REFRAMING RITUAL GESTURES IN DIALOGUE:
GESTURE STUDIES AND SACRAMENTAL RITUALS

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A Thesis Submitted to the School of Graduate Studies in Partial Fulfillment of the Requirements
for the Degree Doctor of Philosophy

McMaster University DOCTOR OF PHILOSOPHY (2023) Hamilton, Ontario (Religious Studies)

TITLE: Reframing Ritual Gestures in Dialogue: Gesture Studies and Sacramental Rituals

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NUMBER OF PAGES: viii; 254

Lay Abstract

Ritual gestures have traditionally been understood as conventional bodily actions that are an external accompaniment to language. This thesis challenges this understanding by exploring the relevance of the modern field of gesture studies to Roman Catholic understandings of ritual gestures. Following the field of gesture studies, which argues that gestures are indeed part of language, this thesis argues that ritual gestures are actually a fundamental part of the content and structure of the "sacramental dialogue" that occurs between ritual participants in Roman Catholic sacramental rituals. This thesis examines the nature and function of three sacramental gestures within the context of sacramental dialogue: palm-up open hand (PUOH) gestures, the raising of the Eucharistic elements, and the breaking of the Eucharistic bread. This thesis also represents the first comprehensive attempt to build a bridge between the fields of religious studies and gesture studies.

Abstract

Ritual gestures have traditionally been understood as conventional bodily actions that are an external accompaniment to language. This thesis challenges this understanding by exploring the relevance of the modern field of gesture studies to Roman Catholic understandings of ritual gestures. Following the field of gesture studies, which argues that gestures are indeed part of language, this thesis argues that ritual gestures are a fundamental part of the content and structure of the "sacramental dialogue" that occurs between ritual participants in Roman Catholic sacramental rituals. Despite a number of overlapping interests, researchers in the field of gesture studies have given very little attention to ritual gestures and religious studies scholars have in turn given very little attention to the field of gesture studies. This thesis represents the first comprehensive attempt to build a bridge between these fields. Using conceptual blending theory, this thesis shows that gestures in ritual settings can actually function similarly to gestures in everyday settings because they both occur within the context of dialogue. The nature and function of three sacramental gestures in the Roman Catholic tradition are examined within the context of the metaphorical concept of "sacramental dialogue": palm-up open hand (PUOH) gestures, the raising of the Eucharistic elements, and the breaking of the Eucharistic bread. It is shown that these and other ritual gestures are rich multi-modal communicative actions that contribute to the structure and content of the sacramental rituals in ways that words cannot. Ritual gestures are therefore a fundamental part of the structure and content of the sacramental dialogue and cannot be adequately understood apart from words as non-verbal accompaniments or in terms of words as symbols.

Acknowledgements

As for the hands, without which all action would be crippled and enfeebled, it is scarcely possible to describe the variety of their motions, since they are almost as expressive as words. For other portions of the body merely help the speaker, whereas the hands may almost be said to speak.

- Quintilian[1]

If language was given to men to conceal their thoughts, then gesture's purpose was to disclose them.

- John Napier[2]

Language and interaction are partners. The ultimate source of language, one can argue, is interaction. Language arises when people try to do things with each other in *joint* activities.

- Herbert Clark[3]

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[1] Quintilian, *The Instiutio Oratoria of Quintilian,* Translated by H. E. Butler (New York: G. P. Putnam and Sons, 1922), Book XI.III.85-87 quoted in Adam Kendon, *Gesture: Visible Action as Utterance* (Cambridge: Cambridge University Press, 2004), 18.

[2] John Napier quoted in David McNeill, *Hand and Mind: What Gesture Reveals about Thought* (Chicago: The University of Chicago Press, 1992), 11.

[3] Herbert H. Clark, "Coordinating with Each Other in a Material World," *Discourse Studies* 7, no. 4–5 (2005): 507.

Table of Contents

List of Figures

Chapter 1: Introduction

1.1 Gestures and the Sacraments in Dialogue

Bodily gestures are a pervasive feature of religious rituals. Whether it is static postures such as standing or kneeling, or dynamic movements such as bowing or processing, religious groups often place a great deal of importance on the meaning and performative significance of their ritual gestures. In the Roman Catholic tradition, bodily gestures are important because they signify the values and beliefs of the church in ways that words cannot. Gestures like kneeling, genuflection, processions, the elevation of material objects, the sign of the cross, the gesture of peace, the laying on of hands, *orans* gestures, the raising of material objects, the breaking of the Eucharistic bread and many others are ascribed a variety of different functions in the Roman Catholic liturgy: they are signs and symbols that are set apart from everyday movements or activities;[4] they promote active participation in the liturgy;[5] they help to express or make apparent what is hidden or not immediately seen in the ritual setting;[6] they create and prepare the ritual space through the handling of material objects;[7] they direct participants' attention to

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[4] In the Roman Catholic liturgy, the visible movements of the body are more than mere "social gestures" because they are transformed into "signs of the covenant, symbols of God's mighty deeds for his people." Catholic Church, *Catechism of the Catholic Church: With Modifications from the Editio Typica* (New York, NY: Doubleday, 1995), n. 1150. For example, when a bishop extends his hands over his community, this gesture "has signified the gift of the Spirit" since the "time of the apostles." Catholic Church, n. 1299.

[5] Vatican Council II, "Sacrosanctum Concilium: Constitution on the Sacred Liturgy," December 4, 1963, no. 30: "To promote active participation, the people should be encouraged to take part by means of acclamations, responses, psalmody, antiphons, and songs, as well as by actions, gestures, and bodily attitudes. And at the proper times all should observe a reverent silence."

[6] The sign of the cross, for example, "signifies the grace of the redemption Christ won for us by his cross." Catholic Church, *Catechism*, n. 1235. When the Priest signs himself with the sign of the cross during the introductory rites of the Mass at the Greeting of the congregation, "the mystery of the Church gathered together is made manifest." Catholic Church, *The General Instruction of the Roman Missal* (Ottawa, ON: Canadian Conference of Catholic Bishops, 2010), n. 50, hereafter GIRM. According to Antonio Donghi, the truth of the mystery of the cross "becomes visible in this sign, which becomes a truly personalized experience." Antonio Donghi, *Words and Gestures in the Liturgy*, trans. William McDonough, Dominic Serra, and Ted Bertagni (Collegeville, MN: Liturgical Press, 2009), 14.

[7] See, for example, The Preparation of the Gifts, Catholic Church, *GIRM*, n. 73–76.

features in the ritual setting like an altar, a material object, an icon, a symbol, or a direction;[8]

they train participants to reverently attend to all the dimensions of the ritual;[9] they dispose

individuals to a variety of affects and dispositions;[10] they facilitate the "hearing and the reception

of a message from wherever it may come. It supports attention, meditation, and spiritual

contemplation";[11] they mediate interactions between participants to help unify them into one

"body",[12] and so on.

However, despite the important role that bodily gestures play in Roman Catholic ritual

performances, interpretations of these gestures typically categorizes them as non-verbal displays

of reverence or emotive expressions of someone's inner disposition which are separate or distinct

from language and spoken words. In sacramental theology, for example, a qualitative distinction

is often made between verbal (i.e., words) and non-verbal elements (i.e., gestures, bodily actions,

material elements, etc.) of sacramental rituals. Thomas Aquinas suggested that the sacraments

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[8] This is done, for example, through gestures like the raising of liturgical elements. See section 4.3 of this thesis: "Raising the Eucharistic elements and the establishment of 'joint presence.'"

[9] According to the GIRM, bodily movement "must be conducive to making the entire celebration resplendent with beauty and noble simplicity, to making clear the true and full meaning of its different parts, and to fostering participation of all." Catholic Church, *GIRM*, n. 42. Cf. Vatican Council II, "Sacrosanctum," n. 30: "To promote active participation, the people should be encouraged to take part by means of acclamations, responses, psalmody, antiphons, and songs, as well as by actions, gestures, and bodily attitudes. And at the proper times all should observe a reverent silence." Cf. Catholic Church, *Catechism*, n. 1387: "Bodily demeanor (gestures, clothing) ought to convey the respect, solemnity, and joy of this moment when Christ becomes our guest." Cf. Catholic Church, *GIRM*, n. 160: "When receiving Holy Communion, the communicant bows his or her head before the Sacrament as a gesture of reverence and receives the Body of the Lord from the minister."

[10] From an Orthodox liturgical perspective, ritual gestures help to train participants to move their bodies "in certain ways" so that "[they] are more open to experiencing the kind of affectivity liturgy tries to produce in us." Christina M. Gschwandtner, *Welcoming Finitude: Toward a Phenomenology of Orthodox Liturgy* (New York, NY: Fordham University Press, 2019), 135. Gschwandtner goes on: "And these movements are often corporeal ones: Affect is guided by our bodily postures, encouraged by physical gestures, ordered through the orientation given to our movements. The awe or reverence of worship is enabled and reinforced through bodily postures and gestures of humility, such as bowing and veneration." Gschwandtner, 136.

[11] Donghi, *Words and Gestures*, 29.

[12] According to the Catholic Church, ritual gestures "unify the assembly in a common cause. Thus, bodily movement both expresses and fosters the unity of the assembly gathered in the Holy Spirit as the Body of Christ." Catholic Church, "Pastoral Notes for the Celebration of the Eucharist in Light of the Revised Roman Missal" (Concacan Inc., 2012), n. 66. The GIRM also says that "A common bodily posture, to be observed by all those taking part, is a sign of the unity of the members of the Christian community gathered together for the Sacred Liturgy, for it expresses the intentions and spiritual attitude of the participants and also fosters them." Catholic Church, *GIRM*, n. 42.

consist of both form and matter, where "the words are as the form, and sensible things are as the matter."[13] The distinction made between spoken words and bodily gestures and material things is representative of a tendency to characterize the sacraments and ritual performances primarily or even solely in terms of words. Augustine, for example, called the sacraments "a visible word"[14] and Thomas Aquinas noted that "the signification of [the sacraments] is completed by means of words" because the sacraments are "more perfectly [signified] in words than in other things."[15] Karl Rahner said that "the fundamental essence of the sacrament must really consist in word"[16] and Louis-Marie Chauvet has argued that "every sacrament is a sacrament of the word"[17] and that "The word should not be treated as merely one example among others but as the very archetype of what happens between subjects and within any subject."[18] In sacramental theology, the visible, material elements do not operate as sacramental signs on their own accord; it is the words that transform the visible, material elements into sacraments so that they are able to bring about the reality that the sacramental sign signifies. As Augustine said, "Take away the word, and the water is neither more nor less than water. The word is added to the elemental substance, and it becomes a sacrament."[19] It is words, not bodily movements or the material elements themselves, which have the power to bring about the reality that the sacraments signify.

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[13] Thomas Aquinas, *Summa Theologica*, Translated by Fathers of the English Dominican Province (Westminster, MD: Christian Classics, 1981), III, q. 60, a. 7.

[14] Saint Augustine, *Tractates on the Gospel of John*, vol. 90, The Fathers of the Church (Washington, DC: Catholic University of America, 1994), 80.3.2, 117.

[15] Aquinas, *ST*, III, q. 60, a. 6.

[16] Karl Rahner, "What Is a Sacrament?," *Worship* 47, no. 5 (1973): 276. See also Karl Rahner, "What Is a Sacrament?," in *Theological Investigations*, trans. David Bourke, vol. 14 (New York: Seabury Press, 1966), 138: "According to Catholic teaching there are sacraments which are enacted in words alone, and it follows that the true nature of sacrament as such must consist in the word."

[17] Louis-Marie Chauvet, *The Sacraments: The Word of God at the Mercy of the Body*, trans. Madeleine Beaumont (Collegeville, MN: The Liturgical Press, 2001), 93.

[18] Louis-Marie Chauvet, *Symbol and Sacrament: A Sacramental Reinterpretation of Christian Existence*, trans. Patrick Madigan and Madeleine Beaumont (Collegeville, MN: The Liturgical Press, 1995), 266.

[19] Augustine, *Tractates on the Gospel of John*, 90:80.3.2, 117.

To be sure, words *are* an effective way to characterize the signifying of the sacraments and sacramental rituals. The capacity of words to refer to things beyond the words themselves gives them great communicative power. Augustine said that words are "almost infinite in number" and therefore "far and away the principle means used by human beings to signify the thoughts they have in their minds."[20] Words also have the capacity to *do* things and bring things about in the world. The words "I do" in a marriage ceremony do not merely signify a couple's intent to get married, they also *enact* the reality of marriage itself. It is through the act of saying words like "I do" that an effect or reality is brought about.[21] Louis-Marie Chauvet argues that the sacraments are like words because they can do things in the world by virtue of being performed or spoken.[22] As Chauvet puts it, the sacraments are not merely an act *of* signification by means of words, they are an act that is effected *in* the act of speaking words: "Not only is language efficacious but *it is what is most efficacious.*"[23]

Unfortunately, however, the prioritization of words in sacramental theology—as well as in the study of language and the study of ritual performances more generally—has often led to a denigration of non-verbal or bodily forms of communication like gestures. Gestures regularly carry the stigma of being "trivial," "ineffectual," "empty," or "falling short of the mark" because they do not communicate with the same precision or efficacy as words. However, this tendency

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[20] Saint Augustine, *Teaching Christianity (De Doctrina Christiana)*, trans. Edmund Hill, The Works of Saint Augustine: A Translation for the 21st Century (Hyde Park, NY: New City Press, 1996), 134–35.

[21] J. L. Austin refers to these particular kinds of speech acts as "illocutionary" speech acts which are speech acts that effect something *in* the act of saying something (i.e., what was done in saying something). An illocutionary speech act is contrasted with a "locutionary" speech act, which is the actual performance *of* saying something (i.e., what was said), and a "perlocutionary" speech act, which is what is achieve *by* saying something (i.e., what happened as a result). See J. L. Austin, *How to Do Things with Words* (Oxford: Oxford University Press, 1962), 108–19.

[22] Following J. L. Austin's characterization of illocutionary speech acts (see previous footnote), Louis-Marie Chauvet argues that the sacraments are not merely "declarative" speech acts which describe something about the world, they are rather "performative" and "illocutionary" speech acts that change "the position of the subjects by the very fact of the act of enunciation." Chauvet, *Symbol and Sacrament*, 131–35.

[23] Chauvet, *The Sacraments*, 91.

to think of our body and its movements as being set apart or distinct from language and speech does not adequately appreciate how our bodily movements contribute to the meaning and structure of language and communication. In recent years, researchers in the field of gesture studies have challenged this non-verbal, non-linguistic understanding of gestures and have argued instead that gestures are a fundamental *part of* language and thought itself. Language, instead of being a collection of spoken or written symbols that take the form of words, is a multi-modal activity that arises out of social interactions between people and makes use of many different types of communicative resources, especially bodily movement. Herbert Clark, for example, argues that "The ultimate source of language, one can argue, is interaction. Language arises when people try to do things with each other in *joint* activities."[24] When we speak, we invariably communicate and interact with others with and through our gestures in ways that go beyond the meaning of words themselves. Gesture researchers have shown that prioritizing words at the expense of bodily gestures and the material context within which language occurs inevitably results in an impoverished view of communication, language, and social interactions. In other words, language cannot be properly understood in terms of speech or words alone.

In this thesis, I draw on the field of gesture studies to argue that current understandings of the nature and function of gestures in ritual settings remains impoverished because researchers still consider gestures to be non-verbal, non-linguistic accompaniments to language rather than a fundamental *part of* language itself. I will show that just as gestures are a fundamental part of everyday social interactions gestures in the sacramental rituals of the Roman Catholic liturgy are a fundamental part of the structure and content of the sacramental "dialogue"[25] that occurs

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[24] Clark, "Coordinating with Each Other in a Material World," 507.
[25] Catholic Church, *Catechism*, n. 1153: "A sacramental celebration is a meeting of God's children with their Faither, in Christ and the Holy Spirit; this meeting takes the form of a dialogue, through actions and words."

between ritual subjects. Just as words on their own cannot bear the weight of social interactions in everyday dialogue, words on their own cannot bear the weight of the dialogue or encounter that occurs between ritual participants, the church, and God in Roman Catholic sacramental rituals.

1.2 Problematic Assumptions about Gestures

If gestures are indeed a fundamental part of the dialogue that occurs in sacramental rituals, why haven't ritual gestures been given more attention before? There are a number of possible reasons for why this is the case. As already alluded to, one possible reason is that gestures are commonly assumed to be an external accompaniment to spoken or written language but not part of language itself. In his book, *Gesture and Speech*, Andre Leroi-Gourhan quotes Gregory of Nyssa to highlight the common view in the West that gestures exist merely in the service of speech. Gregory of Nyssa says, "So it was thanks to the manner in which our bodies are organized that our mind like a musician, struck the note of language within us and we became capable of speech. This privilege would sure never have been ours if our lips had been required to perform the onerous and difficult task of procuring nourishment for our bodies. But our hands took over that task, releasing our mouths for the service of speech."[26] Our bodies—and especially our hands—are often thought of as mere tools that free up our mouths for speech.

The privileging of speech over bodily gestures has meant that the linguistic status of gestures and manual languages like sign languages has long been viewed with suspicion. A telling example of this was evident at the International Congress of the Educators of the Deaf in Milan, Italy in 1880, where a resolution was passed "condemning the use of manualist methods

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[26] Gregory of Nyssa, *Treatise on the Creation of Man* quoted in André Leroi-Gourhan, *Gesture and Speech* (Cambridge, MA: MIT Press, 1993), 25.

[i.e., sign language] to teach language to deaf children."[27] The assumption was that sign

languages are not fully developed languages and therefore they do not have the capacity to

reflect the profundity of humankind—that capacity was reserved for words and speech. Consider,

for example, the words of Giulio Tarra, the president at the 1880 conference:

> Gesture is not the true language of man which suits the dignity of his
> nature…Moreover, it is not and never will be the language of society…Oral
> speech is the sole power that can rekindle the light God breathed into man when,
> giving him a soul in a corporeal body, he gave him also a means of understanding,
> of conceiving, and of expressing himself…The fantastic language of signs exalts
> the senses and foments the passions, whereas speech elevates the mind much
> more naturally, with calm and truth and avoids the danger of exaggerating the
> sentiment expressed and provoking harmful mental impressions.[28]

Some of the blame for this understanding of language lies in the deeply entrenched

dichotomy between the body and the mind that exists in the history of Western thought. Whereas

language and speech are positively associated with the mind, rationality, and the immaterial,

gestures and sign languages are negatively associated with the body and primitive ways of

thinking and communicating, which, as sign language researcher Sherman Wilcox notes, has

been further cemented by the Cartesian dichotomy between the mind and the body.[29] Wilcox

identifies four problematic and commonly held assumptions about language, gesture, and sign

languages that result from a Cartesian dichotomy between the mind and the body:

> 1) Language is of the mind; gesture is of the body;
> 2) Language is expressed solely through speech;
> 3) Gesture is distinct from language;
> 4) Because language is speech, sign language is not a language; sign language is
> gesture.[30]

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[27] Susan Goldin-Meadow and Diane Brentari, "Gesture, Sign, and Language: The Coming of Age of Sign Language and Gesture Studies," *Behavioral and Brain Sciences* 40 (2017): 4.
[28] Giulio Tarra quoted in Harlan Lane, *When the Mind Hears: A History of the Deaf* (New York: Random House) 391, 393–394 quoted in Sherman Wilcox, "Speech, Sign, and Gesture," in *Body-Language-Communication: An International Handbook on Multimodality in Human Interaction*, ed. Cornelia Müller et al., vol. 1, Handbooks of Linguistics and Communication Science 38 (Berlin: De Gruyter Mouton, 2013), 126.
[29] Wilcox, 127–28.
[30] Wilcox, 127.

Maxine Sheets-Johnstone also notes that philosophical reflection on bodily movement and its role in language and thought has been painfully lacking in the history of philosophy. She says, "Given the fact that we intuitively equate aliveness with movement, it is difficult to explain why philosophers would overlook the primacy of movement in their renditions of what it is to be human."[31] Sheets-Johnstone observes that philosophers tend to understand what it is to be human in a textual model, "which reduces movement to mere visual and/or manual gestures coincident with reading and writing," a computer model, "which reduces movement to a mere 'output'," an objective model, which either "disregards movement by considering only objects in motion" or "instrumentalizes movement by de-cognizing it, making it no more than a means," or by taking "no model at all" which "simply trivializes [movement]."[32]

The "textual model" of language, which reduces language to reading and writing, has been one of the dominant approaches to the study of language in the 20th century. In this approach, language is assumed to be a symbolic system of arbitrary signifiers whose meaning is determined by social convention and whose structure is isolatable from the context within which it is used. Pamela Perniss and Gabriella Vigliocco have highlighted two fundamental assumptions of this approach to language research: 1) That language can be sufficiently investigated as speech or text and 2) that language is a wholly arbitrary system.[33] One negative consequence of this approach is that little attention or consideration has been given to language as it is used in face-to-face social interactions. According to Perniss and Vigliocco, a large amount of language research has ignored "the wealth of additional information available in face-

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[31] Maxine Sheets-Johnstone, *The Primacy of Movement*, Expanded 2nd Ed. (Philadelphia, PA: John Benjamins Pub. Co, 2011), 117.

[32] Sheets-Johnstone, 117.

[33] Pamela Perniss and Gabriella Vigliocco, "The Bridge of Iconicity: From a World of Experience to the Experience of Language," *Philosophical Transactions of the Royal Society B: Biological Sciences* 369 (2014): 20130300.

to-face communication, leading to the (explicit or implicit) assumption that the object of investigation—language—can be properly and sufficiently addressed by ignoring other characteristics of face-to-face interactions: the communicative context in which language has evolved, in which it is learnt by children, and in which it is most often used."[34] Ferdinand De Saussure famously distinguished language into *langue* ('language'; concerned with the rules and conventions of a language system) from *parole* ('speech'; concerned with language use) and almost exclusively examined language in terms of *langue.*[35] Other influential approaches to language in linguistics, such as Noam Chomsky's notion of "universal grammar,"[36] similarly give little attention to how language is used in social interactions.

The textual model of language has also led to a written language bias in the study of language. Because gestures cannot be inscribed into texts as easily as words, "it can be very difficult (not to mention inadequate) to capture an embodied action which comprises a source domain in the form of a word or phrase" within text-based frameworks.[37] Gestures are a difficult phenomenon to analyze because they contain an enormous amount of information and do not "leave any traces for historians"[38] and linguists alike. Fey Parrill and Eve Sweetser note that gestures "rather intimidating" to study and some researchers even "discourage" their students

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[34] Perniss and Vigliocco, 2.

[35] Ferdinand De Saussure, *Course in General Linguistics*, ed. Perry Meisel and Haun Saussy, trans. Wade Baskin (New York, NY: Columbia University Press, 1959).

[36] Noam Chomsky, *Aspects of the Theory of Syntax* (Cambridge, MA: MIT Press, 1965). Chomsky's notion of "universal grammar" attempts to identify an innate cognitive structure to language that is genetically grounded and shared across all languages regardless of how language is used or what it means in a given context.

[37] Alan Cienki and Cornelia Müller, "Metaphor, Gesture and Thought," in *The Cambridge Handbook of Metaphor and Thought*, ed. Raymond W. Gibbs, JR. (Cambridge, UK: Cambridge University Press, 2008), 497. Elsewhere, Cienki says, "[T]he analog nature of meaning expressed in imagery, particularly in moving images as we have with gesture, is inadequately captured in written words, which are static, digital symbols." Alan Cienki, "Cognitive Linguistics: Spoken Language and Gesture as Expressions of Conceptualization," in *Body-Language-Communication: An International Handbooks on Multimodality in Human Interaction*, ed. Cornelia Müller et al., vol. 1, Handbooks of Linguistics and Communication Science 38 (Berlin: De Gruyter Mouton, 2013), 195.

[38] Jean-Claude Schmitt, "The Rationale of Gestures in the West: Third to Thirteenth Centuries," in *A Cultural History of Gesture: From Antiquity to the Present Day*, ed. Jan Bremmer and Herman Roodenburg (Cambridge, UK: Polity Press, 1991), 62.

from studying gestures "because it is such a Herculean task."[39] Strong preference is therefore given to words because words are accessible "data" which can be more easily transcribed and analyzed. As a result, as Eve Sweetser notes, "The vast majority of linguists, psychologists and cognitive scientists do not look at gestural data."[40] The written language bias in linguistics has inherent limitations in the study of language because it can obscure the fact that many linguistic expressions and abstract conceptualizations are grounded in movements of the body rather than in words. Furthermore, written transcripts of spoken dialogue, for example, do not always adequately reflect how language is actually spoken and used in social interactions. As Alan Cienki notes, it is easy in the process of transcription "to fall into the trap of following the conventions of the written form of a spoken language…'correcting' what speakers said, often inadvertently."[41]

In theology, gestures have not been of great interest because they are similarly considered to be outside the bounds of language or somehow *less than* spoken or written words. Even though gestures are appreciated as vital elements of the Roman Catholic liturgy and are at times said to "speak,"[42] or to "perform and interpret the Word in time,"[43] or to "carry theological

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[39] Fey Parrill and Eve Sweetser, "What We Mean by Meaning: Conceptual Integration in Gesture Analysis and Transcription," *Gesture* 4, no. 2 (2005): 197. Parrill and Sweetser disagree with this assessment, of course, and point out that "researchers from many disciplines have begun to feel they cannot do without the study of gesture." Parrill and Sweetser, 197.

[40] Eve Sweetser, "Looking at Space to Study Mental Spaces: Co-Speech Gesture as a Crucial Data Source in Cognitive Linguistics," in *Methods in Cognitive Linguistics*, ed. Monica Gonzalez-Marquez et al. (Amsterdam: John Benjamins Pub. Co, 2007), 201.

[41] Alan Cienki, "Cognitive Linguistics, Gesture Studies, and Multimodal Communication," *Cognitive Linguistics* 27, no. 4 (2016): 607.

[42] Peter Fink, for example, says the liturgy "speaks" three languages: the declarative language of liturgical instruction, the evocative language of song, prayer and proclamation, and the non-verbal language of human interaction in gesture and space-arrangement. "The third language," he says, "aims to explain and illuminate the event which is constituted by the first two languages. It speaks, however, not simply to satisfy the mind. It speaks to send the believer back to worship in search of its truth there." P. E. Fink, Praying the Sacraments (Washington, DC: Pastoral Press, 1991) 29 quoted in Siobhán Garrigan, *Beyond Ritual: Sacramental Theology after Habermas* (London; New York: Routledge, 2004), 17.

[43] Randi Rashkover, *Liturgy, Time, and the Politics of Redemption* (Grand Rapids, Mich.: Eerdmans, 2006), 20 quoted in Gschwandtner, *Welcoming Finitude*, 83: "Liturgical postures will be discovered both within and supplementary to scriptural texts as the lived practices that perform and interpret the Word in time."

convictions at a deeper cultural level than do rationally expressed 'beliefs,'"[44] the non-verbal

nature of gestures means that they tend to be grouped alongside other non-linguistic ritual

elements such as clothing (or vestments), instrumental music, art and architecture rather than

words or speech. Gestures may be important as an accompaniment to words but they remain

separate from the words themselves which are what ultimately give the sacraments their

meaning. Some, including David Power, have recognized that "more attention needs to be given

theologically to the entire use of word in sacramental liturgy, so also more attention has to be

given to the complex bodily action," but this attention has not yet been given and complex bodily

actions like gestures have not yet been recognized to function as part of "the entire use of word

in sacramental liturgy."[45]

     Gestures are also often considered to be inaccessible or too ambiguous for analysis. In

her book *Beyond Ritual: Sacramental Theology after Habermas*,[46] theologian Siobhan Garrigan

uses Jürgen Habermas's theory of communicative action to argue that social interaction is at the

heart of the ritual sacramental experience. However, despite the obvious overlap between

communicative action and gestures, Garrigan does not consider the role that gestures play in

ritual interactions because there are apparently no clear "grounds" on which a gesture can be

"accessed."[47] As Garrigan says, any attempt to "elucidate the understanding a community has of

the acts it performs (which is what all theology, but liturgical theology specifically, claims as its

intention), any application of my own experience to theirs would constitute not just conjecture

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[44] Don Saliers, *Worship as Theology* (Nashville: Abingdon Press, 1994), 163-164 quoted in Gschwandtner, 83–84: "[B]odily movements, gestures, and dispositions may be the most deeply theological aspects of communal worship. For the human body is itself a primary symbol of God's glory…the bodily signs carry theological convictions at a deeper cultural level than do rationally expressed 'beliefs.'"

[45] David N. Power, *Sacrament: The Language of God's Giving* (New York, NY: The Crossroad Publishing Company, 1999), 124.

[46] Garrigan, *Beyond Ritual: Sacramental Theology after Habermas*.

[47] Garrigan, *Beyond Ritual: Sacramental Theology after Habermas*, 124.

but a small act of imperialism."[48] In other words, because ritual actions like gestures cannot be easily interpreted according to linguistic conventions, any interpretation of a gesture is unavoidably an imposition of meaning by an observer. Garrigan, for her part, laments this situation, as she acknowledges that "a large proportion of the embodied reality of the liturgy (e.g.: gestures, movements, visual art, seating-style, non-linguistic symbols, smells, sounds and music) lay, frustratingly, beyond the scope of analysis."[49] The apparent problem that Garrigan faces is that there is "no critical precedent or model on which to base an interpretation of bodily gesture."[50]

One of the primary aims of this thesis is to challenge some of these problematic assumptions about gestures and to suggest that gestures are in fact accessible to study. Rather than being mere non-verbal or paralinguistic accompaniments to speech, the field of gesture studies has shown that gestures are actually *part of* language itself. According to researchers in the field of gesture studies, language is not an autonomous process of the mind that is set apart from the rest of our bodily and cognitive capacities—instead, language is a cognitive process that is intimately connected with our bodies and the particular context in which it is performed.[51] As David Armstrong, William Stokoe, and Sherman Wilcox argue, language is, at its core, an embodied *gestural* activity: "the essence of language is bodily activity"—not mental activity as

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[48] Garrigan, 124.

