

The Fourfold Typology of Accountability: A Reexamination of Theoretical Connotations, Values, and Limits

Jun Xiao

School of Public Administration, Sichuan University, Chengdu 610065, China
Email: 2024225010034@stu.scu.edu.cn

How to cite this paper: Xiao, J. (2025). The fourfold typology of accountability: A reexamination of theoretical connotations, values, and limits. *Social Sciences and Humanities*, 2(1), 1-12. ISSN Print: 3104-4328; ISSN Online: 3104-4336. <https://doi.org/10.63313/SSH.9030>

Published: 2025-10-01

Copyright © 2025 by author(s) and Erytis Publishing Limited.

This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Abstract

This article reexamines Barbara S. Romzek and Melvin J. Dubnick's fourfold typology of accountability, which distinguishes hierarchical, legal, professional, and political forms. The study aims to clarify the theoretical connotations, practical values, and inherent limitations of this framework in contemporary public administration. Methodologically, the paper conducts a systematic literature review combined with a critical theoretical analysis from a "values-action" perspective. The results show that the typology effectively expands the analytical boundaries of administrative responsibility by introducing a multidimensional and context-sensitive approach, thereby offering a flexible tool for understanding accountability in complex governance environments. However, its application in practice reveals persistent dilemmas, including conflicts among accountability types, blurred responsibility boundaries, and institutional path dependence, which may lead to accountability failure or buck-passing. The conclusion emphasizes that while the fourfold typology enriches the theoretical foundation of accountability studies, its practical implementation requires continuous adaptation to institutional contexts, task characteristics, and managerial strategies. For China, the framework provides significant insights into improving administrative accountability, particularly under the conditions of digital governance, globalization, and decentralization.

Keywords

Romzek and Dubnick; accountability typology; values; action; governance reform

1. Introduction

The construction and refinement of accountability systems in public administration has long been one of the core issues in the study of governmental governance. Under the traditional paradigm of public administration, accountability mechanisms primarily manifested as unidirectional checks on power, emphasizing hierarchical management and legal oversight centered on a "command-control" chain, with the

aim of ensuring administrative efficiency and legal compliance. However, with the acceleration of globalization, the increasing complexity of social problems, and the rapid advancement of information technology, the diversity and intricacy of public affairs have risen significantly. As a result, the traditional unitary accountability framework has become inadequate for addressing the multiple challenges faced by contemporary public management. Against this backdrop, Barbara S. Romzek and Melvin J. Dubnick proposed a “compound theory of public accountability,” offering a new perspective for understanding and analyzing accountability in public administration. Their framework classifies the responsibilities of public officials into four distinct types and underscores the contextual dependence and structural features of accountability mechanisms under different conditions, particularly institutional environments. This theoretical contribution has enriched the connotation of accountability research in public administration and advanced deeper inquiry into the transformation and improvement of accountability systems in administrative institutions. Nevertheless, scholarly debates remain regarding the conceptual completeness and applicability of this fourfold typology of accountability. First, some critics argue that the framework does not adequately clarify the conceptual boundaries of public accountability, particularly the multidimensionality and layered nature of accountability in complex social structures. Second, questions persist about how to realize effective coordination among the four types of accountability in practice—especially how to ensure balance and coherence when institutional conflicts arise. In light of these debates, this article systematically reviews Romzek and Dubnick’s accountability typology, provides an in-depth analysis of its core components, and, from a “values–action” perspective, critically examines the contributions and limitations of the theory.

2. Literature Review

Extensive scholarly discussions have been devoted to Romzek’s fourfold typology of accountability, covering its theoretical foundations, comparative perspectives with other approaches, and its implications for modern public administration. Since its first articulation in 1987, the typology has become a core theoretical tool in the field of public sector accountability. It has not only broadened the connotation and scope of the traditional concept of administrative responsibility, but also provided a new interpretive and analytical framework for multiple accountability mechanisms in governance. Current research on Romzek’s framework primarily concentrates on the following aspects.

