

Hosting via Airbnb: Motivations and Financial Assurances in Monetized Network Hospitality

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ABSTRACT

We examine how financial assurance structures and the clearly defined financial transaction at the core of monetized network hospitality reduce uncertainty for Airbnb hosts and guests. We apply the principles of social exchange and intrinsic and extrinsic motivation to a qualitative study of Airbnb hosts to 1) describe activities that are facilitated by the peer-to-peer exchange platform and 2) how the assurance of the initial financial exchange facilitates additional social exchanges between hosts and guests. The study illustrates that the financial benefits of hosting do not necessarily crowd out intrinsic motivations for hosting but instead strengthen them and even act as a gateway to further social exchange and interpersonal interaction. We describe the assurance structures in networked peer-to-peer exchange, and explain how such assurances can reconcile contention between extrinsic and intrinsic motivations. We conclude with implications for design and future research.

Author Keywords

network hospitality; peer-to-peer exchange; uncertainty; motivation; money; Airbnb; Couchsurfing; sharing economy

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

INTRODUCTION

A variety of emerging platforms are creating new peer-to-peer marketplaces that challenge established industries. Online systems such as Airbnb and Couchsurfing disrupt the traditional corporate business models associated with

rental housing and hospitality: Instead of a single company managing buildings, terms, and leases, these new platforms facilitate connections between hosts who rent spaces in their homes or secondary properties and guests from around the world. The emergence of peer-to-peer housing for short-term guests may contribute to the revival of homestays, local bed-and-breakfast inns, and multicultural hospitality networks, such as Servas¹, which have long connected hosts and travelers.

The broad realm of online peer-to-peer sharing systems for housing, mobility, and other exchanges of goods or services is often classified together as the “sharing economy” – a phenomenon that is attracting increasing scholarly attention within HCI and CSCW [22]. As a term, ‘sharing’ tends to engender notions of gifts, favors, and other non-monetary transactions. However, many peer-to-peer online platforms in the purported sharing economy explicitly involve monetary negotiated exchanges. For example, Airbnb creates a market of short-term rentals with a clearly defined price. A host is free to name any price they want or take rate recommendations from Airbnb.

This research builds on a recent study on monetizing network hospitality [20] which found Airbnb hosts in Finland to be motivated by both financial gains and expected social gratification. This prior study highlighted the broader importance of social interactions in network hospitality, while raising important unanswered questions about how financial exchanges relate to social exchanges, and how different extrinsic and intrinsic motivations for hosting interact. The goals of this paper are twofold: (1) to deeply examine the role of financial assurance structures in the economic and non-monetary interactions that are facilitated in monetized network hospitality, and (2) to corroborate key findings about intrinsic and extrinsic motivations and experiences from [20] in a different geographical and cultural setting (the San Francisco Bay Area, USA).

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¹ A cooperative founded after World War II to coordinate hospitality exchange with phone calls and letters [16,17]

We argue that the platform and entire system of monetized network hospitality create assurances to reduce risk and uncertainty for hosts. Our main research question is: *How does the primary, negotiated exchange of money for space and hospitality create opportunities for other exchanges between hosts and guests?*

Our study reveals that ‘sharing’ in this type of technology-mediated system often encompasses far more than just the initial financial exchange. Our analysis demonstrates how many of the most valued intrinsic benefits of hosting are only discovered after taking the initial leap of faith into becoming a host, and how the presence of strong assurance structures at the root of host–guest relationships may facilitate taking such a leap. The paper makes a unique contribution by illustrating mechanisms through which financial motivations may encourage or enable other social exchanges, acting as a gateway to further interpersonal interaction in network hospitality. We conclude with implications for design and future research regarding network hospitality and interpersonal interaction in the sharing economy more broadly.

BACKGROUND

We now briefly discuss social exchange theory as a lens to peer-to-peer exchange, motivations for participation in peer-to-peer exchange, and, third, the domain of our study, network hospitality. In our review, we focus on considerations of risk and uncertainty.

Peer-to-Peer Exchange as Social Exchange

Online peer-to-peer exchange systems involve the transfer of valued resources such as goods and services (that is, social exchange) between parties who likely have never met face-to-face before. Social scientists recognize that social exchange is an elementary part of human interaction [4,12,13,19]. In fact, the exchange of goods and services is a core aspect of modern economic theory that was built on early anthropological observations of exchange in societies [27,28,30]. Across different social, economic and anthropological perspectives, there is a key observation that individuals exchange goods and services through different forms of interaction, including gift giving, negotiation, and normative understandings of reciprocity. Importantly, social exchange involves both economic and social outcomes. A central difference between the social exchange perspective and classic views of economic exchange is that the former strongly emphasizes the role of interpersonal interactions and relationships in the exchange process, while the latter focuses primarily on price and valuations of goods and services in a market defined by clear parameters.

A key aspect of social exchange is the form of the exchange. For example, reciprocity (where giving is not contingent on receiving) and negotiation (where giving is contingent on an agreement for receiving) are two common modes of exchange [7,8,19,12]. All things being equal, the underlying form of exchange accounts for observed outcomes, as well as the initial likelihood of choosing to

engage in social exchange in the presence of risk and uncertainty [7]. One of the most common forms of exchange in commerce settings involves negotiated exchanges of goods and services for money. Negotiations can be non-binding or binding. Non-binding negotiations are highly uncertain because the exchange partners must rely on each other to uphold the agreement [8]. For example, non-binding negotiations are common in barter and trades that take place outside of regulated, monitored settings. In binding negotiated direct exchange, however, a reliable third party confirms the transaction (e.g., provides an assurance) between two or more exchange partners. Thus, in binding negotiated exchange, the interaction is much less risky and less uncertain compared to non-binding negotiations [32, 35, 8].