[49] Garrigan, 205. Garrigan also says: "While it is acknowledged that the verbal should be studied as behavior (and not as text), it will nevertheless be important in developing this epistemology to find an accurate way of accessing the non-verbal." Garrigan, 205.

[50] Garrigan, *Beyond Ritual: Sacramental Theology after Habermas*, 124.

[51] Cognitive linguists take a usage-based approach to the study of language and focus on what language means in a particular context rather than simply how language functions from an abstract perspective. As cognitive linguist Alan Cienki puts it, cognitive linguistics "highlight semantics as a starting point for explaining linguistic structure, with *meaning* understood as some form of conceptualization." Cienki, "Cognitive Linguistics: Spoken Language and Gesture as Expressions of Conceptualization," 183. See also Ronald W. Langacker, "A Usage-Based Model," in *Topics in Cognitive Linguistics*, ed. Brygida Rudzka-Ostyn (Amsterdam: John Benjamins Pub. Co, 1988), 127–61; Ronald W. Langacker, "Metaphoric Gesture and Cognitive Linguistics," in *Metaphor and Gesture*, ed. Alan Cienki and Cornelia Müller (Amsterdam, Netherlands: John Benjamins Pub. Co, 2008), 249–51; Sweetser, "Looking at Space to Study Mental Spaces."

is so often assumed.[52] Linguist Eve Sweetser similarly notes that "Many cognitive linguists now take seriously the embodiment of human thought and language—the idea that our conceptual and linguistic structures could not be as they are if they were not based in human bodily experience of the world."[53] According to gesture researchers, language is a cognitive process like other cognitive processes in that is realized in and through the activity and movement of our bodies. Linguist Lorenza Mondada further argues that bodily resources and the material environment are not mere accessories to language but that they are actually "the *locus* in which broader issues relative to language, body, cognition, action, culture, knowledge, social relations and identities, spatiality and temporality are locally shaped, implemented and transformed, and, as such, made observable for the analyst."[54] For Mondada, such a multi-modal approach to language entails that:

> [A]. there is no principled priority of one type of resource over the others (e.g. of language over embodiment); b. potentially every detail can be turned into a resource for social interaction…and, finally, c. some ecologies and types of activities might favor verbal resources along with gestures and body movements, whereas other ecologies and activities might favor distinctive and specific embodied resources over talk (including actions achieved without a word).[55]

In other words, for Mondada, verbal resources like spoken words should not be given priority in our analysis of how language works because traditionally non-verbal resources like gestures and the material environment fulfill important communicative functions that words cannot. The

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[52] David F. Armstrong, William C. Stokoe, and Sherman E. Wilcox, *Gesture and the Nature of Language* (Cambridge: Cambridge University Press, 1995), 36: "Physical, signal-producing gestures are the means by which signed and spoken languages are realized. While there are many differences between signed and spoken language articulatory gestures, and indeed between linguistic and non-linguistic gestures, the key to understanding the human language capacity depends on exploring what unites them qua gesture." And as Sherman Wilcox notes elsewhere, "signed and spoken language are united by their common basis in embodied cognition." Sherman Wilcox, "Cognitive Iconicity: Conceptual Spaces, Meaning, and Gesture in Signed Language," *Cognitive Linguistics* 15, no. 2 (2004): 120.

[53] Sweetser, "Looking at Space to Study Mental Spaces," 201.

[54] Lorenza Mondada, "Challenges of Multimodality: Language and the Body in Social Interaction," *Journal of Sociolinguistics* 20, no. 3 (2016): 362.

[55] Mondada, 341.

implications of this approach to language and gestures has not yet been adequately recognized or explored within religious studies or theology. This thesis represents the first substantial attempt to bring gesture studies into dialogue with religious studies and theology in order to explore some of these implications.

1.3 Overview of Chapters

A seemingly straightforward yet complicated question that lies at the heart of this thesis is the question, "What is a gesture?" The answer to this question can differ depending on who is asking the question and why. In the field of gesture studies, gestures are typically understood as the "spontaneous movements of the hands and body that universally accompany speech."[56] The context in which these gestures are typically analyzed is everyday face-to-face dialogue. In contrast, in theology and religious studies, gestures are often understood as a "conventionalized bodily expression[s]"[57] which are performed at particular times and in particular places such as a ritual performance. The apparent incongruity between spontaneous everyday gestures and conventional ritual gestures is a major reason why gesture researchers have given very little attention to gestures in ritual settings and why theologians and religious studies scholars have in turn given very little attention to the field of gesture studies. It is not obvious how these different types of gestures relate—if they do at all. How would one go about comparing these different types of gestures? The primary aim of this thesis is to address this question by reframing what ritual gestures are and what they do in ritual settings in the light of the field of gesture studies. I

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[56] Natasha Abner, Kensy Cooperrider, and Susan Goldin-Meadow, "Gesture for Linguists: A Handy Primer: Gesture for Linguists," *Language and Linguistics Compass* 9, no. 11 (2015): 1.
[57] Ronald L. Grimes, *The Craft of Ritual Studies* (Oxford: Oxford University Press, 2014), 341.

will do this by looking specifically at gestures in sacramental rituals in the Roman Catholic liturgical tradition.

Chapters 2 and 3 are an effort to bridge the gap between the different methodological assumptions and theoretical frameworks in these fields in order to bring gesture studies into dialogue with religious studies and theology. Chapter 2 will look at the development of the field of gesture studies and its unique approach to gestures which has led gesture researchers to argue that gestures are best understood as being a fundamental *part of* language and thought rather than as non-verbal external accompaniments. Chapter 3 will overview the various approaches to gestures in ritual settings and argue that the insights from the field of gesture studies on gestures in everyday settings are relevant to gestures in ritual settings because gestures in both settings occur within the context of *dialogue*. Whereas everyday gestures typically occur within the context of face-to-face dialogue, ritual gestures in the Roman Catholic tradition occur within the context of "sacramental dialogue."[58] Using conceptual blending theory,[59] I will show how the metaphorical concept of sacramental dialogue is informed by features from everyday face-to-face dialogue and how ritual gestures—and the immediate environment—are a fundamental part of the structure and content of the sacramental dialogue itself.

In Chapter 4, I explore the implications and promise of using the insights from the field of gesture studies and conceptual blending theory to re-frame how we think about gestures in ritual settings. Chapter 4 will look specifically at three gestures that are commonly used in Roman Catholic rituals: palm-up open hand (PUOH) gestures, the raising of the Eucharistic elements, and the breaking of the Eucharistic bread. Through these gestures, I will attempt to

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[58] Catholic Church, *Catechism*, n. 1153.
[59] Gilles Fauconnier and Mark Turner, *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities* (New York: Basic Books, 2002).

demonstrate the central role that gestures play in creating and mediating the sacramental dialogue that occurs between ritual participants, the Church, and God.

In Conclusion, I will highlight questions for future study and propose a guide for analyzing ritual gestures that incorporates many of the dimensions of gestures explore in this thesis.

Chapter 2: Everyday Gestures: Gestures according to the field of Gesture Studies

2.1 What is a "Gesture"?

Gestures are a universal feature of communication. Speakers of all languages and in all cultures use gestures to visually depict ideas or things or events, to mediate social interactions, to engage with the material environment, to express affects or emotions, to function as a conceptual tool, and so on. However, even though gestures are pervasive and myriad in everyday life, gestures as a phenomena are remarkably difficult to define. The English word "gesture" derives from the Latin word *gestus*, meaning carriage or posture, and the medieval Latin word *gestura,* meaning bearing or mode of action. In modern day usage, the meaning of the word gesture can vary widely. According to researchers across a variety of fields, a gesture can mean: a "movement expressive of thought or feeling";[60] an action that is performed as a courtesy or to demonstrate "friendly feeling, usually with the purpose of eliciting a favourable response from another";[61] a "sign" or "symbol" performed in a ritual setting;[62] a "conventionalized bodily expression";[63] a "visible action when it is used as an utterance or as a part of an utterance";[64] a

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[60] OED, s.v. "Gesture, n., 4a."

[61] OED, s.v. "Gesture, n., 4b." For example, sending something flowers is often described metaphorically as a "nice gesture."

[62] Catholic Church, *Catechism*, n. 1150: "The Chosen People received from God distinctive signs and symbols that marked its liturgical life. These are no longer solely celebrations of cosmic cycles and social gestures, but signs of the covenant, symbols of God's mighty deeds for his people. Among these liturgical signs from the Old Covenant are circumcision, anointing and consecration of kings and priests, laying on of hands, sacrifices, and above all the Passover."

[63] Ronald Grimes defines both gestures and postures as "conventionalized bodily expression[s]." He contrasts the two by associating gestures with dynamic bodily expression and posture with static bodily expression. Grimes, *The Craft of Ritual Studies*, 341.

[64] Kendon, *Gesture*, 2004, 7.

"visible act of meaning";[65] a "family of human *practices*";[66] a "technique of the body";[67] a

vehicle for "being-in-the-world";[68] an "*exhibition of mediality*";[69] a movement of the body that

does not have a "satisfactory causal explanation"[70] and a "movement through which a freedom is

expressed";[71] a "significant (body) movement";[72] a movement that generates "a dynamic space

of relations" between subjects;[73] "*a functional unit, an equivalent class of coordinated*

movements that achieve some end";[74] "any kind of bodily movement or posture (including facial

expression) which transmits a message to the observer";[75] or, quite simply, "any willful bodily

movement."[76]

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[65] Janet Beavin Bavelas and Nicole Chovil, "Visible Acts of Meaning: An Integrated Message Model of Language in Face-to-Face Dialogue," *Journal of Language and Social Psychology* 19, no. 2 (2000): 163–94.

[66] According to Jürgen Streeck, gestures are a "family of human *practices*: not as a code or symbolic system or (part of) language, but as a constantly evolving set of largely improvised, heterogeneous, partly conventional, partly idiosyncratic, and partly culture-specific, partly universal practices of using the hands to produce situated understandings." Jürgen Streeck, *Gesturecraft: The Manu-Facture of Meaning* (Philadelphia, PA: John Benjamins Pub. Co., 2009), 5.

[67] Carrie Noland, *Agency and Embodiment: Performing Gestures/Producing Culture* (Cambridge, MA: Harvard University Press, 2009), 18–54. See also Marcel Mauss, "Techniques of the Body," trans. Ben Brewster, *Economy and Society* 2, no. 1 (1935 1973): 70–87.

[68] Maurice Merleau-Ponty, *The Phenomenology of Perception*, trans. Colin Smith (London; New York: Routledge, 1962).

[69] Giorgio Agamben, "Notes on Gesture," in *Infancy and History: On the Destruction of Experience*, trans. Liz Hero (London: Verso, 2007), 58. Agamben describes gestures as "*medialities*" because they are actions that do things in the world which have unavoidable ethical consequences. Agamben argues that this is also true of cinema which itself is best characterized in terms of gestures: "*Because cinema has its center in the gesture and not in the image, it belongs essentially to the realm of ethics and politics (and not simply to that of aesthetics).*" Agamben, 56. The idea that gestures are a type of mediality or action which has ethical consequences served as the launching point for a special issue in the journal *Performance Philosophy* on the relationship between gestures and ethics. See Michael Minden, "Ethics, Gesture and the Western," *Performance Philosophy* 3, no. 1 (2017): 40–53; Carrie Noland, "Ethics, Staged," *Performance Philosophy* 3, no. 1 (2017): 67–91; Lucia Ruprecht, "Introduction: Towards an Ethics of Gesture," *Performance Philosophy* 3, no. 1 (2017): 4–22; Rebecca Schneider and Lucia Ruprecht, "In Our Hands: An Ethics of Gestural Response-Ability. Rebecca Schneider in Conversation with Lucia Ruprecht," *Performance Philosophy* 3, no. 1 (2017): 108–25.

[70] Vilém Flusser, *Gestures*, trans. Nancy Ann Roth (Minneapolis, MN: University of Minnesota Press, 2014), 2.

[71] Flusser, 163.

[72] Peter Jackson, "The Literal and Metaphorical Inscription of Gesture in Religious Discourse," *Gesture* 6, no. 2 (2006): 216.

[73] Michael Schandorf, *Communication as Gesture: Media(tion), Meaning, & Movement* (Bingley: Emerald Publishing, 2019), 4.

[74] Armstrong, Stokoe, and Wilcox, *Gesture and the Nature of Language*, 46.

[75] Keith Thomas, "Introduction," in *A Cultural History of Gesture: From Antiquity to the Present Day*, ed. Jan Bremmer and Herman Roodenburg (Cambridge, UK: Polity Press, 1991), 1.

[76] Alan Cienki, "Why Study Metaphor and Gesture?," in *Metaphor and Gesture*, ed. Alan Cienki and Cornelia Müller (Amsterdam; Philadelphia: John Benjamins Pub. Co., 2008), 6.

All of the possible uses and meanings of the word gesture has resulted in different and sometimes contrasting approaches to the study of gestures. In religious studies and theology, for example, a gesture is often understood as a conventional or symbolic bodily expression that is performed as part of a ritual. Symbolic gestures typically represent something (an idea, a value, a disposition, etc.) that lies beyond the gesture itself. The meaning of a conventional gesture is usually determined by a particular tradition and not the individual performing the gesture. In contrast, in the field of gesture studies, gestures are understood to be the spontaneous movements of the body—particularly the hands—that occur during speech in everyday face-to-face dialogue. The aim of this and the following chapter is to try to understand these differing approaches to gestures and to bridge the gap between these fields. This chapter will outline the development of the field of gesture studies and how gestures are understood within the field. The following chapter will explore how gestures are broadly understood within the fields of religious studies and theology. My aim in these chapters is to show that the insights from the field of gesture studies on co-speech gestures in everyday settings are relevant to how religious studies scholars understand gestures in ritual settings. What will hopefully be clear is that many of the perceived differences between ritual gestures and everyday gestures has as much to do with the way they are studied and understood than with any inherent difference between them. In other words, gestures are an analytic category and not a natural one—there is no necessary difference between gestures in ritual and everyday settings. The answer to the question "What is a gesture?" therefore depends on who is asking the question and why.

2.2 "Gestures" in Gesture Studies

2.2.1 A Brief History of the Study of Gestures

The modern field of gesture studies is a diverse and interdisciplinary field that includes a wide range of disciplines—psychology, linguistics, anthropology, cognitive linguistics, cognitive science, neurology, semiotics, primatology, artificial intelligence, etc.—on a wide range of topics—everyday language use, sign languages, communication in great apes, early language development, language acquisition, language evolution, embodied cognition, spatial cognition etc. The interdisciplinarity of the field has led some to describe it as "a wanderer between disciplines,"[77] which is a compliment rather than a criticism because the "interdisciplinary approach [of the field] has become one of the field's major strengths."[78] One example of the strength of the field of gesture studies is that it has changed the way that we understand the nature and function of gestures and their relationship to language and thought. Instead of gestures being merely a conventional bodily action, an expression of affect, or a non-verbal accompaniment to speech, gestures are now considered to be part of speech and thought in one integrated conceptual and communicative system. An important reason why gesture researchers were able to reach this and other important insights is because they have re-defined what a gesture is. For example, David McNeill defines gestures as "the movements of the hands and arms that we see when people talk"[79] and Natasha Abner, Kensy Cooperrider, and Susan Goldin-Meadow similarly define gestures as the "spontaneous movements of the hands and body that universally accompany speech."[80] The aim of this section is to track the development of the field of gesture studies to better understand why such a narrow definition of "gestures" has been

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[77] Jana Bressem, "20th Century: Empirical Research of Body, Language, and Communication," in *Body-Language-Communication: An International Handbooks on Multimodality in Human Interaction*, ed. Cornelia Müller et al., vol. 1, Handbooks of Linguistics and Communication Science 38 (Berlin: De Gruyter Mouton, 2013), 406.
[78] Bressem, 406.
[79] McNeill, *Hand and Mind*, 1.
[80] Abner, Cooperrider, and Goldin-Meadow, "Gesture for Linguists," 1.

especially productive in understanding the relationship between bodily movement and speech and thought.

Prior to the eighteenth century, gestures in the West were studied as part of rhetoric because gestures were thought to primarily serve pragmatic or paralinguistic functions alongside the *actio* or delivery of speech.[81] While some in the ancient Western world had reservations about the use of gestures for rhetorical delivery of speech, such as Aristotle (c. 384 – c. 322 BCE), others, such as Cicero (c. 106 – c. 43 BCE) and Quintilian (c. 35 – c. 100 CE), were far more positive about the usefulness of gestures for the delivery of speech. Speakers regularly use their posture, gaze, and hand movements to organize a discourse and to punctuate the content of their speech. Cicero said that movements of the body complement speech and can express "the sentiments and passions of the soul"[82] and Quintilian considered gestures of the hands to be a natural or universal language of humankind, capable of such a high level of expression that "the hands may almost be said to speak":

> As for the hands, without which all action [i.e., *actio* or delivery] would be crippled and enfeebled, it is scarcely possible to describe the variety of their motions, since they are almost as expressive as words. For other portions of the body merely help the speaker, whereas the hands may almost be said to speak. Do we not use them to demand, promise, summon, dismiss, threaten, supplicate, expression aversion or fear, question or deny? Do we not employ them to indicate joy, sorrow, hesitation, confession, penitence, measure, quantity, number and time? Have they not power to excite and prohibit, to express approval, wonder or shame? Do they not take the place of adverbs and pronouns when we point at places and things? In fact, though the peoples and nations of the earth speak a multitude of tongues, they share in common the universal language of the hands.[83]

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[81] Adam Kendon, "Pragmatic Functions of Gestures: Some Observations on the History of Their Study and Their Nature," *Gesture* 16, no. 2 (2017): 157–75.

[82] Cicero as quoted in Geoffrey Beattie, *Rethinking Body Language: How Hand Movements Reveal Hidden Thoughts* (New York, NY: Routledge, 2016), 43. Beattie also notes that Cicero described the body as a musical instrument wherein "nature has assigned to every emotion a particular look and tone of voice and bearing of its own; and the whole of a person's frame and every look on his face and utterance of his voice are like the strings of a harp, and sound according as they are struck by each successive emotion." Beattie, 43.

[83] Quintilian, *The Instiutio Oratoria of Quintilian,* Translated by H. E. Butler (New York: G. P. Putnam and Sons, 1922), Book XI.III.85-87 quoted in Kendon, *Gesture,* 18.

Quintilian's idea that hand gestures are a kind of universal language of humankind is also present in the first book of St. Augustine's *The Confessions*, where he characterizes bodily movement as "the natural vocabulary" of humankind.[84] For Augustine, gestures or movements of the body, particularly ostensive bodily movements such as pointing, are natural because they allow individuals to display their intentions without the use of words or language.[85] This is why infants, who do not yet have language, are able to communicate their own intentions and understand the intentions of others. As Augustine says of his own experience,

> *By groans and various sounds and various movements of parts of my body I would endeavour to express the intentions of my heart* to persuade people to bow to my will. But I had not the power to express all that I wanted nor could I make my wishes understood by everybody. My grasp made use of memory: when people gave a name to an object and when, following the sound, *they moved their body towards that object*, I would see and retain the fact that that object received from them this sound which they pronounced when they intended to draw attention to it. Moreover, *their intention was evident from the gestures which are, as it were, the natural vocabulary of all races, and are made with the face and the inclination of the eyes and the movements of other parts of the body*, and by the tone of voice which indicates whether the mind's inward sentiments are to seek and possess or to reject and avoid.[86]

Despite Augustine's interest in the expressive power of bodily movement and his immense influence on the thought of the Middle Ages, interest in the communicative role of gestures in the delivery of speech declined markedly in the Middle Ages. This decline has been attributed both to the loss of Cicero's and Quintilian's writing shortly after the ancient period and to the emergence of the highly ritualized function of gestures in medieval social life. According to Claude Schmitt, while gestures were prevalent and pervasive in the Middle Ages and some

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[84] Saint Augustine, *The Confessions*, trans. Henry Chadwick, Oxford World's Classics (Oxford: Oxford University Press, 1991), Book 1.8.

[85] See Chad Engelland, *Ostension: Word Learning and the Embodied Mind* (Boston: MIT Press, 2014), 85-105, Chapter 5: "Augustine: Word Learning by Understanding the Movements of Life."

[86] Augustine, *The Confessions*, Book 1.8. Emphasis added.

even refer to the period as "a 'culture of gestures' or a 'gestural culture',"[87] interest in gestures was less on their role in the delivery of speech and more on how they functioned as disciplined bodily techniques or symbolic actions that often took the place of words in social or ritual life. Schmitt notes that since "very few people could write," legal commitments and contracts

> [H]ad to be made through ritual gestures, formal words, and symbolic objects (a reliquary, the host, a sword, etc.). Gestures transmitted political and religious power; they made such transmission public, known by all, and they gave legal actions a living image, as for example when a lord received in his hand the homage of his vassals or when a bishop laid his hand on the head of a newly consecrated priest. Gestures bound together human wills and human bodies.[88]

The important role of ritualized gestures in religious settings is especially evident in the writings of Hugh of St. Victor who, in his *De institutione novitiorum* (On the Formation of Novices), is said to have "provided the most elaborate theory of gestures of the entire Middle Ages."[89] For Hugh, ritual gestures are a "discipline" or a "bodily technique" of the monastic program which is designed to cultivate the physical, intellectual, and moral aspects of a person.[90] According to Talal Asad, "Hugh of St. Victor's conception of ritual gesture and speech as the discipline of the body that is aimed at the proper ordering of the soul expresses very well the central purpose of the monastic program."[91] Hugh of St. Victor's understanding of the

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[87] Schmitt, "The Rationale of Gestures in the West: Third to Thirteenth Centuries," 59.

[88] Schmitt, 60.

[89] Schmitt, 67.

[90] According to Hugh of St. Victor, "Gesture is the movement and configuration of the body appropriate to all action and attitude… *Gestus* [gesture] designates not so much a unique gesture as the animation of the body in all its parts. It describes outwardly a *figure* presented to the gaze of others… even as the soul inside is under the gaze of God." Jean-Claude Schmitt, "Le geste, la cathédrale et le roi," *L'Arc* 72 (1978): 9-10 quoted in Talal Asad, *Genealogies of Religion: Discipline and Reasons of Power in Christianity and Islam* (Baltimore, MD: John Hopkins University Press, 1993), 138. See also Mauss, "Techniques of the Body." For Mauss, movements of the body were a reflection of culture and society shapes the way that people move in the world. Mauss was more interested in bodily techniques or gestures as they express the beliefs and structures of a culture or society than he was in the psychological and communicative dimension of gestures as they occur in conversation or social interactions. Because of that, his contribution to modern approaches to gestures is often overlooked. Nevetherless, Mauss's contribution to our understanding of gestures is important because, as Carrie Noland puts it, "The primary argument of Mauss's deceptively modest text…is that gesturing is absolutely central to the cultural construction of the body." Noland, *Agency and Embodiment: Performing Gestures/Producing Culture*, 22.

[91] Asad, *Genealogies of Religion*, 139.

sacraments fits into this larger scheme of discipline or bodily techniques which are of vital importance to everyday life and not simply a symbolic expression of some hidden reality.

After the Middle Ages, interest in the communicative function of gestures in relation to speech increased due to a number of developments. First, around the turn of the fifteenth century, the writings of Cicero and Quintilian were rediscovered, which contributed to a revival of the idea that gestures could be seen as a valuable partner to speech and could be taught and utilized for public ends.[92] Second, gestures increasingly became a social marker of "education and nobility."[93] A person's ability to control their gestures in public was a visible indicator of their social status and so it became increasingly important for an individual to be able to manage their gestures when they spoke. Third, the perceived role of the gestures in Roman Catholic rituals began to shift with the Protestant Reformation in the sixteenth century. In Roman Catholic rituals, the priest was seen a "manager" of a ritual, performing prescribed gestures according to an established liturgy, but in Protestant rituals, the priest or minister was more of a preacher or "persuader" from the pulpit, and it became important for preachers to utilize their gestures as rhetorical tools alongside speech.[94] Fourth, around the beginning of the fifteenth century, increased European travel to different parts of the world led to more contact with non-European peoples and languages. Despite a lack of common language and common heritage, Europeans and indigenous peoples discovered that they were still able to communicate with each other through gestures.[95] This experience of the universality of gesture contributed to the Renaissance

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[92] Kendon, *Gesture*, 2004, 20.

[93] David McNeill, *Gesture and Thought* (Chicago: University of Chicago Press, 2005), 14.

[94] Kendon, *Gesture*, 2004, 21. This emphasis on the rhetorical power of gestures in religious settings was not exclusive to Protestants, though. Adam Kendon notes that gestures for rhetorical delivery also "began to be taught systematically in universities and schools, especially those runs by Jesuits" who also "recognized the importance of skill in acting" in education. Kendon, 21.

[95] See for example Céline Carayon, *Eloquence Embodied: Nonverbal Communication among French and Indigenous Peoples in the Americas* (Williamsburg, Virginia and Chapel Hill: Omohundro Institute of Early American History and Culture and the University of North Carolina Press, 2019).

idea that gesture was a kind of "natural" form of communication common and that "universal principles of expression and communication could be found in gesture,"[96] which was reminiscent of the ideas expressed by Quintilian and Augustine. For example, John Bulwer, whose books *Chirologia: or the Naturall Language of the Hand; Chironomia: or the Art of Manual Rhetoricke* (1644) were the first books in English dedicated entirely to gesture, argued that because gestures are a visible "language of the hand" and do not require a conventional linguistic system to be understood, gestures have a "natural" origin in the physiology of the body, making them "the only speech which is natural to man."[97] As Bulwer put it, "gesture is the only speech and general language of the human nature. It speaks all languages, and as universal character of reason, is generally understood and known by all nations."[98]

Debates about whether gesture were a universal language and whether language "could have a natural, rather than a divine origin" continued into the eighteenth and nineteenth centuries amongst philosophers and scientists such as Étienne Bonnot de Condillac (1715-1780), Denis Diderot (1713-1784) and Charles Darwin (1809-1882).[99] Following Darwin, evolutionary theory made it possible to understand language as a process that developed over time and gestures became a top candidate for a possible universal precursor to speech. However, the idea that gestures were a possible a precursor to speech also led to the damaging idea that many non-

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[96] Kendon, *Gesture*, 2004, 22. See also Jeffrey Wollock, "Renaissance Philosophy: Gesture as Universal Language," in *Body-Language-Communication: An International Handbooks on Multimodality in Human Interaction*, ed. Cornelia Müller et al., vol. 1, 2 vols., Handbooks of Linguistics and Communication Science (Berlin: De Gruyter Mouton, 2013), 364–78.

[97] John Bulwer, *Chirologia or the Natural Language of the Hand, etc. [and] Chironomia or the Art of Manual Rhetoric, etc.* (London: Henry Twyford. Edited with an Introduction by James W. Cleary. Carbondale and Edwardville, Illinois: Southern Illinois University Press, 1974 [1644]), 16 quoted in Kendon, *Gesture*, 2004, 25. Kendon notes that Bulwer's view of language has similarities to some modern views of language in fields such as cognitive linguistics because both approaches consider language to be a phenomenon that emerges from the body.

[98] John Bulwer, *Chirologia or the Natural Language of the Hand, etc. [and] Chironomia or the Art of Manual Rhetoric, etc.* (London: Henry Twyford. Edited with an Introduction by James W. Cleary. Carbondale and Edwardville, Illinois: Southern Illinois University Press, 1974 [1644]), 3 quoted in Beattie, *Rethinking Body Language: How Hand Movements Reveal Hidden Thoughts*, 46.

[99] Kendon, *Gesture*, 2004, 35.

European cultures, whose language appeared more "gestural" to European observers, were thought of as more "primitive" and therefore representative of an earlier stage of human evolution. As Edward Tylor (1832-1917), an anthropologist who subscribed to this idea, put it, gestural languages "[tend] to prove that the mind of the uncultured man works in much the same way at all time everywhere."[100] By the twentieth century, however, "the idea that primitive cultures, so-called, might be representatives of an earlier stage in human evolution, was no longer accepted"[101] and the quest for the origin of language through gesture was largely forgotten.[102] As a consequence, there was a "marked decline" in the interest in gesture and its relation to speech in the first half of the twentieth century.[103]

Renewed interest in the communicative function of gestures arose in the middle of the twentieth century from a few different places. In 1941, David Efron, a student of the famed linguist Franz Boas, published an empirical study of gesture where he compared the gesturing styles of east European Jewish immigrants and south Italian immigrants with that of second-generation immigrants of the same groups in Manhattan, New York. His aim was to examine whether gesturing styles are natural or culturally determined. Efron found that while gesturing can vary significantly between racial groups, gesturing styles were nurtured and a "matter of cultural tradition, and not a matter of racial inheritance," as some, like those in Nazi Germany,

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[100] E. B. Tylor, *Researches into the Early History of Mankind* (London: John Murray, 1878): 88 quoted in Beattie, *Rethinking Body Language: How Hand Movements Reveal Hidden Thoughts*, 47. See also Kendon, *Gesture*, 2004, 63–64.

[101] Kendon, *Gesture*, 2004, 64.

