

Reducing Transaction Costs of Epistemic Recognition through Online Platforms: Empowering Marginalised Academic Communities to Challenge Epistemic Injustice

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Abstract. *This paper offers a fresh perspective on the sharing economy by adopting the theoretical lens of transaction cost economics (TCE) with the aim of expanding the discussion on online platforms beyond a commercial context to examine their potential for social good. Focusing on the user experience, this study investigates under what conditions online platforms designed to empower marginalised academic communities in addressing epistemic injustice attract and retain prospective users by reducing the transaction costs associated with knowledge exchange between knowers and knowledge seekers. In this regard, the paper examines whether these platforms have the potential for growth or rather remain niche platforms primarily facilitating matchmaking within a small academic community and their knowledge seekers. Drawing on survey data from users of platforms such as 'Women Also Know Stuff', 'People of Colour Also Know Stuff', and 'LGBTQ Scholar Network', the study explores this phenomenon through a set of TCE-related variables, including registration process, functionality, personalisation, transaction uncertainty, sense of community, social identification with other users and platform, and direct and cross-network effects.*

Keywords. *Epistemic Injustice, Sharing Economy, Online Platforms, Women, People with Colour, LGBTQ+A, Transaction Cost Economics, Recognition.*

1 Introduction

Systematic biases persist within the processes of knowledge creation, utilization, and sharing. Existing biases target specific groups based on factors such as gender, race, disability, and geographical origin, especially impacting people from the Global South. Many scientific communities marginalized by these structural barriers are faced with the problem of recognition and commonly find their work ignored by mainstream academic and policy circles. These leads to epistemic injustice resulting in disparities in how dominant and non-dominant knowers are treated (Fricker, 2007). Initiatives are emerging to amplify marginalized academics' voices in public discourse and decision-making. Online platforms like 'Women Also Know Stuff' and 'People of Colour Also Know Stuff' are showcasing expertise and perspectives of marginalized communities and aim to tackle epistemic injustice.

Addressing epistemic injustice is often termed 'epistemic resistance,' (Medina, 2013) necessitating collective efforts beyond individual actions. Strategies like widespread intergroup integration, communities of epistemic resistance, and subaltern counter-publics are proposed to confront structural barriers (Schlüter, 2021). These approaches offer spaces for marginalized groups to share experiences, challenge dominant narratives, and resist epistemic injustice. Online platforms and academic social networking sites are advocated as solutions to recognize marginalized groups, offering advantages such as fostering social connections, facilitating collaboration, and enhancing visibility (Treem & Leonardi, 2013). These platforms promote interdisciplinary and international collaboration, improve information management, and provide alternative metrics for assessing academic impact.

Academic social networking sites offer opportunities for marginalized researchers, aiding in networking, knowledge dissemination, and scholarly engagement. However, it remains unclear if these platforms effectively support marginalized communities in engaging with and promoting their work beyond hegemonic academic landscapes. Furthermore, what factors may favour or impede the attraction and retention of platform members and eventually determine the growth of these communities and the accomplishment of their mission merits further analysis. This article thus investigates the role of online platforms in sharing and promoting knowledge among marginalized communities to tackle

epistemic injustice, employing TCE as a novel framework in this context. This study also aims to explore whether these online platforms effectively economize on transaction costs linked to knowledge exchange between knowers and seekers. By focusing on the role of a set of TCE-related factors this study examines whether these platforms could expand beyond niche status, facilitating broader connections beyond a small academic circle and its knowledge seekers.