In peer-to-peer exchange, individuals may face many sources of uncertainty. One source of uncertainty arises when decisions are made with new, unknown individuals instead of fixed partners [6]. However, the presence of a third-party assurance structure in binding negotiated exchange reduces the need for interpersonal trust between the two primary parties [8]. In other words, two individuals do not need to trust one another to fulfill an agreement if they can rely *entirely* on the assurance structure to guarantee the transaction. Thus, assurance structures make it possible for individuals who are risk-averse or generally more cautious of others to take an initial leap of faith by interacting with unfamiliar exchange partners [7]. As we will argue, the presence of an assurance from an online platform can serve as an important tool for inclusion and act as a gateway to other social exchanges.

Motivations for Participation in Peer-to-Peer Exchange

Many peer-to-peer exchange platforms motivate participation by allowing individuals to monetize their resources, including possessions, skills, and time. Alternatively, a variety of peer-to-peer exchange systems, such as foodsharing communities [15] and timebanks [e.g., 2,5,39] do not rely on money as a primary motivation. Research on the latter indicates challenges stemming from a real (or perceived) tension between members with instrumental versus idealistic and altruistic motivations [39]. Such frictions among competing motivations exist insofar as both instrumental and idealistic goals cannot be satisfied at the same time. A central concern in such cases is whether the monetary motivations displace other intrinsic, non-monetary motivations or not.

Some peer-to-peer systems combine monetary and non-monetary exchanges. Research on the mixed online exchange system Kassi shows that favorable motivations to engage in local social exchange do not necessarily translate into participation if individuals feel uncertain about how they can contribute [41], or how they can avoid indebtedness towards others [23].

Finally, advocates of peer-to-peer sharing economies may name “*alternative collectivist motivations*” as a trait that

distinguishes the sharing economy from the conventional economy. However, Bellotti and colleagues [1] argue that it is not clear, “*how important [collectivist motivations] are when weighed against monetary and other self-interested motivations.*”

Network Hospitality

The notion of network hospitality [16] originally described how users connect to one another using online platforms, as well as the kinds of relationships they perform when they meet face-to-face for the material exchange of accommodation. Couchsurfing and Airbnb are currently among the best-known examples of platforms that support network hospitality. The two differ crucially: Couchsurfing fosters non-monetary network hospitality offered on the basis of generalized reciprocity, while Airbnb allows monetizing network hospitality via short-term peer-to-peer rentals [20]. We now consider how this difference is reflected in two key issues related to managing uncertainty in network hospitality: reputation and social obligations.

In early research on Couchsurfing, network hospitality among new, unknown partners was characterized as “a leap of faith” [42], a process of dealing with “irreducible vulnerability and uncertainty.” Mechanisms such as third-party reviews and reputation metrics emerged as a way to reduce information asymmetry and facilitate productive social exchange between unfamiliar exchange partners [24].

While risk and uncertainty has been less prevalent in research on Airbnb, reputation and trust [35,37] remain central concerns. Reputation is intertwined with pricing tactics in network hospitality [21]: Hosts may cash in on their accumulated ‘reputational capital’ by raising prices once they have established a good reputation. Echoing Resnick’s [35] work on the cost of cheap pseudonyms, this is presumably because reputed hosts are perceived as more desirable and trustworthy partners. Lee et al. [25] found that the number of reviews an Airbnb host received was a better predictor of room sales than rating scores. The authors speculate that this might be explained by the tendency of ratings to skew positive, thereby having less distinguishing power than the number of completed transactions.

Finally, research on non-monetary network hospitality via Couchsurfing [e.g., 3,33] highlights that intense social interaction is often considered an obligation. Ikkala and Lampinen [20] suggest that monetary transactions in network hospitality may help bring about enjoyable sociability by reducing hosts’ sense of obligation. Since our current study included interviewees who had experiences of hosting via both Couchsurfing and Airbnb, we investigate how the monetary nature of exchange may actually promote opportunities for sociable experiences that might seem like obligations in non-monetary network hospitality.

MATERIAL AND METHOD

We present a qualitative study comprising twelve in-depth, semi-structured interviews with current, prior, or aspiring

Airbnb hosts. We chose a holistic, qualitative method to understand 1) social exchanges, 2) the role of financial assurances, and 3) intrinsic and extrinsic motivations through the varied experiences and interpretations of hosts.

Participants

We employ *purposive sampling*, which involves non-random sampling of individuals, groups, or settings where the processes and experiences of interest are most likely to be observed [40]. The prerequisite for participation in the study was that the interviewees should be current, prior, or aspiring Airbnb hosts based in the San Francisco Bay Area, CA, USA. We recruited participants through an e-mail invitation to listservs at a large, public university in the area, as well as through recommendations from acquaintances who were connected to local Airbnb hosts. We also recruited from a speak-out event that was organized by San Francisco’s city hall to lobby for regulation favorable for those practicing ‘home sharing’.

The first author conducted altogether twelve semi-structured interviews, providing a rich set of diverse experiences with network hospitality. Six of the participants were hosting at the time of the study. Five had discontinued hosting for different reasons, ranging from changes in family and housing situations to disappointment in the financial and/or social benefit that hosting provided. The final interviewee had personal experience of Airbnb solely as a guest but was aspiring to host once his housing situation would permit it.

Of the twelve interviewees, nine had experienced Airbnb as both host and guest. Moreover, four participants previously hosted via Couchsurfing, too. Personal experiences with monetary and non-monetary systems allowed these four interviewees to reflect on both forms of network hospitality.

