

Beyond Medical and Social Models: Proposing Ecological Empowerment for China's Disability Assistance Mechanisms

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Abstract: *How societies conceptualize disability shapes assistance policy design and implementation. This paper traces paradigm shifts in disability studies from the medical model through the social model to the social-ecological model, examining their distinct orientations toward individual deficits, environmental barriers, and person-environment interactions. Drawing on Foucault's power-knowledge analytics and Bronfenbrenner's ecological systems theory, the paper develops an "Ecological Empowerment" framework that emphasizes simultaneous capability development, opportunity expansion, and structural transformation across multiple system levels. Analysis reveals that China's disability assistance mechanisms require fundamental reorientation: replacing charitable relief with rights-based protection, shifting from individual rehabilitation to environmental modification, and moving beyond single-sector interventions toward coordinated governance. These theoretical insights offer guidance for deepening existing policies.*

Keywords: *disability models; social-ecological paradigm; ecological empowerment; assistance mechanisms*

1. Introduction

On a global scale, disability constitutes a significant dimension of human experience, with an estimated 1.3 billion people, or 16% of the world's population, identified as living with some form of disability^[1]. In China, where 85 million people live with disabilities, how we understand disability influences everything from policy design to resource allocation to cultural attitudes. Yet defining disability's essence remains contested terrain in both academic and policy circles.

Western disability studies have undergone several paradigmatic revolutions since the mid-20th century: from the medical model through the social model to more recent social-ecological approaches^[2]. Each shift has reconfigured power relations and reshaped policy practices. China ratified the Convention on the Rights of Persons with Disabilities in 2008 and launched nationwide implementation of the Two Subsidies policy in 2016, which provides living allowances for financially disadvantaged disabled persons and nursing subsidies for those with severe disabilities. While policy architecture has gradually moved from traditional charity toward rights-based protection^[3], theoretical development has lagged. Policy design still bears the inertia of the medical model: it tends toward excessive medicalization and individualization, positioning disabled persons as passive recipients rather than rights-bearing citizens^[4].

This paper asks: how can we move from "fixing broken individuals" to "transforming disabling environments" and ultimately to "optimizing ecological interactions"? How might we build an analytical framework that engages global theoretical frontiers while remaining grounded in Chinese practice? We draw on Foucault's micro-power analytics^[5] and Bronfenbrenner's ecological systems theory^[6] to propose an "Ecological Empowerment" framework as theoretical scaffolding for upgrading assistance mechanisms.

2. Three Models, Three Logics

2.1. *The Medical Model: When Bodies Become Problems*

The medical model, rooted in 19th-century biomedical dominance, defines disability as “abnormalities, losses, or impairments of bodily or mental functions”^[7]. Disability is treated as an individual pathophysiological phenomenon, and solutions center on medical intervention, rehabilitation training, and assistive devices^[8]. Foucault showed how medical knowledge constructs truth claims about bodies, positioning clinical professionals as authorities who define normality and abnormality^[5]. This authority extends well beyond hospitals, permeating social management through classification systems like the ICD and assessment tools like the Functional Independence Measure^[9].

Three problems follow from this logic. The model commits an individualistic attribution fallacy, ignoring how social environments produce disability while framing structural issues as personal misfortunes. It creates power asymmetry, reducing disabled persons to passive objects of treatment. It also generates resource allocation bias, over-investing in medical rehabilitation while neglecting social inclusion^[10]. The historical Chinese concept of canfei (disabled), the work-unit era’s “labor capacity assessments,” and the current overreliance on medical criteria in disability evaluation all testify to the enduring influence of this model.^[4]

2.2. *The Social Model: Disabling Barriers, Not Bodies*

British disability scholar Michael Oliver (1990) drew a distinction between “impairment” (at the bodily level) and “disability” (at the social level)^[11]. His central argument was that society disables people through inaccessible environments, exclusionary institutions, and discriminatory cultures^[12]. This model drove global accessibility movements and anti-discrimination legislation. The WHO’s International Classification of Functioning, Disability and Health (ICF) partially incorporated environmental factors, acknowledging that disability emerges from person-environment interaction^[13].