First, explorations of its theoretical underpinnings. Scholars have sought to clarify the intellectual origins of the accountability typology. Some have noted that Romzek’s “compound accountability theory” drew inspiration from the classic debate between Carl Friedrich and Herman Finer in the 1940s on the relationship between accountability and control. Finer, building on Frank J. Goodnow’s view of a

politics–administration dichotomy, argued that indirect public control of bureaucrats through elected representatives was the key to ensuring accountability; officials, therefore, should comply with the directives of political leaders. In contrast, Friedrich inherited Woodrow Wilson’s emphasis on administrative autonomy and argued that accountability should not be confined to obedience to orders but should also be constrained by professional and ethical norms. He highlighted that accountability ought to be realized through internal behavioral standards rather than a simple “command–obedience” relationship. Friedrich’s contribution lay in introducing a complex framework of internal–external interaction, emphasizing professional ethics. However, this model still relied heavily on unidirectional supervision and fell short of addressing modern demands for transparency and public participation. Other scholars have observed that with the transformation from traditional public administration to modern public management, administrators are now expected to be more responsive, to provide more choices, and to grant broader discretion to “customers” of public services. This implies that managers cannot hide behind the shield of “value neutrality” but must assume greater responsibility, with a focus on results and performance while remaining accountable for their actions. Hence, as the times evolved, “a managerialist model of accountability indeed needed to be constructed and broadly recognized by the public,” and Romzek’s fourfold typology emerged precisely in this context.

Second, evaluations of its significance and limitations. Hughes emphasized that Romzek’s framework was particularly valuable in diminishing the dominance of compliance-oriented hierarchical and legal accountability, while elevating non–“command–control” forms of political and professional accountability. As noted above, one of the core aims of public management reform was to reduce procedural preoccupation, relax regulatory controls, and grant greater discretion to public officials, thereby shifting focus toward outputs and outcomes. The emphasis on political and professional accountability, with its respect for expertise and skills and its responsiveness to public expectations, clearly aligns with the reform trajectory of New Public Management. Schillemans and Bovens further argued that, in practice, organizations and individuals often find themselves accountable to multiple principals. Such structures are particularly common in the public sector, where officials may be subject to multiple accountability and reporting requirements. While multi-accountability may ensure broader oversight, the fourfold typology also reveals the potential for conflict among different forms of accountability, especially in complex governance environments. They pointed out that while multiple accountability mechanisms may enhance scrutiny, they can also generate tensions, producing confusion or ambiguity in accountability structures.

Third, attention to its implications for reshaping China’s accountability system. In the context of globalization, digital governance, and decentralization, scholars have highlighted both the persistent problems of existing accountability mechanisms and

possible pathways for their improvement. First, globalization has driven public governance toward transnational cooperation, with policies, regulations, and governance systems across states increasingly intertwined. This raises new challenges for the attribution and execution of governmental accountability. Some scholars have noted the “blurring of accountability” under economic globalization, arguing that in areas such as international economic cooperation, environmental governance, and public health, legal and political accountability often intersect. For instance, while international environmental agreements may impose legal obligations on governments, their domestic implementation ultimately depends on political accountability. Second, digital technologies—such as big data, artificial intelligence, and blockchain—have become key tools of governance, but they also bring risks relating to algorithmic transparency, data privacy, and information security. Digital governance has complicated the exercise of legal accountability, as governments now bear stricter obligations in data collection, storage, and use, while simultaneously having to fulfill political and professional accountability by safeguarding citizens’ privacy. Third, from a decentralization perspective, scholars have examined the challenges facing China’s current accountability framework. Decentralized governance emphasizes power devolution, local autonomy, and multi-actor collaboration, but also risks fragmented governance, blurred responsibility, and intergovernmental buck-passing. In China, local governments face increasing political accountability pressures—not only to the central state but also to the public, requiring them to balance the demands of multiple interest groups. How to reconcile competing responsibilities and enhance the resilience of local governments thus remains a pressing issue. Moreover, based on Romzek’s framework, some scholars have offered direct implications for improving China’s accountability mechanisms. Li Mi-aoyan, for instance, argued that the fourfold typology is applicable in the Chinese context: in highly professional domains, staff must be granted sufficient decision-making authority and be held accountable for outcomes, while political accountability should be strengthened through more transparent governance and greater public oversight. Such measures, she suggested, could significantly advance the improvement and implementation of administrative accountability in China.

In summary, existing research has not only deepened the understanding of the complexity of administrative accountability but also provided robust theoretical support for addressing the increasingly diversified and complex accountability demands of modern governance. Nevertheless, some scholars caution that the typology may engender conflicts among accountability types and raise challenges for coordination in multi-accountability systems. These debates not only shed light on the practical application of Romzek’s fourfold typology but also lay a solid foundation for this paper’s critical examination of its theoretical content and applicability.