Participants’ age varied from 27 to 65. Three were male and nine female. Interviewees worked in diverse roles in companies, municipalities and non-profits in a range of fields. Four were self-employed, one was retired, and one was a graduate student. Six of the eleven hosts lived alone. Two shared their home with a significant other, and another two with housemates. The final host did not live in the house that she rented out (she owned it, and had one long-term housemate living on-site at the time of the hosting).

Out of the eleven interviewees with hosting experience, seven hosted in an apartment, and the other four in a detached house. Six participants were renting the real estate in which they hosted. Five hosted in space that they owned. Nine rented out a private bedroom, while the other two rented out the entire apartment. All hosting locations except one were easily reachable by public transportation: six in downtown areas, four in more remote urban/suburban neighborhoods, and one in a rural/small town setting.

Finally, seven interviewees engaged in on-site hospitality. Three practiced (or had practiced) remote hospitality with limited face-to-face interaction with guests. The eleventh

host had a hybrid approach, preferring to overlap with guests for a day or two before leaving them on their own. The number of guests participants had hosted ranged from a handful to several hundred.

Interview Procedure

The interviews were conducted in the San Francisco Bay Area, California, USA, in April–May 2014. The first author interviewed participants at a public venue of their choosing, such as a café, with the exception of two interviews that were conducted over a Skype call. No compensation was offered for participation. All interviews were conducted in English, audio-recorded, and transcribed verbatim.

The interviews were semi-structured. As our aim was to elicit holistic accounts of hosting experiences, we followed a similar interview procedure as Ikkala & Lampinen [20]. The interviews started with a conversation about how the participants first learned about Airbnb and decided to try it out, as well as whether they had experience of other types of network hospitality or peer-to-peer exchange. The interview protocol then turned to questions regarding the participant's home, motivations for hosting, as well as their approach to pricing, accepting guests, interacting with them, and handling reviews. Where relevant, we discussed participants' interactions with neighbors, landlords, or other actors regarding hosting. Finally, participants had a chance to bring up any remaining issues they considered pertinent.

Analysis Procedure

Our analysis is informed by prior research on network hospitality [e.g., 16,20,33] and social exchange [e.g., 7, 8, 23]. Using a grounded approach that emphasizes processes, actions and interactions, as expressed in participants' views [10], our goal was to document such experiences from the perspective of Airbnb hosts. We placed analytical emphasis on exchanges, financial assurances, and motivations.

Both authors read each interview transcript, making notes and coding for the two primary themes of exchanges and motivations. In a second iterative pass, we then excerpted all sections from the interview transcripts that illustrated 1) the negotiated, monetary exchange at the core of hosting, 2) other exchanges that were facilitated or enabled by the core exchange, and 3) motivations. Both authors were PIs on the project since its inception and collaborated actively on the analysis, so the extracted codes and themes were directly compared and discussed until we reached full agreement.

In coding excerpts on motivations, we built on the previously established basic distinction between extrinsic and intrinsic motivations [26,34], coded the interview material for both types, and compared the resulting excerpts to one another. In addition to our focal codes and excerpts related to exchange and motivation, we noted emergent themes through iteration. In particular, we analyzed comparisons between Couchsurfing and Airbnb, as these remarks further elucidated the distinguishing characteristics of monetary versus non-monetary exchanges. In the

following sections, we refer to participants with pseudonyms to protect their anonymity.

UNCERTAINTY REDUCTION IN RISKY INTERACTIONS

Online peer-to-peer hospitality exchange systems such as Airbnb add an explicit financial exchange to the online–offline sharing context that was pioneered by platforms like Couchsurfing. Even when individuals choose to engage in potentially risky and uncertain exchanges (such as sharing a room in one's home with a stranger), we argue that the nature of this core financial exchange in Airbnb brings additional structure to the entire range of interactions between hosts and guest, and other actors.

Our analysis of Airbnb hosts reveals that uncertainties are reduced through several key factors related to the nature of the binding negotiated exchange that initializes interaction between hosts and guests. First, we describe how hosts rely on the platform (and company) as an assurance structure to warrant the core financial transaction. Second, we find that the nature of binding negotiated exchange as an initial form of interaction between hosts and guests reduces uncertainty for hosts, so that they can focus on managing expectations, creating flexibility in their offerings, and facilitating other social exchange and interaction with guests.

The Platform as an Assurance Structure

Prior research demonstrates that binding agreements are less risky because transactions are ensured by a third party, creating an assurance structure [32,35]. In the case of peer-to-peer exchange systems such as Airbnb, the hosts in our study indicated a variety of ways that the structured design of the platform as well as the company itself provided assurances that reduced risks. We now examine how hosts describe their reliance on the platform and the company both to ensure the initial financial exchange, and as a way to provide social distance between the host and guest.

Based on our analysis, the platform provides at least two forms of assurance for hosts. First, it acts as a simple agent to *facilitate the core financial transaction* so that both host and guest know that payment has completed successfully without ever having to talk about or directly exchange money. Second, the platform acts as the definitive record-keeping authority of financial exchanges, which helps to *resolve conflicts between hosts and guests*. In this way, the platform becomes a kind of translucent broker, facilitating and ensuring the core exchange but remaining uninvolved in all other aspects of the interaction unless problems occur.

Facilitating the core transaction

A central source of risk reduction for hosts is the fact that when Airbnb facilitates network hospitality, payments do not need to be made face-to-face. Instead, they are handled via the platform. This has at least two important benefits for the host: First, when the guests arrive, they are fully paid, so the host need not worry about getting the agreed upon compensation. Second, by foregoing the in-person payment ritual, the interaction with the guests can feel less awkward.