[102] That is, until the late twentieth century and early twenty-first century when new theories on the origin of language emerged and "gesture-first" hypotheses on the evolution of language once again gained prominence. See, for example, Michael A. Arbib, *How the Brain Got Language: The Mirror System Hypothesis* (Oxford: Oxford University Press, 2012); Michael A. Arbib, "In Support of the Role of Pantomime in Language Evolution," *Journal of Language Evolution* 3, no. 1 (2018): 41–44; Michael C. Corballis, "Language as Gesture," *Human Movement Science* 28, no. 5 (2009): 556–65; Michael Tomasello, *Origins of Human Communication* (Cambridge, MA: MIT Press, 2010).

[103] Kendon, *Gesture*, 2004, 61. See also Bressem, "20th Century: Empirical Research of Body, Language, and Communication."

had supposed.[104] In other words, Efron showed that gestures are culturally learned, not biologically determined. Efron's study was the first of its kind to do a cultural empirical comparative examination of spontaneous gestures as they occur in everyday social interactions and was influential in the later development of the field of gesture studies.

Around the same time but on the continent of Europe, the French philosopher Maurice Merleau-Ponty was wrestling with questions of embodiment and the relationship between perception, language and thought from a phenomenological perspective. In his book, *Phenomenology of Perception*,[105] first published in French in 1945, Merleau-Ponty rejected "empiricist" and "intellectualist" interpretations of language which understood language as a material causal process or an external accompaniment to thought, respectively. For Merleau-Ponty, both approaches encourage a problematic mind-body dualism which does not adequately appreciate the way a person's body contributes to their perception of the world and their use of language in the world. Merleau-Ponty argued that language is not an objective description of the world nor an external representation of an internal thought but rather an embodied, situated activity that depends on "the subject's taking up of a position in the world of his meanings."[106] Bodily movement and gestures play a prominent role in Merleau-Ponty's understanding of language and thought because, as he wrote, "the body is our vehicle of being in the world, and having a body is, for a living creature, to be involved in a definite environment."[107] One well-cited example that Merleau-Ponty offers is a gestural expression of anger, such as shaking one's fist at another. In this gesture, Merleau-Ponty does not "see anger or a threatening attitude as a

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[104] Kendon, *Gesture*, 2004, 66. David Efron's empirical study was done in no small part to counter racist and eugenic positions that were prevalent at the time.
[105] Merleau-Ponty, *The Phenomenology of Perception*.
[106] Merleau-Ponty, 225.
[107] Merleau-Ponty, 94.

psychic fact hidden behind the gesture, I read anger in it. The gesture *does not make me think* of anger, it is anger itself."[108] Language therefore *accomplishes* thought in and through the moving body in a particular environment.

For Merleau-Ponty, the question wasn't whether gestures function like speech but whether speech functions like gestures: "The spoken world is a gesture, and its meaning, a world."[109] According to Merleau-Ponty, speech is a "genuine gesture" because it is an embodied taking up of a position in the world towards something significant and not merely an external representation of an internal thought.[110] The meaning of a gesture—and by extension speech—is inherent in situated bodily movement. Merleau-Ponty's work on embodiment and language has had a large impact on the way gestures are now studied and understood. Many linguists today similarly take a "gestural" view of speech where words are analyzed as gestural complexes rather than as discrete units that are distinct from the movement of one's body.[111] David Armstrong, William Stokoe, and Sherman Wilcox, for example, argue for a "gesture-framework of language" because the key to a "general model encompassing both spoken and signed languages…lies in describing both with a single vocabulary, the vocabulary of neuromuscular activity—i.e. gesture."[112] Merleau-Ponty's significance to the field of gesture studies is perhaps most evident in the work of David McNeill who similarly describes language as a form of

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[108] Merleau-Ponty, 214.
[109] Merleau-Ponty, 214.
[110] Merleau-Ponty, 213: "The spoken word is a genuine gesture, and it contains its meaning in the same way as the gesture contains its. This is what makes communication possible."
[111] See for example J. A. Kelso, E. L. Saltzman, and B. Tuller, "The dynamical perspective on speech production: data and theory," *Journal of Phonetics* 14 (1986): 31 quoted in Armstrong, Stokoe, and Wilcox, Gesture and the Nature of Language, 44: "[W]ords are not simply strings of individual gestures, produced one after the other; rather, each is a particular pattern of gestures, orchestrated appropriately in time and space."
[112] Armstrong, Stokoe, and Wilcox, 6. According to Armstrong, Stokoe, and Wilcox, a gesture-framework of language assumes an evolutionary perspective that grounds language in "*embodied action*" and acknowledges "that the cognitive structures that underlie language emerge from perceptually guided gestures, prototypically those made by the hands." Armstrong, Stokoe, and Wilcox, 52.

"being-in-the-world" and even says that his embodied understanding of language (which is also influenced by Martin Heidegger) is largely "an extension of Merleau-Ponty's 'existential content of speech' (and gesture)."[113] For McNeill, gestures are not an "external accompaniment" to speech or a "representation" of meaning, gestures instead "inhabit" meaning.[114]

In the 1960's, around the same time that Merleau-Ponty's book *Phenomenology of Perception* became available to English speakers (1962), there were increasing efforts to try to make sense of how our bodies communicate in non-verbal languages such as sign languages. Whereas Merleau-Ponty was interested in showing how language functions like gestures, early researchers of sign languages were interested in showing how gestures function like languages. The motivation for this approach was in large part because sign languages were not considered to be fully developed linguistic systems and were often said to be "nothing more than pantomime."[115] It was widely assumed at the time that sign languages lacked the adequate tools for abstract and complex thinking and communication. According to Sherman Wilcox, "Signed languages were rarely, if ever, recognized as language; rather, they were commonly seen as nothing more than depictive gestures. Gesture was regarded as a universal language, more closely related to nature than is spoken language."[116] In 1960, William Stokoe challenged this view in an influential paper where he analyzed the linguistic dimensions of American Sign Language (ASL) and argued that ASL was a linguistic system in its own right and should be regarded as a fully developed language.[117] Stokoe characterized the physical appearance of manual signs of ASL according to three parameters or phonological classes that remain central to

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[113] McNeill, *Gesture and Thought*, 99.
[114] McNeill, 92.
[115] Goldin-Meadow and Brentari, "Gesture, Sign, and Language," 2.
[116] Wilcox, "Speech, Sign, and Gesture," 126.
[117] William Stokoe, "Sign Language Structure: An Outline of the Visual Communication of the American Deaf," in *Studies in Linguistics*, vol. 8, Occasional Papers (Buffalo, NY, 1960).

sign language research today: handshape, motion, and location.[118] He argued that these

parameters show that sign languages exhibit a linguistic structure and a "duality of patterning"[119]

that was long assumed to be lacking in sign languages. Even though sign language research did

not really expand until the 1970's and sign language continues to be widely misunderstood,[120]

Stokoe's 1960 paper helped to change the perception around the linguistic capacity of sign

languages. As Charles Hockett famously put it, we now consider ASL to be structurally and

functionally "as much like a spoken language as it possibly could be, given the difference in

channel."[121]

Important efforts were also being made in the 1960's to categorize the nature and

function of non-verbal behaviour in communication more generally. Paul Ekman and Wallace V.

Friesen's 1969 paper, "The Repertoire of Nonverbal Behaviour: Categories, Origins, Usage, and

Coding,"[122] categorized non-verbal behaviours into 5 categories: (1) "affect displays":

behaviours that convey a speaker's emotions and are primarily located in the face; (2)

"regulators": movements of the head or body that maintain the social interaction or give-and-take

between a speaker and listener in a conversation; (3) "adaptors": habitual hand movements (eg.

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[118] Current sign language and gesture research generally accepts four basic parameters of form: handshape, movement, location, and orientation. Other parameters can include: other body parts (head, legs, torso), handedness (left or right), and non-manual signals or markers (e.g., shape of the mouth, raising of the eyebrows, etc.).

[119] Duality of patterning refers to the ability of language to form meaningful units (i.e. words) from non-meaningful units (i.e. sounds). In the case of sign languages, Stokoe demonstrated that meaningful units (i.e. signs) can emerge from non-meaningful actions (i.e. handshape, motion, location) in a highly developed structure that resembles the linguistic structure of spoken languages. See also Wilcox, "Speech, Sign, and Gesture."

[120] Karen Emmorey identifies four persistent myths about sign languages: 1) There is a universal sign language; 2) sign languages are based on oral languages; 3) sign languages cannot convey the subtleties and complex meanings that spoken languages can; and 4) sign languages are made up of pictorial gestures and are similar to mime. Karen Emmorey, "Language and Space," in *Space: In Science, Art, and Society*, ed. F. Penz, G. Radick, and R. Howell (Cambridge: Cambridge University Press, 2004), 24–27.

[121] Charles Hockett, "In search of Jove's brow," *Am. Speech* 53 (1978): 273 quoted in Adam Kendon, "Semiotic Diversity in Utterance Production and the Concept of 'Language,'" *Philosophical Transactions of the Royal Society B: Biological Sciences* 369, no. 1651 (2014): 2.

[122] Paul Ekman and Wallace V. Friesen, "The Repertoire of Nonverbal Behavior: Categories, Origins, Usage, and Coding," *Semiotica* 1, no. 1 (1969): 49–98.

pushing up glasses, rubbing chin, etc.); (4) "emblems": conventional hand movements (eg. thumbs up); and (5) "illustrators": hand movements that are part of a speech act and often function to "illustrate" what is said in speech. These categories have since been modified but they remain influential in the field of gesture studies. Most of the attention of gesture researchers today has been given to the categories of "emblems," "regulators," and "illustrators." In this thesis, I refer to the latter two categories as "interactive" and "representational" gestures, respectively (more on this below in section 2.2.4.2).

There were a few more developments in the 1980's and '90s that led to the emergence of what can be called the modern field of gesture studies in the 1990's and 2000's.[123] The first was the development of the fields of cognitive science and cognitive linguistics and the insight that our capacity for language and thought depends on our bodily experience of the world. Prior to these newly developed cognitive approaches to language and thought, linguistic research largely ignored gestures as a companion of spoken language. As Alan Cienki and Cornelia Müller note, "It is only with the cognitive turn in the eighties and nineties of the 20th century that co-verbal gesturing was considered a valuable phenomenon to study."[124] Gestures became of topic of interest to cognitive scientists and cognitive linguists because they affirm "the embodied nature of meaning and the grounding of abstract conceptions in perceptual and motor experience"[125] and they provide "another window to understand how we structure concepts, and how we use those structures while speaking."[126] As we will explore in greater detail in Chapter 3, gestures

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[123] There is no "official" inauguration of the field of gesture studies. A few important signposts that mark the beginnings of an organized field called gesture studies were David McNeill's publication of *Hand and mind: What gestures reveal about thought* in 1992, which was the first in-depth study of gestures as a substantive phenomenon of speech and thought, and the inaugural issue of the journal *Gesture* in 2001, and the formation of the International Society for Gesture Studies in 2002.

[124] Cienki and Müller, "Metaphor, Gesture and Thought," 486.

[125] Langacker, "Metaphoric Gesture and Cognitive Linguistics," 249.

[126] Cienki and Müller, "Metaphor, Gesture and Thought," 493.

provide evidence for how general conceptual structures like metaphoricity and iconicity are rooted in bodily movement and how those conceptual structures shape the way we understand and experience religious rituals.

Another important development in the 1980's and 1990's was the introduction of video technology. Even though gestures are visible and theoretically available for anyone to observe, the subtle and ephemeral nature of gestures makes them very difficult to analyze in real-time. As Jürgen Streeck notes, "The human mind cannot consciously register every detail that lends structure and meaning to a moment of interaction: analysis of the microscopic level of human communication had to await the invention of film. Only film could enable researchers to disclose the many tacit background processes that participants and observers attend to."[127] The use of video technology and gesture analysis techniques like micro-analysis[128] allowed early gesture researchers like Adam Kendon and David McNeill to analyze fine-grained communicative actions in everyday social interactions and observe how such bodily movements are not just non-verbal accompaniments to speech but rather *part of* language itself.

2.2.2 Gestures are *Part of* Language

While there has been interest in the communicative power of gestures and their relationship to speech in the West, gestures have largely remained on the outside looking in when it comes to our general understanding of language. In this section, I will briefly highlight two popular and problematic assumptions about language that gesture researchers have argued

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[127] Streeck, *Gesturecraft*, 32.
[128] Microanalysis is the detailed analysis of a video recording of a social interaction. Microanalysis is helpful in the study of gesture because the precise meaning and function of a gesture and its relationship to words can be subtle and difficult to decipher. Microanalysis allows researchers to study communication as it actually occurs in social interactions and to uncover hitherto unknown or overlooked features of human communication, like gestures.

against in order to come to the conclusion that gestures should be considered *part of* language: (1) verbal expression is distinct from non-verbal action; and (2) language is non-iconic.

First, language has traditionally been understood as a system of symbols or discrete signs that are structured by grammatical rules and communicated verbally (or textually) through words. As linguist Lorenza Mondada observes, "Throughout its history, linguistics has been heavily based on the idea of the autonomy of language and has largely limited communication to language: this has produced a logocentric view of language."[129] Such a logocentric view of language treats language as a product of the mind, not of the body, and it privileges verbal forms of bodily expression over non-verbal bodily actions. Anthropologist John Haviland refers to this common approach to language as "subtractive" because non-verbal behaviours like gestures are removed from what constitutes language.[130] Gestures, as a result, are typically characterized as extra- or paralinguistic and therefore qualitatively and even ontologically distinct from verbal speech or language.

David Armstrong, William Stokoe, and Sherman Wilcox highlight two problematic assumptions of any approach to language that assumes an ontological division between verbal and non-verbal forms of communicative expression.[131] First, it assumes that grammatical structure is independent of communicative meaning. According to Armstrong et al., this assumption has led to a series of "pre-empirical postulates":

> (1) Language is a separate module of the mind/brain, not part of 'general cognition'; (2) Structuralism in the analysis of language; that is, language structure can be analyzed independently of its communicative function; (3) The sign-relation between the linguistic code and its mental designatum is arbitrary, unlike the obvious iconicity seen in pre-human communication.[132]

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[129] Mondada, "Challenges of Multimodality," 340.

[130] John B. Haviland, "Gesture," in *A Companion to Linguistic Anthropology*, ed. Alessandro Duranti (Malden, MA: Blackwell Publishing, 2003), 198.

[131] Armstrong, Stokoe, and Wilcox, *Gesture and the Nature of Language*, 29–31.

[132] Armstrong, Stokoe, and Wilcox, 29.

The second problem is that it assumes that mental processing is independent of our physical moving bodies. This second assumption has led to a fourth pre-empirical postulate which has dominated the study of language in the twentieth century: "(4) Some abstract, idealized entity—be it *langue* or *competence*—is the 'object' of linguistic analysis."[133] Because this approach to language assumes that language is organized and structured independently of the body, "it ignores the deep historical and neurological linkages between oral and manual gestures, and between human movement, cognition, and language."[134]

While gestures have always been acknowledged to be in some respect non-verbal, the explicit categories of "verbal" and "non-verbal" emerged in the middle part of the twentieth century in large part because of attempts to apply information theory and cybernetics to human communication.[135] As Kendon notes, human communication at that time was increasingly "conceived of as if it were a *code* in an information transmission system."[136] The two "codes" that comprised human communication were "analogical" codes and "digital" codes which aligned with non-verbal and verbal categories, respectively. These differing categories of communication arose because they were understood to *encode* communicative information differently.[137] Non-verbal forms of communication such as gestures encode information analogically (i.e., iconically, pictorially, indexically) and are typically expressed in visual and

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[133] Armstrong, Stokoe, and Wilcox, 29.

[134] Armstrong, Stokoe, and Wilcox, 31.

[135] Kendon, *Gesture*, 2004, 70. See also Bressem, "20th Century: Empirical Research of Body, Language, and Communication," 396.

[136] Kendon, *Gesture*, 2004, 70. Emphasis added.

[137] Roy Rappaport helpfully describes the distinction between analogical and digital forms of communication using the analogy of "measuring and counting": "The term 'analogic' refers to entities and processes in which values can change through continuous imperceptible gradations in, for instance, temperature, distance, velocity, influence, maturation, mood, prestige and worthiness. Signals, like other phenomena, may be analogic. Cries of pain, for instance, can proceed through continua of imperceptibly increasing intensity that may indicate the intensity of the suffering they signify. The term 'digital,' in contrast, refers to entities or processes whose values change not through continuous infinitesimal gradations but by discontinuous leaps." Roy A. Rappaport, *Ritual and Religion in the Making of Humanity* (Cambridge: Cambridge University Press, 1999), 87.

spatial modalities. Analogical forms of communication are good at communicating visuo-spatial information like size, shape, position, or movement. Gestures are a prototypical form of analogical communication because they are able to communicate gradations such as 'upward and to the left' vs. 'upward and slightly to the left' vs. 'upward and to the far left' in ways that words cannot.[138] A good deal of literature exists on the role that gestures play in spatial cognition and how they can represent different kinds of visuo-spatial information.[139] Natasha Abner et al. note that gestures "seem to be designed" for the task of communicating visuo-spatial information.[140] In English, prepositions such as in, on, within, into, upon, over, upward etc. cannot convey visible or spatial information in the way that gestures can. In contrast, verbal forms of communication encode information digitally (i.e., linear, conventional, categorical, discrete) and are typically expressed in oral and auditory modalities. Digital forms of communication such as speech are good at communicating substantive and propositional information like general categories (e.g., objects, actions, events, etc.), abstract ideas (e.g., justice), and arbitrary names (e.g., John).[141]

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[138] Emmorey, "Language and Space," 33.

[139] See for example Martha W. Alibali, "Gesture in Spatial Cognition: Expressing, Communicating, and Thinking About Spatial Information," *Spatial Cognition & Computation* 5, no. 4 (2005): 307–31; Kensy Cooperrider and Susan Goldin-Meadow, "When Gesture Becomes Analogy," *Topics in Cognitive Science* 9, no. 3 (2017): 719–37; A. B. Hostetter and M. W. Alibali, "Visible Embodiment: Gestures as Simulated Action," *Psychonomic Bulletin & Review* 15, no. 3 (2008): 495–514; Sotaro Kita, Martha W. Alibali, and Mingyuan Chu, "How Do Gestures Influence Thinking and Speaking? The Gesture-for-Conceptualization Hypothesis.," *Psychological Review* 124, no. 3 (2017): 245–66.

[140] Abner, Cooperrider, and Goldin-Meadow, "Gesture for Linguists," 442. See also Alibali, "Gesture in Spatial Cognition."

[141] Examples taken from Bavelas and Chovil, "Visible Acts of Meaning," 187. The differing modalities between speech and gestures also produces notable differences between spoken and sign languages. Karen Emmorey notes that complex words in spoken languages are created through a "combinatorial process," where prefixes and suffixes are added to a word stem. In contrast, complex signs in sign languages are created by "nonconcatenative processes, i.e., process that do not add a morpheme to the beginning or end of the sign." Instead, sign languages "superimpose" various movement patterns onto a sign stem. This occurs in part because "the visual system is very good at perceiving information simultaneously, whereas the auditory system is very good at making fine temporal distinctions within a linear string." Emmorey sums up the phonological differences between sign and spoken languages this way: "Sign languages prefer simultaneous morphology in which inflections (movement patterns) are superimposed on a verb, whereas spoken languages prefer linear affixation with prefixes and suffixes." Emmorey, "Language and Space," 29–33.

The "apparently clear dichotomy between 'analogical' and 'digital' encoding in human communication"[142] has led to the strongly held assumption that non-verbal forms of communication function separately and should be studied as such. As Adam Kendon characterizes this perspective, "visible bodily actions may be interesting and illuminating from the point of view of what they may reveal about the speaker's mental processes or otherwise unobservable mental imagery, but they are not regarded as part of the talk itself, because, it seems, we can almost always make ourselves clearly understood in words alone."[143] Verbal language is tasked with communicating the substantive or propositional content of a discourse whereas gestures are part of a "separate, less well-controlled 'channel' dedicated to emotional expression"[144] or to the pragmatic "processes by which interpersonal relations are established and maintained."[145] Gregory Bateson, for example, suggested that "iconic (i.e., analogical) communication serves functions totally different from those of language and, indeed, perform functions which verbal language is unsuited to perform…It seems that the discourse of nonverbal communication is precisely concerned with matters of relationship."[146]

The assumed "ontological division" between verbal and non-verbal categories aligns with other "epistemological divisions in linguistics," such as that between linguistic competence (often considered "the purview of linguistic proper") and linguistic performance, and between semantics and pragmatics.[147] As a result, in the middle part of the twentieth century, gestures that accompanied and contributed to the content of speech—which eventually became the purview of

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[142] Kendon, *Gesture*, 2004, 70–71.
[143] Kendon, "Semiotic Diversity in Utterance Production and the Concept of 'Language,'" 4.
[144] Janet Beavin Bavelas, "Gestures as Part of Speech: Methodological Implications," *Research on Language & Social Interaction* 27, no. 3 (1994): 211.
[145] Kendon, *Gesture*, 2004, 71.
[146] Gregory Bateson, "Redundancy and coding," In *Animal Communication: Techniques of Study and Results of Research*, Thomas A. Sebeok, ed. (Bloomington: Indiana University Press 1968): 614-615 quoted in Kendon, 71.
[147] Alan Cienki, "Gesture and Pragmatics: From Paralinguistic to Variably Linguistic," in *The Routledge Handbook of Pragmatics*, ed. Anne Barron, Yueguo Gu, and Gerard Steen (London; New York: Routledge, 2017), 61–62.

the field of gesture studies—were without a theoretical framework to be understood. Gestures

that occur with speech—or gesticulations or co-speech gestures as they are commonly referred to

today—did not fit into the field of linguistics because the field was solely concerned with verbal

utterances. Nor did they fit within the concept of non-verbal behaviour because, as later research

demonstrated, gestures *do* contribute to the semantic content of speech. As a result of this

disciplinary mismatch, co-speech gestures were overlooked as a proper object of study:

> So long as the focus of linguistics was purely on spoken utterance, and
> especially as this focus was upon idealized utterances abstracted from the
> vagaries of actual usage, the relationship between gesture and speech would
> remain obscure. So long as nonverbal communication was considered sharply
> separate from verbal communication, attention in this field would be directed
> mainly to those aspects of behaviour that contributed to the maintenance or
> change of interactions or relationships, or which were thought to reveal
> attitudes and characteristics of persons that are not revealed through a study of
> what is spoken. Gesture did not seem to fit here, either. It thus fell between
> two stools.[148]

David McNeill's 1985 paper, "So you think gestures are nonverbal?", directly challenged

the assumption that gestures are non-verbal and fundamentally distinct from speech.[149] Adam

Kendon credits this paper as "setting the framework for much of what has since been done in

'gesture studies.'"[150] David McNeill argues that gestures are not an external accompaniment to

speech but rather an integral part of the content and production of speech itself and should

therefore not be understood as being non-verbal. For McNeill, gestures that occur with speech

visibly display the substantive or propositional content of speech and thought and offer a

"window" onto the mental and cognitive processes that govern thinking and speaking which are

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[148] Kendon, *Gesture*, 2004, 72.
[149] David McNeill, "So You Think Gestures Are Nonverbal?," *Psychological Review* 92, no. 3 (1985): 350–71.
[150] Kendon, "Pragmatic Functions of Gestures," 158.

not always communicated in speech.[151] Janet Bavelas argues in a similar vein that "the notion of nonverbal communication as a separate 'channel' from verbal communication is based on a deep confusion of physical source with linguistic function. It makes no more sense to suggest that the linguistic function of a gesture is determined by its physical manifestation than to suggest that the function of a word is determined by the letter it begins with or the phonemes it contains."[152]

The second closely related problematic assumption which has prevented gestures from being understood as part of language is the iconic nature of many gestures. Traditionally understood, iconicity is the resemblance between a sign and its referent. In the middle part of the twentieth century, especially, it was assumed that for a sign to be linguistic it must have an arbitrary relationship to its referent so that the meaning of a linguistic sign is determined by social conventional rather than an iconic resemblance between the sign and its referent. Verbal communication like spoken and written words were assumed to be arbitrary because the form of the sign (the word) is unrelated to its referent (what the word means). By contrast, gestures and sign language are often—but not always—iconic, meaning that the form of a gesture will often resemble or share a likeness to its referent. For example, if a speaker were to explain a set of directions they will often use the shape or movement of their hands to depict certain aspects of the route, such as an intersection, a turn in the road, or the location of landmarks along the road. A gesture which depicts one of these aspects, such as a right hand turn, is iconic in a way that the words, "then turn right," is not. The shape and movement of a speaker's gestures are "motivated"

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[151] David McNeill and Susan D. Duncan, "Growth Points in Thinking-for-Speaking," in *Language and Gesture*, ed. David McNeill (Cambridge, UK: Cambridge University Press, 2000), 142. See also Abner, Cooperrider, and Goldin-Meadow, "Gesture for Linguists," 444.

[152] Bavelas, "Gestures as Part of Speech: Methodological Implications," 205.

by the actual form of the road, creating a close relationship between the form and meaning of the gesture and its physical source.[153]

The physical motivation for the close form-meaning relationship present in many gestures violates the long-standing assumption in linguistics that the form-meaning relationship of a linguistic sign must be arbitrary and its meaning determined by social convention. In recent decades, with the rise of cognitive linguistics in the 1980's and 1990's, linguists have reconsidered the criterion of arbitrariness for language and have increasingly argued not just that language can be iconic but that that iconicity is a "general property of language."[154] As Cornelia Müller puts it, "It is only with the rise of cognitive linguistics in the eighties and nineties that iconicity was eventually rehabilitated as an ubiquitous and fundamental property of spoken languages."[155] There is ample evidence in Indo-European, non-Indo-European, and sign languages that shows that iconicity is a pervasive and persistent part of both spoken and sign languages.[156] Examples of iconicity in spoken languages include onomatopoeias (e.g., tone,

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[153] The term "motivation" here means that the meaning of a gesture can be inferred from its hand shape or movement (i.e., the gesture is an analog of a physical object) and not simply by social convention. Iconic gestures are regularly described as being "motivated" because the meaning of a gesture is motivated in part by its form. In other words, there is an apparent resemblance between the form of an iconic gesture and its meaning that cannot be straightforwardly attributed to convention. See Eve Sweetser, "What Does It Mean to Compare Language and Gesture? Modalities and Contrasts," in *Crosslinguistic Approaches to the Psychology of Language: Studies in the Tradition of Dan Isaac Slobin*, ed. Jiansheng Guo et al. (New York: Psychology Press, 2009), 361; Sarah F. Taub, *Language from the Body: Iconicity and Metaphor in American Sign Language* (Cambridge: Cambridge University Press, 2001), 8–18 Chapter 2: Motivation and Linguistic Theory.

[154] Pamela Perniss, Robin L. Thompson, and Gabriella Vigliocco, "Iconicity as a General Property of Language: Evidence from Spoken and Signed Languages," *Frontiers in Psychology* 1 (2010): 227. Some linguists even argue that iconicity, *not* arbitrariness, is a universal feature of language: See linguist Bodo Winter, "Iconicity, not arbitrariness, is a design feature of language," Abralin (The Brazilian Linguistics Association), YouTube: https://www.youtube.com/watch?v=R1ETw21oCGE.

[155] Cornelia Müller, "Gestural Modes of Representation as Techniques of Depiction," in *Body-Language-Communication: An International Handbooks on Multimodality in Human Interaction*, ed. Cornelia Müller et al., vol. 2, Handbooks of Linguistics and Communication Science 38 (Berlin, Germany: De Gruyter Mouton, 2014), 1695.

[156] See for example: Mark Dingemanse et al., "Arbitrariness, Iconicity, and Systematicity in Language," *Trends in Cognitive Sciences* 19, no. 10 (2015): 603–15; Karen Emmorey, "Iconicity as Structure Mapping," *Philosophical Transactions of the Royal Society B: Biological Sciences* 369 (2014): 20130301; Perniss, Thompson, and Vigliocco, "Iconicity as a General Property of Language"; Perniss and Vigliocco, "The Bridge of Iconicity"; Pamela Perniss et

amplitude, prosody, "sound-for-sound iconicity" like animal noises and sounds made by objects

in motion, "time-for-time iconicity" where the speed of speech represents speed of an object,[157]

etc.), sound-symbolisms or sound-shape mappings (e.g., words like *bouba* and *kiki* are

consistently associated with round, curvy objects and sharp, pointed objects, respectively[158]), and

phonesthemes (e.g., In English, words ending in *-ack*, such as whack and crack denote forceful

contact between two things, words beginning with *gl-*, such as gleam, glow, and glint, denote a

meaning related to low light intensity, and words beginning with *wr-*, such as writhe, wriggle,

wrist, and write, refer to twisting[159]). Examples of iconicity in sign languages and gestures

include "shape-for-shape mapping" (e.g., the shape of the hands depicts the shape of a physical

referent), "motion-for-motion mapping" (e.g., the motion of the hands maps onto the motion of

the referent), "path-for-shape mapping" (e.g., tracing), and "location" (e.g., a physical location is

used to represent locations in someone's mental space, real or imagined).[160] The recognition that

iconicity is a prevalent feature in both spoken and sign languages has encouraged linguists to

adopt of broader definition of language which includes traditionally non-linguistic or

paralinguistic bodily movements like gestures. As Pamela Perniss and Gabriella Vigliocco argue,

> [C]urrent theories of language have been encumbered by too narrow a focus on
> the object of study, attempting to explain the emergence of an ultimately vocal
> and arbitrary system. However, to understand language in its multifaceted use as a
> system for meaning representation in communicative interaction, viable theories
> of language must take into account the availability and use of multiple channels
> (vocal and visual) and formats (iconic and arbitrary) of expression.[161]

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al., "Mapping Language to the World: The Role of Iconicity in the Sign Language Input," *Developmental Science* 21, no. 2 (2018): e12551; Taub, *Language from the Body*; Wilcox, "Cognitive Iconicity."