3. Elucidating the Fourfold Typology of Accountability: Control Dimensions and Conditions of Applicability

Barbara S. Romzek and Melvin J. Dubnick first advanced the fourfold typology of public accountability in their study of the Challenger Space Shuttle disaster. They emphasized that accountability cannot be determined solely by a single dimension of hierarchical control and oversight, but rather constitutes a complex system shaped by the interplay of multiple factors. In their seminal work, the authors argued that the root cause of the Challenger tragedy did not lie, as NASA claimed, in technical failures per se, but rather in the excessive emphasis on bureaucratic and political accountability. Had professional accountability (technical responsibility) been given equal weight, the shuttle's launch would never have been scheduled on such a cold morning in January 1986.[1] Against this backdrop, Romzek and Dubnick developed a novel composite theory of accountability, positing that the public sector operates within a multi-dimensional and dynamically competitive accountability system comprising at least four distinct types: hierarchical, legal, professional, and political accountability. This framework provided a new analytical lens and intellectual impetus for the study of administrative responsibility.

3.1. Control Dimensions: Accountability Entities and Intensity

Within this framework, the four types of accountability are closely conditioned by institutional contexts, with each form possessing distinct generative bases. Accountability mechanisms for public managers are constrained by two core dimensions: the source of control and the strength of control.

First, the source of control refers to whether accountability is imposed internally—emanating from actors within the organization—or externally, through the legal system or public oversight. Internal control is typically exercised through administrative orders and organizational rules, whereas external control derives from statutes, judicial institutions, audit and inspection agencies, as well as expectations from societal stakeholders.

Second, the strength of control denotes the extent to which these entities are empowered to define and enforce organizational expectations. Control intensity determines whether accountability imposes rigid constraints on public agencies. Coercive accountability is typically imposed either by statutory regulation or by administrative commands issued within hierarchical authority structures. Both approaches place clear, formalized, and legally binding constraints on public managers, ensuring compliance through institutional rigidity. By contrast, non-coercive accountability relies more heavily on professional norms, societal expectations, and moral standards, exerting softer forms of behavioral influence.

Based on these two dimensions, Romzek and Dubnick classified accountability into four types:

(1) Hierarchical accountability refers to responsibility embedded within organizational hierarchy. Its core logic is to ensure effective policy implementation through administrative directives, supervisory systems, and chain-of-command management.

This type is most prominent in traditional bureaucracies, where subordinates are unconditionally accountable to superiors, reinforcing discipline and organizational stability. It operates through a “command–control” model, wherein authority flows top-down, emphasizing clarity of command chains and rigidity of task execution. Discretionary authority for managers is strictly curtailed to minimize uncertainty in administrative decision-making.

(2) Legal accountability highlights the obligation of public agencies and officials to adhere strictly to laws, regulations, and policy frameworks, thereby safeguarding the legality and legitimacy of administrative action. Its sources of control are external, deriving from legislatures, courts, audit offices, and oversight agencies. Institutionalized rule-based constraints are enforced through statutory compliance, budgetary audits, litigation, and formal accountability proceedings. On the one hand, public agencies must implement their functions in strict accordance with legal texts to prevent illegality or abuse of power. On the other hand, citizens and civil society organizations may challenge governmental decisions via lawsuits or judicial review, ensuring transparency and fairness.

(3) Professional accountability is rooted in deference to expert knowledge, professional norms, and technical judgment. It requires public managers operating in complex governance environments to follow professional standards and best practices, incorporating advice from internal technical staff and professional employees. This mechanism emphasizes technical discretion and is particularly relevant in fields marked by high technical complexity or scientific uncertainty.

(4) Political accountability occupies a central position in democratic systems, requiring public managers to be responsive to citizens, legislatures, and public opinion. Its essence lies in responsiveness to societal expectations and demands. From the perspective of New Public Management, political accountability rests on the principal–agent relationship, in which public managers, as agents, must represent and respond to the demands of citizens, the principals. Mechanisms such as elections, public hearings, and media scrutiny ensure managers remain under continuous democratic oversight.