Maria who had hosted via both Couchsurfing and Airbnb highlighted these issues in depicting her experiences of interaction with Airbnb guests: “[I]t could be so awkward. It’s really not. Because everything is, the transaction is handled behind the scenes. When they show up, they’re fully paid, and you don’t have to worry about that. -- I think that that helps the social interaction to not be [as] weird as it could be.” The structured, platform-managed payment process provided convenience for guests and increased reliability of payment for the hosts, thereby removing uncertainty and alleviating awkwardness for both parties.

Veronica rented her extra space out permanently after she failed to attract a sufficiently steady flow of Airbnb guests to meet her financial goals. She discussed the convenient, hands-off nature of check-out, noting that as the payments were handled by Airbnb, there was little need to interact with the guests at that point: “They would just leave the key, and then there was no other formal process. I guess the payment would just happen. I think it was just taken care of automatically by Airbnb.”

Another aspect of the assurance is having the platform maintain a centralized data repository documenting details of all exchanges. Adam described how having a third party mediating the exchange functioned as a protection against fraud: “I liked the fact that there was a third party holding the funds. – [B]oth parties had a lot of their information on file. Credit card information, so everything was traceable. And so, there wasn’t going to be a real chance of fraud.”

Resolving conflicts between hosts and guests

Respondents indicated several cases where they turned to Airbnb for help in settling a problematic situation with a guest. In these instances, the company is called to act as an authoritative, third party who supports and confirms the binding nature of the negotiated exchange and helps resolve conflicts between hosts and guests. In doing so, the company acts as a mediator to reduce perceived (or realized) risks and uncertainties.

Barbara depicted an incident where a guest told her that she would be arriving with an extra person even though Barbara felt that she had made very clear that she would accommodate only one guest at a time. She explained that after communication with the guest had not led to any satisfactory conclusion, Airbnb had been contacted to get the conflict resolved: “I said, ‘I’m sorry. I won’t rent to you. This isn’t going to work.’ And Airbnb came to me, and I said, ‘I have all of this evidence that she has not been forthright with me. And at this point, I don’t want her in my home.’ They said, ‘We’re gonna give you a full refund.’ And so they did. They paid for her stay, and they actually gave her some sort of a credit to stay somewhere else.” In this case, the company offered to settle the host’s bill while organizing another place to stay for the guest. Without the trusted third party to ensure a resolution, the host and guest could not have reached this outcome on their own.

In another case, Airbnb was contacted only after the fact. Emily described an adverse hosting experience where her guest had brought in several unexpected and unwelcome visitors: “I came home—I told him it was only for him. I came home and there was five people in my house all super high. They were at the Bluegrass Festival.” Here, the host explains how she did not know how to best handle a guest who was behaving in ways that she deemed inappropriate and that made her feel uncomfortable: “He had the key. It was weird. And then he hit on me the next day. That made me really uncomfortable. --I just stayed at my boyfriend’s the whole weekend. -- I then emailed Airbnb, and they took care of it. I think they could have been faster. They took a week or so to finally respond and get back. And then they kicked him off Airbnb.” Here, the company was not able to prevent Emily from having an unsettling experience that led her to vacate her home for the weekend. Yet, once Emily reported the misconduct to Airbnb, the company took action to prevent the guest from causing similar concerns for others in the future. While this did not resolve the conflict between Emily and her guest directly, Emily felt better knowing that the issue had been addressed.

The Nature of Monetary Negotiated Exchange

The initial financial interaction through Airbnb is a binding, negotiated transaction. Hosts provide a description of a room or property, any specific rules or requirements, along with a price. Potential guests can agree to the terms as provided by the host, or contact the host for clarifications, questions, and negotiation. Once the parties have reached an understanding about the hospitality to be provided, the financial transaction handled via the platform works to ensure a shared notion of value in the exchange. We found that these features of the core financial exchange helped hosts in two key ways. First, by using the online system as a broker for the financial transaction, hosts could comfortably manage expectations on their terms, while achieving a welcome sense of flexibility and creativity regarding their approach to hosting. Second, hosts described how the core monetary exchange facilitated additional social exchange by acting as ‘an ice breaker’ that turned strangers into less risky exchange partners.

Managing expectations and providing flexibility

While our participants were driven to become hosts by a variety of motivations, several highlighted the value of the flexibility in choosing how to host, including considerations regarding length of stay, number of guests at a time, space provided, as well as the amount of interaction with guests. By negotiating the terms of the financial exchange, hosts and guests are able to regulate the amount of social interaction with one another in line with their preferences.

Adam, a remote host who vacated his studio for guests when he needed extra income, explained that the platform gives hosts control over what type of hospitality model to pursue: “And I think that’s the beauty of Airbnb, is that it can be different for each host. They can say that, ‘When you

come stay at this place, these are the rules,' and that it can vary, depending on where you go." For Greg, who did not rely on hosting earnings at the time of the study, the freedom to choose when to host was a source of valued control over his own space and hosting efforts. He was only comfortable accepting guests who seemed *"interesting enough,"* and moreover, to forego hosting altogether if he felt like having his home all to himself. The experiences of our interviewees indicate that in order for hosts to realize the benefits of such control, they need to gain a clear sense of their own preferences and enough experience to articulate them effectively to prospective guests.

