

The Architecture of Asking

Prior Literature in Light of the ODD Model

A reading of the existing literature on questions, surveyed against the Opening/Direction/Displacement framework

The study of questions has proceeded along several parallel tracks for more than a century, each productive within its own discipline, each largely unaware of the others.

Logicians have formalized the semantic structure of interrogatives.

Linguists have mapped their syntax across spoken and signed languages.

Psychologists have measured the conditions under which learners generate them.

Pedagogues have deployed them as instruments of instruction.

Philosophers have debated whether they constitute speech acts, propositional attitudes, or something else entirely.

None of these traditions has produced an architectural framework capable of analyzing a question's structural effectiveness independent of its disciplinary context.

The **ODD** model advanced by **Wurman** and **Klyn** addresses this absence directly.

The model proposes that any question can be decomposed into its Opening (the conceptual space it creates), its Direction (whether it functions as a hook seeking bounded answers or a net catching divergent ones), and its Displacement (how much new figuration the question proposes against the community's settled tropes).

Around the three dimensions sits a meta-criterion drawn from **Christopher Alexander: Good Fit**. ODD is the architecture of a question. Good Fit is the test of whether the question, with these settings, fits the case, the community, and the moment.

The bifurcated ‘20 Questions’ typology that accompanies this model, ten hook varieties and ten net varieties, offers a systematic vocabulary where previously there existed only ad hoc classification.

The existing literature, read against this framework, reveals both how much preparatory work has already been accomplished and how persistently the field has lacked the integrating structure the **ODD** model supplies.

THE FORMAL TRADITION

The formal tradition begins with Sylvain **Bromberger**'s 1966 analysis in *The Journal of Philosophy*, which treated questions as logical entities possessing identifiable presuppositions and satisfaction conditions.

Lauri **Karttunen** extended this program in 1977 with a transformational account distinguishing direct from indirect questions and classifying the verbs that embed them.

Seiichi **Nakada**'s comparative study of interrogative structures in Japanese and English, published the previous year, demonstrated that the formal properties **Bromberger** and **Karttunen** identified were not artifacts of Indo-European grammar but appeared across typologically distant languages.

Rodney **Huddleston**'s 1994 contribution clarified a persistent confusion: interrogatives belong to grammar, questions to semantics, and the two categories do not map onto each other as neatly as most treatments assumed.

These works collectively establish the syntactic and semantic machinery of interrogatives with considerable precision.

They do not, however, address the dimension the **ODD** model calls Direction: the functional distinction between a question designed to catch one specific answer and a question designed to trawl.

The formal tradition treats all well-formed interrogatives as equivalent objects of analysis. The hook/net distinction introduces a dimension of purposive variation that formal semantics has not accommodated.

THE SPEECH ACT TRADITION

A second tradition, rooted in speech act theory, situates questions within the broader landscape of communicative intention.

John **Searle**'s 1962 treatment established that an interrogative performs an act, that asking is something a speaker does rather than merely something a sentence means.

Jared **Millson**'s later dissertation at **Emory University** pressed this insight further, arguing that the capacity to ask questions constitutes a minimal condition for discursive agency itself.

The **ODD** model's notion of Opening finds its closest antecedent here. To open a conceptual space through questioning is to perform an act that restructures the conversational field.

Searle's framework, however, classifies the act without analyzing the space it creates. The difference between the narrow opening of a polar question and the vast opening of a speculative one remains invisible to speech act classification.

COGNITION AND DEVELOPMENT

The cognitive and developmental traditions supply evidence for the **ODD** model's Displacement dimension, though they frame it differently.

Ashwin **Ram**'s 1991 theory of question-driven understanding proposed that questions arise from discrepancies between a reasoner's model and the state of the world, a formulation that parallels the **ODD** model's account of how a question proposes a figuration the community has not yet absorbed.

José **Otero** and Arthur **Graesser**'s **PREG** model, published in *Cognition and Instruction* in 2001, specified the cognitive mechanisms by which readers generate questions from text, predicting question type from the interaction of textual features and prior knowledge.

Barry **Zimmerman**'s 1972 experimental work demonstrated that question-asking behavior in children responds to modeling and reinforcement.

