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QUINE'S MONISM AND MODAL ELIMINATIVISM IN THE REALM OF **SUPERVENIENCES**

QUINE'IN MONİZMİ VE MODAL DIŞLAYICILIĞI KAPSAMINDA BAĞLILIK **KAVRAMI**

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ABSTRACT

This study asserts that W.V.O. Quine's eliminative philosophical gaze into mereological composition affects inevitably his interpretations of composition theories of ontology. To investigate Quine's property monism from the account of modal eliminativism, I applied to his solution for the paradoxes of de re modalities'. Because of its vital role to figure out how dispositions are encountered by Quine, it was significantly noted that the realm of de re modalities doesn't include contingent and impossible inferences about things. Therefore, for him, all the intrinsic forces and elements of entities such as powers and causal or teleological dispositions for ontology demand to be seen neccesarily as bound variables from a monist perspective. Although his denial of analyticity and the elimination of dispositional field of ontology, S. Mumford criticizes the monist perspective of Quine's paradoxical approach to superveniences. Because superveniences create problems while determining type-type identities from a monist mereological perspective. It is observed that Quine faces with a reduction again in terms of his dispositional monism despite his critiques to repulse vagueness from the ontology in his well-known article Two Dogmas of Empiricism.

Keywords: Ontology, Mereology, Quine, Mumford

ÖZET

Bu çalışmanın iddiası, W.V.O. Quine'ın mereolojik kompozisyon düşüncelerine karşı takındığı felsefi tavrın kaçınılmaz olarak onun ontolojik kompozisyon teorilerini dışlayıcı bağlamda yorumlamasına sebep olduğudur. Quine'ın özgülük monizmini modal bağlamda dışlayıcı bir maddecilik olarak ele almak suretiyle modalite problemlerini çözmeye çalıştığı gözlemlenmiştir. Bu tasniflerin Quine tarafından nasıl karsılandığını cözmedeki hayati rolü nedeniyle. Quine'ın de re modaliteler aleminin içerisine, koşullu ve imkansız çıkarımları kabul etmediği kaydedilmiştir. Bu nedenle Quine, bütün içsel güçler (power) ve nedensel veya teleolojik eğilimler (dispositions) gibi entitelerin ontolojik bakımdan monist bir perspektifle görülmesini talep etmektedir. Quine, analitikliği reddetmesi ve modaliteleri dışlama üzerinden kurduğu ontolojisine rağmen felsefeci S. Mumford, Quine'nin bu çözümüne "bağlılıklar" (superveniences) üzerinden yeni bir paradoksal tartışma açmak suretiyle Quine'ın monist perspektifini reddetmiştir. Bağlılıklar (superveniences), Mumford'a göre tip-tip kimlikleri (type-type identities) monist bir mereolojik bakış açısıyla belirlerken bazı sorunları da beraberinde getirmektedir. Mumford'ın bu itirazına göre Quine, her ne kadar ünlü makalesi "Empirisizmin İki Dogması"nda eleştirmiş olsa da indirgemeciliği, monizm adı altında bir çeşit ontolojik belirsizlikleri eleme girişimi olarak yeniden sunmaktadır.

Anahtar Kelimeler: Ontoloji, Mereoloji, Quine, Mumford

1. INTRODUCTION

W.V.O. Quine's approach to mereological entities emerges from his monist projection to ontology. Holism is the simplest way to think internal and external properties are categorically correspondent. By this way, the holistic approach is a scientific foundation for Quineian property monism which can be conceived as a way of thinking "all entities are mereologically simple, without parts." Therefore, things are only grounded in their wholeness, thus their composition may never be distinguished. Monist identifications of beings, therefore bear no subdivided properties. Quine also rejects the nature of

¹ Koons, R C., and T Pickavance. *Metaphysics: The Fundamentals*. 1 ed., Wiley-Blackwell, 2015, p. 139.

analytics and it's allegedly universal (or anthropological) capacities to shape the entities' topological conditions and logical usage of semantics for their representations. This kind of philosophical gaze affects inevitably his interpretations of composition theories of ontology. To represent Quine's property monism from the account of his modality presuppositions and Mumford's objection to the Quinean use of categorical dispositions, we adress:

- 1. From the Quine's interpretations of modalities, we never face with any room for intrinsic dispositions.
- 2. Quine's attempt to see bound variables from a monist perspective.
- 3. Mumford's negations to monist perspective according to Quine's paradoxical approach in the realm of superveniences.