From the standpoint of control source and intensity, two observations follow. First, hierarchical and professional accountability both originate internally within public organizations, but differ in coerciveness: the former derives from administrative authority and rigid organizational rules, while the latter depends on professional knowledge and ethics rather than direct commands, thus operating at a lower control intensity. Second, legal and political accountability are externally imposed: legal accountability, akin to hierarchical accountability, carries high coerciveness, whereas political accountability, relying on public expectations and electoral scrutiny, exerts comparatively weaker binding force.

3.2. Conditionality in the Choice of Accountability Systems

In analyzing NASA's institutional characteristics, Romzek and Dubnick observed that the agency resembled other public organizations in having to reconcile the legitimacy demands of democratic political systems with the often conflicting expectations of multiple stakeholders. Consequently, public managers cannot rely on a single form of accountability; rather, their choices must be conditioned by the institutional arrangements within which they operate.

James D. Thompson further argued that the choice of accountability types is not only shaped by institutional context but also by the nature of tasks (technical responsibility) and by the strategies of organizational leadership (managerial responsibility). Ideally, all three factors—institutions, tasks, and leadership—should be considered jointly in order to ensure the effective functioning of accountability mechanisms, thereby promoting stability and adaptability in public governance.

Romzek emphasized that all four forms of accountability—hierarchical, legal, professional, and political—can provide legitimacy within specific institutional contexts, ensuring that managerial behavior conforms to normative expectations of public governance. However, no single type is inherently superior or more legitimate across all contexts. Each emphasizes distinct core values, applies different constraints, and is suited to particular circumstances. Thus, the applicability of accountability systems must be dynamically adjusted to fit governance contexts, policy demands, and institutional arrangements, rather than relying on a fixed or unitary mechanism.

As noted earlier, in practice, the choice of accountability mechanisms is jointly influenced by institutional settings, the technical nature of tasks, and managerial philosophies. While theoretically each type can ensure the fulfillment of responsibilities, in practice the choice is constrained by governance goals, policy attributes, and leadership styles, and is subject to external environmental change. For example, under routine governance, administrative agencies often rely predominantly on hierarchical and legal accountability to ensure command compliance and legal adherence, while other types remain latent. In crises or policy failures, however, secondary forms such as professional and political accountability are frequently reactivated to reinforce oversight and restore public trust. Similarly, during reform periods, shifts in policy orientation and underlying administrative philosophy can recalibrate the relative importance of accountability types—for instance, with professional and political accountability gaining prominence under New Public Management to enhance responsiveness and performance orientation.

In sum, as Romzek herself observed, accountability is neither simple nor monolithic but inherently complex and multidimensional. The selection of accountability types is never fixed; rather, it emerges from the interaction of institutional conditions, task characteristics, and managerial strategies. At different governance stages and under different policy environments, the priority and configuration of accountability mechanisms vary, presenting formidable challenges for public managers in balanc-

ing responsibility management with expectation management.

4. Reexamining the Typology from a “Values–Action” Perspective

Romzek and Dubnick’s accountability theory, building upon and extending the Friedrich–Finer debate on accountability and control, constructed a systematic framework for analyzing administrative responsibility that has had considerable impact in the field of public administration. Its central contribution lies in breaking with the limitations of traditional approaches, which tended to be one-dimensional, mechanistic, and static. Instead, the typology emphasizes the multidimensionality and contextual dependence of accountability systems, making it more suitable for the complex accountability demands of contemporary governance. Nevertheless, while the fourfold framework offers a clear theoretical classification and dynamic explanation of applicability, its practical operability remains contested.

To evaluate both the contributions and the limitations of Romzek and Dubnick’s typology, this section adopts a values–action perspective, exploring the theory on two levels: theoretical value and practical applicability. On the one hand, it highlights the contributions of the typology in broadening the conceptual scope of accountability and innovating analytical frameworks and methods for responsibility in the public sector. On the other hand, it examines challenges in practice, including inherent tensions among accountability types, the inertia of path dependence, and the risks of blurred boundaries and buck-passing.

4.1. Theoretical Value: Expanding Perspectives on Administrative Accountability

4.1.1. Constructing a multidimensional framework of analysis

Romzek and Dubnick’s fourfold typology broke away from the reliance of traditional responsibility theories on single accountability models. Earlier theories focused primarily on external legal accountability and internal hierarchical accountability, emphasizing legality, procedural compliance, and obedience to administrative commands, while overlooking the complexity and diversity of accountability mechanisms. This simplification made it difficult to explain how accountability types interact and adapt in changing contexts. The Challenger disaster demonstrated that unclear definitions of responsibility could lead to catastrophic consequences.