Hosts were free to adapt their approach to their changing needs and desires, too. Marissa explained how the platform allowed her and her wife to adjust their hosting style in line with how much they needed to make and how much effort they were able and willing to invest. Both women were self-employed, so their income and workload fluctuated. By learning to alternate dynamically between hosting short and long-term visitors, they used hosting as a financial safety net that could make up for decreased income when needed: *"With Airbnb, you have a lot of flexibility. -- And so you have flexibility to decide how much money do I want to make? How often do I want to clean? How hard do I want to work at it? But we can always meet our financial goals as they shift and change by shifting and changing who we accept."*

The monetary nature of Airbnb exchange can itself be a factor in managing expectations. Cynthia depicted that she priced the spaces she rented out through an act of balancing pro-social and financial goals: *"I just played around with different figures. -- I wanted it to be accessible, but I wanted it to be worth my while. -- So I just struck a balance there."* Adam explained how demand tends to increase over time, as a host accumulates a reputation on the site. He described how pricing can be used to manage the amount of requests: *"The accepted wisdom is that you're, that you need to start low. Then, when you get reviews, you can start to jack up your price. I got to the point where I was receiving so many requests that it made sense for me to jack up the price."*

Our analysis revealed similar pricing tactics as identified in prior research [20]: Some, such as Emily, intentionally offered below-market rates to promote the community and to attract youthful guests. Others, such as Greg, used pricing in a similar strategic way to manage whom to host, albeit with different preferences: *"If you got it really cheap, you might get like students or something. -- If you got it a little higher, then you figure the people that are okay to pay that are maybe not gonna be as troublesome or something."*

Enabling additional social exchanges

When hosts engage in the core financial transaction, they experience a relatively low-risk, low-uncertainty interaction with previously unknown partners (i.e., guests). We argue that this initial exchange can act as a gateway to other

social exchanges and interpersonal interactions. In our interviews we discovered a variety of ways that other types of exchanges were created and enabled as a result of the secure financial transaction that links hosts and guests.

First, we learned about small financial exchanges that were viewed as thoughtful additions by hosts. As noted earlier, social exchange often involves financial transactions. However, the key to social exchange lies in understanding the relational aspect of the exchange rather than viewing it solely in terms of price and/or market conditions. As an instance of casual add-on exchange within network hospitality, Maria shared a delightful experience she had as a guest: *"--the first host that I stayed at, the guy in Amsterdam; he had a fridge full of beer and a wine rack. He said, 'Anything that's on that wine rack, there's a bowl on the table. You can take any of those, and all of them are seven euros.' -- It meant that I didn't have to go and find a neighborhood store, and most of them are closed after the conference anyway."* Maria adopted the same practice and praised the possibility to delight her guests and add convenience to their stay: *"I did that for my guests as well. And every time they wrote notes saying what, 'That's so nice, and really cool idea.' Stuff like that I found was just really fun."*

When Marissa hosted guests who shared her love of opera, she offered to order tickets in advance, using the discounts that were available to her as a subscriber: *"And we've had people who came because in my profile I said I love opera. -- 'Cause we also if people want to use the discounts that come with our subscriber status at the opera and the symphony, I'll order tickets for 'em in advance if they want me to."* Here, a shared interest led the host to provide an extra service from which she herself draws no direct financial benefit but that is both convenient and economical for the guest. It is noteworthy how the negotiated, financial exchange between parties who are initially strangers to one another leads to additional social exchange of a variety normally reserved for friends and family. Participants indicated that such favors were a by-product of hosting; something that could occur once the exchange partners had met through establishing a host-guest relationship.

Second, beyond these extra services where money changed hands outside of Airbnb's payment system, the core monetary exchange led to less clearly defined social exchange, too, such as valued social interaction with guests. For example, Cynthia described that money had been the initial spark for her interest in hosting, but over time, she grew to enjoy the company her guests provided: *"Sharing the space --well, I started doing it for money. But I found that I really enjoyed it. -- And it's really enriched my life. - - I had one fellow last fall -- who was just terrific. -- And he got along with everyone and just brightened things up."*

Our materials contained instances of gift-giving, too. For example, Marissa explained that she would often come up with little treats for her guests: *"If it just comes around,*

we'll do something special. -- A lot of guests bring us gifts. We often give gifts back." Gifts and other acts of reciprocity have been identified as a common characteristic of non-monetary network hospitality [33]. The provision of unilateral gifts from hosts in monetized network hospitality demonstrates how an initial negotiated monetary exchange may evolve into social interaction that resembles reciprocal, non-monetary practices.

In some cases, the exchange partners kept in touch after the visit, or changed roles when hosts stayed with their own prior guests while traveling. Barbara, who was renting out a small guest room on a regular basis, described such an instance as one of the best experiences she had as a host: *"I think a really good one was the Swedish woman who stayed here. She's gonna host me this summer. -- She's more than a host. She's like a friend-host."*

The value placed on the potential of further social exchange was also apparent in accounts of disappointments related to hosting. Shuli explained that she discontinued hosting after it turned out to be less enjoyable than expected, highlighting how the monetary profits alone had not been enough to justify the lack of expected social benefit: *"I just didn't have as good a time as I thought I would. Like people just weren't as cool as I thought they would be, and so I stopped."*

BALANCING EXTRINSIC AND INTRINSIC MOTIVATIONS

Different types of motivations and incentives can encourage or discourage behaviors in peer-to-peer exchange systems. Extrinsic motivations are those that can be satisfied through indirect compensation, such as money [34]. Intrinsic motivations are a more direct form of compensation to meet one's immediate satisfaction or needs. They include a sense of achievement, completing tasks for their own sake, or for commitments associated with one's identity [26].

When examining motivations to participate in peer-to-peer systems such as Airbnb, we must understand how different kinds of incentives might promote or reduce hosting activities. Crowding theory [14,26] offers a framework for understanding how extrinsic financial incentives such as money may "crowd out," or displace, intrinsic motivation, whereas the same incentives may sometimes "crowd in," or amplify, intrinsic motivation. In this section, we examine how respondents considered different motivations to host.