2. **OUINE'S TWO DOGMAS AND PROPERTY MONISM**

Firstly, Quine denies analytic/synthetic distinction to make justifications or articulating the syntax in order to communicate. Secondly, in the light of former denial, he rejects the idea that the composition of powers around properties with intrinsic dispositions may not be determined by an a priori schemas of a metaphysical background. For this reason, he grasps the two parts of equation distinct. Because, while investigating for a causal change or disposition of entities, we cannot use the copula to predicate oneness and a substantive nature for distinct signs or objects. Quine's gaze "encourages deflationary approaches to ontology, according to which talking about abstract objects need not involve the Platonist picture of entities beyond space and time." Therefore, powers and dispositions can not be identified with their objects universally. However, they may only stand as "perspicuous ontic commitments such as 'to be is to be the value of a bound variable." Holistic gaze against the objects and their dispositions emerges from here. Because for Quine, dispositions only depend on linguistic relations and also they cannot be represented satisfactorily by "stranger entities like innate entities." Thus, Quine's holism here erupts the analytic/synthetic distinction while representing dispositions in language according to their indivisible characteristics which are quantified. According to Hooker, quantification of the bound variables is a Quineian doctrine for ontology and logic. He notes that "the burden of objective reference is now taken over by words of the kind that logicians call bound variables, variables of quantification, namely, words like 'something', 'nothing', 'everything'."⁵

Quine's first challenge in Two Dogmas, therefore, is that an interpretation of empiricism that hypothetically applies to analytic/synthetic distinction in order to give a path to true statements about things. Therefore, he stated "the first dogma is radical reductionism which is an attempt by some philosophical traditions to reduce all external occasions into a sense-datum language." Quine implies that the radical reduction is a habit for empiricist tradition who states "every idea must either originate directly in sense experience or else be compounded of ideas thus originating."⁷ As Quine noted Carnap's linguistic project is an attempt to solve that sense-data problem of empiricism by setting some semantical rules on set of experiental qualities. For Quine, semantical rules only emerge from the difficulty to split analytic references from the difficulty in separating analytic statements from synthetic ones in ordinary language. Besides, we are facing the vagueness in the statements out of the realm of synthetic propositions and it makes us to compromise for an artifical semantics. However, for Quine, those rules are inadequate to repeal internal and external distinction of entities due to their vague characteristics. As O'Grady noted, "Quine's chief argument against semantic rules was that they were drawn arbitrarilythere was no behaviouristic or empirical basis for picking out certain kinds of a statement by these rules." Moreover, Quine's analyticity can be grasped as an attempt to make statements and semantical

8 Ibid., 20-43.

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² Glock, Hans-Johann. "Does Ontology Exist?" Philosophy 77, no. 300 (April 2002): 235-60.

³ Audi, R. The Cambridge Dictionary of Philosophy. 3rd ed., Cambridge University Press, 2015, p. 898.

⁴ Innate basis for human language acquisition is also a common for problematic empirical/externalist language theories of Quine. For Chomsky's further essentialist acquisition theories such as; universal phrase-structures and Chomsky's refusal to Quinean verbal behaviour see. Chomsky, N. Language and Mind. 3rd ed. Cambridge: Cambridge University Press, 2006.

⁵ Hooker, C A. "Quine on the Referential Functions of Bound Variables and Quantifiers." Mind, New Series 80, no. 320 (1971): 481-96.

⁶ Quine, W.V. O. "Main Trends in Recent Philosophy: Two Dogmas of Empiricism." The Philosophical Review 60, no. 1 (1951): 20-43.

⁷ Ibid., 20-43.

⁹ O'Grady, P. "Carnap and Two Dogmas of Empiricism." Philosophy and Phenomenological Research 59, no. 4 (December 1999): 1015-27.

2019

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rules from a bundle or a 'bound variable'.