By contrast, the typology introduced four distinct types, each reflecting different normative values and expectation bases, thereby expanding the analytical boundaries of responsibility. In the context of globalization, digitalization, and decentralization, governance structures have become increasingly pluralistic and interdependent. A unitary accountability framework is no longer sufficient to address cross-sectoral and multi-level collaboration in the public sector. The fourfold typology thus provides a more comprehensive framework for understanding how public managers make decisions under multiple accountability constraints. It explains not

only bureaucratic responsibility systems but also collaborative governance, network governance, and multi-level governance arrangements. For instance, in interdepartmental collaboration or public-private partnerships, accountability mechanisms often cross organizational and functional boundaries—an aspect largely neglected in earlier theories. Thus, the typology offers policymakers and managers a more flexible and adaptive tool for configuring and adjusting accountability in complex environments.

4.1.2. Introducing a dynamic, context-sensitive method of accountability analysis

Another core contribution of the typology lies in its contextual approach to applicability. It highlights that accountability mechanisms are not universally applicable but must be adapted to institutional arrangements, organizational characteristics, and leadership strategies. In compliance-intensive fields such as auditing or procurement, legal accountability typically dominates. By contrast, in technical or complex policy domains, professional accountability is more salient. In democratic systems, political accountability often outweighs other forms, reflecting responsiveness to citizen demands.

As Romzek noted, this framework provides theoretical support for managers to identify which accountability type is most appropriate under specific institutional conditions, thereby guiding optimization of responsibility structures. Furthermore, the typology underscores the adaptability of accountability. Under routine conditions, hierarchical and legal accountability may dominate, but in crises or policy windows, professional and political accountability can quickly become paramount. This dynamic perspective enhances both the precision and the resilience of accountability management.

4.2. Action Dilemmas: Risks of “Accountability Failure” and Transformation Challenges

4.2.1. Latent contradictions among the four types of accountability

Although the fourfold typology reveals, at the theoretical level, that accountability is a complex and multidimensional concept and stresses its historical and contextual contingency, its application in administrative practice frequently confronts internal conflicts and coordination problems among the different types. In complex governance arenas and under demanding tasks, each accountability type embodies distinct sets of expectations, which are often inherently contradictory. In public administration, goals, values, and enforcement modes associated with different accountability types frequently conflict with one another.

When organizations attempt to simultaneously fulfill all four types of accountability, they often encounter formidable practical challenges—especially in cases where accountability boundaries remain ill-defined. Such ambiguity exacerbates conflicts

among types, depriving accountability of clear standards and practical operability. Without clearly demarcated boundaries, policymaking and implementation risk devolving into confusion. The burden of multiple, overlapping accountabilities may reduce decision-making efficiency, waste resources, and generate policy oscillation, ultimately rendering all forms of accountability ineffective. This not only weakens policy execution but also undermines organizational performance, erodes governance capacity, and jeopardizes the legitimacy and credibility of public institutions. Furthermore, blurred accountability boundaries may foster buck-passing. In governance practice, buck-passing typically arises when responsibility bearers are not clearly defined. When multiple agencies or hierarchical levels jointly shoulder a responsibility, disputes over “who is accountable” often emerge. The root cause lies in the absence of institutionalized frameworks and rules that delineate accountability clearly. Faced with complex decision-making, public organizations may thus evade responsibility to avoid liability for errors. In cross-sectoral collaboration in particular, unclear accountability allocation can lead to “accountability vacuums,” in which no actor assumes ownership, producing accountability failure and rendering governance outcomes unattainable.

4.2.2. Path dependence as an obstacle to reform

Although Romzek and Dubnick’s theory emphasizes that accountability systems should be adaptable and dynamic, in practice path dependence often serves as a critical barrier to reform. This inertia is not only rooted in institutional arrangements but also deeply embedded in the rigid structures and cultural norms of public bureaucracies.

In traditional bureaucratic systems, hierarchical and legal accountability have long dominated, establishing relatively fixed and stable patterns. Hierarchical accountability relies on top-down command chains and strict authority relationships to ensure execution and efficiency, while legal accountability requires strict adherence to formal procedures and rules, safeguarding legality and compliance. Both reflect Max Weber’s notion of legal-rational legitimacy as the foundation of political authority in modern societies, forming strong institutional inertia widely accepted in traditional administrative systems.