The social model’s contributions were substantial: it challenged the medical monopoly over defining disability, politicized disability by transforming private troubles into collective rights claims, and redirected policy attention toward environmental modification^[14]. Critics argued, however, that overemphasizing structural oppression leaves little room for the lived experiences of impairment. The model’s binary thinking struggles to explain disability’s complexity, since chronic pain and fatigue, for instance, cannot be entirely attributed to social barriers^[15].

2.3. *The Social-Ecological Model: Systems and Interactions*

The social-ecological model adapts Bronfenbrenner’s (1979) ecological systems theory^[5], understanding disability as a dynamic interaction between individual characteristics and multilayered environmental systems. Bronfenbrenner conceptualized human development as occurring within nested contexts: microsystems (immediate settings such as families), mesosystems (interconnections between microsystems), exosystems (settings that affect but do not directly include the person, such as parents’ workplaces), macrosystems (cultural values and ideologies), and chronosystems (time-related changes)^[16].

Researchers have applied this framework explicitly to disability studies. Hammel et al. (2008) used qualitative methods to document how environmental barriers and supports at multiple ecological levels shape participation for people with disabilities^[17]. Their findings revealed complex interactions across several domains: physical barriers such as inaccessible transportation, social barriers such as stigmatizing attitudes, institutional barriers such as discriminatory policies, and temporal factors related to life stage transitions all intersect to create or constrain participation opportunities.

Lollar and Crews (2003) argued that applying ecological models to disability requires examining interactions across these levels^[18]. They demonstrated how microsystem factors (family support) interact with exosystem factors (community resources) and macrosystem factors (disability rights legislation) to shape individual outcomes. Working on intellectual disability inclusion, Simplican et al. (2015) similarly showed how ecological models can account for interactions among individual needs, social networks, community resources, and macro-level policies^[19].

The model’s strengths lie in its systematicity and sensitivity to context-dependent variation. Limitations remain, however: it pays insufficient attention to power inequalities within and across system

levels, and the multilayer complexity poses real challenges for operationalization^[20].

3. Toward Ecological Empowerment: A Synthesis

3.1. Theoretical Foundations

Foucault offers tools for understanding how power operates in disability contexts. His concept of disciplinary power explains how classification, assessment, and correction techniques shape “docile bodies,” with rehabilitation institutions serving as disciplinary spaces. The knowledge-power nexus shows how medical and psychological sciences construct truth discourses about disability, legitimizing particular interventions. Biopolitics illuminates how states govern disabled populations through demographic statistics and health management technologies^[21]. This lens reveals assistance mechanisms as not merely aid delivery but power operation arenas where charitable discourse may reinforce dependency while rehabilitation practices may internalize normalization pressures.

Ecological systems theory provides structure for analyzing disability experiences. Microsystems capture direct interactions between disabled persons and immediate social contacts. Mesosystems examine connections across microsystems—home-school cooperation, for instance. Exosystems encompass community services and labor markets as indirect influences. Macrosystems cover cultural values and policy regulations as ideological structures. Chronosystems attend to how historical changes interact with life courses. While the framework offers systematicity and a dynamic view of development, it requires supplementation with explicit power analysis.

3.2. Defining Ecological Empowerment

We define Ecological Empowerment as a set of processes that achieve dynamic balance among capability building, opportunity expansion, and structural transformation through coordinated changes across multiple ecological system levels, while keeping disabled persons’ agency at the center. Three dimensions prove essential to this framework.

The capability dimension concerns enhancing both functional capabilities (health, education, skills) and psychological empowerment (self-esteem, autonomy, belonging) without imposing “normalization” as the sole goal. This draws on Sen’s (1999) capability approach^[22], which emphasizes the freedom to pursue valued ways of living rather than forcing predetermined outcomes.

The opportunity dimension involves removing environmental barriers and expanding participation across employment, political engagement, and cultural life. This requires ensuring reasonable accommodations and accessible environments, moving beyond token inclusion toward genuine and sustained participation.

The structural dimension calls for transforming institutional arrangements and power relations, shifting from “doing for” disabled persons toward “co-producing with” them. This reflects the disability rights movements’ foundational principle: “Nothing About Us Without Us.”

