others enjoy these interactions while oneself is being excluded from them. The lonely person experiences herself

[17] See Motta (this volume) for qualitative support of the thesis that loneliness prevents its sufferers from fully experiencing themselves.

[18] See Motta (2021) for an overview and Seemann (2022b) for an attempt at classification.

as being excluded from the social opportunities that a relationship that is in tune with the model she has of it would afford. So the use of model theory to characterise the psychological processes that give rise to loneliness supports Ratcliffe's account of the phenomenological structure of (at least many experiences of) the condition. In particular, it can explain both the world-oriented and the self-focused dimensions of loneliness and their complex interrelation. Because the social model has three constituents, one of which is the environment in which the relationship takes place, the theory can do justice to Ratcliffe's consideration that places can be experienced as lonely. Social creatures always operate in particular environments and the experience of loneliness suffuses not only the way oneself and other people are presented to the lonely person but also the way in which she experiences the places at which the perceived reality of her social relationships fails to match the model she entertains of them. A more complex case Ratcliffe considers is the experience of a place as lonely that does not involve an experience of oneself as lacking in desirable social connections. But this case, too, can be accommodated by the model-theoretic account by thinking of such experiences as the result of a second-order kind of exercise of the imagination: the perceiver of a lonely landscape applies the social model to an environment in which she has no stake and the experience presents the place as it would appear to her if she had a stake in it. The resulting sense of exclusion from future opportunities for social action then does not apply to the agent herself, in relation to an environment in which she desires social relationships, but to an imaginary self who would be placed in these environments and would desire such relationships.

These final remarks are quite brief, but they may suffice to show that the model-theoretic account I have been developing makes it possible to think of loneliness both as an experience that presents the entire environment in a particular isolating way and the result of a frustrated desire for certain social goods. Loneliness can then be relationally and intentionally construed without requiring a choice between these two ways of locating the embodied mind in its environment. The model theoretic account thus supports the pluralist view (Seemann 2022b) that loneliness is a complex experiential phenomenon whose characterization may involve a variety of *prima facie* incompatible philosophical outlooks.

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