Thus, if we presuppose this kind of dualism between logical and philosophical realms then either ontology or science would be impossible. Quine rejected that dogma by complaining about Carnap's ontological position. To him, analytic and synthetic distinction which is presupposed by Carnap, should be abandoned. Quine's recommendation to emancipate from which so-called distinction is holism. Because holism is a way of undoing the arbitrary lines between ontology and science. Consequently, Quine defends that all the statements cannot be separated into factual and linguistic realms. Furthermore, cases of modality cannot be grasped as classical dimensions or possibilities in favor of interpreting them as "the extension of the predicate in each world." From the holistic account, Quine also claims "no robust *de re/de dicto* distinction could be made without giving up the claim that all modality is a conceptual matter." By the light of holism, all the intrinsic forces and elements of entities such as powers and causal or teleological dispositions for ontology demand to be seen as bound variables from a Quineian monist perspective.

3. QUINE'S ANTI-HAECCEITISM: DISPOSITIONS AND DE RE MODALITIES

This ontological gaze gives him a path to posit an logically extensional mereological position for entities. According to this, they bear no divided properties with themselves, therefore only abstract matters as a whole. "Quine thought part-to-whole structures figured centrally in the ground conception of reality. This kind of nominalism which Quime applied is called as *Class Nominalism*. It refers an existent object either as factual and concrete physical entities or as abstract sets. ¹² He only gives permission to access entities from an extensional predication or abstract sets of affairs. To give an example from *Two Dogmas*; "the general terms 'creature with a heart' and 'creature with a kidney" both signify the class of *zoon* in extension, although, they possibly be interpreted as distinct connotations for human life as the abstract forms. In brief, sort projections of Quine give permission only two possible worlds or entities. Thus, those sentences cannot be encountered by a proposition i.e. '*X creature with a heart has the disposition to love somebody*' as *de re* statements. Due to the fact that entities' becoming and changes cannot be exactly open to create limitless dispositional quantifiers on them.

Empirically speaking, entities can alter into the various consequences. Besides, dispositions that predicated might occur in different ways spatiotemporally. For Quine, dispositions for entities are still at the stage of vagueness, therefore we are not free to develop numerous '-ble' quantifiers for entities. In fact, dispositional possible worlds for Quine must keep in the realm of necessary dispositions to be represented by '-ble' quantifiers in a linguistic project. Quine, unlike Carnap, manifests his account 'ble' quantifiers are not translatable ontological commitments nominally for colloquial usage for people. Instead, from the accounts of holism this gaze can be interpreted as an attempt to give "freedom of scientific inquiry from metaphysical prejudice masked as ontological insight." Furthermore, Quine's investigation for such inquiry can only be depended upon a naturalistic/behavioral explanation of things and also their dispositions. To emphasize the fact that he implies the effect of general and common belief and the limits of verbal dispositions to represent the worldly events and things in general. ¹⁵ As Harman noted, Quine considers that "objects correctly treating such a general disposition as a convention deprives the notion of convention of its explanatory force." Thus for Quine, there is no conventional explanation for vague dispositions on objects (or subjects, as well as they, are language-users). Rather, Quine prefers to naming them under a robust explanatory force. Those forces though should refer only to monist structures and well-bounded variables while using abstract concepts or ideas.

Quineian modal dispositions also only allow itself to satisfy *de dicto* inferences. Because *de re* modalities generally related with a concrete subject or predication. Conversely, modality *de dicto* only manifest itself in the *a priori*, semantic or nominalistic backgrounds. For Quine, "a formula is called modally *de re* iff an individual constant or variable in *A* occurs free in the scope of \Box , otherwise it is

12 Meyers, J. "What is Nominalistic Mereology?" *Journal of Philosophical Logic* 43, no. 1 (February 2014): 71-108.

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¹⁰ Cresswell, M J. "Predicate Wormism: A Quineian Account Of De Re Modality." Logique et Analyse 212 (December 2010): 449-64.

¹¹ Ibid., 449-64.

¹³ Quine, W.V. O. "Main Trends in Recent Philosophy: Two Dogmas of Empiricism." *The Philosophical Review* 60, no. 1 (1951): 20-43.

¹⁴ Alspector-Kelly, M. "On Quine on Carnap on Ontology." *Philosophical Studies: An International Journal for Philosophy in the Analytic Tradition* 102, no. 1 (January 2001): 93-122.