Extrinsic Motivations

Participants mentioned varied reasons for becoming hosts and accommodating guests over time. Earning money by hosting came up as a repeating theme across interviews, but it was very rarely the sole rationale for participation.

Several participants described how earnings from hosting supplemented income, and helped making rent or paying off one's mortgage. Two participants mentioned hosting as a means to finance their education. Adam, a graduate student, explained that hosting helped him to stay in charge of his student loans. For Marissa, hosting had been an

invaluable source of income during the sabbatical that she took to pursue further education: *"I would not have been able to do that without Airbnb because it assured enough money to pay the rent while we were doing that."* Greg had started hosting when he needed to cover significant unexpected medical expenses: *"Then, when I had a bicycle accident about basically a year ago. -- I had to get all this dental surgery and stuff. It was gonna be about \$8,000.00 out of pocket. So then, I was like, 'Well, I have this empty room in my house that I never use. It's just for my guests to stay and my friends.' And then I was like, 'Oh. I should maybe use Airbnb' 'cause some of my friends had told me they were making some good money on it."*

Monetary motivations for hosting were not restricted to making ends meet or harnessing a financial buffer, though. Jennifer stated that money had been *"[the] least important thing"* when she started to experiment with hosting, yet she pointed out how *"it definitely is cool to have extra spending money."* Greg continued to host after his medical expenses were covered, explaining that once he had tried out hosting, it was *"a no-brainer"* to make *"extra money"* by having a guest stay at his place while he was out of town. These examples illustrate that financial need is not the only extrinsic motivation for hosting, but rather, some make money in this way simply because it is a convenient source of additional disposable income.

Intrinsic Motivations

Participants described many different intrinsic motivations for hosting, including the social benefits of interacting with guests and the gratification of being 'a good host'. In addition, they indicated having experienced a wide range of ancillary, often unexpected, intrinsic benefits such as a heightened appreciation for their solitary time and increased inspiration to organize dinner parties and entertain friends.

Valued Social Interaction with Guests

Opportunities to meet people and have enjoyable company were an important motivation for hosting. Sunil, the aspiring host we interviewed, discussed reasons for wanting to become a host: *"I also like the sort of act of hosting people. -- [O]bviously, another aspect is to offset my rent. But for me, the main reason I would host an Airbnb would be to actually meet new kind of people and also be able to show them my very beautiful city."* While Sunil cites offsetting rent as an aspect of hosting, he describes potential earnings as supplemental to perceived social benefits.

For Cynthia, valuable social outcomes were already a reality. She described things she and her guests might do together: *"On occasion, if I like someone and I have free time, I'll take 'em somewhere like to the beach or just give 'em a drive around. And with some people, we'll eat dinner together sometimes or play cards or go to the movies."*

Further examples of valued social interaction extend beyond individual stays, sometimes leading to new friendships. Shirley praised her luck of having hosted

guests with whom she built strong bonds: *“I have brought in people that I have made connections -- really deep friendships that otherwise it would not have happened. -- I had dinner with—one of them came into my house, the other day, who just wanted to see me and see my dog. I’m having dinner with another one on Thursday. So, yeah, the friendship is just, it’s amazing.”*

Gratification of Being a Good Host

Several participants described gratification stemming from being a competent host, and surprising one’s guests. Adam’s depiction of hosting as gratifying work captures these sentiments poignantly: *“There’s something very nice about when you show a guest in, and, not to say that this happens all the time, but their eyes light up because I’ve worked so hard on making this place spotless. -- And it sounds kind of silly to say that preparing a studio could be this work of pride, but it is.”*

Another commonly mentioned aspect of being ‘a good host’ was sharing one’s local expertise. Jennifer described the enjoyment of giving recommendations in this way: *“I’m going to host our place on Airbnb for like other, you know people who don’t wanna pay a ton, but want a cool experience. I, personally, really love giving recommendations on places.”* While our participants did not typically spend much (or any) face-to-face time with guests, most were happy to be hospitable by providing useful information, such as maps and tips on what to do.

Finally, some hosts explained that hosting is their way to ‘give back’ in a broader sense of local community. Shirley who often hosted foreigners who were new to San Francisco, expressed satisfaction at being able to help these people by offering them a reasonably-priced, calm and safe place to stay: *“The whole idea that I could finally share my home with somebody, and then they appreciate it, was great -- It’s really my way of giving back. -- I feel maybe it’s just very selfish or, I don’t know, egotistical, but it’s very satisfying that I can do that.”*

Ancillary Benefits of Hosting

The final set of intrinsic motivations we identified concern ancillary benefits created wholly or in part due to hosting guests. These motivations were typically emergent in that the hosts had not expected such outcomes at all when they first started hosting. Yet, once noticed, these benefits further motivated participants to continue hosting.

First, hosting could have a positive impact on the hosts’ social lives beyond the interactions they had with their guests. Marissa relayed how as a by-product of keeping the home at the ready for Airbnb guests, she ended up entertaining friends more often than before: *“Well, it means you keep it cleaner and nicer. I mean we’re always ready for company. -- And so I think we do entertain more as a result of Airbnb of just our regular friends.”*

Second, hosting sometimes improved the hosts’ perception of their own homes. According to Cynthia, hosting had a

positive impact on her life by helping her become more relaxed about her home and the level of orderliness she considered necessary: *“Well, I’ve loosened up a great deal. -- [T]here’s more clutter than there is when I’m just there alone. I’ve just learned to relax and go with it.”* As another example, Adam, a remote host we interviewed, described how vacating his home to be able to accommodate guests had inspired a newly-found appreciation of his own space and time: *“You appreciate, maybe, a little bit more of what you took for granted. -- [I]t makes you happy to have a roof over your head when you jump from couch to couch for a couple weeks.”* While much of the early rhetoric around Airbnb (and network hospitality more broadly) tends to focus on improved utilization of ‘excess space’, we noted several instances where hosts were purposefully ‘creating excess’ by vacating portions of their homes.