[157] Taub, *Language from the Body*, 23–25, 64–66.

[158] Daphne Maurer, Thanujeni Pathman, and Catherine J. Mondlock, "The Shape of Boubas: Sound-Shape Correspondences in Toddlers and Adults," *Developmental Science* 9, no. 3 (2006): 316–22.

[159] See Dingemanse et al., "Arbitrariness, Iconicity, and Systematicity in Language"; Perniss, Thompson, and Vigliocco, "Iconicity as a General Property of Language."

[160] Taub, *Language from the Body*, 67–89.

[161] Perniss and Vigliocco, "The Bridge of Iconicity," 9.

The claim that gestures are part of language use is not without its caveats as different types of gestures can be part of language in variable ways (see Kendon's continuum below in section 2.2.4.3) but the core idea that gestures are part of language use is one of the central insights of the field of gesture studies and it stands as a formidable challenge to many long-held assumptions about the nature and function of language. Demarcating clear boundaries on what is and what is not language can drastically limit our understanding and appreciation of the linguistic capacity of humans to be able to communicate meaning in a multitude of ways. Gestures have been shown to be "highly structured, meaningful and closely integrated with speech."[162] When we speak, we invariably communicate and interact with others with and through our gestures and the material environment in ways that go beyond the meaning or capacity of words. As a result, language is more accurately a "multi-modal phenomenon" that makes use of a multitude of communicative tools and signs (i.e., verbal sounds, bodily movements, and the immediate environment) that work in concert with each other to efficiently and effectively communicate something to someone.[163] According to Lorenza Mondada, the multi-modality of language resources is "constitutive and primary" and language is "integrated within this plurality as one among other resources, without any a priori hierarchy."[164] The multi-modal nature of language has led gesture researchers to redefine our basic ideas of what a language is and how it functions. John Haviland notes that linguists and gesture researchers are

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[162] Cornelia Müller, Silva Ladewig, and Jana Bressem, "Gesture and Speech from a Linguistic Perspective: A New Field and Its History," in *Body-Language-Communication: An International Handbooks on Multimodality in Human Interaction*, ed. Cornelia Müller et al., vol. 1, Handbooks of Linguistics and Communication Science 38 (Berlin: De Gruyter Mouton, 2013), 58.

[163] See for example Herbert H. Clark, *Using Language* (Cambridge: Cambridge University Press, 1996); Charles Goodwin, "Environmentally Coupled Gestures," in *Gesture and the Dynamic Dimension of Language*, ed. Susan D. Duncan, Justine Cassell, and Elena T. Levy (Amsterdam; Philadelphia: John Benjamins Pub. Co, 2007), 195–212; Gabriella Vigliocco, Pamela Perniss, and David Vinson, "Language as a Multimodal Phenomenon: Implications for Language Learning, Processing and Evolution," *Philosophical Transactions of the Royal Society B: Biological Sciences* 369, no. 1651 (2014): 20130292.

[164] Mondada, "Challenges of Multimodality," 338.

increasingly taking a "non-subtractive view" of language which "integrates attitudes and movements of the body, first, into the full repertoire of interactive human communicative resources and, second, into the expressive inflections of language itself."[165] Cognitive linguist Ronald W. Langacker argues that "Language is not a discretely bounded entity such that particular factors either belong to it exclusively or are wholly excluded. It recruits and adapts a wide array of physical structures, neural circuitry, knowledge, and cognitive abilities that exist independently and serve other functions."[166] Alan Cienki says,

> [R]ather than thinking of language as a "classical" category (i.e., one with clear boundaries) which contains verbal communication (in written, spoken, and signed forms of language), perhaps a different concept of the category of language is needed… perhaps linguists should approach language itself as a category with conventional verbal symbols being the prototypical manifestation but also recognize that what are often considered paralinguistic features—including expressive forms like intonation and gesture with spoken language—can also sometimes have conventionalized symbolic status.[167]

And as Adam Kendon puts it,

> [I]f we approach 'language' as something that people engage in, something that they do, and consider how units of language action or utterances are constructed, then the resources of visible action as used by speakers, as well as used by signers, must be considered as a part of it, and from this point of view they may be included in the purview of 'linguistics.'[168]

If gestures are indeed part of language, "not as embellishments or elaborations, but as integral parts of the processes of language and its use,"[169] how exactly do gesture researchers

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[165] Haviland, "Gesture," 198–99.

[166] Langacker, "Metaphoric Gesture and Cognitive Linguistics," 249. Langacker also notes that "If a gesture is both familiar and conventional in a speech community, bearing a systematic relation to the expressions it occurs in, its exclusion from 'the language' would be arbitrary. If a particular gesture is novel, it may nonetheless reflect the linguistic system by instantiating a conventional gesture pattern characterized at a certain level of schematicity. This is not to say, of course, that all occurring gestures qualify as linguistic. But to the extent that they do, the full description of a language has to account for them." Langacker, 251.

[167] Cienki, "Cognitive Linguistics: Spoken Language and Gesture as Expressions of Conceptualization," 195.

[168] Kendon, "Semiotic Diversity in Utterance Production and the Concept of 'Language,'" 12.

[169] McNeill, *Gesture and Thought*, 13.

characterize the relationship between gesture and speech? How do gesture and speech go "hand in hand" as part of a single integrated communicative system?[170] To begin answering this question, it is important to note that gesture researchers primarily analyze gestures in relation to speech in the context of face-to-face dialogue or social interaction. Language is understood by many gesture researchers not simply as a communicative activity which has the capacity to convey or represent of ideas or information but as a social and collaborative activity that is meaningful because it is performed with and for others in a social interaction. Gesture researchers focus primarily on gestures in face-to-face dialogue because face-to-face dialogue is considered to be the "the basic and primary use of language"[171] and "the fundamental site of language use."[172] Janet Bavelas and Nicole Chovil argue that face-to-face dialogue is especially important to the study of language "because it is our first language developmentally and it remains our language of everyday interaction."[173] Gestures are a foundational feature of face-to-face dialogue because gestures are visible and sensitive to the relationship between the speaker and the listener. It has been shown that speakers gesture more in a dialogue than speakers who are alone,[174] that speakers orient their gestures toward the location of addressees in space,[175] that speakers adapt their gestures depending on a number of social variables including social status,[176] and so on. Listeners are "co-narrators" in face-to-face dialogue and it is through their

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[170] Abner, Cooperrider, and Goldin-Meadow, "Gesture for Linguists," 437.

[171] Charles J. Fillmore, "Pragmatics and the Description of Discourse," In *Radical Pragmatics,* P. Cole Ed. (New York: Academic Press, 1981): 152 quoted in Bavelas and Chovil, "Visible Acts of Meaning," 163.

[172] Herbert H. Clark and Deanna Wilkes-Gibbs, "Referring as a Collaborative Process," *Cognition* 22 (1986): 1 quoted in Bavelas and Chovil, 163.

[173] Bavelas and Chovil, 163.

[174] Janet Bavelas et al., "Gesturing on the Telephone: Independent Effects of Dialogue and Visibility," *Journal of Memory and Language* 58, no. 2 (2008): 495–520.

[175] Asli Özyürek, "Do Speakers Design Their Cospeech Gestures for Their Addressees? The Effects of Addressee Location on Representational Gestures," *Journal of Memory and Language* 46, no. 4 (2002): 688–704.

[176] N.J. Enfield, Sotaro Kita, and J.P. de Ruiter, "Primary and Secondary Pragmatic Functions of Pointing Gestures," *Journal of Pragmatics* 39, no. 10 (2007): 1722–41.

gestures that a listener is able to collaborate in the discourse with the speaker in a moment-by-moment manner.[177]

Within the context of face-to-face dialogue or social interaction, gesture and speech are part of a larger multi-modal communicative ensemble and they cannot be properly understood apart from that ensemble. The unique relationship between gesture and speech has been described as "two aspects of a single process,"[178] two parts of a "single integrated system,"[179] a "gesture-speech *ensemble*,"[180] a "multimodal utterance,"[181] a "composite utterance,"[182] a "composite signal,"[183] a "gesture-language complex,"[184] and an "integrated message model."[185] Instead of the traditional understanding of language which prioritizes and separates speech from gestures, gesture researchers argue that gesture and speech are two aspects of a single communicative act.

Gestures can contribute to the meaning of the larger communicative ensemble in similar ways that words do. As Janet Bavelas puts it, gestures are "truly part of speech in two senses: They contribute to meaning just as words and phrases do; and, like their lexical counterparts, their meaning depends upon the whole of which they are a part."[186] Like words, gestures "both

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[177] Janet Beavin Bavelas, "Listeners as Co-Narrators," *Journal of Personality and Social Psychology* 79, no. 6 (2000): 941–52.

[178] Adam Kendon, "Gesture," *Annual Review of Anthropology* 26 (1997): 110. See also Adam Kendon, "Gesticulation and Speech: Two Aspects of the Process of Utterance," in *The Relation between Verbal and Nonverbal Communication*, ed. Mary Ritchie Key (The Hague: Mouton, 1980), 207–27.

[179] McNeill, *Hand and Mind*, 11.

[180] Kendon, *Gesture*, 2004, 127.

[181] Charles Goodwin, "Human Sociality as Mutual Orientation in a Rich Interactive Environment: Multimodal Utterances and Pointing in Aphasia," in *Roots of Human Sociality: Culture, Cognition and Interaction*, ed. N. J. Enfield and Stephen C. Levinson (London: Berg, n.d.), 97–125.

[182] N. J. Enfield, "A 'Composite Utterances' Approach to Meaning," in *Body–Language–Communication: An International Handbook on Multimodality in Human Interaction*, ed. Cornelia Müller et al., vol. 1, 2 vols., Handbooks of Linguistics and Communication Science 38 (Berlin: De Gruyter Mouton, 2013), 689–707.

[183] Clark, *Using Language*.

[184] Sweetser, "Looking at Space to Study Mental Spaces," 203.

[185] Bavelas and Chovil, "Visible Acts of Meaning."

[186] Bavelas, "Gestures as Part of Speech: Methodological Implications," 205.

shape and are shaped by their immediate linguistic context."[187] In everyday face-to-face dialogue, co-speech gestures are analyzed as part of speech or a communicative act in two primary ways: temporally (timing) and semantically (meaning). Temporally, the "stroke"[188] of a gesture is "almost always temporally aligned in some meaningful way with a spoken utterance."[189] Co-speech gestures often precede the part of speech that they correspond to—not the other way around as we might assume. Semantically, there are two basic ways that a gesture can be understood to be part of the meaning of speech. First, a gesture may be redundant and share an "underlying conceptual message" with speech.[190] The communicative benefit of gestures and speech sharing a semantic meaning or conceptual message is that they can supplement each other as the communicative context demands. Gestures can make the meaning of speech "more precise"[191] or they can communicate in a visuo-spatial modality in ways that words cannot. For example, if a speaker expresses the metaphor, "I'm at a fork in the road," they may also visually depict the fork in the road with their hands by moving their hands in different directions as if each hand was a different imaginary road (or a moving vehicle traveling along different imaginary roads). In this example, gesture and speech are expressing the same underlying metaphor but they do so in different modalities: one verbal and the other visible and spatial. Because of the difference in modalities, speakers often express metaphors in gestures that are unavailable to speech.

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[187] Bavelas, 205.

[188] The different parts or "phases" of a gesture include: preparation, pre-stroke hold, stroke, stroke hold, post-stroke hold, and retraction. The stroke is the most visible, effortful and only obligatory part of a gesture. It is the phase of the gesture that is imbued with meaning and is tightly bound with speech. For non-experts, the stroke is usually identified as the gesture itself. The other parts or phases of a gesture are optional and are less tightly bound with speech. McNeill, *Gesture and Thought*, 29–33.

[189] Abner, Cooperrider, and Goldin-Meadow, "Gesture for Linguists," 4. It is the stroke of the gesture that is usually considered to be temporally aligned with speech.

[190] Abner, Cooperrider, and Goldin-Meadow, 440.

[191] Adam Kendon, "Language and Gesture: Unity or Duality?," in *Language and Gesture*, ed. David McNeill (Cambridge: Cambridge University Press, 2000), 51–54.

Second, gestures can also supplement or contradict the meaning expressed in speech. For example, a gesture can supplement speech by expressing a metaphor that is not present in the co-occurring speech. Alan Cienki gives the example of a speaker who describes an issue or a problem as "black and white" while performing a chopping gesture which divides the space in front of the speaker into two distinct spaces or categories.[192] In this example, the gesture and speech both express a similar underlying meaning—an issue or a problem that has two clear categories or options—but they do so with different metaphors in two different modalities, one using colour and the other using space, that have slightly different meanings and connotations. Gestures can also contradict the meaning expressed in speech. Susan Goldin-Meadow has shown that contradictory "mismatches" between gesture and speech can actually display a learner's readiness to learn and that the gestures in these mismatches offer privileged access to a speaker's thought in ways that words cannot.[193] In one example, Goldin-Meadow describes a child justifying their belief that the amount of water changed when it was poured from a tall thin glass to a short wide dish. The child said, "'It's different because this one is high and this one is low,' while indicating with her hands the skinny diameter of the glass and then the wider diameter of the dish."[194] This gesture is neither redundant or supplementary with speech because it communicates information (width) not present in the co-occurring speech. Despite the falsity of the child's belief that the amount of water changed, the child's gestures nevertheless reveal an awareness of the nature of conservation of quantity of liquids and their readiness to learn something new. Therefore, quite apart from obscuring the meaning of a communicative act,

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[192] Cienki, "Why Study Metaphor and Gesture?," 14–15.
[193] Martha W. Alibali and Susan Goldin-Meadow, "Gesture-Speech Mismatch and Mechanisms of Learning: What the Hands Reveal about a Child's State of Mind," *Cognitive Psychology* 25, no. 4 (1993): 468–523; R. Breckinridge Church and Susan Goldin-Meadow, "The Mismatch between Gesture and Speech as an Index of Transitional Knowledge," *Cognition* 23, no. 1 (1986): 43–71; Susan Goldin-Meadow, "Using Our Hands to Change Our Minds," *Wiley Interdisciplinary Reviews: Cognitive Science* 8, no. 1–2 (2017): e1368.
[194] Abner, Cooperrider, and Goldin-Meadow, "Gesture for Linguists," 10.

gesture-speech mismatches can actually reveal important underlying cognitive processes at work in an individual. It is important to note that this is true to some extent of all gestures and not just gesture-speech mismatches. Because co-speech gestures are usually in the "background"[195] or below the level of conscious awareness, they are an "unwitting"[196] representation of a person's thoughts or a "window unto the mind"[197] because they can reveal thoughts and intentions that are not otherwise communicated in speech. It is for this reason that the "lion's share of research"[198] in the field of gesture studies has been devoted to understanding spontaneous co-speech representational gestures. As Alan Cienki and Cornelia Müller put it, "Gesture provides another window to understand how we structure concepts, and how we use those structures while speaking."[199]

2.2.3 Defining Gestures

An important reason why gesture researchers have been able to rethink how gestures are part of language is that they have been very specific about what they mean by the word gesture. As mentioned at the beginning of the chapter, the word "gesture" can mean anything from the general carriage or "manner of carrying" one's body,[200] to a "movement expressive of thought or feeling,"[201] to a "technique of the body,"[202] to "any willful bodily movement."[203] The broad

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[195] Kensy Cooperrider refers to these gestures as "background gestures" because "they are in the background of the speaker's awareness, in the background of the listener's awareness, and in the background of the interaction." Kensy Cooperrider, "Foreground Gesture, Background Gesture," *Gesture* 16, no. 2 (2017): 180.
[196] McNeill, *Hand and Mind*, 12.
[197] McNeill and Duncan, "Growth Points in Thinking-for-Speaking," 142. See also Abner, Cooperrider, and Goldin-Meadow, "Gesture for Linguists," 444.
[198] Abner, Cooperrider, and Goldin-Meadow, "Gesture for Linguists," 3.
[199] Cienki and Müller, "Metaphor, Gesture and Thought," 493.
[200] OED, n, 1a. "Manner of carrying the body; bearing, carriage, deportment."
[201] OED, n, 4a.
[202] Noland, *Agency and Embodiment: Performing Gestures/Producing Culture*, 18–54. See also Mauss, "Techniques of the Body."
[203] Cienki, "Why Study Metaphor and Gesture?," 6.

scope of the word "gesture" makes gestures a difficult phenomenon to define and categorize. Gesture researchers have dealt with this difficulty by narrowing their focus to the movement of the hands and arms that occur during speech. For example, as mentioned, David McNeill defines a gesture as "the movements of the hands and arms that we see when people talk"[204] and Abner et al. similarly define gestures as the "spontaneous movements of the hands and body that universally accompany speech."[205]

An important qualification that helps gesture researchers narrow their definition of gestures to movements that accompany speech is the distinction between "informative" and "communicative" bodily actions.[206] Informative actions are bodily movements that "give off" information whereas communicative actions are bodily movements where information is intentionally "given" to someone. According to this distinction, any bodily movement can be informative but only gestures can be communicative. Examples of informative bodily movements that are not considered to be gestures include movements that are part of an instrumental action (e.g., lifting a cup to take a drink, writing with a pen, eating with utensils, smoking a cigarette, etc.), inadvertent movements that a person cannot help (e.g., laughing, crying, blushing, twitching, flinching, etc.), and movements that are oriented towards oneself (e.g., "adaptors"[207] such as brushing hair, adjusting glasses, scratching, fiddling, etc.). The label of "gesture" is reserved specifically for bodily actions that are "seen as part of the individual's effort to convey meaning."[208] For a bodily movement to meet this criteria it must be "directly

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[204] McNeill, *Hand and Mind*, 1. Susan Goldin-Meadow and Diane Brentari gives a similar definition of gesture: "the manual movements that speakers produce when they talk." Goldin-Meadow and Brentari, "Gesture, Sign, and Language," 2.

[205] Abner, Cooperrider, and Goldin-Meadow, "Gesture for Linguists," 1.

[206] Abner et al. note that this distinction was first framed by John Lyons in 1977. Abner, Cooperrider, and Goldin-Meadow, 2.

[207] Ekman and Friesen, "The Repertoire of Nonverbal Behavior."

[208] Kendon, *Gesture*, 2004, 14.

perceived as being under the guidance of the observed person's voluntary control and being done for the purposes of expression rather than in the service of some practical aim."[209] Adam Kendon says that the bodily movements that are under a person's guidance display what he calls "*features of manifest deliberate expressiveness.*"[210] According to this understanding, bodily actions are judged to be gestures if an observer is able to visibly perceive and interpret the action as an intentional and communicative action rather than as an instrumental or reflexive one. The underlying assumption for gesture researchers is that people are generally very good at distinguishing between communicative and non-communicative actions—in other words, we know a gesture when we see it.[211] This does not mean, however, that a gesturer is always aware of their bodily movements or that an observer will always notice and understand what a gesture means. It simply means that gestures are intentional because they are part of an individual's general effort to communicate and that a gesture is at least potentially visible to an observer.[212] From this, gesture researchers infer that a gesture can be understood as *intentional* when it is part of an individual's general effort to communicate something to someone regardless of whether the speaker or observer is aware of the gesture. To give an example, the bodily action of someone lifting up a cup to take a drink is both *instrumental* (it is a means to an end, i.e., satisfying thirst)

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[209] Kendon, 15.

[210] Kendon, 13–14.

[211] Kendon describes a study where he asked twenty people without a background in psychology or any other behavioural science to identity what they perceive to be intentional communicative actions or gestures from a film of a ceremony performed by the Enga, who live in the Western Highlands of Papua New Guinea. Kendon says that among the participants "there was very considerable agreement as to which movements were considered as a significant part of what the man was trying to say and those which were 'natural' or 'ordinary' or of no significance." Kendon, 11.

[212] For example, it has been shown that speakers gesture more when their addressees can see them than when their addressees cannot see them. Interestingly, though, there are many cases where people gesture even when their gestures cannot be seen. Janet Bavelas, for example, has shown that people continue to gesture on the telephone even though their gestures serve no communicative purpose for the recipient because they cannot be seen. Many of these unseen bodily movements are still considered gestures because they are visible and could in theory be observed by another. Bavelas et al., "Gesturing on the Telephone." See also Martha W. Alibali and Lisa S. Don, "Children's Gestures Are Meant to Be Seen," *Gesture* 1, no. 2 (2001): 113–27; Alibali, "Gesture in Spatial Cognition."

and *informative* (others can infer from the action that the person lifting the cup is thirsty) but it is *not* a gesture because the primary purpose of the action is to achieve some practical end rather than to communicate something to someone.

Even though the distinction between informative bodily actions and communicative gestures is helpful for analyzing the relationship between gestures and speech, it is not without its difficulties. For one, there are many times when a bodily action can be both communicative and informative or instrumental at the same time. For example, the action of lifting up a cup to take a drink *could* be both instrumental and communicative if the action were exaggerated or embellished in some manner or if the lifting up of the cup was part of a demonstration (i.e., teaching a child how to drink from a cup). The manner and the context in which the action is performed can transform what is otherwise an instrumental action into a communicative action that has communicative intent. Herbert Clark describes one group of such actions as "manifesting actions" because they are actions that are performed "*in a time, place, or manner intended to be recognized as marked or special*."[213] Similarly, Jürgen Streeck notes that "gestural communication may consist in nothing more than a repetition or a slight embellishment or exaggeration of an instrumental act. The boundaries of these communicative micro-acts may not be obvious because the very distinction between instrumental behavior and communicative behavior may not be: a communicative dimension may simply come into play by the fashion in which an instrumental act is carried out."[214] As we will see in Chapter 4 (section 4.4), many ritual gestures are manifesting actions and can be both instrumental and communicative at the same time. They can perform instrumental functions (e.g., eating, healing, etc.) while at the same time communicate something to someone by virtue of the manner and context in which the

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[213] Clark, "Coordinating with Each Other in a Material World," 513–14. See also Clark, *Using Language*, 167–68.
[214] Streeck, *Gesturecraft*, 23.

gesture is performed. This both/and interpretation of ritual gestures is not typical of previous understandings of the nature and function of ritual gestures. As Chapter 3 will explore in more detail, ritual gestures are often understood in either/or terms: they are either instrumental or communicative but rarely, if ever, both. As I hope to show throughout this thesis, gestures are rarely if ever just one thing and the field of gesture studies offers tools for understanding the multifaceted nature and function of gestures in ritual settings.

Another difficulty with the distinction between informative and communicative bodily actions is the complexity of the concept of communicative intention. For example, it is not always clear how gestures "stand out" as intentional communicative actions or how they "compel" observers to interpret some actions as gestures and others as mere physical actions.[215] As media theorist Vilem Flusser notes, equating gestures with communicative intention is "not very serviceable" because "'intention' needs to be defined, and because it is an unstable concept that involves issues of subjectivity and of freedom, it will surely get us into difficulties."[216] The difficulties surrounding the notion of intention are an important reason why some scholars outside the field of gesture studies do not see communicative intention as a helpful criterion for gestures. Carrie Noland, for example, notes that "there is no necessary distinction between the instrumental and the expressive gesture…on the level of sensation and quality of effort, there is no way to distinguish between an expressive gesture and an instrumental skill."[217] For Noland, the term "gesture" is therefore better understood as a "technique of the body" than as a *manifest deliberate expressiveness.*

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[215] Kendon, *Gesture*, 2004, 10: "For an action to be treated as 'gesture' it must have features that make it stand out as such." And Kendon, 14: "movements made under the guidance of an openly acknowledge intention to convey meaning are directly perceived as such as a consequence of characteristics of the movement's dynamic features which 'compel' the observer to see them in this way."

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[217] Noland, *Agency and Embodiment: Performing Gestures/Producing Culture*, 15.

In his book, *Ostension: Word Learning and the Embodied Mind*, Chad Engelland distinguishes two approaches to communicative intention when it comes to ostensive (i.e., pointing) gestures: ostensive definition and ostension. Ostensive definition is "[a] deliberately communicative bodily movement, such as a gesture," whereas ostension is "[a]n unintentionally communicative bodily movement, arising from a pattern of meaningful human action."[218] According to many in the field of gesture studies, including Adam Kendon and his notion of *manifest deliberate expressiveness,* gestures fall within Engelland's ostensive definition because they are a deliberately communicative bodily movement. Engelland, however, argues that it is not necessary to invoke the idea of communicative intention to understand the communicative capacity of gestures because "What ostension manifests is not an intention per se but the target of an intention, namely, a publicly available item in the world. Ostension, then, is behavior that makes manifest the target of our intentions, and it can occur either with or without an intention to communicate."[219] Following this, the concept of communicative intention has its limits when determining the communicative capacity of bodily movements because many gestures, such as ostensive bodily movements or prescribed ritual gestures that are part of a ritual tradition, cannot be straightforwardly equated with the communicative intention of the individual performing the gesture.

2.2.4 Categorizing Gestures

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[218] Engelland, *Ostension: Word Learning and the Embodied Mind*, 35–36. For the sake of brevity and clarity, I have truncated Engelland's definitions. Here are the full definitions: Ostensive definition: "A deliberately communicative bodily movement, such as a gesture, that makes an item in the world jointly present and affords the opportunity for an interlocutor to identify a certain kind of item in the world and/or to learn the articulate sound used to present the identified item." Ostension: "An unintentionally communicative bodily movement, arising from a pattern of meaningful human action, that makes an item in the world jointly present and affords the opportunity for an eavesdropper to identify a certain kind of item in the world and/or to learn the articulate sound used to present the identified item."
[219] Engelland, 31.

Gestures are "multifunctional by nature"[220] which makes them an "extremely heterogeneous"[221] phenomena. Even though other forms of communication are also multifunctional, "in gesture, multifunctionality appears to be more of a ubiquitous norm."[222] The multifunctionality of gestures is a big reason why there is "no entrenched typological tradition in the field of gesture studies"[223]—gestures are too heterogeneous to be organized into neat categories. Many gesture researchers explicitly warn against rigid categorizations of gestures because such approaches box gestures into categories which cannot reflect the complexity and multifunctionality of those gestures. Adam Kendon asserts that "no attempt should be made to develop a single, unified classification scheme, since so many different dimensions of comparison are possible."[224] Janet Bavelas considers gesture classifications or taxonomies of both language and gesture to be "retrogressive" because they "suggest that we look for intrinsic properties of a gesture rather than for what that gesture is doing in its particular moment in the conversation."[225] David McNeill says that "None of the [gesture] 'categories' is truly categorical."[226] John Haviland notes that the impulse to classify gestures can often be "analytically obfuscating rather than helpful" because "gestural typologies [can] ignore or minimize such semiotic complexity in the different gestural 'types' they isolate,"[227] and that all gestures, even near-universal pointing gestures, are "clearly constructed from repertoires of bodily form derived from both individual idiosyncrasy and cultural tradition."[228] Michael

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[220] Cienki, "Gesture and Pragmatics: From Paralinguistic to Variably Linguistic," 64.
[221] Sweetser, "What Does It Mean to Compare Language and Gesture? Modalities and Contrasts," 364.
[222] Cienki, "Gesture and Pragmatics: From Paralinguistic to Variably Linguistic," 64.
[223] Abner, Cooperrider, and Goldin-Meadow, "Gesture for Linguists," 7.
[224] Kendon, *Gesture*, 2004, 84. He goes on: "Any given gesture, once understood in the context of its use, may be located on several of these dimensions simultaneously. Which aspect or dimension is given emphasis must depend upon the particular objectives of the inquiry being undertaken."
[225] Bavelas, "Gestures as Part of Speech: Methodological Implications," 202.
[226] McNeill, *Gesture and Thought*, 41.
[227] Haviland, "Gesture," 2003.
[228] Haviland, 197.

Schandorf even suggests that gestures "mock" our objectifying "compulsion towards the discrete and definable."[229] In response to the reality that gesture classifications are often a reflection of the ideology of the researcher as much as they are a reflection of the gesture itself, gesture researchers often resist rigid categorical approaches to gestures in favour of more "functional"[230] or *"dimensional"*[231] or "heuristic"[232] approaches.

However, despite the various protestations and warnings against gesture categorizations, gesture categories remain a somewhat distinctive characteristic of the field of gesture studies. There is seemingly no limit to the different ways that gesture researchers organize gestures into categories. Some categorizations are broad, focusing on the form and function of gestures within the whole context of a social interaction, while other categorizations are narrow, focusing especially on the unique relationship between gesture and speech. According to Adam Kendon, gestures have been categorized according to:

> [W]hether they are voluntary or involuntary; natural or conventional; whether their meanings are established indexically, iconically, or symbolically; whether they have literal or metaphorical significance; how they are linked to speech; their semantic domain…whether they contribute to the propositional content of discourse, whether they serve in some way to punctuate, structure or organize the discourse, or indicate the type of discourse that is being engaged in; and whether they play a primary role in the interactional process, as in salutation, as a regulator in the process of turn-taking in conversation, and the like.[233]

To stress the point further, consider a few different gesture classifications that researchers commonly use to categorize gestures. Ekman and Friesen categorized non-verbal behaviours into five categories: (1) affect displays; (2) regulators; (3) adaptors; (4) emblems; and (5)

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[229] Schandorf, *Communication as Gesture: Media(Tion), Meaning, & Movement*, 4.