The framework draws together Sen’s capability approach, the social model perspective, and ecological systems theory’s contextual analysis, while incorporating Foucauldian power critique. Unlike traditional empowerment theories focused primarily on individual psychology, ecological empowerment insists on simultaneous multilevel change. Unlike environmental determinism, it acknowledges the dialectical relationship between agency and structure.

4. Implications for China’s Disability Assistance Mechanisms

The ecological empowerment framework challenges fundamental assumptions underlying China’s current assistance policies. Traditional “benevolence-gratitude” logic positions disabled persons as subordinate recipients of kindness. Reframed through ecological empowerment, policies like the Two Subsidies should be articulated as citizenship rights rather than welfare favors. This matters for institutional design, discursive framing, and implementation processes^[23]. Policy evaluation must therefore examine not just economic effects but impacts on power relations: does the policy enhance disabled persons’ bargaining power, and does it enable autonomous decision-making, or does it generate new dependencies?

Beyond discursive shifts, resource allocation patterns require reorientation. Current resources are

heavily concentrated on rehabilitation services, essentially fixing individuals to fit existing environments. Priority should shift toward systematic environmental transformation, covering accessibility infrastructure, anti-discrimination enforcement, and reasonable accommodation provision. China's accessibility legislation features abundant laws but weak enforcement^[24], and robust accountability mechanisms are needed to close that gap. The ecological empowerment framework demands simultaneous modification of physical environments (architecture, transportation), social environments (attitudes, stereotypes), and institutional environments (laws, policies, bureaucratic procedures).

Effective policy also demands breaking departmental silos. Disability cuts across civil affairs, health, education, employment, and urban planning jurisdictions, yet sectoral fragmentation produces contradictory interventions and service gaps. Cross-agency coordination must bring governmental departments together while engaging families, communities, employers, and social organizations as active partners rather than passive implementers. At the community level, peer support networks merit particular attention because they draw on disabled persons' own capabilities while distributing expertise beyond professional monopolies.

Cultural transformation operates at the deepest level. Media representations, educational curricula, and public advocacy currently oscillate between portraying disabled persons as tragic victims and celebrating exceptional individuals who "overcome" impairments. China's traditional "shen can zhi jian" (physical disability but strong will) narrative valorizes perseverance but may also internalize pressure to constantly prove one's worth through extraordinary achievement. Ecological empowerment calls for reframing disability as human diversity rather than deficit, treating difference as intrinsic to human experience rather than as a problem requiring solution^[25]. This cultural shift is the hardest to legislate yet the most essential for sustainable inclusion, because accessible environments and rights-based policies operate within cultural contexts that either validate or undermine their transformative potential.

5. Comparative Analysis and Methodological Implications

To clarify how these paradigms relate to one another, it is useful to examine their contrasting assumptions about problem framing, power relations, and intervention strategies (Table 1). The medical model locates problems in individual bodies, grants expert control, and targets rehabilitation interventions. The social model shifts attention to environmental barriers, emphasizes rights-based advocacy, and prioritizes structural modification. The social-ecological model recognizes multi-level interactions while promoting negotiated cooperation across systems. Ecological empowerment builds on these foundations by synthesizing capability development, opportunity expansion, and structural transformation into a framework that foregrounds distributed agency and co-produced change.

Table 1 comparative framework of disability paradigms, showing progressive shifts from individualized deficits to systemic enablement. Each paradigm reflects distinct assumptions about where disability problems originate, how power should be distributed, and what interventions can achieve. The ecological empowerment framework draws on insights from earlier models while maintaining explicit attention to power dynamics and disabled persons' agency.