¹⁵ Cahoone, L E. Cultural Revolutions. Penn State University Press, 2005, p. 150.

¹⁶ Harman, G. "Analyticity Regained?" Nous 30, no. 3 (September 1996): 392-400.

called de dicto." Hence that, Quine's modal dispositions primarily must acquisite a constant haecceity by its changes' continuity to be categorized as modally de re. Kripke also articulated Quine's approach as "rigid designators" and he stated his *necessities aposteriori* from a near perspective from Quine's. As Kripke points out that "they can be known a priori" doesn't mean 'must be known a priori." ²⁰

Thus, Quinean attack to de re modalities, for Kripke, demands necessity on all possible worlds. When the necessity on all possible worlds reached out, then iff de re propositions would be satisfactory.

MUMFORD'S ATTACK ON QUINEIAN MODAL ELIMINATIVISM OF **SUPERVENIENCES**

According to Drewery, two kinds of gazes sketched out in terms of dispositions; dispositions as properties of objects and dispositions as properties itself.²¹ By this account Quineian account, it is not possible to grasp dispositions as properties itself, because properties are not mereological counterparts for Quine's ontology, in favor of his property monism. Secondarily, properties cannot be approached as 'dispositions as properties of objects' because referring objects' properties as dispositions instead of its semantic monist reference, means that representing an analyticity again. Due to it ends up with predicating one more property on an object, therefore we are facing a dogma out of the two: nominalism. In fact, Quine's understanding only gives the path to the possible worlds de re only under their necessary occurrences. When their dispositions are observed as necessities, then their opaque and vague properties in our analytic understandings, then it will be bound variables that may be objectively referred. Quine's position here can be interpreted as an "anti-haecceteism." 22 By this way, Quineian attitude can also be regarded as a refusal to Aristotelian correspondence theories (i.e. hylomorphism or substantive approaches by referring ideas²³) for metaphysics. Because, the analyticity that human being uses here actually derives from a conventional (or maybe historical) intention to naming individuals as bundles, sets or bound variables for interacting around the social sphere. The basis for internal/external correspondences belongs to the realm of analyticity. In this portrait, Quine, "motivates "his modal eliminativism."²⁴ Because he eliminates all possible worlds to predicate a mereological composition for words and/or objects. Consequently, it can objectively be stated that "Quine's empiricist approach to science ensures that he sees the notion of analyticity as the only hope for clarifying necessity."²⁵ Besides, necessity's satisfactory inferences can only depend upon their empirical shreds of evidence. In brief, as Fine noted, "the sentences are names for some special kind of entity. 26 Additionally, those names take their substantial roles for the whole composition role of modal dispositions and also haecceity or substantial periphery on objects can be deducted neither from analyticity (yet a priori human capacities) nor from logical conventions.

According to the (modally contingent) nominal variables of logical conventions; every particular disposition is possible and does not include necessity. Because of a concept (or a bound variable for Quine's account) represents any kind of a contingent state in which the dispositions are possible. According to Mumford; the theory of possible worlds claims that all the entities have some sort of dispositions in accordance with the idea of "pandispositionalism"²⁷, which connects all the entities to a causal conclusion and also enables us to think independently from the bundles or sets. Pandispositionalism manifests itself in the contingency of all powers' changes. Mumford uses Popper²⁸ as a reference where the concept of bundle or set is temporary. Temporarily, dispositions turn into the

19 Ibid., 445-446.

²⁶ Fine, K. "The Role of Variables." *The Journal of Philosophy* 100, no. 12 (December 2013): 605-31.

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¹⁷ Schurz, G. "Alethic Modal Logics and Semantics." In A Companion to Philosophical Logic, edited by D. Jacquette, 445-46. Massachusetts: Wiley-Blackwell, 2005.

¹⁸ Ibid., 445-446.

²⁰ Kripke, S. Naming and Necessity. 12th ed., Harvard University Press, 2001, p. 35.