Yet the introduction of new forms of accountability inevitably collides with these entrenched structures. Professional accountability, which demands greater technical expertise and independence, often requires breaking free from organizational constraints imposed by hierarchical control—directly challenging the core principles of bureaucratic command-and-control. Institutional culture further entrenches this resistance: bureaucracies rely on rigid divisions of labor, hierarchical chains, and codified rules, all of which reinforce institutional inertia. With the growing importance of cross-sectoral and cross-domain collaboration, new composite accountability mechanisms that emphasize flexibility and adaptability often encounter

strong pushback from existing path-dependent arrangements.

As a result, the flexibility and adjustability envisioned by the fourfold typology frequently run into the entrenched rigidity of bureaucratic structures and institutional culture. Reforming accountability systems thus becomes a protracted, uncertain, and highly contested process. Successful transformation requires not only theoretical innovation but also sustained political impetus and incremental change over time. Breaking free from path dependence demands dismantling entrenched boundaries, reconfiguring institutional processes, and reshaping power structures before genuine innovation in accountability can be achieved.

5. Conclusion

Romzek and Dubnick's fourfold typology provides a complex and multidimensional framework for analyzing administrative accountability, revealing the dynamic adaptability and complementarity of different types under conditions of modern governance. Yet its application in practice faces persistent challenges, including conflicts among accountability types, buck-passing driven by blurred boundaries, and obstacles to reform arising from institutional path dependence. These challenges underscore the enduring gap between theory and practice.

For China, however, the typology offers instructive insights. Amid profound structural reforms and the accelerated construction of a law-based government, certain elements of the typology—particularly its multidimensional and contextualized orientation—remain highly relevant. They provide valuable reference points for advancing responsible government and strengthening the modernization of governance capacity.

References

- [1] Romzek, B. S., & Dubnick, M. J. (2018). Accountability in the public sector: Lessons from the Challenger tragedy. In *Democracy, bureaucracy, and the study of administration* (pp. 182-204). Routledge.
- [2] Yu, W. (2006). A new conceptual framework of public responsibility: Compound public responsibility theory and its implications. *Dongnan Xueshu* (Southeast Academic Research), (3), 17-22.
- [3] Finer, H. (1941). Administrative Responsibility in Democratic Government. *Public Administration Review*, 1(4), 335.
- [4] Friedlich, C. J. (1940). Public policy and the nature of administrative responsibility. *Public policy*, 1, 1-20.
- [5] Hughes, O. E. (2007). *Public management and administration: An introduction* (3rd ed.; Zhang Chengfu et al., Trans.). Beijing: China Renmin University Press. p. 295..
- [6] Hughes, O. E. (2007). *Public management and administration: An introduction* (3rd ed.; Zhang Chengfu et al., Trans.). Beijing: China Renmin University Press. p. 290-281.
- [7] Schillemans, T., & Bovens, M. (2011). The challenge of multiple accountability. *Accountable governance: Problems and promises*, 3-21.
- [8] Wang, M. (2018). *Research on graded protection of personal privacy in the era of big data*. Beijing: Social Sciences Academic Press. pp. 37-48.
- [9] Guo, D. (2022). *Social governance and art critique from multiple perspectives*. Chong-

-
- qing: Chongqing University Press. pp. 73–135, 143–175.
- [10] Li, M. (2007). The implications of the four-part accountability framework for the construction of China's administrative accountability system. In *Proceedings of the 2007 Annual Conference of the Hubei Administrative Management Society*.
 - [11] Thompson, J. D. (2017). *Organizations in action: Social science bases of administrative theory*. Routledge: 1-224.
 - [12] Romzek, B. S., & Ingraham, P. W. (2000). Cross pressures of accountability: Initiative, command, and failure in the Ron Brown plane crash. *Public Administration Review*, 60(3), 240-253..
 - [13] Koppell, J. G. (2005). Pathologies of accountability: ICANN and the challenge of “multiple accountabilities disorder”. *Public administration review*, 65(1), 94-108..
 - [14] Weber, M. (2010). *Economy and society* (Vol. 1; Yan Kewen, Trans.). Shanghai: Shanghai People's Publishing House. pp. 318–330.