[230] According to Bavelas and Chovil, "functions are not mutually exclusive, whereas classifications are." Bavelas and Chovil, "Visible Acts of Meaning," 166.

[231] McNeill, *Gesture and Thought*, 41.

[232] Jürgen Streeck says gesture categories have "heuristic value, because reality refuses to be neatly divided into mutually exclusive categories." Streeck, *Gesturecraft*, 11.

[233] Kendon, *Gesture*, 2004, 84.

illustrators.[234] David McNeill classifies co-speech gestures into four categories or dimensions: (1) iconic; (2) metaphoric; (3) deictic; (4) and beat.[235] Adam Kendon suggests that gestures function as part of an utterance in three primary ways: (1) referential; (2) pragmatic; (3) interactive.[236] Jürgen Streeck identifies six distinct "gesture ecologies" which are "six different ways in which gestural activity can be aligned with the world, with concurrent speech, and with the interactants": (1) making sense of the world-at-hand; (2) disclosing the world within sight; (3) depiction; (4) thinking by hand: gesture as conceptual action; (5) displaying communicative action; (6) ordering and mediating transactions.[237] Michael Arbib classifies gestures into three categories according to modality: (1) auditory gestures (e.g., sound making gestures such as clapping or snapping); (2) tactile gestures; and (3) visual gestures.[238] Philosopher Shaun Gallagher identifies two aspects of gestures: (1) an intersubjective or communicative aspect, and (2) an intra-subjective or cognitive aspect.[239] Media theorist Vilém Flusser identifies four kinds of gestures which may be "experimentally defined": "(1) gestures directed at others, (2) gestures directed toward a material, (3) gestures directed at nothing, and finally, (4) gestures directed (back) at themselves."[240]

This is by no means an exhaustive list but it shows why analyzing gestures is no simple task. While many gesture researchers are wary of categorical approaches to gestures, gesture categories persist because they provide heuristic value when researchers are trying to analyze the nature and function of such a complex phenomenon. As Jürgen Streeck puts it:

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[234] Ekman and Friesen, "The Repertoire of Nonverbal Behavior."
[235] McNeill, *Hand and Mind*, 76. McNeill, *Gesture and Thought*, 38–41.
[236] Kendon, *Gesture*, 2004, 158–59.
[237] Streeck, *Gesturecraft*, 7–11.
[238] Michael A. Arbib, Katja Liebal, and Simone Pika, "Primate Vocalization, Gesture, and the Evolution of Human Language," *Current Anthropology* 49, no. 6 (2008): 1053–76.
[239] Shaun Gallagher, *How the Body Shapes the Mind* (Oxford: Oxford University Press, 2005), 122.
[240] Flusser, *Gestures*, 166.

These typological categories overlap, and often a single gesture can be assigned to more than one category. Typologies are often of primarily heuristic value, because reality refuses to be neatly divided into mutually exclusive categories. This is certainly true for the unwieldy family of communication practices that we collectively call "gesture." Still, the typology helps us organize our analysis of these practices, reminds us of the wide range of different uses to which gesture is put, and thus keeps us from drawing overly broad generalizations from a narrow data-set.[241]

Here I will highlight three different approaches to categorizing gestures that are relevant for understanding the nature and function of gestures in ritual settings: form, function, and convention.

2.2.4.1 Form

Categorizing gestures based on form looks first and foremost at the kinesic features of a gesture, such as handshape (i.e., closed fist, open palm, single fingers, combination of fingers, etc.), orientation (i.e., palm up, palm down, towards body, away from body, etc.), movement (i.e., shape, direction, size, speed, effort, etc.), and location (i.e., position in gesture space relative to the speaker). These four form features—handshape, orientation, movement, location—constitute the four basic parameters of sign language and gesture research. A well-known example of a form-feature approach to gestures is Genevieve Calbris's 1990 book, *The Semiotics of French Gestures*, where she offers a semantic classification of co-speech gestures according to their form.[242] Jana Bressem suggests that approaches to gesture which analyze their form assume "a heuristic separation of form, meaning, and function in the analytical process."[243]

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[241] Streeck, *Gesturecraft*, 11.

[242] Geneviève Calbris, *The Semiotics of French Gestures* (Bloomington, IN: Indiana University Press, 1990).

[243] Jana Bressem, "A Linguistic Perspective on the Notation of Form Features in Gestures," in *Body-Language-Communication: An International Handbooks on Multimodality in Human Interaction*, ed. Cornelia Müller et al., vol. 1, Handbooks of Linguistics and Communication Science 38 (Berlin: De Gruyter Mouton, 2013), 1080.

Each component of a gesture is separated so that the researcher can better analyze how gestures are structured and how they mean in relation to speech in a particular setting.

"Recurrent gestures" are a common type of gesture that can show variation in form, meaning, and context while maintaining a "distinct set of kinesic features" and a "common semantic theme" so that gesture researchers can identify them as belonging to similar groups or "gesture families" based on form.[244] Gestures within a gesture family share similar form features as well as similar semantic themes or pragmatic functions in a discourse.[245] Examples of recurrent gestures include palm-up open hand gestures (PUOH), ring gestures, holding, brushing or throwing away gestures, cyclic gestures, extended index finger, etc. An important recurrent gesture that forms a gesture family that I will explore PUOH gestures in more detail in Chapter 4 (see section 4.2) because they are very common in Christian liturgical settings but the communicative significance of their form has not been analyzed or adequately appreciated within ritual settings.

2.2.4.2 Function

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[244] Jana Bressem and Cornelia Müller, "A Repertoire of German Recurrent Gestures with Pragmatic Functions," in *Body-Language-Communication: An International Handbooks on Multimodality in Human Interaction*, ed. Cornelia Müller et al., vol. 2, Handbooks of Linguistics and Communication Science 38 (Berlin: De Gruyter Mouton, 2014), 1576. See also Silva Ladewig, "Recurrent Gestures," in *Body-Language-Communication: An International Handbooks on Multimodality in Human Interaction*, ed. Cornelia Müller et al., vol. 2, 2 vols., Handbooks of Linguistics and Communication Science 38 (Berlin: De Gruyter Mouton, 2014), 1558–75; Cornelia Müller, "Forms and Uses of the Palm Up Open Hand: A Case of a Gesture Family?," in *The Semantics and Pragmatics of Everyday Gestures; Proceedings of the Berlin Conference April 1998* (Berlin: Weidler, 2004), 233–56.

[245] According to Kendon, "gesture families" are "groupings of gestural expressions that have in common one or more kinesic or formational characteristics…[E]ach family not only shares in a distinct set of kinesic features but each is also distinct in its semantic themes. The forms within these families, distinguished as they are kinesically, also tend to differ semantically although, within a given family, all forms share in a common semantic theme." Kendon, *Gesture*, 2004, 227.

Another common way to categorize gestures is according to their function. The two most common categories according to function are "representational" gestures and "interactive" gestures, though there is no broadly accepted nomenclature for these two types of gestures. For example, Ekman and Friesen refer to them as "illustrators" and "regulators,"[246] Janet Bavelas refers to them as "topic" and "interactive" gestures,[247] Alan Cienki refers to them as "reference" and "discourse-related" gestures,[248] Eve Sweetser and Marisa Sizemore refer to them as "content" and "interactional" gestures,[249] Kensy Cooperrider calls them "background" and "foreground" gestures,[250] and so on. For simplicity's sake, I will follow Abner et al. and refer to these categories as "representational" gestures and "interactive" gestures.[251]

Representational and interactive gestures differ primarily in how they relate to speech and to their interlocutor during a discourse. Representational gestures are directly related to the topic of the discourse because they depict or indicate the propositional content of speech. The imagistic or illustrative quality of representational gestures has led gesture researchers like Cornelia Müller and David McNeill to refer to these gestures as "forms of visual and manual thinking"[252] and suggest that they are speech and thought "rendered visible."[253] Representational gestures can render the propositional content of speech and thought visible in a number of ways. Here I will briefly mention the representational function of pointing gestures, emblems, and gestural depictions.

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[246] Ekman and Friesen, "The Repertoire of Nonverbal Behavior."

[247] Janet Beavin Bavelas et al., "Interactive Gestures," *Discourse Processes* 15 (1992): 469–89.

[248] Cienki, "Cognitive Linguistics: Spoken Language and Gesture as Expressions of Conceptualization," 185.

[249] Eve Sweetser and Marisa Sizemore, "Personal and Interpersonal Gesture Spaces: Functional Contrasts in Language and Gesture," in *Language in the Context of Use: Cognitive and Discourse Approaches to Language and Language Learning*, ed. Andrea Tyler, Yiyoung Kim, and Mari Takada, vol. 37, Cognitive Linguistics Research (Berlin: De Gruyter Mouton, 2008), 25.

[250] Cooperrider, "Foreground Gesture, Background Gesture."

[251] Abner, Cooperrider, and Goldin-Meadow, "Gesture for Linguists." 439.

[252] Müller, "Gestural Modes of Representation as Techniques of Depiction," 1687.

[253] McNeill, *Hand and Mind*, 12.

Pointing gestures are often placed in a category by itself because pointing gestures do not fit neatly into representational and interactive categories. Pointing gestures are considered to be a unique place "where language, culture, and cognition meet"[254] and Michael Tomasello argues that "many of the aspects of language that make it such a uniquely powerful form of human cognition and communication are already present in the humble act of pointing."[255] Nevertheless, pointing gestures are routinely grouped with representational gestures because they are often directly related to the topic of the discourse and "because of their coupling with the local environment, which not all interaction-management gestures have."[256]

While pointing gestures may appear to be a simple or "humble" form of communication and are often credited as being the most "natural" or universally used type of gesture, pointing gestures are highly complex and can vary widely across cultures. The most prototypical or recognizable form of pointing is the extended index finger—finger is *index* in Latin—but the extended index finger is not a universal sign for pointing. Many cultures differ in the form and function of pointing gestures depending on a variety of factors including cultural context, the communicative context, the physical environment, the bodily orientation of those in dialogue, and the communicative intention of the pointer. The Australian Aboriginal group Arrente uses the "horned" hand gesture—where the index and little finger shape the horns—to indicate the "global orientation of a place that is being moved to" rather than the specific path use to get there.[257] In Naples, Italy, four types of hand shapes with contrastive meanings have been shown

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[254] Sotaro Kita, *Pointing: Where Language, Culture, and Cognition Meet* (Mahwah, NJ: Lawrence Erlbaum Associates, 2003).

[255] Michael Tomasello, "Why Don't Apes Point?," in *Roots of Human Sociality: Culture, Cognition and Interaction*, ed. N. J. Enfield and Stephen C. Levinson (Oxford & New York: Berg, 2006), 518.

[256] Streeck, *Gesturecraft*, 10.

[257] David Wilkins, "Why Pointing with the Index Finger Is Not a Universal (in Sociocultural and Semiotic Terms)," in *Pointing: Where Language, Culture, and Cognition Meet*, ed. Sotaro Kita (Mahwah, NJ: Lawrence Erlbaum Associates, 2003).

to be used for pointing ("index-finger pointing with the palm vertical, index-finger pointing with the palm down, open hand pointing with the palm vertical, and thumb pointing").[258] Pointing with the lips has also been demonstrated in a wide variety of cultures, including Central America, Central Australia, East Africa, and Southeast Asia.[259]

At their core, pointing gestures are a form of indicating—a means of directing someone's attention to something of interest. According to Herbert Clark, indicating is a method of communication which establishes a "intrinsic connection" between the sign and its referent so that the addressee of the communicative act can make the connection for themselves.[260] Clark identifies two basic techniques of indicating: *directing-to* and *placing-for*. In directing-to gestures, "speakers try to *direct* their addressees' attention *to* the object they are indicating."[261] A pointing gesture with an extended index finger would be a prototypical example of a directing-to indicating action. In placing-for gestures, "speakers try to *place* the object they are indicating so that it falls within the addressee's focus of attention."[262] Placing-for gestures are pervasive in everyday dialogues and in ritual performances but as Clark notes they are not typically considered part of "communication proper." Clark argues that placing-for gestures *should* be considered a fundamental communicative act because placing-for gestures are a form of indicating and have to do with "creating indexes for things": "If pointing is a communicative act, I argue, then so is placement. Yet if it is, we must revise our views of both communication and context. Much of what is now called context are really acts of communication."[263] For Clark,

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[258] Sotaro Kita, "Cross-Cultural Variation of Speech-Accompanying Gesture: A Review," *Language and Cognitive Processes* 24, no. 2 (2009): 148.

[259] Kita, 148.

[260] Herbert H. Clark, "Pointing and Placing," in *Pointing: Where Language, Culture, and Cognition Meet*, ed. Sotaro Kita (Mahwah, NJ: Lawrence Erlbaum Associates, 2003), 246.

[261] Clark, 248. Emphasis original.

[262] Clark, 248. Emphasis original.

[263] Clark, 244.

what we understand to be a communicative act needs to be expanded so that it can adequately incorporate the material context into the structure of the communicative act itself.

Clark notes two related differences between directing-to and placing-for gestures. The first difference relates to attention: "In directing-to, speakers try to move the addressees' attention to the object. In placing-for, they try to move the object into the addressees' attention."[264] Directing-to gestures direct someone's attention by creating a vector or an imaginary line from the gesture to something of interest whereas placing-for gestures place or position the thing of interest in someone's focus of attention. The second difference relates to the site where the gesture occurs: "With directing-to, speakers *create* the indexing site with respect to the referent…With placing-for, speakers *presuppose* an existing indexing site and establish the referent with respect to it."[265] In other words, "directing-to is *site-creating*, whereas placing-for is *site-exploiting*."[266] In Chapter 4, we will look at the raising of the Eucharistic elements in the Roman Catholic liturgy as an example of a placing-for pointing gesture which exploits the ritual space as an indexing site to establish joint attention between people around an object of interest. Here, I will just focus on directing-to pointing gestures and how the material environment plays an essential role in the communicative act.

Directing-to pointing gestures are one of the most recognizable acts of communication that humans perform. They are pervasive in everyday dialogue and are often coupled with deictic expressions such as this, that, here, there, etc. The core communicative function of a directing-to gesture is to direct someone's attention to something. The word attention comes from the Latin *attendere* (ad- 'to' + tendere 'stretch') which literally means "stretching towards" something.

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[264] Clark, 248. Emphasis original.
[265] Clark, 249. Emphasis original.
[266] Clark, 250. Emphasis original.

When we point to something, we move toward it in some way, with our body and our attention. Pointing is therefore not a static posture but a dynamic movement of the body that directs the attention of others and engages with the immediate environment. The notion that pointing is a stretching or moving towards something goes all the way back to Augustine who, in a passage in the first book of Confessions, describes pointing or the act of ostension as a "movement towards" something.[267] Pointing, however, is more than just a movement towards something—it is also an act of "showing." When we point, we don't just point *at* something, we point it *out*—we make that thing available to another person by bringing it to the forefront of their attention. From a phenomenological perspective, pointing can reveal or manifest or make something present that was otherwise hidden or unseen.[268]

There are two basic types of directing-to pointing gestures which David McNeill calls "concrete" and "abstract" pointing gestures.[269] Concrete pointing gestures are gestures that point to something present in the immediate environment, like a physical object, whereas abstract pointing gestures point toward an empty space around the speaker without aiming at anything in particular in the immediate environment. Interestingly and perhaps somewhat surprisingly, David McNeill notes that "Most pointing gestures in narratives and conversations are of this abstract

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[267] Augustine, *The Confessions*, Book 1.8. Emphasis added:: "My grasp made use of memory: when people gave a name to an object and when, following the sound, *they moved their body towards that object*, I would see and retain the fact that that object received from them this sound which they pronounced when they intended to draw attention to it." See also Kensy Cooperrider, "Fifteen Ways of Looking at a Pointing Gesture," preprint (PsyArXiv, 2020), https://doi.org/10.31234/osf.io/2vxft.

[268] See Engelland, *Ostension: Word Learning and the Embodied Mind*, 131–50.

[269] McNeill, *Hand and Mind*, 173. John Haviland refers to these two types of pointing gestures as "relatively presupposing" and "relatively creative" pointing gestures: "In relatively presupposing pointing, the location pointed at can be derived from coordinating the space referred to (i.e., the space conceptually containing the referent) with the immediate space (where the gesture is physically performed). In relatively creative pointing, a location is selected in the local scene, as it were, arbitrarily. The gesture 'creatively' entails the referent's existence by 'placing' it within the referent space, and it imposes a structure on that space – including a location for the referent where such location is relevant – with certain possibilities for subsequent reference." John B. Haviland, "Pointing, Gesture Spaces, and Mental Maps," in *Language and Gesture*, ed. David McNeill (Cambridge: Cambridge University Press, 2000), 22.

kind."[270] With abstract pointing, the empty space around the speaker becomes full of conceptual meaning and significance because the pointing gesture projects a referent onto that space. As McNeill puts it, "Although the space may seem empty, it was full to the speaker. It was a palpable space in which a concept could be located as if it were a substance."[271] Abstract pointing gestures are fundamentally metaphorical in nature because they communicate one thing in terms of another: they use physical space to represent an abstract idea or something not physically present.

Both concrete and abstract pointing gestures perform what John Haviland calls a "*conceptual* projection"[272] because they project conceptual entities onto physical objects or physical spaces. Concrete pointing gestures involve at least two types conceptual projections. The first type is an imaginary line or vector that is "projected" from the pointing gesture to something in the immediate environment. An observer can "see" what someone is pointing at because they are able to follow the imaginary line that runs from the pointer's gesture to the thing they are pointing at. The second type of conceptual projection that occurs with concrete pointing gestures is the "blending",[273] "layering",[274] or "laminating"[275] a conceptual idea with an object of interest. When we point we never merely identify or indicate some external thing or object, we always assign meaning to that thing, which means that the significance of that thing goes above and beyond the thing itself. In distinction to concrete pointing gestures, abstract pointing gestures are conceptual projections that create their referent by demarcating physical

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[270] McNeill, *Hand and Mind*, 18.

[271] McNeill, 18.

[272] Haviland, "Pointing, Gesture Spaces, and Mental Maps," 18–19.

[273] Scott K. Liddell, "Blended Spaces and Deixis in Sign Language Discourse," in *Language and Gesture*, ed. David McNeill (Cambridge: Cambridge University Press, 2000).

[274] Anja Stukenbrock, "Pointing to an 'Empty' Space: Deixis Am Phantasma in Face-to-Face Interaction," *Journal of Pragmatics* 74 (2014): 70–93.

[275] Haviland, "Pointing, Gesture Spaces, and Mental Maps."

space in the immediate environment as representative of an idea, a person, or a thing. Signers of ASL, for example, will regularly point to the empty space around themselves to signify people or things that are not physically present and will continue to refer back to those spaces in the course of the discourse when they or others want to refer to that person or thing.

The second way that gestures can represent the content of speech or thought is through "emblems"[276] (or "quotable gestures"[277] or "symbolic gestures"[278]), which are defined as the "conventional body movements that have a precise meaning which can be understood easily without speech by a certain cultural or social group."[279] Emblems are highly conventional and have a stable form-meaning relationship within a particular community. Emblems are also highly salient, meaning they carry a large communicative load and can be used as a substitute for words. Examples of common emblems include the "thumbs up," the "okay sign," the "peace sign," or the "V as victory sign." Because emblems are conventional, their meaning is highly dependent on cultural context. The "okay sign," for example, is a sign made when the thumb and ring finger form a circle and the other fingers are outstretched. In most European cultures and North America, this gesture can mean "OK/good" but in France it can mean "zero" and in Greece and Turkey it can mean a bodily orifice like the anus.[280] Ritual gestures are usually categorized as a type of emblem because they too are a highly conventionalized or symbolic form of bodily expression whose meaning can be understood independently from speech. While this

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[276] Ekman and Friesen, "The Repertoire of Nonverbal Behavior."Ekman and Friesen, 1969
[277] Adam Kendon, "Some Recent Work from Italy on 'Quotable Gestures (Emblems),'" *Journal of Linguistic Anthropology* 2, no. 1 (1992): 92–108.
[278] Isabella Poggi, "Semantics and Pragmatics of Symbolic Gestures," in *Body-Language-Communication: An International Handbooks on Multimodality in Human Interaction*, ed. Cornelia Müller et al., vol. 2, 2 vols., Handbooks of Linguistics and Communication Science 38 (Berlin: De Gruyter Mouton, 2014), 1481–96.
[279] Sedinha Teßendorf, "Emblems, Quotable Gestures, or Conventionalized Body Movements," in *Body-Language-Communication: An International Handbooks on Multimodality in Human Interaction*, ed. Cornelia Müller et al., vol. 1, Handbooks of Linguistics and Communication Science 38 (Berlin: De Gruyter Mouton, 2013), 82.
[280] Kita, "Cross-Cultural Variation of Speech-Accompanying Gesture," 146.

characterization may be true of some ritual gestures, it is overly reductive because many ritual gestures perform functions that go well beyond the category of emblems. In this thesis, I hope to show why and how that is the case.

The third way that gestures can represent the content of speech and thought is through gestural depiction. Gestural depiction is the capacity for a gesture to represent or image something other than itself. Herbert Clark identifies depicting as a basic method of communication alongside describing and indicating. "In describing," he says, "people use arbitrary symbols (e.g., words, phrases, nods, and thumbs-up) to denote things categorically, and in indicating, they use pointing, placing, and other indexes to locate things in time and space. In depicting, people create one physical scene to represent another."[281] For Clark, a depiction, which is a method of communication that extends beyond gestures, functions like a physical analog of what it represents. "They are," he says, "visible, audible, tactile, or proprioceptive models of things that one could actually see, hear, touch, or feel."[282] A gestural depiction utilizes visible, audible, tactile, or proprioceptive modalities to become a physical analog of something other than itself. The two most common types of representational gestures which depict their referent are iconic gestures—gestures which depict concrete imagery such as objects or events—and metaphoric gestures—gestures which depict abstract imagery like ideas.[283]

Gestural depictions are more than mere representations—they are expressions of our bodily being-in-the-world and our ability to think and communicate *with* our hands. Like any medium, gestures are constrained by their form and their form is inescapably part of their meaning. Because of this, a gesture is only ever a *partial* representation of its referent because

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[281] Herbert H. Clark, "Depicting as a Method of Communication," *Psychological Review* 123, no. 3 (2016): 324.
[282] Clark, 327.
[283] McNeill, *Hand and Mind*, 12–15.

the form of a gesture depends on the range of hand shapes and movements afforded by the structural and kinesthetic features of the hand. According to Cornelia Müller, gestures "come with specific perspectives on the world they depict, perspectives that are individual and subjective views of the world. Gestures are conceptualizations of perceived and conceived experiences that merge visual and manual ways of thinking through and in movement."[284] And as Jürgen Streeck puts it, "Depictive gestures organize the world in their own fashion, which is fundamentally different from the way in which words organize the world."[285] The process by which a gesture is formed to depict its referent is called "mapping"[286] or "construal"[287] or "conceptualization."[288] Cornelia Müller describes this process as a "cognitive-semiotic process"[289] where "Each gesture offers a different construction, a different conceptualization, and a different way of thinking visually and manually about [something]."[290] As she says, "speakers economically make use of the advantages of the visual and audible modality at hand [in social interactions]. In doing this, they orient their thinking towards these manual expressive forms."[291]

There are many different ways a gesture can depict something other than itself. Jürgen Streeck identifies twelve: modeling, bounding, drawing, handling, making, scaping, marking, self-marking, model-world making, abstract motion, acting, and pantomime.[292] Cornelia Müller

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[284] Müller, "Gestural Modes of Representation as Techniques of Depiction," 1689. Müller also says, "Gestures…are 'natural' and 'artful' illusions of reality, created by speakers in the flow of discourse and interaction, and they are probably the first mimetic devices appearing on the stage of human evolution." Müller, 1699.

[285] Streeck, *Gesturecraft*, 120.

[286] See section 3.3.2.3 below for more on "double-mapping." See also Emmorey, "Iconicity as Structure Mapping"; Irit Meir, "Iconicity and Metaphor: Constraints on Metaphorical Extension of Iconic Forms," *Language* 86, no. 4 (2010): 865–96; Parrill and Sweetser, "What We Mean by Meaning"; Taub, *Language from the Body*, 94-133: Ch. 6: Metaphor in American Sign Language: The Double Mapping.

[287] Wilcox, "Cognitive Iconicity," 123.

[288] Müller, "Gestural Modes of Representation as Techniques of Depiction," 1689.

[289] Müller, "Gestural Modes of Representation as Techniques of Depiction," 1692.

[290] Müller, 1689.

[291] Müller, 1689.

[292] Jürgen Streeck, "Depicting by Gesture," *Gesture* 8, no. 3 (2008): 292–93.

offers a shorter list of four which she refers to as the basic "gestural modes of representation":

acting, molding, drawing, and representing. Each of these modes of representation "[display] a

different form of seeing and of conceiving":

> In the *acting* mode, the hands are used to mime or reenact actual manual activities, such
> as grasping, holding, giving, receiving, opening a window, turning off a radiator, or
> pulling an old-fashioned gear shift; in the *molding* mode, the hands mold or shape a
> transient sculpture, such as a picture frame or a bowl; in the *drawing* mode, the hand(s)
> outline(s) the contour or the form of objects or the path of movements in space; and in the
> *representing* mode, the hand embodies an object as a whole, a kind of manual
> "sculpture", when, for example, a flat open hand represents a piece of paper and the
> extended index finger represents the pen used to make notes on that paper.[293]

Müller's modes of representation focuses primarily on the representational capacity of the hands.

Other lists, such as Virginia Volterra et al.'s four strategies of symbolic representation for

gesture and sign language communication, include a whole-body mode of representation called

"own-body or enactment", which is essentially the same as Müller's acting mode but for the

whole body.[294] Müller's four modes of representation can also be mapped onto David McNeill's

distinction between character and observer viewpoints for gestural depictions.[295] In character

viewpoint, which is in the first-person point of view and aligns with Müller's acting mode of

representation, the bodily movements of the gesturer represent the bodily movements of the

character or person that they are representing, such as when a gesturer shows how a person acted

or moved in a particular situation. In observer viewpoint, which is in the third-person point of

view and aligns with Müller's molding, drawing, and representing modes of representation, the

bodily movements of the gesturer represent an entity in the representation, such as when a hand

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[293] Müller, "Gestural Modes of Representation as Techniques of Depiction," 1690-1691. Emphasis original.
[294] Virginia Volterra et al., *Italian Sign Language from a Cognitive and Socio-Semiotic Perspective* (Amsterdam; Philadelphia: John Benjamins Pub. Co., 2022), 21–22. Voltera et al.'s four strategies of symbolic representation include: own-body or enactment (cf. Müller's acting mode), hand as hand (cf. Müller's acting mode), hand as object (cf. Müller's representing mode), and shape and size (cf. Müller's molding and drawing modes).
[295] McNeill, *Gesture and Thought*, 34.

becomes a representation of an entity like a rock or a moving car. Gestural viewpoints are relevant to rituals because ritual performers regularly role shift during ritual performances, such as when a Roman Catholic priest acts *in persona Christi* ("in the person of Christ") or when a shaman speaks on behalf of the spirits they are communicating with.[296]

Müller's four modes of gestural representation provide a general explanation for the motivation behind the relationship between gesture form and meaning. Müller identifies metonymy and metaphor as two of the most important cognitive processes that "motivate" the meaning of gesture forms.[297] Gestures are motivated by metonymy because gestures are restrained by their form and are only ever a partial representation of its referent. A gesture can represent some but not all of the physical features of an entity or action—size, shape, movement, location, etc.—for the purposes of communication. Gestures are also motivated by metaphor because they can express one thing in terms of another. For example, gestures readily represent non-visible and non-spatial entities or concepts through the visible and spatial medium of bodily movement. The following chapter (see sections 3.3.2.2 and 3.3.2.3) will explore the process of gestural representation in more detail in order to show how the form of a gesture can function metaphorically and be conceptually mapped alongside words.

Whereas representational gestures depict the propositional content of speech or thought, interactive gestures are gestures that organize or mediate a social interaction between people in a given environment.[298] Interactive gestures are also commonly referred to as "pragmatic,

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[296] See William F. Hanks, "Joint Commitment and Common Ground in a Ritual Event," in *Roots of Human Sociality: Culture, Cognition and Interaction*, ed. N.J. Enfield and Stephen C. Levinson (London & New York: Routledge, 2006), 299–328.

[297] Müller, "Gestural Modes of Representation as Techniques of Depiction," 1692.