²¹ Drewery, A. "Dispositions and Ceteris Paribus Laws." The British Journal for the Philosophy of Science 52, no. 4 (December 2001): 723-

²² Fine, K. "Model Theory for Modal Logic Part I: The "de re/de dicto" Distinction." Journal of Philosophical Logic 7, no. 1 (January 1978):

²³ 'Hylomorphism' here was used as Manning displayed the theme of matter and form which is committed by Aristotle and Peripathetic tradition. See. Manning, G. "The History of "Hylomorphism"." Journal of the History of Ideas 74, no. 2 (April 2013): 173-87.

²⁴ McLeod, S K. Modality and Anti-Metaphysics. 1 ed., Routledge Revivals, 2001, p. 36.

²⁷ Mumford, S. "Passing Powers Around." The Monist 92, no. 1 (January 2009): 94-111.

²⁸ Ibid., 94-111. See. Popper, K R. The Logic of Scientific Discovery. 2nd ed. New York: Routledge, 2002.

new powers and Popper recommends here to give them a proper truth function in terms of a dispositional property monism²⁹ (so properties' exact ontological positions only depend on the momentum). E.g. all properties that make water possible by the inductive method that can be reunited after being separated from each other, which is the contingency of being a composition without a particular set or bundle. The powers do not hold the entities, the entities travel around the forces. Thus the forces are irreducible, as Hume claims (irreducible power) that we can not achieve a definitive conclusion about the next state as an inductive event, we can only show the possible worlds by predicting the forces around the event. In spite of that, Quine's ontological position differs from Humeist perspective, because of the internal impressions' refers only to the analyticity. Apart from that, those impressions cannot be regarded as truth functions for bound variables or Rylean "inference-tickets" for such ontological commitment.

S. Mumford has a critique on Quine's approach to dispositions from the realm of superveniences. Because Quineian property monism doesn't allow to bound variables' discernibility. However, according to Mumford, Quine's property monism over his bound variables create new ways of thinking about categorical properties.³¹ Because this kind of metaphysical gaze, can simply be regarded as act of dealing with the vagueness. When such vagueness is presupposed, the move of reducing dispositional categories in favor of categorical properties. Mellor's implication picturing dispositional properties' reduction specifically, supposing that all the fragile things satisfies fragility's reduction sentences even if they are not sharing the familiar properties.³² Mumford's objection to such reductionism rooted from the concept he referred "supervenience". According to Davidson the concept of supervenience is conceived "as a thesis about the relations between properties or characteristics or respects - e.g. mental and physical properties - which he understands."33 Hence, to give a metaphysical ground for supervenience, applying the bound variables becoming to a significant case. Because predicating the position of a type-type identical on superveniences is a crucial failure for Quineian eliminativism. "Generally, one realm of properties, facts, events, sentences, or models supervenes on another just in case the latter determines the former; just in case, that is, the constitution of the former."34 Mumford attacks to Quine's categorical property monism which reflected from his analyticity paradigm. Mumford states his objection on supervenience and identification as below;

"Identity alone would not secure the supervenience of dispositions upon categorical bases, nor the converse. If, however, dispositions can be shown to supervene on categorical bases, then a reduction of the dispositional is possible. I argue now that an alleged supervenience between the dispositional and the categorical is an empty notion; thus the reduction of dispositions to their putative bases is equally empty."35

Therefore, Quine's modal eliminativism remains primarily as the activity of emptying the ontological bases of dispositions. Superveniences occurring as a new type of events or occasions however, they are still being reduced by a bound identity extensionally for Quine's theory. The problem here for Mumford is failure to distinct subvenient and the supervenient while positing a type-type identification in the name of a monist ontological position³⁶

5. **CONCLUSION**

In the light of Mumford's projection, if a property is only identical with itself according to the property monism, then when it supervenes on another one, it will continue to remain identical. So the dispositions around superveniences are cut out from the scenery of modal possibilities and are eliminated and/or reduced. For Mumford, in Quine's scenario of ontology, we are only facing with a modal eliminativism to fix the dispositions into a monist property structure. Therefore as Mumford emphasized, Quine's approach is "not as saying anything about ontology." Consequently, Quine's categorical property monism is deflated by the realm of superveniences according to Mumford's rejection. We can summarize the fact by stating two main objections:

37 Ibid.

²⁹ Mumford, S. "Dispositions, Supervenience and Reduction." The Philosophical Quarterly 44, no. 177 (October 1994): 419-38.