2 The Conceptualisation of Transaction Features

The term TCE is typically used to understand costs related to economic exchange between agents. It encompasses expenses associated with searching, contacting, and contracting (Munger, 2018). According to TCE, when there are environmental uncertainties and a low volume of exchanges, transaction costs increase for organizations and individuals. To minimize these costs, entities choose the most suitable governance structures (Williamson, 1985). Online sharing platforms, functioning as intermediaries, leverage technology to optimize resource sharing, thus lowering transaction costs for users. By offering easy accessibility, personalized services, and reducing uncertainties, these platforms facilitate asset sharing and gain popularity among users (Li & Fang, 2022). While the role of online sharing platforms in reducing transaction costs has been studied in a commercial context, platforms developed for marginalized academic communities face similar uncertainties. As transaction costs influence the behaviours of transacting parties this study posits that the success of online sharing platforms designed to promote the research of marginalized scholars is intimately connected to the ability of the platform to govern exchange and reduce transaction costs associated with its usage. This study focuses on the role played by seven TCE-related variables in determining the willingness of its members to participate and disseminate their research through the platform; these variables are the following: registration process, functionality, personalisation, transaction uncertainty, sense of community, social identification with other users and platform, and direct and cross-network effects.

2.1 Ease of Registration

Online sharing platforms and their technological infrastructure lowers entry barriers for users, allowing them to share resources easily. These platforms are accessible to anyone with an internet connection and a device, enabling interaction with other users upon registration. They facilitate network participation and underutilized resource sharing while eliminating geographical barriers to knowledge exchange. However, the registration process on online platforms often requires users to share comprehensive personal information, known as the 'cost of registration' (Morath & Münster, 2018). The effectiveness of reducing transaction costs depends largely on the user-friendliness of this process. Complex registration procedures can discourage participation, emphasizing the importance of low-barrier accessibility to reduce transaction costs. This leads to the first hypothesis:

H1: The greater the ease of the registration to online research-sharing platforms, the greater the participation and dissemination of the research of marginalized academic communities.

2.2 Platform User Friendliness

Learning is often seen as the time and effort individuals invest in acquiring knowledge needed to effectively use a new service. This learning process incurs a cost for users, as they allocate time and effort, which may lead to abandonment if perceived as too high compared to the value gained (Dang et al., 2017). Hence, when users spend more time learning to navigate and utilize an online platform, it creates transaction costs. If the aim of an online sharing platform is to enhance user recognition, a simple learning process contributes to lowering transaction costs associated with promoting user knowledge. Accordingly:

H2: The greater the user-friendly functionality of online research-sharing platforms, the greater the participation and dissemination of the research of marginalized academic communities.

2.3 Customization of interactions with the platform

Asset specification refers to the degree to which tangible and intangible assets dedicated to one particular transaction can be shifted or used for different transactions. These assets include shared knowledge, human resources, physical assets, and company-specific processes. If an online sharing



platform transaction requires specialized assets, using alternative, less suitable assets becomes difficult, discouraging platform use (Jones & Leonard, 2007). For knowledge-sharing platforms, specialized assets are the expertise of registered users. As the number of users increases, the time and effort required to find appropriate knowledge also increases. To mitigate this, platforms adopt profile personalization capabilities, collecting personal data to offer targeted content through algorithmic models. Improved predictive capabilities allow users to find specific assets more quickly, reducing transaction costs (Vendemia, 2017). Effective personalization and predictive capabilities also discourage users from switching to alternative platforms. The third hypothesis is thus as follows:

H3: The greater the ability to personalize user profiles on online research-sharing platforms, the greater the participation and dissemination of the research of marginalised academic communities.

2.4 Transaction Uncertainty

User confidence in online sharing platforms is hindered by the absence of physical contact and uncertainties regarding the platform environment. Transaction uncertainty, which encompasses challenges associated with unknown factors increases transaction costs for users. To mitigate these costs, specific contractual arrangements are necessary (Hart & Moore, 1990). For online sharing platforms aimed at improving recognition of marginalized communities, branding and performance uncertainty are crucial. Branding uncertainty refers to challenges in determining the service provider's reputation, while performance uncertainty relates to assessing service quality (Teo & Yu, 2005). Integration mechanisms like member ratings and experience reviews play a vital role in mitigating these uncertainties. As branding and performance uncertainties decrease through user reviews or ratings, transaction costs decrease, facilitating the recognition of academicians using these platforms. Therefore:

H4: The greater the reliability of user reviews on online research-sharing platforms, the greater the participation and dissemination of the research of marginalized academic communities.