[298] According to Abner et al., interactive gestures "do not represent the content of the speech with which they co-occur but instead help frame the speech within its discourse context." Abner, Cooperrider, and Goldin-Meadow, "Gesture for Linguists," 3.

illocutionary, or discourse"[299] gestures and are sometimes also described as "tools" or "instruments" which are designed for the purposes of communication in a particular context. Jürgen Streeck describes gestures as "interaction phenomena"[300] because one of their primary functions is to "mediate the relationship between the individual, others, and the inhabited world,"[301] and Janet Bavelas et al. suggest that the primary function of interactive gestures is to "aid the maintenance of conversation as a social system"[302] because "Dialogue is not simply information transmission between individuals but is a reciprocal process of co-construction."[303] Examples of interactive gestures that occur in everyday dialogue include shrugs, nods, handshakes, touching, posturing, turn-taking or floor-claiming gestures, giving and receiving gestures (e.g., PUOH gestures), gestures of negation and affirmation, and so on. These gestures are usually "foregrounded" [304] in a social interaction and do not depict the topic of the discourse but instead display the gesturer's epistemic or affective stance in relation to the topic of the discourse and/or their interlocutor (e.g., a shrug may display a person's lack of knowledge or their indifference to the topic of the discourse). Bavelas et al. identify four basic types of interactive gestures that aid in the maintenance of a conversation: (1) *Delivery* gestures, which refer to the delivery of new information by a speaker to an addressee; (2) *Citing* gestures, which cite a previous contribution by an addressee; (3) *Seeking* gestures, which seek a response (e.g., agreement, understanding) from an addressee; and (4) *Turn* gestures, which coordinate turn-

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[299] Abner, Cooperrider, and Goldin-Meadow, 3.
[300] Streeck, *Gesturecraft*, 13.
[301] Streeck, 205.
[302] Bavelas et al., "Interactive Gestures," 470. Bavelas et al. propose that "conversation must be seen not as alternating monologues but as a social system. That is, dialogue makes significant social or interpersonal demands as well as semantic and syntactic ones." Bavelas et al., 476.
[303] Bavelas, "Listeners as Co-Narrators," 951.
[304] See Cooperrider, "Foreground Gesture, Background Gesture," 181–84. Kensy Cooperrider refers to interactive gestures as "foreground gestures" because "they are in the foreground of the speaker's awareness, in the foreground of the listener's awareness, and in the foreground of the interaction."

taking issues for speaking.[305] Many interactive gestures interact with the dialogue metaphorically as if it were a physical entity. Jürgen Streeck refers to many interactive gestures as "speech-handling" gestures because they do not depict or illustrate the content of speech itself but rather "handle" or manipulate speech as if the speech itself were an object.[306] In Chapter 4 (section 4.2), we will look at PUOH gestures to see how these gestures both handle speech and mediate the interaction between ritual participants.

2.2.4.3 Convention

Categorizing gestures according to convention is best exemplified by David's McNeill's "Kendon's continuum," which he named in honor of Adam Kendon.[307] Kendon's continuum classifies gestures along a continuum according to their conventionality in relation to speech. At one end of the continuum are lexicalized signs, such as those in a sign language. These signs are highly conventional and equivalent to words in spoken languages. They are not dependent on speech for their meaning and are obligatorily performed in the absence of speech. At the other end of the continuum are co-speech gestures or gesticulations which are the "idiosyncratic spontaneous movements of the hands and arms accompanying speech."[308] Gesticulations are what McNeill and others often mean when they simply say "gesture."[309] Most gesticulations are "*ad hoc* fleeting creations of the moment"[310] and may not be produced the same way twice.[311] In contrast to the lexicalized signs of sign languages, gesticulations are non-conventional bodily

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[305] Janet Beavin Bavelas et al., "Gestures Specialized for Dialogue," *Personality and Social Psychology Bulletin* 21, no. 4 (1995): Table 1, 397.
[306] Streeck, *Gesturecraft*, 179.
[307] McNeill, *Gesture and Thought*, 5–12.
[308] McNeill, *Hand and Mind*, 37.
[309] McNeill, 5–6.
[310] Haviland, "Pointing, Gesture Spaces, and Mental Maps," 16.
[311] As Janet Bavelas puts it, "each [gesture] is invented anew and may never be used again." Bavelas, "Gestures as Part of Speech: Methodological Implications," 209.

expressions that are obligatorily performed in the presence of speech. Because gesticulations must be performed in the presence of speech, the meaning of a gesticulation is tightly bound to speech and cannot be properly understood apart from speech. The speech-dependent nature of gesticulations means that they are structured and function differently than lexicalized signs. Whereas lexicalized signs are conventionalized, sequential, segmented, and analytic, gesticulations are non-conventional, instantaneous, context-sensitive, global, and synthetic.[312] In between signs and gesticulations on the continuum are "emblems," which are conventionalized or symbolic signs with a stable form-meaning relationship (e.g., thumbs up), and "pantomimes," which are bodily actions that convey a story without words (McNeill refers to pantomime as "dumb-show").

While Kendon's continuum has been especially helpful in showing that gestures are a variable phenomenon whose relation to speech is best understood along a continuum, Olga Iriskhanova and Alan Cienki have argued that Kendon's continuum is too "language-oriented" and thus remains too rooted in a Saussurean linguo-centered approach to language which treats convention and arbitrariness as the primary determinants of linguistic capacity.[313] Kendon's

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[312] According to McNeill, gestures are global not segmented because the meaning of the parts are determined by the whole (i.e., meaning is top-down whereas meaning in language is bottom-up), and synthetic not analytic because a variety of different elements are synthesized into a single gesture (i.e., the meaning of a co-speech gesture can be spread across the entire accompanying sentence). McNeill, *Gesture and Thought*, 6–11. See also McNeill, *Hand and Mind*, 41.

[313] Olga K. Iriskhanova and Alan Cienki, "The Semiotics of Gestures in Cognitive Linguistics: Contribution and Challenges," *Voprosy Kognitivnoy Lingvistiki* 4 (2018): 29. According to Iriskhanova and Cienki, Kendon's continuum still "follows the tendency prevalent in linguistics to compare body movements to words and other language units in terms of conventionality." Iriskhanova and Cienki, 29. While McNeill does explicitly reject a Saussurean approach to language which he describes as a "static" tradition that treats language "*as a thing, not a process*", McNeill's linguistic approach to gestures situates spontaneity and conventionality at opposite ends of the linguistic spectrum. McNeill, *Gesture and Thought*, 63. Emphasis original. McNeill also downplays gestures as "natural signs" by incorporating gestures *into* the conventional sign system of words (i.e. language)—something that Augustine of Hippo and Charles Sanders Peirce were careful not to do, as Iriskhanova and Cienki note. Iriskhanova and Cienki argue that the semiotic capacity of gestures should instead be understood along multiple dimensions or continuums and not just conventionality, because "spontaneous bodily actions are initially natural signs (symptoms and signals), grounded in physiology, neurology, psychology along with social conventions and contextual constraints." Iriskhanova and Cienki, "The Semiotics of Gestures in Cognitive Linguistics: Contribution and

continuum also undersells the role that pantomimes play in communication[314] and it does not include other important types of gestures like "recurrent gestures."[315] Recurrent gestures are similar to emblems in that they show a somewhat stable form-meaning relationship based on convention but they are also similar to gesticulations in that they are not a substitute for speech. As Müller and Bressem put it, "While emblems are apt at replacing speech completely, recurrent gestures form part of a multimodal utterance meaning. They are conventionalized co-speech gestures."[316] Silva Ladewig further iterates that "although recurrent gestures have undergone processes of conventionalization they cannot be considered as emblems since their meaning is schematic rather than word-like."[317]

On Kendon's continuum, recurrent gestures would be located somewhere between emblems and gesticulations because they are both variably conventional and variably spontaneous.[318] Recurrent gestures can be used in a variety of different communicative contexts but their conventional nature means that their form-meaning relationship remains relatively stable across different contexts. David McNeill does not give much attention to recurrent gestures or other conventionalized gestures because he takes a psycho-linguistic approach to the study of gestures which means that he is primarily interested in how spontaneous co-speech gestures (or gesticulations) are bound with speech and how they "unwittingly display [people's] inner thoughts and ways of understanding events of the world."[319] Emblems and recurrent

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Challenges," 30. As they put it, "Semiotic continuum of gestures is not so much about being more or less 'sign-like' [i.e. word-like], as it is about gestures being *signs in a variety of ways*." Iriskhanova and Cienki, 30.

[314] See for example Arbib, "In Support of the Role of Pantomime in Language Evolution"; Steven Brown et al., "How Pantomime Works: Implications for Theories of Language Origin," *Frontiers in Communication* 4 (2019), https://doi.org/10.3389/fcomm.2019.00009.

[315] See Bressem and Müller, "A Repertoire of German Recurrent Gestures with Pragmatic Functions"; Ladewig, "Recurrent Gestures."

[316] Bressem and Müller, "A Repertoire of German Recurrent Gestures with Pragmatic Functions," 1576.

[317] Ladewig, "Recurrent Gestures," 1560.

[318] Alan Cienki, "Spoken Language Usage Events," *Language and Cognition* 7, no. 4 (2015): 508.

[319] McNeill, *Hand and Mind*, 12.

gestures are "culturally codified"[320] and more dependent on cultural factors than co-speech gestures and therefore less revealing of an individual's hidden thoughts. While McNeill and other gesture researchers who take a psycho-linguistic approach to gestures do not give emblems and recurrent gestures as much attention as co-speech gestures, emblems and recurrent gestures are important for understanding the nature and function of ritual gestures because ritual gestures can similarly be both variably conventional and variably spontaneous. Different types of ritual gestures which could form different recurrent gesture families include PUOH gestures, indicating gestures (e.g., directing-to, placing-for, etc.), submissive gestures (e.g., kneeling, bowing, prostration, etc.), object manipulation gestures (e.g., holding, elevating, eating, etc.), and locomotive gestures (e.g., walking, procession, queueing, etc.), etc.

2.2.5 Instrumental and Communicative Approaches to Gestures

In addition to the various categories that have been proposed to classify different types of gestures, there are also two broad approaches to gestures that are relevant for how we approach ritual gestures. These two approaches are often referred to as *instrumental* and *communicative* approaches to gestures.[321]

According to the instrumental approach to gestures, gestures are understood as communicative actions that have been abstracted or metaphorically extended from an original instrumental bodily action. Some examples of gesture researchers who argue for this approach

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[320] Poggi, "Semantics and Pragmatics of Symbolic Gestures," 1482.
[321] Shaun Gallagher refers to these approaches as *motor* and *communication* theories of gesture. Gallagher, *How the Body Shapes the Mind*, 107–30. In using the term instrumental, it is important to note that an instrumental *approach* to gestures is not the same thing as an instrumental *action*. An instrumental approach refers to a particular interpretation on the source and origin of gestures (i.e., instrumental action) and how they relate to speech whereas an instrumental action refers to an actual bodily action that is performed towards some end.

include Autumn Hostetter and Martha Alibali, who describe gestures as "simulated actions"[322] which arise from perceptual and motor simulations that underlie language, Sotaro Kita, who argues that gestures are the product of "spatio-motoric thinking,"[323] and Curtis LeBaron and Jürgen Streeck, who suggest that "conversational hand gestures ascend from ordinary, non-symbolic exploratory and instrumental manipulations of the world of matter and things."[324] In this understanding, instrumental bodily actions *become* communicative gestures when those instrumental actions are "uncoupled" from their original material context and re-purposed toward a communicative end.[325] Instrumental actions serve as the foundation or material "vehicle" that facilitates the communication of abstract thoughts through bodily movement. Gestures depict or evoke or manipulate ideas and imaginary objects *as if* those ideas and objects were physically present.[326] For example, the brushing aside gesture, which is a gesture that metaphorically brushes aside arguments or ideas present in a discourse, is based on the instrumental action of brushing disagreeable objects to the side, like crumbs, dirt, mosquitos, etc.[327] In this approach, therefore, gestures are an analog of an original instrumental action but in a virtual or imaginary communicative space. As Streeck puts it, instrumental actions "enable the abstraction in the first place. In other words, the gesture does not simply express an abstraction that 'the mind' has independently arrived at, but it is itself the vehicle by which such abstraction operates."[328]

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[322] Hostetter and Alibali, "Visible Embodiment"; Autumn B. Hostetter and Martha W. Alibali, "Gesture as Simulated Action: Revisiting the Framework," *Psychonomic Bulletin & Review* 26, no. 3 (2019): 721–52.

[323] Sotaro Kita, "How Representational Gestures Help Speaking," in *Language and Gesture*, ed. David McNeill (Cambridge, UK: Cambridge University Press, 2000), 162–85.

[324] Curtis LeBaron and Jürgen Streeck, "Gestures, Knowledge, and the World," in *Language and Gesture*, ed. David McNeill (Cambridge: Cambridge University Press, 2000), 119.

[325] Streeck, *Gesturecraft*, 175.

[326] Shaun Gallagher says that according to the instrumental approach, gestures are "instrumental actions without actual objects." Gallagher, *How the Body Shapes the Mind*, 109.

[327] Sedinha Teßendorf, "Pragmatic and Metaphoric--Combining Functional with Cognitive Approaches in the Analysis of the 'Brushing aside Gesture,'" in *Body–Language–Communication: An International Handbook on Multimodality in Human Interaction*, ed. Cornelia Müller et al., vol. 2, 2 vols., Handbooks of Linguistics and Communication Science 38 (Berlin: De Gruyter Mouton, 2014), 1540–58.

[328] Streeck, *Gesturecraft*, 133.

Cornelia Müller even goes as far as to say that gestures are "artfully created illusions of reality, creative abstractions, schematizations" because they are "manifestations of visual and manual forms of thinking" which depend on the embodied features and capacities of the human hand.[329]

According to Jürgen Streeck, one of the most prominent proponents of the instrumental approach to gestures, human communication has too frequently been "separated from the world" and made "disembodied and worldless."[330] For Streeck, we need to recover the "practical, instrumental, non-symbolic"[331] foundation of action and experience on which communicative gestures are built. The knowledge—or "haptic schemata"[332]—attained from the hand's engagement with and manipulation of the material world which is ingrained in our motor neural pathways functions as the basis for the hand's ability to communicate symbolically about things other than itself. In other words, gestures are physical actions that are inescapably tied to bodily ways of knowing and interacting with the material world: "Gestures originate in the tactile contact that mindful human bodies have with the physical world."[333] Gesture's origin in a tactile, spatial world is what makes them good at representing visuo-spatial information in ways that words cannot.[334]

For example, if someone performed the communicative gesture of lifting up an empty hand *as if* they were holding a cup to take a drink, this gesture is meaningful because it is grounded on the embodied knowledge and experience of an original instrumental action of lifting a cup to take a drink. According to an instrumental interpretation of this gesture, the cup is an

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[329] Müller, "Gestural Modes of Representation as Techniques of Depiction," 1699.

[330] Streeck, *Gesturecraft*, 83–84.

[331] LeBaron and Streeck, "Gestures, Knowledge, and the World," 119.

[332] Streeck, *Gesturecraft*, 175.

[333] LeBaron and Streeck, "Gestures, Knowledge, and the World," 119.

[334] See for example Alibali, "Gesture in Spatial Cognition"; Cooperrider and Goldin-Meadow, "When Gesture Becomes Analogy"; Hostetter and Alibali, "Visible Embodiment"; Kita, Alibali, and Chu, "How Do Gestures Influence Thinking and Speaking?"

object that is stored in our haptic schemata "as a kinesthetic, enactive pattern"[335] and the communicative gesture with an empty hand is a virtual action or simulation of an original instrumental action. While the instrumental origin of many gestures may not always be as easily apparent, an instrumental approach argues that the same principle applies to all types of gestures because gestures are virtual or simulated bodily actions that arise from our bodily interaction with the material world. Our ability to use and make sense of gestures as communicative actions depends on our knowledge of the nature and function of the human hand and its fundamental role in interacting with and exploring the material world. In Chapter 4, we will revisit many of the principles inherent to the instrumental approach when we analyze the gesture of breaking the Eucharistic bread, which is a communicative gesture that arises from an instrumental action that interacts directly with the material world.

In contrast to the instrumental approach, the communicative approach argues that gestures are first and foremost a linguistic or communicative action and not a physical action. According to Shaun Gallagher, "gesture is not a form of instrumental action but a form of expressive action; not a reproduction of an original instrumental behaviour, but a different kind of action altogether."[336] While it is acknowledged that every gesture is in some way a physical movement, the communicative approach to gestures argues that the meaning and function of a gesture should be understood in the same way that the movement of our mouths is understood in relation to speech: first as a communicative action and second as a physical movement. A gesture, therefore, similar to words and other material symbols, cannot be thought of primarily in terms of physical movements. As Janet Bavelas and David McNeill put it, respectively, a gesture

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[335] Streeck, *Gesturecraft*, 175.
[336] Gallagher, *How the Body Shapes the Mind*, 117.

"is not based on physical action but on an inference about its meaning and function"[337] and
"Gestures are not just movements and can never be fully explained in purely kinesic terms. They
are not just the arms waving in the air, but *symbols that exhibit meanings* in their own right."[338]

According to the communicative approach, gestures do not originate in motor neural
pathways as those in the instrumental camp suggest but rather in our linguistic or communicative
neural pathways. David McNeill argues that gestures originate with speech in what he calls
"growth points," which are the initial, irreducible "minimal psychological units" or "idea units"
out of which thinking and speaking emerge.[339] Growth points are equal parts imagery (gesture)
and language (speech) which exist in an "*imagery-language dialectic*"[340] because "language and
imagery are inseparable: a joint system with these two components was part of the evolutionary
selection of the human brain."[341] McNeill's theory of growth points helps explain why, from an
evolutionary, neurological and empirical perspective, gestures and speech appear to form an
"unbreakable" bond with each other.[342] McNeill calls gestures the "images" or "material
carriers" of speech and thought and argues that images or gestures are a fundamental part of any

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[337] Bavelas, "Gestures as Part of Speech: Methodological Implications," 201.

[338] McNeill, *Hand and Mind*, 105.

[339] McNeill, *Gesture and Thought*, 105. Growth points are "the initial form of a thinking for (and while) speaking, out of which a dynamic process of organization emerges." McNeill, 105. Borrowing from the psychologist Lev Vygotsky (1896-1934), McNeill describes growth points as a "psychological predicate" which is the differentiation of a focal point from a background context. This differentiation provides the "theoretical link" between growth points and contexts of speaking. The focus is the content of communication but the background is retained as the context of the communicative expression.

[340] McNeill, *Gesture and Thought*, 87–127.

[341] McNeill, 16.

[342] McNeill gives five arguments for the virtually unbreakable bond between gesture and speech. First, gesture and speech are temporally organized together. Gestures tend to precede or synchronize with its related spoken word. McNeill notes that even in "delayed auditory feedback"—where someone hears their own speech played back to them at a delay—where the flow of speech is dramatically affected, gestures and speech remain synchronized. Second, gestures can "inoculate" against stuttering and also start and stop when stuttering too starts and stops. Third, people continue to gesture when they speak even when the speaker cannot see their own gestures—the congenitally blind gesture when they speak—or when the speaker knows that the listener cannot see their gestures—people continue to gesture when talking on the telephone. Fourth, information received through a gesture can but recalled later through speech suggesting that "speech and gesture exchange information freely." Fifth, gesture and speech coordinate in fluency so that as speech fluency decreases gestures decrease and as speech fluency increases gestures increase. McNeill, 24–27.

cognitive operation. As he says, "language is inseparable from imagery. The imagery in question is embodied in the gestures that universally and automatically occur with speech. Such gestures are a necessary component of speaking and thinking."[343] Therefore, unlike the instrumental approach to gestures which argues that gestures originate in instrumental actions and engagement with the material world, David McNeill and the communicative approach argue that gestures originate with speech in the communicative neural centers of the brain.

It is important, though, not to overstate the difference between these two approaches to gestures. For Jürgen Streeck, instrumental actions and communicative gestures are difficult to parse because they are often built onto each other: "Instrumental actions are routinely interwoven with communicative acts, and the two types do not so much appear as separate sets, but rather as modulations of one another."[344] Shaun Gallagher, who prefers a communicative approach to gestures, nevertheless argues for an "integrative theory of gesture" which combines instrumental and communicative approaches because "it would be wrong to lose track" of the fact that "gesture is nonetheless movement" and that "Gesture and language remain embodied in some important ways."[345] Carrie Noland also maintains that "expressive and instrumental gestures are interchangeable; what makes them *gestures* is that they involve the body in a double process of active displacement (through contraction of the muscles) and information gathering (through the neuro-receptors located along these muscles)."[346] Gestures, for Noland, "are not inherently fixed in either an instrumental or signifying register."[347]

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[343] McNeill, 15.

[344] Streeck, *Gesturecraft*, 83.

[345] Gallagher, *How the Body Shapes the Mind*, 123. According to Gallagher, "an integrative theory understands gesture to be, first, *embodied* (constrained and enabled by motoric possibilities); second, *communicative* (pragmatically intersubjective); and third, *cognitive* (contributing to the accomplishment of thought, shaping the mind)." Gallagher, 123. Emphasis original.

[346] Noland, *Agency and Embodiment: Performing Gestures/Producing Culture*, 15.

[347] Noland, 208.

Understanding the subtle differences between instrumental and communicative approaches to gestures is instructive for understanding the nature and function of ritual gestures. To begin, ritual gestures are frequently classified along the same categorical divide between instrumental action and communicative expression. Roy Rappaport, for example, distinguishes between "two general classes of [ritual] efficacy—the physical and the meaningful," where physical efficacy depends on the mechanical nature of material things and meaningful efficacy depends on the principles of human communication.[348] For some, ritual gestures are likened to instrumental actions because they are performed as a means to an end. An example of this kind of gesture in the Christian tradition could be the laying on of hands in a healing ritual, where the prescribed bodily action is believed to cause a physical effect in another person's body. For others, especially for those wanting to distance their ritual performances from notions of instrumentality and connotations of magic, ritual gestures function as communicative expressions which are symbolic of something beyond the ritual action itself.

Furthermore, ritual action is usually distinguished from instrumental action in the same way that a gesture is distinguished from an instrumental action. For example, in an analysis of the ritual-like patterns of animal behaviour, Julian Huxley distinguished between instrumental and communicative behaviours.[349] According to Huxley, instrumental behaviour includes bodily actions that are directed toward the material environment for practical purposes, such as building a nest or procuring food, and communicative behaviours are bodily actions that are directed toward other members of a species in order to share information from one member to another. Communicative behaviour amongst animals regularly occurs in courtship and mating displays,

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[348] Rappaport, *Ritual and Religion in the Making of Humanity*, 108.
[349] Julian Huxley, ed., "A Discussion on Ritualization of Behaviour in Animals and Man," vol. 251, B (Philosophical Transactions of the Royal Society, 1966), 247–525.

grooming practices, and territorial disputes. Huxley described many of these communicative behaviours as ritual-like because they are analogous to human ritual action in that they are stylized, repetitive, and communicative actions which are best understood as being non-instrumental. Huxley referred to the development of ritual-like communicative behaviour as a process of "ritualization," where instrumental or non-communicative behaviours develop into formal or communicative behaviours over time. Functionally, the process of ritualization is the process of distinguishing communicative behaviours from other instrumental or non-formal behaviours. The formalization of instrumental behaviour into communicative behaviour offers a selective advantage because it enhances a species' ability to communicate between its members because formalization reduces the ambiguity of the communicative action.

The concept and process of ritualization has been influential in the field of ritual studies because it helps explain how instrumental or non-communicative actions are sometimes formalized into communicative or "ritualized" actions within a social group. Prominent ritual study scholars like Catherine Bell[350] and Jonathon Z. Smith[351] argue that ritualization—the practice of distinguishing or marking some actions as being sacred or set apart from other more ordinary actions—is at the heart of ritual activity in religious settings. As Catherine Bell puts it, "At a basic level, ritualization is the production of this differentiation. At a more complex level, ritualization is a way of acting that specifically establishes a privileged contrast, differentiating itself as more important or powerful."[352] Therefore, in the same way that gestures are differentiated from ordinary or instrumental actions in the field of gesture studies because they

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[350] See Catherine Bell, *Ritual Theory, Ritual Practice* (Oxford: Oxford University Press, 1992).
[351] See Jonathan Z. Smith, *To Take Place: Toward Theory in Ritual* (Chicago: The University of Chicago Press, 1987).
[352] Bell, *Ritual Theory, Ritual Practice*, 90.

"*manifest deliberate expressiveness*",[353] ritual actions are differentiated from ordinary or instrumental actions in the field of ritual studies because they manifest something privileged within a community of people. In the Roman Catholic celebration of the Eucharist, for example, the instrumental actions of eating and drinking, actions which are necessary for our survival as humans, are transformed—or routinized, stylized, and formalized—into communicative actions within the context of the ritual celebration of the Eucharist. The celebration of the Eucharist is therefore spiritually "instrumental" to the life of a Christian because it has its origin in instrumental actions that are necessary for human survival.

Harvey Whitehouse credits our ability to set apart ritual actions from instrumental actions to the phenomenon of "*overimitation*—the tendency to copy behaviour that has no obvious instrumental function."[354] As a product of overimitation, ritual behaviour—what Whitehouse calls the "ritual stance" which he distinguishes from the "instrumental stance"—copies modelled behaviour "in every detail, without deviating or making up variants of our own."[355] As a consequence, ritual behaviour is always somewhat "causally opaque" because "at least some components of the observed procedural sequence do not contribute to any obvious way to the outcome."[356] In contrast, instrumental behaviour, which can also at times be causally opaque, differs because it "involves hunting for ever more efficient ways of achieving a recognizable end goal."[357] Whitehouse offers kneeling and hand clasping as examples of ritual actions which are distinguished from instrumental actions because they "are not intended to contribute to an end goal via potentially knowable processes of physical causation." Whitehouse explains:

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[353] Kendon, *Gesture*, 2004, 13–14.

[354] Harvey Whitehouse, *The Ritual Animal: Imitation and Cohesion in the Evolution of Social Complexity* (Oxford: Oxford University Press, 2021), 24.

[355] Whitehouse, 25.

[356] Whitehouse, 24.

[357] Whitehouse, 25.

> Indeed, if it turned out that people were kneeling in church because that was the most efficient way to observe what the priest was doing at the altar and desisted from doing so whenever they could observe just as easily by sitting or standing, then the whole business of kneeling down would cease to be a ritual. It is precisely the irresolvable nature of the causal opacity that makes such gestures, bodily postures, and stereotyped behaviours recognizable as rituals.[358]

For Whitehouse, then, ritual action is a particular or special type of action that is differentiated from ordinary or instrumental actions because it involves socially prescribed meanings which have no instrumental value or end goal. Ritual action is "concerned primarily with observing normative conventions as a way of affiliating with a group."[359]

However, a strong distinction between instrumental and ritual action can easily overlook the fact that communicative ritual action can be also instrumental in important ways. Whitehouse, for example, describes magical thinking as a hybrid between ritual and instrumental behaviour because, in magic, a causally opaque action that is prototypical of a ritual behaviour is perceived as being instrumental because it has a clearly defined end goal that is achievable by ritual actions. For Whitehouse, then, the relationship between ritual and instrumental stances is "fluid"[360] and "largely complementary rather than contradictory."[361] Because of the complex and integrative structure of many gestures, the nature and function of a ritual gesture should be done on a case-by-case basis so that all the elements of the ritual context—speech, material environment, participants, etc.—can be taken into consideration. The following chapters will further explore the relationship between the instrumental and communicative aspects of gestures in an effort to overcome the conceptual and methodological divide that exists between gesture

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[358] Whitehouse, 26–27.

[359] Whitehouse, 26. Whitehouse argues that group affiliation is one of the main driving forces for the phenomenon of overimitation: "when the ritual stance is engaged, participants are more interested in affiliation through conformism rather than skill acquisition via technical learning." Whitehouse, 33.

[360] Whitehouse, *The Ritual Animal: Imitation and Cohesion in the Evolution of Social Complexity*, 39.

[361] Whitehouse, 38.

studies and religious studies. I will show that re-framing ritual gestures within the domain of *inter*-action or "dialogue" allows us to overcome many of the existing conceptual and methodological boundaries that have prevented productive dialogue between the fields of gesture studies and religious studies such as that between everyday and ritual settings, and communicative and instrumental actions. We will see that many of the prescribed gestures that are part of Roman Catholic rituals, such as PUOH or orans gestures and the breaking of the Eucharistic bread, involve a combination of instrumental and communicative actions and that we can incorporate many of the insights from the field of gesture studies to understand ritual gestures as *part of* language rather than as a non-verbal action that is set apart from language.

Chapter 3: Ritual Gestures: Framing Ritual Gestures in terms of Dialogue

3.1 Ritual versus Everyday Gestures

Ritual gestures are a multi-faceted phenomenon. There are many kinds of gestures that can be part of a ritual performance—kneeling, bowing, prostration, dancing, touching, gazing, walking, etc.—and the meaning of each gesture or action can change depending on the context or manner in which the gestures are performed. Ritual gestures are not a standalone phenomenon and each gesture finds its meaning in close relation to its ritual context, accompanying ritual texts, and the canonical texts in the ritual tradition. As Kimberly Hope Belcher argues, there is "constant intertextuality between ritual gestures" because ritual gestures interpret and reinforce one another in light of a multitude of factors.[362]

Despite the diversity and richness of ritual gestures, the modern field of gesture studies has given very little—if any—attention to gestures that occur in ritual settings. This is evident is in the lack of attention that give researchers give to gestures in the Middle Ages. As mentioned in the previous chapter, the Middle Ages are considered by many to be a "culture of gestures"[363] and yet most surveys of the history of the study of gesture histories by gesture researchers routinely fail to mention gestures in the Middle Ages at all—they more or less jump from Quintilian in the first century to the Renaissance in the fifteenth century.[364] David McNeill and Cornelia Müller, for example, identify five themes or approaches to gestures throughout the

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[362] Kimberly Hope Belcher, "Ritual Systems: Prostration, Self, and Community in the Rule of Benedict," *Ecclesia Orans* 37 (2020): 339.

[363] Schmitt, "The Rationale of Gestures in the West: Third to Thirteenth Centuries," 59.

[364] See for example Armstrong, Stokoe, and Wilcox, *Gesture and the Nature of Language*; Beattie, *Rethinking Body Language: How Hand Movements Reveal Hidden Thoughts*; Goldin-Meadow and Brentari, "Gesture, Sign, and Language"; Kendon, *Gesture*, 2004; Müller, Ladewig, and Bressem, "Gesture and Speech from a Linguistic Perspective: A New Field and Its History"; Wilcox, "Speech, Sign, and Gesture."