Table 1. Disability Paradigm Comparison

Dimension	Medical Model	Social Model	Social-Ecological	Ecological Empowerment
Problem framing	Individual deficit	Social barriers	Multi-level interaction	Systemic enablement
Power structure	Expert control	Rights confrontation	Negotiated cooperation	Distributed agency
Intervention target	Rehabilitation	Environment	Multiple systems	Capability-opportunity-structure
Theoretical roots	Biomedicine	Critical sociology	Systems theory	Integrated synthesis
Policy logic	Charitable aid	Legal entitlement	Contextual support	Co-produced change
Subject position	Patient/recipient	Rights-holder	Ecosystem participant	Empowered agent

This analytical progression carries methodological implications. Ecological empowerment requires participatory processes in which disabled persons engage throughout policy cycles rather than serving as token consultants. Their representation in decision-making bodies becomes a structural necessity rather

than a symbolic gesture. Effective interventions must also operate simultaneously across system levels, because isolated modifications produce limited and often unsustainable effects: improving physical accessibility while ignoring discriminatory attitudes or restrictive policies is unlikely to create durable change. Coordination across intervention sites is therefore essential.

Temporal dynamics matter as well. Disability policies generate effects that accumulate across life stages, meaning assessment protocols must use longitudinal tracking rather than snapshot evaluations^[26]. Short-term measures miss how early interventions shape later opportunities or how policy changes cascade through ecological systems over time. This calls for mixed methods approaches that combine quantitative indicators, such as employment rates and service utilization, with qualitative documentation of lived experiences. Statistical patterns reveal outcomes; narrative accounts illuminate how power relations shift, how agency develops, and how participation feels from the inside.

Reflexivity adds another layer. Practitioners and researchers must continuously examine whether their interventions reproduce the dependencies they claim to challenge, and whether their frameworks genuinely empower or subtly constrain. This critical self-examination builds accountability and prevents well-intentioned policies from reinscribing paternalistic relations under new vocabularies. The Two Subsidies policy illustrates these tensions well. While it provides crucial economic support, bureaucratic procedures often position disabled persons as passive applicants rather than rights-bearing citizens^[27]. Deepening such policies requires attending simultaneously to material provision, procedural dignity, and systemic power redistribution.

6. Conclusion

Paradigm shifts in disability concepts extend beyond academic debates to reshape social power configurations. The trajectory from medical model expert control through social model rights advocacy to social-ecological systems thinking reflects evolving understandings of justice and human diversity. The Ecological Empowerment framework proposed here attempts to move past binary oppositions by acknowledging the realities of impairment while emphasizing coordinated change across multiple system levels, recognizing individual agency alongside structural constraints, and holding rights claims together with attention to capability development.

This theoretical reorientation carries practical implications for China's disability assistance mechanisms. At the value level, policy discourse must shift from charitable benevolence toward rights-based entitlements. Strategically, interventions need to move from individual rehabilitation toward systemic environmental modification. Methodologically, policy processes should transition from expert-led design toward participatory co-production with disabled persons themselves. These transformations are interdependent rather than sequential; advancing one dimension without attending to the others risks reproducing existing power asymmetries under new labels.

Several research directions merit further investigation. Empirical work through mixed methods studies could test whether ecological empowerment approaches generate measurably improved outcomes compared to conventional interventions. Comparative analyses across cultural contexts would illuminate how disability paradigms adapt to different institutional environments and value systems. Emerging digital technologies also present both opportunities and risks for disability inclusion, and systematic examination of how online platforms, assistive technologies, and data infrastructures reshape participation while potentially creating new forms of exclusion is overdue.

Theoretical innovation alone produces limited change. Genuine transformation requires aligning conceptual frameworks with institutional practices, policy implementations, and cultural attitudes. When policies reflect ecological empowerment principles, when institutions distribute rather than concentrate power, and when cultures embrace rather than merely tolerate difference, abstract ideals become lived realities. China's commitment to building a moderately prosperous society that "leaves no one behind" demands exactly this integration of rigorous theory and grounded practice. The Eight-Five Development Plan for Persons with Disabilities (2021–2025) offers a concrete opportunity to put these principles into effect, shifting from policies that provide for disabled persons to policies that engage them as full participants in social, economic, and political life. Success will be measured not merely by resource distributions but by whether disabled persons exercise meaningful agency in shaping the environments and institutions that structure their lives.

Acknowledgement

This research was funded by the 2021 Tianjin Philosophy and Social Science Project “Research on the Transformation of Disability Concepts and Assistance Mechanisms—From Theory to Practice”, grant number TJSR21-007.

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