2.5 Sense of Community

Sense of Community (SoC) encompasses membership, influence, integration/fulfilment of needs, and shared emotional connection. In online platforms created for marginalized academic communities, a strong SoC plays a crucial role in reducing transaction costs associated with knowledge exchange. Members feeling connected and supported are more likely to engage effectively in collaboration, streamlining knowledge exchange processes (Sandefur & Laumann, 1998). There is also a positive correlation between SoC and trust. When the community becomes more connected, they develop more social norms to build trust and these community norms further reinforce this relationship by creating predictability and reliability in member actions, making them trustworthy (Blanchard et al., 2011). SoC facilitates smoother interactions, reducing transaction costs and enhancing the efficiency of knowledge exchange processes. Thus,

H5: The greater the feeling of sense of community on online research-sharing platforms, the greater the participation and dissemination of the research of marginalised academic communities.

2.6 Social Identification with Other Users and the Platform

SoC is closely linked with social identification, which is the perception of oneself as a member of a social group and feeling emotionally connected to other members. This fosters favourable perceptions of group members and leads to trust in others. Trust in community members is further reinforced by adherence to group norms, which are strengthened by individuals' identification with the group (Ashforth & Mael, 1989). A strong sense of social identification with other users in the platform enhances trust among community members. Social identification with other users is crucial for reducing transaction costs associated with knowledge exchange. This identification facilitates smoother interactions and knowledge exchange processes, ultimately reducing transaction costs for marginalized academic communities. Thus,

H6: The greater the social identification with other users on online research-sharing platforms, the greater the participation and dissemination of the research of marginalised academic communities.

The concept of social identification also involves developing a strong bond with organizations. Individuals may form a robust identification with organizations, such as online sharing platforms, based

on their perceived attractiveness, mission, principles, and leadership. Identification with the platform can lead to favourable perceptions of its users, fostering positive trusting beliefs about them. Perceived alignment in shared values enhances trusting beliefs among users, as people tend to trust others who resemble themselves (Ziegler & Golbeck, 2007). Social identification enhances trust among like-minded users, facilitates interaction, and ultimately reduces transaction costs for marginalized academic communities in terms of knowledge exchange. Therefore,

H7: The greater social identification with the online research sharing platforms, the greater the dissemination of the research of marginalised academic communities.

2.7 Network Effects

Network effects, a significant factor affecting transaction costs, occurs when the value of a product or service increases with its usage. This is because more users make the product or service more visible, attracting even more users. Network effects reduce information asymmetry between users, making it easier to access information about products and services. In the absence of symmetric information between transaction partners, individuals cannot make rational decisions, increasing the transaction cost for them. Therefore, a growing number of users in the network enables better information sharing and optimizes resource sharing (Barolli et al., 2008).

We focus on two types of networks effects: direct network effects and cross-network effects. The direct network effect is associated with the benefits derived from increasing users and network size. Cross-network effects, on the other hand, involve ties with other networks that provide complementary information (White et al., 2016). As the user base grows, there is increased sharing of information about products and services. From the perspective of direct network effects, the number of users has a significant impact on online platforms. Higher transaction frequency and product availability positively affect transaction costs. As the number of users in the network increase, it provides utility and benefits to users. This expanding user base enhances the recognition of marginalized academic communities. Thus,

H8: The greater the number of already active users registered on online research-sharing platforms, the greater the participation and dissemination of the research of marginalized academic communities.

Regarding cross-network effects, association with other online platforms is also helpful in reducing the transaction cost for platform users. As the number of users increases, more information is available inside and outside the platform. A greater volume of information shared in the platform, virtual communities significantly reduce the information asymmetry for outsiders while making decisions about the product and service. The cross-network effect, as a result, mitigates knowledge-related uncertainties for the potential users outside platform (Palvia et al., 2011). Therefore, if there is rich information promoting the expertise of marginalised academicians in the online platform and this information is disseminated in other social media platforms, the indirect network effect reduces the transaction cost of recognition for these academics. Therefore,

H9: The greater the sharing of content from online research-sharing platforms with other social networks, the greater the participation and dissemination of the research of marginalized academic communities.

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