Third, our findings suggest hosting as a gateway to increased willingness to participate in peer-to-peer exchange. For example, Shirley said she would not have considered using Airbnb as a guest previously, but with positive hosting experiences, her opinion was shifting: *“I am warming up to it. -- I used to travel, all the time, by myself. -- And so, now, I think I can do it. Initially, I wouldn’t have done it.”* Greg expressed appreciating possibilities for more efficient usage of resources even beyond Airbnb: *“I like the idea. -- [S]ome things are good that you can just share with people, and maybe there’s a little fee. Then it helps for—‘cause a lot of people have stuff they don’t barely use, so why not, you know, share it?”* Positive hosting experiences strengthened Greg’s motivation to look for further sharing opportunities.

HOSTING VIA AIRBNB AND COUCHSURFING

Four of our participants had hosted via both Couchsurfing and Airbnb. This provided an opportunity to examine how the monetary nature of exchange affects hosting experiences. These formative, comparative findings are meant to serve as a launching point for further, systematic study (that has been called for also in [20]).

Based on our participants’ accounts, we found little evidence that monetary compensation crowded-out intrinsic motivations to socialize with guests. Emily depicted her experience of switching from receiving couchsurfers to hosting Airbnb guests in this way: *“I do feel like Couchsurfing in a way was nice. But the reward from Airbnb is a lot better. So I still feel I’m getting the experience I wanted from Couchsurfing plus additional income.”* Jennifer, another on-site host, had not perceived a big experiential difference between hosting via the two platforms, although she remarked that couchsurfers were distinct from the average Airbnb guest: *“I feel like the people that stayed with us Couchsurfing maybe a little bit more wild in nature, which I feel like is expected. You’re sleeping on somebody’s couch, basically. Yeah, just like really fun meeting people who are travelers.”*

Contrasting Airbnb to Couchsurfing, Emily highlighted that the monetary nature of exchange means that guests may have higher expectations and that they are more willing to ask for things if they feel that the expectations are not met: *"I felt like the one difference, besides the money, was that people on Airbnb definitely expected things more cuz they're paying. So they would, not demand things but ask politely for things and expect certain things. Then with Couchsurfing they were so grateful and maybe made me dinner."* In brief, Airbnb guests were more prone to act as customers compared to couchsurfers. Emily's choice to keep rates low was partly a means to manage expectations and fend off overly demanding guests. This choice created opportunities for sociable encounters with visitors from across the world; something that made up for Emily's limited travel opportunities.

Maria, a remote host, explained that thanks to the monetary nature of Airbnb exchange, guests were very appreciative of all forms of kindness that exceeded the negotiated terms. Guests' expressions of gratitude, in turn, made hosting more gratifying for her. She stopped hosting via Couchsurfing after a few episodes that left her feeling exploited: *"[B]ased on some of my Couchsurfing hosting experiences, that just people that are taking it for granted, just kind of annoying."* The fact that Airbnb guests were paying made it easier for Maria to delight them with unexpected niceties, such as tips about where to go: *"[regarding] Airbnb people, my experience has been that because they are paying for it, --they value it more, and so they are often quite effusive about how grateful they are, about your maps, or your lists of the coolest five bars in the neighborhood."* In this case, additional hospitality beyond the negotiated terms of financial exchange led to increased satisfaction for both parties. This apparent contradiction illustrates the need for further empirical and theoretical work into financial vs non-financial sharing economies.

Adam, who hosted couchsurfers on-site and Airbnb guests remotely, was our only participant who continued to host via both platforms at the time of the study. He explained that the two served different purposes for him: *"I only host Couchsurfing occasionally. And I usually do Airbnb when I need to make money. So, I, most of the time, I'm too busy for either."* Adam emphasized that social interaction was the key feature of, and reason for, hosting couchsurfers: *"[T]he difference I see is, when I have a Couchsurfing guest, I don't spend a whole lot of time cleaning my apartment beforehand. I view it more as 'I'm going to have this person sleep with my futon. I'm going to sleep in the bed. -- We're gonna go out for a drink or dinner. We're gonna get to know each other.'"* Our interviews indicate that next to the monetary vs non-monetary nature of exchange, on-site vs remote hosting is an important part of the sociability within the host-guest relationship.

DISCUSSION

The term "sharing economy" continues to fluctuate in meaning, and many peer-to-peer platforms seem to be more about making a profit by allowing individuals to monetize their resources than about what we might intuitively think of as 'sharing' [22]. As the early wave of enthusiasm recedes, scholars and journalists are starting to highlight the darker and more complicated implications of sharing economy platforms, such as discrimination [11], differential accessibility across socio-economic status and geographic locations [43], as well as shortcomings in labor conditions and increased requirements to take on emotional labor [31].

Assurances and Motivations for Peer-to-Peer Exchange

We found that the existence of a centralized assurance structure for a financial transaction was not an ideological break from the concept of sharing for the majority of our participants. Instead, the core exchange reduced risks and uncertainties, making it easier for some to become a host and enjoy valued social interaction and other ancillary benefits of network hospitality.