Karin **Stromswold**'s 1995 study traced the developmental sequence through which children acquire subject and object wh-questions.

These findings confirm that interrogative competence is not innate but constructed, and that the displacement at which a questioner can operate depends on the figurative resources available to them.

THE PEDAGOGICAL RECORD

The pedagogical literature has long treated questions as instruments without providing a theory of their architecture.

Harold **Ladas** and Louis **Osti**'s 1973 strategy for teachers organized questions by **Bloom**'s taxonomy, mapping cognitive level onto question type.

Harry **Singer**'s 1978 concept of active comprehension shifted the emphasis from teacher-posed questions to student-generated ones.

Tom **Smith**'s 1987 review of fifty years of survey methodology in *The Public Opinion Quarterly* documented how question design shapes response patterns.

José van **Dijck**'s 2017 examination of the **Dutch National Research Agenda** revealed the political and institutional forces that determine which questions count as legitimate.

Each of these works illuminates one facet of question practice. None offers a framework for comparing a polar question in a classroom with a divergent question in a policy debate.

The **ODD** model's bifurcated '20 Questions' typology, by distinguishing hook varieties (polar, gap-filling, convergent, advice-seeking, reason-seeking, wherefore, tag, alternative, imperative-eliciting, and confirmative) from net varieties (hypothesis-scanning, echo, divergent, open-ended, general inquiry, variable, rhetorical, deep, what-if, and relevance), provides precisely the comparative vocabulary that this practical literature has needed.

COMMUNAL MEANING: THE VICHIAN LINEAGE

The deepest antecedent for the **ODD** model lies in a lineage running from **Vico** through **Gadamer** to Stephen H. **Daniel** and **Christopher Alexander**.

Giambattista Vico's *New Science* (1744) introduced the concept of *sensus communis*, the community's pre-articulate sense of what is fitting, against the rationalist program that sought to ground meaning in the certainty of the isolated knower.

Vico argued that humans figure the world tropically before they figure it logically, and that the community's grammar of meaning is a poetic construction, not a logical one.

Hans-Georg Gadamer's *Truth and Method* (1960) recovers Vico's term against narrower Cartesian and Kantian uses.

Gadamer insists that practical wisdom lives in the medium of *sensus communis*, and that the human sciences cannot be separated from it. Meaning, for Gadamer, is what happens in the tradition the community is always making and remaking.

Stephen H. **Daniel's** 1989 essay *Reading Places* draws on Vico explicitly to argue that a place exists in the *displacement* between bare facticity and figured significance.

A community's grammar, Daniel writes, "is a creative construct of communal redundancy rather than a deductive constraint of the nature of reality."

The **ODD** model's Displacement dimension is named for the move Daniel locates at the heart of communal reading.

Christopher Alexander's *Notes on the Synthesis of Form* (1964) provides the meta-criterion of fit.

Alexander's later work names the same texture *Quality Without A Name*: the felt judgment of what holds together, which the rhetorical tradition names *sensus communis*.

Good Fit is the absence of misfit between form and context. Applied to questions, it is whether **ODD's** Opening, Direction, and Displacement answer the case at hand.

These four are not minor citations in the **ODD** model's apparatus. They are the lineage from which the model is built.

OTHER LINES OF INQUIRY

Several additional lines deserve notice for the way they intersect with the **ODD** model's account.

John **Morgan**'s 1977 dialogue between **Geertz** and **Tillich** in *The Journal of Religion* examined how religious and cultural systems generate meaning through symbolic interpretation, a complement to Daniel's account of communal reading.

Mary **Reichling**'s 1993 analysis of Susanne **Langer**'s theory of symbolism demonstrated that non-discursive symbols pose questions to consciousness through non-linguistic means.

Bradd **Shore**'s 1987 argument that language constitutes both the conditions for thought and the limits of what can be questioned established the cultural boundary within which all interrogative acts operate.

John **Walbridge**'s 2002 study of *ilm al-ikhtilaf* in **Islamic** jurisprudence revealed a tradition in which systematic disagreement and the contestation of claims function as the primary mechanism for generating knowledge.