³⁰ Mellor, D H. "The Semantics and Ontology of Dispositions." *Mind* 109, no. 436 (October 2000): 757-80.

³¹ Mumford, S. (1994)., Ibid., 419-38.

³² Mellor, D H. "The Semantics and Ontology of Dispositions." Mind 109, no. 436 (October 2000): 757-

³³ Shagrir, O. "Supervenience and Anomalism are Compatible." *Dialectica* 65, no. 2 (June 2011): 241-66.

³⁴ Bonevac, D. "Supervenience and Ontology." American Philosophical Quarterly 25, no. 1 (January 1988): 37-47.

³⁵ Mumford, S. (1994)., Ibid., 419-38.

³⁶ Ibid.

- 1. Superveniences create problems while determining type-type identities from a monist mereological perspective.
- 2. Quine faces with a reduction again in terms of his dispositional monism despite his harsh critiques to repulse vagueness from the ontology in *Two Dogmas*.

REFERENCES

- 1. Alspector-Kelly, M. "On Quine on Carnap on Ontology." *Philosophical Studies: An International Journal for Philosophy in the Analytic Tradition* 102, no. 1 (January 2001): 93-122.
- 2. Audi, R. *The Cambridge Dictionary of Philosophy*. 3rd ed., Cambridge University Press, 2015.
- 3. Bonevac, D. "Supervenience and Ontology." *American Philosophical Quarterly* 25, no. 1 (January 1988): 37-47.
- 4. Cahoone, L E. *Cultural Revolutions*. Penn State University Press, 2005.
- 5. Cresswell, M J. "Predicate Wormism: A Quineian Account Of De Re Modality." *Logique et Analyse* 212 (December 2010): 449-64.
- 6. Drewery, A. "Dispositions and Ceteris Paribus Laws." *The British Journal for the Philosophy of Science* 52, no. 4 (December 2001): 723-33.
- 7. Fine, K. "Model Theory for Modal Logic Part I: The "de re/de dicto" Distinction." *Journal of Philosophical Logic* 7, no. 1 (January 1978): 125-56.
- 8. Fine, K. "The Role of Variables." *The Journal of Philosophy* 100, no. 12 (December 2013): 605-31.
- 9. Glock, Hans-Johann. "Does Ontology Exist?" *Philosophy* 77, no. 300 (April 2002): 235-60.
- 10. Harman, G. "Analyticity Regained?" Nous 30, no. 3 (September 1996): 392-400.
- 11. Hooker, C A. "Quine on the Referential Functions of Bound Variables and Quantifiers." *Mind, New Series* 80, no. 320 (1971): 481-96.
- 12. Koons, R.C., and T. Pickavance. *Metaphysics: The Fundamentals*. 1 ed., Wiley-Blackwell, 2015.
- 13. Kripke, S. *Naming and Necessity*. 12th ed., Harvard University Press, 2001.
- 14. Manning, G. "The History of "Hylomorphism"." *Journal of the History of Ideas* 74, no. 2 (April 2013): 173-87.
- 15. McLeod, S K. Modality and Anti-Metaphysics. 1 ed., Routledge Revivals, 2001.
- 16. Mellor, D H. "The Semantics and Ontology of Dispositions." *Mind* 109, no. 436 (October 2000): 757-80.
- 17. Meyers, J. "What is Nominalistic Mereology?" *Journal of Philosophical Logic* 43, no. 1 (February 2014): 71-108.
- 18. Mumford, S. "Dispositions, Supervenience and Reduction." *The Philosophical Quarterly* 44, no. 177 (October 1994): 419-38.
- 19. Mumford, S. "Passing Powers Around." The Monist 92, no. 1 (January 2009): 94-111.
- 20. Quine, W.V. O. "Main Trends in Recent Philosophy: Two Dogmas of Empiricism." *The Philosophical Review* 60, no. 1 (1951): 20-43.
- 21. Schurz, G. "Alethic Modal Logics and Semantics." In *A Companion to Philosophical Logic, edited* by D. Jacquette, 445-46. Massachusetts: Wiley-Blackwell, 2005.
- 22. Shagrir, O. "Supervenience and Anomalism are Compatible." *Dialectica* 65, no. 2 (June 2011): 241-66.