Some may worry that monetizing housing assets creates an ideological tension with early peer-to-peer hospitality systems like Couchsurfing, which expressly prohibits monetary exchange in favor of prosocial behavior, generalized reciprocity, cultural exchange and mutual respect through interpersonal connections [9]. From the perspective of hosts in our study, the concept of 'sharing' in a system like Airbnb encompasses social interactions that are facilitated by the initial financial exchange.

As with any collective good that relies on individual contributors (e.g., a large market of diverse, geographically distributed, temporary housing offerings), one of the hardest issues is getting enough potential contributors to overcome the initial reluctance to contribute, such as by becoming a host. Indeed, the problem of encouraging and sustaining participation in technology-mediated systems is a core problem for HCI [38]. A key observation is that hosts repeatedly explained how their initial and emergent intrinsic motivations were often enhanced, not crowded out, by the existence of the core financial exchange.

Furthermore, since the financial exchange was entirely managed through the Airbnb platform in advance, hosts did not experience the awkwardness that can sometimes make financial negotiations difficult for strangers. As we learned from this study, the core binding negotiated transaction often served as a gateway to further social exchanges and unexpected intrinsic motivations to continue hosting. On-site hosts expressed how important it was to meet new people. Both on-site and remote hosts valued opportunities to find interesting ways to surprise or delight guests, and to feel like they were 'giving something back' to others. Both types of hosts appreciated the financial benefits that usually offset the burdens of being a host.

While there is popular concern over how our social lives are increasingly mediated through information technologies, one of the great social benefits of peer-to-peer exchange and sharing economies is that they can facilitate new face-to-face interactions between strangers who would otherwise never meet. Some of the seven on-site hosts in our study already experienced this potential. The assurances provided through binding exchanges reduce risk and uncertainty during initial interactions, thereby creating opportunities for more social and financial exchanges, additional types of sharing, and more pro-social benefits for hosts and guests.

Our study contributes novel insight into the counterintuitive notion of binding negotiated exchange as a gateway and facilitator of further social exchange. We demonstrated how binding negotiated exchange and the online platform itself can act as assurances, leading to uncertainty-reduction in future interactions. Moreover, our study broadens understanding of the link between monetary profits and social gratification in hosts' motivations by corroborating prior findings regarding sociability [20] in a different cultural and geographical context. Finally, by relaying the accounts of those who previously hosted via Airbnb and Couchsurfing, we probed further into how the presence (or lack) of a financial transaction relates to motivations and expected outcomes in networked hospitality.

The Value of Assurances and Motivations for Design

An important implication of this research for the HCI community is that financial transactions can encourage and supplement the ideals of sharing while engaging a wider variety of participants, including new users who are normally too risk-averse to participate without assurances. Many interviewees expressed initial reservations about becoming a host, but felt that the assurances of the exchange made the initial leap of faith viable. Individuals who are less cautious of others tend to be more willing to engage in different types of social interactions [18,44] and more likely to contribute in uncertain sharing environments [1]. When appropriate, designers can leverage reliable financial brokering systems as a tool for social inclusion by attracting and embracing new users who are more cautious (and therefore less likely to engage in risky interactions).

While this study primarily focused on financial assurances, two or more parties might exchange goods, services or favors directly, under the safeguard of a third party. The key uncertainty-reducing mechanism in binding interactions is the establishment of a trusted third party to ensure an agreement [8]. The presence of a centralized, trusted authority to assure initial exchanges could encourage various peer-to-peer exchanges that do not involve money. This is important precisely because it is contradictory for those who view centralization as antithetical to the ideals of peer-to-peer exchange and 'sharing'. For example, the relative success of BlaBlaCar's² trusted ridesharing model

indicates that such assurances can facilitate peer-to-peer exchange beyond network hospitality, making way for more effective resource use and serendipitous encounters.

We observed that there are a variety of intrinsic motivations that are not initially recognized as important or beneficial to hosts. This is where our two core findings about assurance structures and motivations coalesce: financial assurance structures provide the uncertainty reduction necessary to encourage initial decisions to try out hosting, enabling valuable intrinsic benefits subsequent to this initial decision. Prior work shows that contributors in peer-to-peer exchange derive immense satisfaction from social approval and peer recognition [23]. An important implication for design is the need to highlight and continually recognize the value of different *types* of social contributions in peer-to-peer exchange platforms (e.g., formalized appreciation of memorable exchanges among participants).

Future Work on Peer-to-Peer Exchange

This study points to several opportunities for future work. First, a better understanding of the nuances in motivations and forms of participation remains an important objective, as it could help advance research, design, and policy efforts. In particular, we call for research on hosts who manage several listings on a fully professional basis. This would complement the research to date and help overcome limitations resulting from the present focus on those for whom hosting is a casual, temporary, or supplementary form of income, rather than a primary motivation. Another valuable contribution would be to conduct a focused study on people who have given up hosting as this could help tease out social and legal issues that constrain hosting and, overall, provide insight into how to support continued participation in peer-to-peer exchange.

Second, while many hosts in both prior and the present study can also weigh in on the experience of being a guest, there has been little targeted focus on guests' perspectives in monetized network hospitality: How do they perceive the risk and uncertainties of participation? How do they value the financial and social aspects of participating? How do they react to different hosting styles?

Third, it would be productive to examine ancillary commercial activities in monetized network hospitality, such as concierge and cleaning services. Such efforts would address important issues for the role of online platforms in the future of *work*. This could help distinguish between asset and labor-driven peer-to-peer services, opening up a clearer conceptual space for considering the costs and benefits of different forms of peer-to-peer exchange.

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² <https://www.blablacar.com/>

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