Ulrike **Zeshan**'s 2004 crosslinguistic survey of interrogative constructions across 35 signed languages demonstrated that question-marking operates through distinct mechanisms in visual-gestural modalities.

WURMAN AND KLYN'S CONTRIBUTION

The literature, taken whole, has produced the components from which an architectural theory of questions might be assembled.

No prior work that we are aware of has undertaken that assembly.

The **ODD** model and its bifurcated '20 Questions' typology offer a framework in which the formal logician's interrogative, the speech act theorist's illocutionary force, the cognitive scientist's knowledge discrepancy, the pedagogue's instructional instrument, and the anthropologist's cultural practice become aspects of a single structural phenomenon, amenable to systematic comparison and productive analysis.

The wrapping criterion, Good Fit, attaches the model to the older lineage of *sensus communis*. It names the felt judgment by which any question, however well-formed, is ratified or rejected by the community whose reading it is meant to extend.

The model, taken with its wrapper, is offered as an operative.

BIBLIOGRAPHY

- Alexander**, Christopher. *Notes on the Synthesis of Form*. Harvard UP, 1964.
- Big Think**. *Questioning the Nature of Questions: A Philosophical Exploration*. 2025.
- Bloom**, Harold. *A Map of Misreading*. Oxford UP, 1975.
- Boyce-Jacino**, Charles, and Simon **DeDeo**. “Opacity, Obscurity, and the Geometry of Question-Asking.” *Cognition*, vol. 200, article 104268, 2020.
- Bromberger**, Sylvain. “Questions.” *The Journal of Philosophy*, vol. 63, 597–606, 1966.
- Callard**, Agnes. *Open Socrates: The Case for a Philosophical Life*. U of Chicago P, 2025.
- Carruthers**, Peter. “Questioning Attitudes.” *Mind & Language*, vol. 35, 493–517, 2020.
- Daniel**, Stephen H. “Reading Places: The Rhetorical Basis of Place.” 1989.
- Fuller**, R. Buckminster. *Operating Manual for Spaceship Earth*. Southern Illinois UP, 1972.
- Gadamer**, Hans-Georg. *Truth and Method*. 2nd rev. ed., translated by Joel Weinsheimer and Donald G. Marshall, Continuum, 1989.
- Greater Good Magazine**, UC Berkeley. *Why Humans Ask Questions (and Apes Don’t)*. 2025.
- Gurri**, Martin. “The Distance from Orality to the Alphabet.” *The Fifth Wave*, 2024.
- Harms**, Arnold C. *Inquiring Man: A Study in the Dynamics of Inquiry*. Drew University, 1997.
- Harris**, Paul L. “Children’s Questions.” *Mind & Language*, vol. 35, 528–542, 2020.
- Heidegger**, Martin. *Being and Time*. Translated by John Macquarrie and Edward Robinson, Harper, 1962.
- Huang**, Karen, et al. “It Doesn’t Hurt to Ask: Question-Asking Increases Liking.” *Journal of Personality and Social Psychology*, vol. 113, 430–452, 2017.
- Huddleston**, Rodney. “The Contrast between Interrogatives and Questions.” *Journal of Linguistics*, vol. 30, 411–439, 1994.
- Ibáñez Molinero**, Rafael, and Juan A. **García-Madruga**. “Knowledge and Question Asking.” *Psicothema*, vol. 23, 26–30, 2011.
- Karttunen**, Lauri. “Syntax and Semantics of Questions.” *Linguistics and Philosophy*, vol. 1, 3–44, 1977.
- Ladas**, Harold, and Louis **Osti**. “Asking Questions: A Strategy for Teachers.” *The High School Journal*, vol. 56, 174–189, 1973.
- Lazovsky**, Lior, Charles **Boyce-Jacino**, and Simon **DeDeo**. “The Art of Creative Inquiry—From Question Asking to Prompt Engineering.” *The Journal of Creative Behavior*, 2024–25.
- Liggins**, David. “The Autism Objection to Pretence Theories.” *The Philosophical Quarterly*, vol. 60, 764–782, 2010.
- Millson**, Jared A. *How to Ask a Question in the Space of Reasons: Assertions, Queries, and the Normative Structure of Minimally Discursive Practices*. Emory University, 2014.
- Morgan**, John. “Religion and Culture as Meaning Systems: A Dialogue between Geertz and Tillich.” *The Journal of Religion*, vol. 57, 363–375, 1977.
- Nakada**, Seiichi. *Aspects of Interrogatives and Related Phenomena: A Case Study from Japanese and English*. University of Michigan, 1976.
- Ong**, Walter J. *Orality and Literacy: The Technologizing of the Word*. Methuen, 1982.
- Osborne**, Jonathan, Sibel **Erduran**, and Shirley **Simon**. “The Role of Argument and Questioning in Science Education.” *Handbook of Research on Science Education*, vol. 2, 463–488, 2014.
- Otero**, José. “Question Generation and Curiosity.” *The Psychology of Science Text Comprehension*, 437–457, 2001.
- Otero**, José, and Arthur C. **Graesser**. “PREG: Elements of a Model of Question Asking.” *Cognition and Instruction*, vol. 19, 143–175, 2001.