"two-thousand-plus-year history of commentary on gesture"[365]: (1) the "domestication" or suppression of gesture in favour of speech; (2) the "prescription" of gesture for oratorical use; (3) the "private and dialogic" use of gestures (i.e., gesture in relation to manners and etiquette); (4) the role of gesture in the origin of language; (5) gestures in everyday speech. Conspicuously absent from this list are the "strongly ritualized" gestures of the Middle Ages that had great cultural importance in religious rituals and legal proceedings.[366]

One reason for this blind spot amongst gesture researchers appears to be that gesture researchers consider gestures in everyday settings to be categorically different than gestures in ritual settings. As explored in the previous chapter, the field of gesture studies focuses primarily on the movements of the hands that occur with speech in everyday face-to-face dialogue. These everyday gestures are considered to be voluntary and spontaneous communicative actions whose meaning is directly dependent on its relation to speech. Everyday gestures visibly display the intentions or mind of the gesturer and they are highly dependent on the particular context in which they are performed. In contrast, ritual gestures are generally considered to be prescribed, conventional actions whose meaning is socially pre-determined and largely independent of speech or the particular context in which they are performed. Ritual gestures are similar to "emblems"—a conventional form of bodily expression whose meaning is independent from speech. Certain ritual practices even prohibit speech for devotional reasons, leading to the development of ritual "sign languages" which differ from co-speech gestures because they are language-like and are performed in the absence of speech.[367] According to Kendon's continuum

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[365] Cornelia Müller as referenced in McNeill, *Gesture and Thought*, 14–15.

[366] Schmitt, "The Rationale of Gestures in the West: Third to Thirteenth Centuries," 59.

[367] According to Kendon, "The most notable examples are the systems found in the central desert areas of Australia where the practice of tabooing speech as part of mourning ritual (among women) or as part of initiation ceremonies (among men) was and is followed (Kendon 1988), and the systems at one time in widespread use among the Plains Indians of North America (Davis 2010; Farnell 1995; Mallery 1972). Sign languages developed for ritual reasons also were (and perhaps still are) used in some Christian monastic orders (Bruce 2007; Umiker-Sebeok and Sebeok

(see last chapter, section 2.2.4.3), everyday gestures and ritual gestures are located on opposite

ends of the linguistic spectrum, with everyday gestures towards the spontaneous, non-

conventional end and ritual gestures towards the conventional end.

Furthermore, consider Herbert Clark's "Ten unique features of spontaneous face-to-face

dialogues" in everyday settings which frames the context in which everyday co-speech gestures

are analyzed and whether any of these features could be considered a feature of ritual

performances:

1. Co-presence: The participants share the same physical environment.
2. Visibility: The participants can see each other.
3. Audibility: The participants can hear each other.
4. Instantaneity: The participants perceive each other's actions with no perceptible delay.
5. Evanescence: The medium is evanescent—it fades quickly.
6. Recordlessness: The participants' actions leave no record or artifact.
7. Simultaneity: The participants can produce and receive at once and simultaneously.
8. Extemporaneity: The participants formulate and execute their actions extemporaneously, in real time.
9. Self-determination: The participants determines for themselves what actions to take when [vs. scripted].
10. Self-expression: The participants take actions themselves [vs. roles].[368]

It is not obvious that these features are obviously to gestures in ritual settings. While many

rituals are public actions that are performed by a group of people, it is not empirically clear

whether all ritual participants (i.e., God, divine spirits, etc.) are co-present in the same physical

environment (cf. feature 1) or whether they can visibly see or audibly hear each other in any

commonsense understanding (cf. features 2-3). Many ritual settings (i.e., the community, the

material elements, the physical space, the bodies of the individuals, etc.) are also designed to

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1987)." Adam Kendon, "Exploring the Utterance Roles of Visible Bodily Action: A Personal Account," in *Body-Language-Communication: An International Handbook on Multimodality in Human Interaction*, ed. Cornelia Müller et al., vol. 1, Handbooks of Linguistics and Communication Science 38 (Berlin: De Gruyter Mouton, 2013), 17.
[368] Clark, *Using Language*, 9–10.

preserve the signs and artifacts of the ritual (cf. features 5-6) and ritual actions often involve prescribed and scripted roles that are determined by the community rather than the participant (cf. features 8-9). The features of instantaneity, simultaneity, and self-expression have analogues in rituals but even these features would have to be qualified to show their similarity to features of everyday dialogue.[369] A summary of the commonly held differences between everyday and ritual gestures is listed below:

Everyday Gestures
1. Spontaneous, *ad hoc*, non-conventional
2. Context-dependent
3. Tightly bound with speech
4. Analogical
5. Interlocutors are usually co-present and visible in the same physical environment
6. Intentional (i.e., bodily movement is performed for someone else for the purpose of communication; movement is expressive of thought of individual)

Ritual Gestures
1. Formal, prescribed, repetitive, conventional (e.g., emblems)
2. Context-independent
3. Regularly performed in the absence of speech
4. Digital (e.g., on-off, correct-incorrect, successful-unsuccessful, etc.)
5. Often assumes the presence of invisible, non-present interlocutors (e.g., God, spirits, ancestors, etc.)
6. Non-intentional (i.e., expression of tradition or institutionalized discourse)

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[369] Some ritual scholars argue that individuals *can* express their intentionality or agency in ritual settings but this argument still acknowledges that such self-expression is "rehearsed" in culturally defined ways. See for example Saba Mahmood, "Rehearsed Spontaneity and the Conventionality of Ritual: Disciplines of Salāt," *American Ethnologist* 28, no. 4 (2001): 827–53.

The apparent difference between spontaneous everyday gestures and conventional ritual gestures has resulted in a conceptual and methodological divide that has prevented gesture researchers from considering the nature and function of ritual gestures. As Eve Sweetser notes, linguists are generally not well equipped to make sense of how conventional communicative acts can be powerful in some scenarios while clichéd in others:

> It remains somewhat of a mystery exactly how conventionalization affects the meaning of human symbolic forms…Our understanding of ritual, for example, would suggest that repeated and conventional [actions in ritual settings] can have cognitive power which derives precisely from their conventionality. Perhaps some of the same forces are involved when a child demands a fourth sequential reading of the same story, despite having heard it dozens of times before. On the other hand, clichés lose the communicative power associated with 'freshness' and innovation, as they become conventionalized larger units; they may show reduced phonological structure in production, and increasingly 'subjective' or discourse-related meaning, as well. Linguists don't know how to make sense of both these two facts together.[370]

The field of gesture studies is not alone in assuming a conceptual and methodological divide between gestures in everyday and ritual settings. In the field of religious studies, rituals are frequently characterized as formal, prescribed, or conventional actions that are somehow distinguished or set apart from everyday, spontaneous or instrumental actions. Ritual gestures are also regularly performed in unison by a group of people, meaning that they provide a window into the mind of a community, tradition, or culture rather than a window into the mind of the individual.[371] Catherine Bell has argued that the dichotomy between ritual and the everyday is loosely analogous to the dichotomy between thought and action, where ritual is a type of routine action that is distinct or set apart from genuine thought on the part of the individual. As Bell puts

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[370] Sweetser, "What Does It Mean to Compare Language and Gesture? Modalities and Contrasts," 361.

[371] Ritual scholar Barry Stephenson describes this common approach to rituals: "Ritual is not an expression of intentions, motivations, feelings, beliefs, and so on; rather, ritual entails engaging in specific, formalized acts, and utterances not of one's own making. The actions are nonintentional in the sense that they come to us from outside ourselves, inherited, received, elemental, archetypal." Barry Stephenson, *Ritual: A Very Short Introduction* (Oxford: Oxford University Press, 2015), 84.

it, "Ritual is then described as particularly thoughtless action—routinized, habitual, obsessive, or mimetic—and therefore the purely formal, secondary, and mere physical expression of logically prior ideas."[372] Stanley Tambiah also clearly expresses the assumption that ritual involves the separation between thought and action: "[R]ituals as conventionalized behavior are not designed or meant to express the intentions, emotions, and states of mind of individuals in a direct, spontaneous and 'natural' way…we can say that a large part of the intentions of the actors as regards the purpose and result of the ritual are already culturally defined, presupposed, and conventionalized."[373]

As noted in the previous chapter, rituals often emerge out of a process of ritualization which sets apart sacred or special activities from ordinary, everyday activities. Stanley Tambiah articulates this assumed divide between everyday and ritual actions when he says:

> Now, if for the purposes of exposition we draw a crude distinction between 'ordinary' communicational behaviour and 'ritual' behaviour (accepting of course that both kinds are equally subject to cultural conventions), then we could say (forgetting the problem of insincerity and lying) that ordinary acts 'express' attitudes and feelings directly (e.g. crying denotes distress in our society) and 'communicate' that information to interacting persons (e.g. the person crying wishes to convey to another his feeling of distress). But ritualized, conventionalized, stereotyped behaviour is constructed in order to express and communicate, and is publicly construed as expressing and communicating, certain attitudes congenial to an ongoing institutionalized discourse. Stereotyped conventions in this sense act at a second or further remove; they code not intentions but 'simulations' of intentions…Thus *distancing* is the other side of the coin of conventionality; distancing separates the private emotions of the actors from their commitment to a public morality.[374]

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[372] Bell, *Ritual Theory, Ritual Practice*, 19. Emphasis original. Also: "Theoretical discourse on ritual displays a similar logical structure [as Saussurean linguistics]: a distinction between belief and rite, made as readily as the heuristic distinction between thought and action, clears the way to focus on ritual alone." Bell, 22–23.

[373] Stanley Tambiah, "A Performative Approach to Ritual," *Proceedings of the British Academy* 65 (1979): 124, 127 quoted in Barry Stephenson, "Ritual as Action, Performance, and Practice," in *The Oxford Handbook of Early Christian Ritual*, by Barry Stephenson, ed. Risto Uro et al. (Oxford University Press, 2018), 47.

[374] Stanley Tambiah "A Performative Approach to Ritual," *Proceedings of the British Academy* 65 (1979): 124 quoted in Asad, *Genealogies of Religion*, 73.

In this chapter, I argue that the difference between everyday gestures and ritual gestures is not as large or as clear cut as scholars in the fields of gesture studies and religious studies have often argued. There are a number of possible sources of evidence that support this argument. First, as we saw in the previous chapter, gestures are an extremely heterogeneous phenomena that do not always fit into neat categories. Suggesting that everyday and ritual gestures cannot be rigidly separated into different or even opposing gesture categories is consistent with the approach to gestures taken by many gesture researchers who argue that "Any given gesture, once understood in the context of its use, may be located on several of these dimensions simultaneously. Which aspect or dimension is given emphasis must depend upon the particular objectives of the inquiry being undertaken."[375]

Second, scholars have increasingly noted that conventionality and spontaneity are not contradictory or mutually exclusive features of ritual and everyday actions, respectively. Ronald Grimes suggests that many rituals are "emerging rituals" in that they emerge out of the improvised practices of marginal groups and can exhibit expressions of creativity, freedom, and informality not usually associated with ritual performances. As Grimes puts it, "Just as language is always being invented in the process of using it, so ritual is always in the process of being created as ritualists enact it."[376] Many gestures such as emblems or recurrent gestures are conventional and yet regularly occur as part of everyday or spontaneously occurring dialogues or social interactions between people. Furthermore, formalized ritual gestures can be spontaneous in ways that go beyond social convention. Carrie Noland, for example, argues that gestures have "kinesthetic excess" or a "vestige" of bodily processes and bodily intentionality that are always

[375] Kendon, *Gesture*, 2004, 84.

[376] Ronald L. Grimes, "Reinventing Ritual," *Soundings: An Interdisciplinary Journal* 75, no. 1 (1992): 24. See also Ronald L. Grimes, "Emerging Ritual," in *Proceedings of the North American Academy of Liturgy. Plenary Session Lecture.* (St. Louis, MO, 1990), 15–31.

more than their conventional meaning.[377] In other words, ritual gestures are always in excess of conventional pre-determined meanings because they remain tied to bodily ways of knowing and interacting with the world. The "kinesthetic excess" of bodily movement is what allows individual agency or spontaneity to emerge in ritual settings. Robert Yelle explains the excess of meaning in rituals by highlighting the "poetics of ritual performance."[378] In the same way that poets utilize rhetorical tools like repetition to create new meanings in words that could not have been created otherwise, the poetic texts of ritual utilize repetition to the same end. Saba Mahmood also highlights the possibility of "rehearsed spontaneity" in ritual settings. Rather than being merely a conventional or formal form of social behaviour, Mahmood argues that ritual activity can be "both *enacted through*, and *productive of*, intentionality, volitional behaviour, and sentiments—precisely those elements that are assumed by Tambiah and others to be bracketed in the performance of ritual."[379] For Mahmood, ritual gestures can be spontaneous and expressive of individual intentionality and agency at the same time remain in accord with the conventions of a religious tradition.

Third, the meaning of a ritual gesture often remains ambiguous despite its highly conventional nature. Kimberly Hope Belcher points out that even in the highly structured "ritual system" of the Rule of St. Benedict, the same gesture can be used in different contexts with different meanings.[380] Prostration, for example, the act of positioning one's body in a face-down or prone position on the ground, can be understood as a request for prayer, a gesture which

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[377] According to Noland, gestures provide "kinesthetic sensations that remain in excess of what the gestures themselves might signify or accomplish within that culture." Noland, *Agency and Embodiment: Performing Gestures/Producing Culture*, 2.

[378] Robert A. Yelle, "The Poetics of Ritual Performance," in *The Semiotics of Religion: Signs of the Sacred in History* (London: Bloomsbury, 2013), 23–60.

[379] Mahmood, "Rehearsed Spontaneity," 833. While gesture researchers are not the intended target of Mahmood's criticisms, they can no doubt be placed in the "others" group who knowingly or unknowingly bracket spontaneity from ritual performance.

[380] Belcher, "Ritual Systems: Prostration, Self, and Community in the Rule of Benedict," 338.

"makes satisfaction" for a wrong done, or an act of adoration depending on the context and the individuals involved in the interaction. As Belcher notes, "These three interpretations are not easily harmonized with one another: requesting prayers is communicative, demanding that others understand prostration as a bid for prayers; making satisfaction implies that the act of prostration is a willing act of atonement for a wrong done. The interpretation of prostration as an act of recognition of Christ in the stranger adds another source of tension."[381] Therefore, despite the highly structured ritual system of the Rule of St. Benedict, many of its prescribed ritual gestures remain ambiguous because their meaning depends on the context in which they are performed. For Belcher, this inherent ambiguity in ritual systems makes rituals "productive, not adverse" social activities because "it allows for the process of the production of meaning that structures both self-making and community bonding."[382] Actions and gestures within such ritual systems should therefore be understood as "iterative" rather than "reiterative" practices where the "ritual participants are already engaged as both agent and as a narrator" in a ritual practice that is not isolated from its cultural context.[383]

The fourth reason that everyday and ritual gestures are not as different as they are often perceived is that ritual gestures in the Roman Catholic tradition and many other religious traditions occur within the context of *dialogue*. The dialogical context of many rituals means that ritual gestures are to some degree analogous in nature and function to gestures in everyday dialogue. In this chapter, I will refer to this framing of ritual gestures as a dialogical approach. The benefit of a dialogical approach is that is consistent with how many religious traditions understand their own ritual practices (e.g., as a dialogue, encounter, meeting, communion, etc.)

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[381] Belcher, 338.
[382] Belcher, 351.
[383] Belcher, 355.

and it allows us to incorporate insights from the field of gestures studies into our understanding of the nature and function of ritual gestures. This chapter draws heavily on conceptual metaphor theory and conceptual blending theory to detail the structure of the metaphorical concept of "sacramental dialogue" to show how ritual gestures can function analogously to everyday gestures within the context of ritual dialogue.

Before detailing the metaphorical structure of the concept of sacramental dialogue and incorporating the insights from the field of gesture studies into our understanding of ritual gestures, I will first offer a brief overview of six different ways that ritual gestures or ritual actions have been approached or framed primarily from within the field of religious studies: formal, instrumental, symbolic, indexical, performative, and dialogical. Similar to approaches to everyday gestures in the field of gesture studies, there is no universally accepted approach or typology for understanding or classifying ritual gestures. Ritual gestures are extremely heterogeneous and any attempt to classify them should be understood heuristically and not categorically. The six approaches identified here should therefore not be thought of as being mutually exclusive to each other because many of these approaches share deep commonalities with each other. Like everyday gestures, ritual gestures are best understood as a both/and rather than an either/or phenomenon because ritual gestures can often be formal, instrumental, symbolic, indexical, performative, and/or dialogical at the same time. These six approaches can also be mapped onto different approaches to rituals in general but in this chapter I try to limit my discussion to how gestures function in each of these approaches. Special attention is also given to RC understandings of ritual gestures where applicable.

3.2 Approaches to Ritual Gestures

3.2.1 Formal

The formal approach to ritual gestures prioritizes the prescribed, rule-governed, repetitive, or conventional nature of ritual actions. Roy Rappaport emphasizes the formal nature of rituals when he defines rituals as "*the performance of more or less invariant sequences of formal acts and utterances not entirely encoded by the performers.*"[384] While Rappaport acknowledges that ritual performances *can* be imprecise, that participants *can* have some choice over how a ritual is performed, and that rituals *do* change over time, he argues that the meaning of a ritual is formalized or "encoded" by a tradition rather than the individuals who perform the ritual. According to Rappaport, the ritual participant is not the author of his or her own actions, meaning that people must in some way surrender their individual agency in order to participate in and conform to the formal structure of the ritual.[385] In contrast to everyday gestures which can express the intentions and thought of individuals in the moment, the formal dimension of ritual gestures suggests that ritual gestures readily conform to social convention and received cultural memory and are therefore distanced from individual expression and reflexivity. The encoded nature of rituals also means that rituals are often understood as being digital phenomenon—as discrete signals which can be recognized as on or off, successful or unsuccessful, correct or incorrect, effective or not effective. In a formal ritual setting, ritual gestures are more of a

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[384] Rappaport, *Ritual and Religion in the Making of Humanity*, 24. Emphasis original.
[385] Rappaport, 119: "*In conforming to the orders that their performances bring into being, and that come alive in their performance, performers become indistinguishable from those orders, parts of them, for the time being. Since this is the case, for performers to reject liturgical orders being realized by their own participation in them as they are participating in them is self-contradictory, and thus impossible. Therefore, by performing a liturgical order the participants accept, and indicate to themselves and to others that they accept whatever is encoded in the canon of that order.*" Emphasis original.

"yes/no," "on/off," or "either/or" digital signal than a "more-less" analogous signal.[386] A successful ritual depends on whether it is performed correctly according to the intentions of the tradition rather than the intentions of the individual. The benefit of a digital approach to rituals is that it improves communication and shared understanding within group of people because it reduces the amount of ambiguity present in a coded signal. As Rappaport puts it, "Such a reduction of ambiguity, I have argued (and it is tantamount to tautology) enhances the clarity of messages so transmitted. I would now add that it 'purifies' them, so to speak, as well,"[387] and "The advantage of digitalization is that it increases clarity. The representation of influence, prestige or worth in numbers of discrete units, such as pigs, reduces the vagueness of social and political situations by facilitating comparison."[388] Similarly, Catherine Bell notes that in rituals, "formality appears to be, at least in part, the use of a more limited and rigidly organized set of expressions and gestures, a 'restricted code' of communication or behavior in contrast to a more open or 'elaborated code.'" As a result, "formal gestures are fewer in number than informal ones and are more prescribed, restrained, and impersonal. By limiting or curbing how something can be expressed, restricted codes of behavior simultaneously influence what can be expressed as well."[389] In other words, the more formal or prescribed a ritual action, the clearer they mark the boundaries and communicate the intentions of the community.

Despite the clarity that formality provides, the formal dimension of rituals also makes ritual gestures "opaque" because the meaning of the gesture is located in the ritual tradition rather than in the nature and function of the bodily movement in its immediate context. Ritual

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[386] Full quote from Rappaport: "In sum, the clarity of the messages…derives from the opposition of ritual occurrence to non-occurrence. This opposition reduces great masses of complex 'more-less' information to the answer to a single 'yes/no,' 'on/off' or 'either/or' question." Rappaport, 95.

[387] Rappaport, 102–3.

[388] Rappaport, 88.

[389] Catherine Bell, *Ritual: Perspectives and Dimensions* (Oxford: Oxford University Press, 1997), 139.

opacity is, for many, what makes a ritual a ritual—the meaning of the ritual performance refers back to a received tradition rather than to its immediate social context. As Harvey Whitehouse says, "It is precisely the irresolvable nature of the causal opacity that makes such gestures, bodily postures, and stereotyped behaviours recognizable as rituals."[390] There is therefore a certain irresolvable, closed or circular dimension to many formal ritual gestures—their purpose is to refer to themselves, that is, to the tradition within which they have their meaning. Vilém Flusser, for example, suggests that one of the types of gestures that can be "experimentally defined" are "gestures directed (back) at themselves."[391] Flusser calls this category of gestures "closed or circular gestures" or "ritual gestures" because they have a "fixed structure that is circular" or "purposeless" because they are not directed toward others or the material environment the way that other gestures are. Ritual gestures are, for Flusser and others, a tautology of a tradition. They are more or less fixed, circular, purposeless and opaque—movements that have no meaning outside of the ritual tradition within which they are performed.

The formal, digital dimension of rituals is evident in the Roman Catholic adage *ex opere operato* which literally means "by the very fact of the action's being performed."[392] According to *ex opere operato*, a sacrament is effective by virtue of being performed in the correct manner according to the tradition because the effectiveness of the sacrament depends on Christ and not on local factors like the faith or the holiness of the minister or the recipient (i.e., *ex opere operantis*: by the work of the worker). As the Catechism of the Catholic Church puts it, "From the moment that a *sacrament is celebrated in accordance with the intention of the Church, the power of Christ and his Spirit acts in and through it*, independently of the personal holiness of

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[390] Whitehouse, *The Ritual Animal: Imitation and Cohesion in the Evolution of Social Complexity*, 26–27.
[391] Flusser, *Gestures*, 166–69.
[392] Catholic Church, *Catechism*, n. 1128.

the minister."[393] By celebrating the sacraments in accordance with the tradition of the Church, the intentions of the minister and the recipient are united with the intentions of the Church and Christ, meaning that the efficacy of the sacraments depends not on the intentions of the individuals but on the intentions of the Church and Christ: "the sacrament is not wrought by the righteousness of either the celebrant or the recipient, but by the power of God."[394] As Roger Nutt frames it, the power of the sacraments to cause or to effect grace is "*intrinsic* to the celebration of the sacramental signs, and not merely *extrinsic* and dependent on some other factor (such as the faith or devotion of the minister or recipient)."[395] It is Christ, who is intrinsic to the sacraments, not the minister or the participant, who causes the sacraments to be effective.

While the formal dimension is undoubtedly an important part of many ritual actions, formality on its own cannot explain the diversity of gestures and bodily movements that occur in ritual settings. As noted in the previous chapter, gestures typically function analogically rather than digitally. To reduce all ritual actions to discrete, digital actions is to overlook or to underappreciate the way that ritual actions function analogically—that is, as images and spatial movements that are performed in a particular manner (see section 4.4) rather than simply as coded pieces of information. Consider, for example, the analog gradations embedded in various ritual gestures such as bowing (bow vs. profound bow vs. prostration), kneeling (one knee vs. two knees), touching (finger vs. one hand vs. two hands etc.), and so on. Even proponents of formal understandings of rituals such as Roy Rappaport are apt to point out that rituals exist on a continuum between formality and informality, between conventionality and spontaneity:

> [I]t would be incorrect to impose a simple dichotomy upon all behavior in an attempt to distinguish the formal, stylized or stereotypic from the 'informal' or

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[393] Catholic Church, n. 1128.
[394] Catholic Church, n. 1128.
[395] Roger Nutt, *General Principles of Sacramental Theology* (Washington, DC: The Catholic University of America Press, 2017), 107.

spontaneous. There is surely a continuum running from highly spontaneous interactions in which the behavior of each of the participants is continually modified by his or her interactions with the others, in which great choice of action and utterance is continuously available to them, and in which stylization is slight, to those elaborate rituals in which the sequence of words and actions, through which the participants proceed with great caution and decorum, seems to be fully, or almost fully, specified.[396]

3.2.2 Instrumental

Instrumental approaches to ritual gestures are not dissimilar to formal approaches in that they both emphasize the correct performance of ritual actions. However, in contrast to the formal dimension, the instrumental dimension can be characterized as a means to an end or as a cause of an effect more than as a repetition of a prescribed action according to a tradition. For example, in the Christian tradition, the "laying on of hands" is a common ritual gesture that is often attributed with healing, blessing, anointing, or the invoking the Holy Spirit onto an individual. In such instances, the act of the laying on of hands can play an instrumental role in producing the desired effect because the effect would not occur without the laying on of hands which functions, at least in part, as a means to an end.

It is not always clear, however, how exactly instrumental ritual gestures cause an effect. The ambiguity around the mechanism involved in instrumental ritual gestures is why these gestures regularly carry the pejorative connotation of being magic, which is the attribution of an effect to some mysterious or supernatural cause. Harvey Whitehouse argues that magical understandings of ritual action is a hybrid between instrumental and ritual "stances" of behaviour: on the one hand, the action is instrumental because it is a means to a clearly defined end, such as healing or blessing, but on the other hand, the action is ritualistic or formal because

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[396] Rappaport, *Ritual and Religion in the Making of Humanity*, 34.

the causal pathway to that end involves supernatural causation which "cannot be rendered in physical-causal terms."[397] According to Whitehouse, what distinguishes magic from medicine is that "magic is premised on an unknowable cause and medicine on a potentially knowable one. When we invoke supernatural causation, we are making claims primarily about the social rather than the mechanical structure of the world, claims that can really only be 'right' in a normative rather than an epistemological sense."[398]

The Christian sacraments have often been understood in instrumental terms. Hugh of St. Victor described the sacraments as "vessels" that function as "spiritual medicines" which God, as the healer or physician, gives to humanity to heal (i.e., sanctify) them of their sickness (i.e., sin):

> God the physician, man the sick person, the priest the minister or messenger, grace the antidote, the vessel the sacrament. The physician gives, the minister dispenses, the vessel preserves spiritual grace which heals the sick recipient. If, therefore, vases are the sacraments of spiritual grace, they do not heal from their own, since vases do not cure the sick but medicine does.[399]

Thomas Aquinas characterized the efficacy of the sacraments according to "instrumental causality" where God, the principal agent, causes an effect through Christ, who is the united instrument, by means of the sacrament, which is the separate instrument: "But the instrumental cause works not by the power of its form, but only by the motion whereby it is moved by the principal agent: so that the effect is not likened to the instrument but to the principal agent."[400] Aquinas interestingly used the analogy of a hand moving a stick to explain the causal relationship between God, Christ, and the sacraments:

> A sacrament in causing grace works after the manner of an instrument. Now an instrument is twofold, the one, separate, as a stick, for instance; the other, united, as a hand. Moreover, the separate instrument is moved by means of the united

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[397] Whitehouse, *The Ritual Animal: Imitation and Cohesion in the Evolution of Social Complexity*, 37.

[398] Whitehouse, 38.

[399] Hugh of St. Victor, *On the Sacraments of the Christian Faith (De Sacramentis)*, trans. Roy J. Defarrari, Mediaeval Academy of America 58 (Cambridge, Mass.: Mediaeval Academy of America, 1951), I.9, 160.

[400] Aquinas, *ST*, III, q.62, a. 1.

> instrument, as a stick by the hand. Now the principal efficient cause of grace is
> God Himself, in comparison with Whom Christ's humanity is as a united
> instrument, whereas the sacrament is as a separate instrument.[401]

Aquinas also described the sacraments as a "healing remedy" or "spiritual medicine" which heals

the wounds that are inflicted by sin,[402] which echoes Hugh of St. Victor's use of the metaphor of

medicine.

Instrumental approaches to rituals in general and to the sacraments in particular have

been criticized and often rejected outright for being too mechanistic and for venturing too close

to magical notions of efficacy because they rely on pre-scientific understandings of cause and

effect to explain the outsized or disproportionate effect of ritual action. Symbolic approaches

often consider instrumental approaches to be primitive or irrational and instead argue for a more

communicative or language-like approach to understanding ritual activity (see 3.2.3 below).