- Ram**, Ashwin. "A Theory of Questions and Question Asking." *The Journal of the Learning Sciences*, vol. 1, 273–318, 1991.
- Reichling**, Mary J. "Susanne Langer's Theory of Symbolism: An Analysis and Extension." *Philosophy of Music Education Review*, vol. 1, 3–17, 1993.
- Rilke**, Rainer Maria. *Letters to a Young Poet*. W. W. Norton, 1954.
- Saunders**, Rob, et al. *Human Conversation and Relational Meaning in Dialogue*. 2025.
- Searle**, John R. "Meaning and Speech Acts." *The Philosophical Review*, vol. 71, 423–432, 1962.
- Shore**, Bradd. "Is Language a Prisonhouse?" *Cultural Anthropology*, vol. 2, 115–136, 1987.
- Singer**, Harry. "Active Comprehension: From Answering to Asking Questions." *The Reading Teacher*, vol. 31, 901–908, 1978.
- Sith**, A. "The Ability to Ask Questions and Human Evolutionary Success." *Aeon*, 2023.
- Smith**, Tom W. "The Art of Asking Questions, 1936–1985." *The Public Opinion Quarterly*, vol. 51, S95–S108, 1987.
- Stephens**, James. *The Crock of Gold*. Macmillan, 1920.
- Strand**, Courtney. *Oral Cultures Believe Knowledge Is a Verb*. 2025.
- Stromswold**, Karin. "The Acquisition of Subject and Object Wh-Questions." *Language Acquisition*, vol. 4, 5–48, 1995.
- Tippett**, Krista. "Questions Elicit Answers in Their Likeness." *On Being*, 2022.
- Tomita**, Masaru. "Sentence Disambiguation by Asking." *Computers and Translation*, vol. 1, 39–51, 1986.
- University of North Carolina College of Arts and Sciences**. "The Power of Asking Questions." *College of Arts and Sciences News*, 2025.
- van **Dijk**, José. *The Art and Science of Asking Questions*. Amsterdam University Press, 2017.
- van **Dijk**, Esther M. "Articulating the Right Question at the Right Time." *Science Education*, vol. 101, 579–603, 2017.
- Vico**, Giambattista. *The New Science*. Translated by Thomas Goddard Bergin and Max Harold Fisch, Cornell UP, 1968.
- Walbridge**, John. "The Islamic Art of Asking Questions: Ilm al-Ikhtilaf and the Institutionalization of Disagreement." *Islamic Studies*, vol. 41, 69–86, 2002.
- Whyte**, David. "The Art of Asking Beautiful Questions." *On Being with Krista Tippett*, 2022.
- Zerpa**, Levis. *The Interrogative Approach to Inquiry: A Defense of Moderate Contextualism in the Theory of Questions*. University of Kentucky, 2011.
- Zeshan**, Ulrike. "Interrogative Constructions in Signed Languages: Crosslinguistic Perspectives." *Language*, vol. 80, 7–39, 2004.
- Zimmerman**, Barry J., and Earl O. **Pike**. "Effects of Modeling and Reinforcement on the Acquisition and Generalization of Question-Asking Behavior." *Child Development*, vol. 43, 892–907, 1972.