However, as the previous chapter noted, a strict divide between instrumental and communicative

gestures is not always helpful for understanding the nature and function of a gesture. For

example, many communicative gestures are metaphorical extensions of instrumental bodily

actions, making the distinction between instrumental actions and communicative gestures not as

clear as it is often portrayed. PUOH gestures are an example of a communicative gesture that is

not disconnected from its origin in instrumental action (see section 4.2). "Manifesting actions"

are another example of an instrumental action that can be performed in a "*marked or special*"

manner so that it performs instrumental and communicative functions at the same time (see

section 4.4). Kevin Irwin also notes that,

> Symbols and symbolic gestures used in liturgy reflect and are derived from
> actions performed in human life. In the words of David Power these actions are
> "daily and domestic things." This is to say, for example, that water as a symbol is
> important for the act of bathing, that bread and wine are important for the act of

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[401] Aquinas, III, q. 62, a. 5.
[402] Aquinas, III, q. 61, a. 1 and 2.

dining and the embrace is important as a sign of relatedness and reconciliation. This means that "gestural speech" and "symbolic action" are essential to and constitutive of liturgy and liturgical theology.[403]

Peter Jackson has also observed that many instrumental or "technical gestures" are used to metaphorically describe the intangible act of cultural transmission by means of ritual practices.[404] Jackson argues that everyday, instrumental gestures such as handing down, laying down, grasping, picking up, and receiving are used metaphorically to "denote faculties, actions, and institutions such as recollection, tradition, religion, and law."[405] Religious rituals, in particular, involve "passing something into someone else's hands" through two lines of action: "the act of (1) handing down, giving up, leaving behind, and the act of (2) recollecting, selecting, picking up."[406] As Jackson notes, "In their literal sense, these gestures define everyday actions…In their metaphorical sense, on the other hand, they denote faculties, actions, and institutions such as recollection, tradition, religion, and law."[407] Accordingly, for Jackson, "the concepts of *tradition* and *religion* are nothing but metaphorical transportations of contiguous kinetic operations to a different domain of social action."[408] In other words, religious rituals incorporate instrumental or technical bodily actions into the performance and conceptual understanding of rituals in ways that cannot reduced to a simple act of communication. Instrumental actions such as giving and receiving are present in the Roman Catholic celebration of the Eucharist which re-enacts when Jesus *took* the bread and wine and *handed* it to his disciples to eat at the Last Supper (the instrumental actions which are normally characterized as gestures in the rite are emphasized in *italics*):

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[403] Kevin W. Irwin, *Context and Text: Method in Liturgical Theology* (Collegeville, MN: The Liturgical Press, 1994), 143.
[404] Jackson, "The Literal and Metaphorical Inscription of Gesture in Religious Discourse."
[405] Jackson, 217.
[406] Jackson, 221.
[407] Jackson, 217.
[408] Jackson, 221.

> At the Last Supper Christ instituted the Paschal Sacrifice and banquet, by which the Sacrifice of the Cross is continuously made present in the Church whenever the Priest, representing Christ the Lord, *carries* out what the Lord himself did and *handed* over to his disciples to be done in his memory. For Christ *took* the bread and the chalice, gave thanks, *broke* the bread and *gave* it to his disciples, saying: Take, eat and drink: this is my Body; this is the chalice of my Blood. Do this in memory of me. Hence, the Church has arranged the entire celebration of the Liturgy of the Eucharist in parts corresponding to precisely these words and actions of Christ.[409]

While the instrumental or technical aspect of ritual gestures can carry different meanings and connotations within different domains of social action, many ritual gestures cannot be properly understood apart from their origin in ordinary or instrumental action. The following chapter will explore the instrumentality of PUOH gestures (section 4.2) and the breaking of the Eucharistic bread (section 4.4) in more detail to better understand how a ritual action could be understood as both communicative and instrumental at the same time.

3.2.3 Symbolic

Symbolic approaches to ritual gestures are often positioned in direct opposition to instrumental approaches. Whereas instrumental approaches treat ritual gestures as actions that cause an effect or a means to an end, symbolic approaches treat ritual gestures as signifying behaviour that has the capacity to symbolize, represent, or communicate something other than the gesture itself.[410] Symbolic ritual gestures are non-practical or non-utilitarian actions whose purpose is to signify something beyond the gesture, whether that thing is an idea, a social structure, or an unseen spiritual reality. Symbolic approaches to rituals are sometimes characterized as being quintessentially modern because they are more concerned with the

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[409] Catholic Church, *GIRM*, n. 72.
[410] Bell, *Ritual Theory, Ritual Practice*, 70: "Hence, in ritual activity the relationship between ends and means is described as rule-governed, routinized, symbolic, or noninstrumental. By contrast, technical activity is described as pragmatic, spontaneous, and instrumentally effective."

signified (i.e., the referent) than with the sign or action itself (i.e., the ritual gesture). As a result, the significance of the kinesthetic dimensions of ritual gestures are often treated as derivative or secondary to the beliefs or realities that the gestures refer to. As Talal Asad puts it, ritual activity in the modern period has been "conceived essentially in terms of signifying behaviour—a type of activity to be classified separately from practical, that is, technically effective, behaviour."[411]

The signifying capacity of rituals has led to the prominent idea that rituals and ritual elements function like a language. Like words, rituals and ritual gestures are part of a culturally encoded system of symbols that has the capacity to refer to things beyond the sign or symbol itself. The encoded dimension of rituals has led many scholars of religion in the modern period to argue that rituals are essentially language-like and can thus be decoded or interpreted like a text. For example, Claude Levi-Strauss treats rituals as texts that can be read[412] and Edmund Leach says that rituals are "a language in a quite literal sense" because rituals are a means to transmit "coded information in a manner analogous to sounds and words and sentences of a natural language."[413] Clifford Geertz argues that "cultural forms can be treated as texts" because they are accessible and available to be "read" by outside observers such as anthropologists.[414] In symbolic approaches, rituals and ritual gestures are visible representations of encoded cultural structures whose meaning can be read or interpreted by an outside observer.

As noted in Chapter 1, a similar emphasis on the language-like aspect of rituals can be seen in Roman Catholic "symbolic" approaches to the sacraments. Theologians like Karl Rahner and Louis-Marie Chauvet draw on the symbolic dimension of language and words to explain

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[411] Asad, *Genealogies of Religion*, 58.

[412] Lévi-Strauss takes a structural linguistic approach to language and rituals. See for example Claude Lévi-Strauss, "The Structural Study of Myth," in *Structural Anthropology*, trans. Claire Jacobson and Brooke Grundfest Schoepf (New York: Basic Books, 1963), 206–31.

[413] Edmund Leach, *Culture and Communication: The Logic by Which Symbols are Connected*. (Cambridge: Cambridge University Press, 1976): 10 quoted in Stephenson, "Ritual as Action, Performance, and Practice," 2.

[414] Clifford Geertz, *The Interpretation of Cultures* (Basic Books, 1973), 449.

how the sacraments express or embody the reality that the sacraments signify. Rahner says, "the true nature of sacrament as such must consist in the word,"[415] and Chauvet says, "every sacrament is a sacrament of the word."[416] Chauvet directly contrasts his symbolic approach to the sacraments to instrumental approaches which he says offers a "productionist scheme of representation" because such schemes reify or objectify grace as an entity or thing that can be produced and possessed simply by performing a sacramental rite in the prescribed manner.[417] In contrast to these instrumental approaches, Chauvet's symbolic approach is rooted in a Heideggerian non-instrumental approach to language which resists treating language—and by extension the sacraments—as "'a simple instrument' which human beings, supposedly existing before it, would have created."[418] For Chauvet, the sacraments, as symbols, participate in a "symbolic order," which, like language, is prior to and other than humans because "it is only in language—itself the voice of Being—that humans come into being."[419] "The symbolic order is," according to Chauvet, "*the mediation through which subjects build themselves while building the real into a 'world,'* their familiar 'world' where they can live."[420] As part of the symbolic order, the sacraments function as mediators of grace rather than as instruments which produce grace. The word "symbol" comes from the Greek verb *symballein* meaning "to throw together" or "to

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[415] Rahner, "What Is a Sacrament?," 1966, 138. Full quote: "According to Catholic teaching there are sacraments which are enacted in words alone, and it follows that the true nature of sacrament as such must consist in the word."
[416] Chauvet, *The Sacraments*, 93.
[417] Chauvet largely equates "productionist schemes of representation" with Thomas Aquinas's understanding of instrumental causality. According to Aquinas, the mediating function of the sacraments means that it is appropriate to say that the sacraments are "instrumental" causes of grace. However, for Chauvet, causality "presupposes an explanatory model implying production, sometimes of a technical, sometimes of a biological variety (the germ cell in development), a model in which the idea of 'instrumentality' plays a pivotal role." (Chauvet, *Symbol and Sacrament*, 7.)
[418] Chauvet, 57. Chauvet also says that instrumental approaches to language "use language as a necessary *tool for the translation* of their mental representations to themselves (thought) or to others (voice)." The problem, for Chauvet, is that "although an instrument of translation, language is simultaneously—alas!—an *instrument of betrayal*; for it can never exhaust the 'what the presence of meaning wishes to say about itself' which, according to J. Derrida, characterizes the Augustinian sign." Chauvet, 33.
[419] Chauvet, *Symbol and Sacrament*, 57.
[420] Chauvet, 86.

put in a relationship."[421] Symbolic approaches to the sacraments in the Roman Catholic tradition emphasize how the sacraments bring participants into relation with the symbolic reality of the sacraments which includes grace.

What makes Chauvet's symbolic approach to the sacraments especially relevant for understanding ritual gestures is the attention he gives to the body in the mediation of the sacraments. For Chauvet, the body is an "arch-symbol" where the self, others, language, culture, tradition and material things are symbolically joined together.[422] Our bodies are our way of being-in-the-world and language is a symbolic manifestation of a subject's coming-to-being which occurs in and through the body rather than as an external representation of an internal or disembodied thought. For Chauvet, the same is true of the sacraments. The sacraments are not an external representation or product of an internal or invisible reality, they are instead part of a "symbolic order" that is inescapably mediated by the body so that the body is the inescapable locus of the coming-to-being of the believing subject and the worshipping community. We will return to Chauvet's symbolic approach to ritual gestures again in Chapter 4 (see section 4.4) when we examine the gesture of breaking the Eucharistic bread.

3.2.4 Performative

For some ritual theorists, the performance of the ritual is the most fundamental dimension of rituals. As Roy Rappaport puts it, "Unless there is a performance there is no ritual…Liturgical orders are realized—made into *res*—only by being performed."[423] While symbolic approaches

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[421] Kevin W. Irwin, *The Sacraments: Historical Foundations and Liturgical Theology* (Mahwah, NJ: Paulist Press, 2016), 253.

[422] Chauvet, 151.

[423] Rappaport, *Ritual and Religion in the Making of Humanity*, 37. See also: "The act of performance is itself a part of the order performed, or, to put it a little differently, the manner of 'saying' and 'doing' is intrinsic to what is being said and done." Rappaport, 38.

likely constitute the most popular approach to ritual gestures since about the middle of the twentieth century, such approaches have been increasingly criticized in recent decades for overlooking the performative or non-linguistic dimension of ritual action. Kimberley Hope Belcher, for example, argues that symbolic approaches to the sacraments which equate the sacraments with symbolic words or linguistic expressions limit the nature and scope of ritual activity because symbols ultimately depend on the intellect to carry meaning. As Belcher puts it, symbolic or linguistic models of sacramental efficacy "stem from an oversimplified understanding of human (and thus Christian) identity as something relatively static, fixed by one's culture, and intellective-linguistic rather than integrative."[424] According to Belcher, the "language act model" proposed by Chauvet,

> reinscribes the neoscholastic, Western hierarchy that privileges the word or form, the intelligible part of the sacramental ritual, above the embodied material and behavioral parts…The model tends to suppress the exterior, material, and bodily parts of the rite in favor of a sacramental reading based solely on the text, like Chauvet's interpretation of EPII [Eucharist Prayer II]. This minimizes the performative nature of the rite and jeopardizes our appreciation of the ritual experience.[425]

In contrast to both instrumental and symbolic models of the sacraments, Belcher advocates for an "efficacious engagement" model where the sacraments have the capacity to produce an effect through the act of performing the ritual because it is the embodied action of performing a ritual which constitutes a subject's identity.[426] According to Belcher, an "efficacious" ritual action "refers to the capacity of the rite to alter the status and identity of its participants, or to the participants' ability to alter their own identities through the rite."[427]

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[424] Kimberly Hope Belcher, *Efficacious Engagement: Sacramental Participation in the Trinitarian Mystery* (Collegeville, MN: Liturgical Press, 2011), 44.

[425] Belcher, 43.

[426] Belcher, 36: "[H]uman experience begins before symbolism, and the human experience of salvation is greater than the symbolic. Christian ritual is not just about constructing a symbolic world for the human person to inhabit; it is about constructing a human body that can inhabit the Christian world."

[427] Belcher, 47.

Belcher's goal, ultimately, is to enlarge "the methodological foundation [of sacramental theology] to include ritual rather than linguistic efficacy."[428] Belcher points to infant baptism as an example of ritual participation that necessarily presupposes an embodied pre- or extra-linguistic understanding of grace which directly challenges symbolic or linguistic understandings of the sacraments.

Belcher's critique of the symbolic approaches to the sacraments relies on the work of Marcel Mauss, Maurice Merleau-Ponty, Michel Foucault, and Talal Asad to provide a performative interpretation of ritual action. Whereas symbolic approaches highlight how ritual actions communicate something about the world, performative approaches highlight how ritual actions do something in the world. However, performative approaches should not be understood as being in complete opposition to the symbolic approaches, which is common in modern understandings of rituals.[429] For example, performative understandings of ritual action have been greatly informed by J. L. Austin's characterization of "performative speech acts," which are spoken utterances that *do* things in the world.[430] Louis-Marie Chauvet, a strong advocate for a symbolic approach to the sacraments, relies on Austin's speech act theory to explain how symbols such as words or gestures can actually *do* and not just communicate things in sacramental rituals.[431] He notes, for example, that "One is in prayer as soon as one simply

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[428] Belcher, 44. Belcher also says that her motivation the methodological foundation of sacramental theology is "threefold: to account for the fact of grace experience infants and other nonspeakers (even if it remains impossible to characterize), to differentiate sacramental efficacy from the ambiguous efficacy of language acts, and to open a broader view in order to respect the bodily and ritual nature of liturgical exchange." Belcher, 44.

[429] Catherine Bell notes that in modern symbolic approaches to rituals there is a pervasive dichotomy between thought and action in modern understandings of rituals. In these understandings, ritual action is equated with "*thoughtless* action—routinized, habitual, obsessive, or mimetic—and therefore the purely formal, secondary, and mere physical expression of logically prior ideas." Bell, *Ritual Theory, Ritual Practice*, 19. In this thought-action schema, thought and language are considered *prior to* bodily actions, which means that bodily actions, such as ritual gestures, are no more than a mere representation of something other than itself.

[430] Austin, *How to Do Things with Words*.

[431] Chauvet, *Symbol and Sacrament*, 130–35.

assumes the ritual position of kneeling" and that "The rite of readings from the Bible in the assembly starts well before the proclamation, 'A reading from the prophet Isaiah'; it begins as soon as the assembly sits down and the reader stands up and takes the book or moves to place himself or herself before it."[432] For Chauvet, then, the distinction between language and action in ritual performances is not always as clear-cut as it often seems given his tendency to reduce the sacraments to words.

According to Catherine Bell, ritual performance is a form of social action that is a particular way of acting or a "cultural strategy of differentiation"[433] that gets inscribed unto people's bodies. This way of acting is the result of ritualization, which isn't just the practice of distinguishing some actions from other actions, as noted in the previous chapter, but is also a process where social conventions and authority structures become embedded or inscribed unto the "ritualized" bodies of individuals. As Bell puts it, "The strategies of ritualization are particularly rooted in the body, specifically, the interaction of the social body within a symbolically constituted spatial and temporal environment. Essential to ritualization is the circular production of a ritualized body which in turn produces ritualized practices."[434] In other words, ritual performances are about the production of ritualized bodies through bodily action: "[T]hrough a series of physical movements ritual practices spatially and temporally construct an environment organized according to schemes of privileged opposition. The construction of this environment and the activities within it simultaneously work to impress these schemes upon the bodies of participants."[435] Talal Asad similarly argues that our bodies play a central role in ritual

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[432] Chauvet, 327.
[433] Bell, *Ritual Theory, Ritual Practice*, 8.
[434] Bell, 93.
[435] Bell, 98. See also: "The specific strategies of ritualization come together in the production of a ritualized social body, a body with the ability to deploy in the wider social context the schemes internalized in the ritualized environment." Bell, 107. "And yet what ritualization does is actually quite simple: it temporally structures a space-time environment through a series of physical movements (using schemes described earlier), thereby producing an

performance because it is the cultural structures, skills, and virtues inherent in a ritual performance that get inscribed unto people's bodies. For example, Asad suggests that the rituals in the Rule of St. Benedict function as a "disciplinary program" which develop an individual's capacity for virtue and right behaviour in accordance with the community and saintly exemplars. As he puts it, "Ritual is therefore directed at the apt performance of what is prescribed, something that depends on intellectual and practical disciplines but does not itself require decoding. In other words, apt performance involves not symbols to be interpreted but abilities to be acquired according to the rules that are sanctioned by those in authority: it presupposes no obscure meanings, but rather the formation of physical and linguistic skills."[436] The performative purpose of a ritual, therefore, is not to merely foster a particular emotive or subjective experience or to express or represent a cultural pattern that exists prior to the ritual performance (i.e., the symbolic approach), but rather to form individual subjectivities through disciplinary practices which enact social authority structures or cultural patterns unto the bodies of ritual participants.

Raquel Romberg provides one example of the performative role that gestures play in the ritual practices of Puerto Rican Spiritists.[437] According to Romberg, Spiritists are those who "live according to the premise that spirits can be manifested in the material world and that any aspect of the material world can be a manifestation (*manifestación*) of the spirits."[438] Romberg argues that it is not just the words but the "carefully crafted gestures and meticulously manipulated objects" of the Spiritists that "do" things such as manifesting the spirits in the material world. Romberg uses the term "inter-gesturality" to "capture the temporal and

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arena which, by its molding of the actors, both validates and extends the schemes they are internalizing." Bell, 109–10.

[436] Asad, *Genealogies of Religion*, 62.

[437] Raquel Romberg, "'Gestures That Do': Spiritist Manifestations and the Technologies of Religious Subjectivation and Affect," *Journal of Material Culture* 22, no. 4 (2017): 385–405.

[438] Romberg, 385.

contextual dimensions of 'how gestures do' (not just how words do)"[439] and to account for the power relations and embodied interrelationships that are inherent in the ritual practice which play a formative role in the creation of the ritual subject. In Romberg's performative understanding, ritual gestures do not just symbolically represent something beyond the material world or the gesture itself, they do or enact something into being which could not otherwise be without the performance of the ritual. As Romberg puts it, "Indeed, certain gestures, sounds, objects and attitudes within the realm of ritual 'do'—they effect immediate results beyond their functional materiality, when performed within the framework of magic technologies. They 'do' because they do not merely 'represent' something, they 'become' that something."[440]

3.2.5 Indexical

The performative approach to ritual gestures highlights how all rituals are inescapably performed within a sociocultural context and how that context structures the nature and function of ritual action. The indexical approach to ritual gestures further highlights how rituals are performed within a larger sociocultural context and how the performance of a ritual can signify or refer to this context in different ways. From a semiotic perspective, following Charles Sanders Peirce's tripartite classification of signs, a ritual or a ritual element can function as a symbol, an icon, or an index.[441] A symbol is a sign whose meaning is determined by social convention which results in no necessary or direct relationship between a symbol and its referent. Words are an example of a symbolic sign because words are sounds or written images which refer something that is unrelated to the sound or image of the word itself. The English word for "tree,"

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[439] Romberg, 388.
[440] Romberg, 396.
[441] Charles Sanders Peirce, *Collected Papers of Charles Sanders Peirce*, ed. Charles Hartshorne and Paul Weiss (Cambridge, MA: Harvard University Press, 1932), 2:156-173.

for example, refers to a type of perennial plant but the spoken or written word itself does not resemble an actual tree in any direct way. The meaning of the word tree is therefore determined by the community that uses the word and not by the features of the spoken or written word itself. As noted in section 3.2.3, ritual gestures are often understood as symbols because the meaning of ritual gestures is determined by the ritual tradition or community within which the gesture is performed. In distinction to a symbol, an icon is a sign which resembles the thing it refers to. A picture of a tree is an iconic representation of a tree because it resembles a tree but it is not itself a tree. Icons have regularly been understood to be in opposition to symbols because the meaning of a symbol is determined by social convention rather than any sort of resemblance between the sign and its referent. Lastly, an index is a sign that refers to something by virtue of a direct or causal relationship between the sign and the thing it refers to. Pointing is a prototypical example of an index because in the act of pointing there is a direct relationship between the pointing tool (e.g., index finger) and the thing being pointed at. These categories are not, in themselves, mutually exclusive. Many gestures can be both symbolic *and* iconic or symbolic *and* indexical at the same time. As we noted last chapter (see section 2.2.2) and as we will see later in this chapter (see section 3.3.2.2), spoken languages, gestures, and sign languages can be symbolic and iconic at the same time.

Although symbols, icons, and indexes are all signs that can refer something beyond the sign itself, symbolic or iconic signs are often distinguished from indexical signs because indexical signs are much more dependent on the particular context within which the sign occurs. Symbols (i.e., the word "tree") and icons (i.e., a picture of a tree) have a greater capacity to be displaced or removed from a particular context and still retain some of their referential capacity whereas indexical signs, such as pointing gestures, cannot be understood outside of the context

within which the gesture occurs. Roy Rappaport distinguishes between two classes of information that can be transmitted by a ritual: canonical messages and self-referential messages. Canonical messages are symbolic messages that are "encoded in apparently invariant aspects of liturgical orders"[442] and refer to things that are beyond or that transcend the present ritual context. As Rappaport puts it,

> Canonical messages, which are concerned with things not concerned to the present in time or space, which may even be conceived to stand outside the time-space continuum altogether, and whose significata may be, indeed, usually are spiritual, conceptual or abstract in nature, are and *can only be* founded upon symbols (i.e., signs associated by law or convention with that which they signify) although they can employ, secondarily, icons and even make limited use of indices.[443]

Canonical messages are strongly associated with formal and symbolic approaches to rituals. In contrast, self-referential messages are not encoded because they refer to the here and now and "transmit information concerning [the participant's] own current physical, psychic or social states to themselves and to other participants."[444] Self-referential messages are indexical because there is a direct relationship between the sign (e.g., the ritual action or gesture) and the thing the sign refers to (e.g., the psychic or social state of the individual). A grimace, for example, is an indexical sign of the pain or discomfort that an individual may be feeling at the moment they perform the gesture.

David Calabro makes a similar distinction between referential and indexical interpretations of ritual gestures.[445] Calabro identifies ten ways to interpret hand gestures in ritual settings and subdivides those ten ways into five referential interpretations which focus on the relationship between the sign and signified and five indexical interpretations which focus on the

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[442] Rappaport, *Ritual and Religion in the Making of Humanity*, 58.
[443] Rappaport, 54.
[444] Rappaport, 52.
[445] David M. Calabro, "Ten Ways to Interpret Ritual Hand Gestures," *Studia Antiqua* 12, no. 1 (2013): 65–82.

relationship between the sign and its cultural context. As Calabro puts it, "any gesture used in a specific context can be analyzed both in terms of what it references through symbolic or iconic association and in terms of how it indexes—that is, presupposes or creates—aspects of the ritual context."[446] According to Calabro, whereas a referential interpretation of a ritual gesture asks "what does this gesture mean?", an indexical interpretation asks "what causes this gesture?" and "what does this gesture do?"[447]

One interesting example of the indexical quality of ritual gestures is Eric Hoenes del Pinal's ethnographic study of the gestural expressions or "ideologies" of Mainstream and Charismatic Q'eqchi'-Maya Catholics in San Felipe, Guatemala.[448] According to Hoenes del Pinal, Mainstream and Charismatic Catholics have a contentious relationship in the community because they differ greatly in their expectations of how church members should comport their bodily movements in Church settings. Mainstream Catholics emphasize "control, constraint, and respect" whereas Charismatic Catholics emphasize "effusiveness, spontaneity, and joy." What is relevant for our purposes here is how bodily gestures are used in this context to index social belonging. According to Mainstream Catholics, the expressive and unrestrained use of the body by Charismatic Catholics betrays a "lack of outward physical control [which] is thought to *index* a lack of moral and spiritual control, which would make someone unsuitable for holding religious office."[449] Hoenes del Pinal therefore suggests that bodily gestures play an important role in the Q'eqchi'-Maya Catholic community because they help construct people's moral and

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[446] Calabro, 69.
[447] Calabro, 73.
[448] Eric Hoenes del Pinal, "Towards an Ideology of Gesture: Gesture, Body Movement, and Language Ideology Among Q'eqchi'-Maya Catholics," *Anthropological Quarterly* 84, no. 3 (2011): 595–630.
[449] Hoenes del Pinal, 606. Emphasis added.

religious identities and because they function as an index of an individual's own physical, psychic or social states (i.e., as a self-referential message).

3.2.6 Dialogical

A dialogical approach to ritual gestures highlights how ritual gestures occur within the context of a social interaction between subjects. In many religious traditions, rituals are framed as a dialogue, an encounter, a meeting, or a communion where ritual participants hear, speak, and interact with present ritual participants and/or non-present others like God or spirits. Paul Chilton and Monika Kopytowska argue from a cognitive science perspective that ritual dialogue is grounded on the basic human capacity for language and the ability to dialogue with an interlocutor, regardless whether that interlocutor is physically present or has to be "postulated" or "conjured up"[450] by the participant: "[R]ituals are not monologues, they are dialogues in which people or their religious representatives address a CPS [culturally postulated supernatural]-agent and get messages or meanings back."[451] "Prayer," they give as an example, "may look one-sided to an observer; in the mind of a praying person, the activity of (silent or vocal) speaking or perhaps non-linguistic ideation ('feeling' a presence) is necessarily dialogic—it follows a cognitive template (frame) that all humans have and that is reinforced in daily social interchange."[452] Jack David Eller similarly describes all ritual activity as a form of communicative interaction "because ritual is how humans interact."[453]

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[450] Paul Chilton and Monika Kopytowska, "Introduction: Religion as a Cognitive and Linguistic Phenomenon," in *Religion, Language, and the Human Mind*, ed. Paul Chilton and Monika Kopytowska (Oxford: Oxford University Press, 2018), xxix: "Since the interlocutor expected in the dialogue frame is not physically present, he or she has to be conjured up. That is to say, a supernatural agent— an interlocutor—has to be postulated."
[451] Chilton and Kopytowska, xxix.
[452] Chilton and Kopytowska, xxx.
[453] Jack David Eller, *Introducing Anthropology of Religion: Culture to the Ultimate* (New York: Routledge, 2007), 110.

A dialogical approach to ritual gestures is the approach being advocated for in this thesis. The latter half of this chapter will draw on "conceptual metaphor theory"[454] and "conceptual blending theory"[455] to show in detail how ritual gestures are a fundamental part of the richly multi-modal ritual dialogues in the Roman Catholic tradition. The following chapter will explore the implications of this approach in greater detail by examining three different gestures that are regularly part of sacramental rituals: palm-up open hand (PUOH) gestures, the raising of the Eucharistic elements, and the breaking the Eucharistic bread.

There are a number of advantages to taking a dialogical approach to ritual gestures. First, a dialogical approach is not in conflict with any of the previously mentioned approaches to ritual gestures. A dialogical framing can still appreciate the different dimensions of ritual gestures highlighted in the formal, instrumental, symbolic, performative and indexical approaches because ritual gestures within the context of a dialogue can be many things and serve many functions at the same time. Second, dialogue is how many religious traditions frame their own ritual practices. As already mentioned, the sacraments in the Roman Catholic tradition are framed not just as material things or symbolic signs but as *events* that mediate an *encounter*, a *meeting* or a *dialogue* between humanity and God. As the Catechism of the Catholic Church puts it, "In the *liturgy of the New Covenant* every liturgical action, especially the celebration of the Eucharist and the sacraments, is an encounter between Christ and the Church,"[456] and "A sacramental celebration is a meeting of God's children with their Faither, in Christ and the Holy Spirit; this meeting takes the form of a dialogue, through actions and words."[457] The framing of

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[454] George Lakoff and Mark Johnson, *Metaphors We Live By* (Chicago: The University of Chicago Press, 1980); George Lakoff and Mark Johnson, *Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought* (New York, NY: Basic Books, 1999).

[455] Fauconnier and Turner, *The Way We Think*.

[456] Catholic Church, *Catechism*, n. 1097. Emphasis original.

[457] Catholic Church, n. 1153. The relationship between the Priest and the church in the celebration of the Eucharist is also framed as a communion or dialogue: "Since the celebration of Mass by its nature has a 'communitarian'

the sacraments in terms of dialogue is also apparent in Karl Rahner's characterization of the

sacraments as a "word-event" which depends fundamentally on God's self-communication in the

world through Jesus Christ and the Church,[458] in Edward Schillebeeckx's characterization of the

sacraments as a personal "encounter" between an individual and God,[459] in David Power's

characterization of the sacraments as a "language event,"[460] and in Donald Wallenfang's

"dialectical" approach to the nature of the Eucharist which he describes as having a "*prosopic*

trait*" ("relating to the person or face") because it involves people in face-to-face dialogue.[461]

Each of these examples displays the deep conviction in the Roman Catholic tradition that the

ritual celebrations of the sacraments are a dialogue, a meeting, an encounter, or a communion

between the Church, its members, and God.

As we saw in the previous chapter, gestures play an extremely important role in

mediating dialogue between interlocutors. There has been a small number of studies that have

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character, both the dialogues between the Priest and the assembled faithful, and the acclamations are of great significance; for they are not simply outward signs of communal celebration but foster and bring about communion between Priest and people." Catholic Church, *GIRM*, n. 34.

[458] Rahner, "What Is a Sacrament?," 1973, 276: "[W]e can arrive at a conception of 'sacrament' in which it can be understood within a theology of the word as a quite specific word-event."

[459] Edward Schillebeeckx frames the entire sacramental rite as an encounter between an individual and God: "The sense and purpose of the whole sacramental event is to bring about encounter with Christ. Since such an encounter must involve both parties, the religious intent of the recipient (who in this context is the one going towards the encounter) belongs to the essence of any authentic sacrament; one, that is, which is a personal encounter with the living God." Edward Schillebeeckx, *Christ the Sacrament of the Encounter with God* (Lanham, MD: Sheed & Ward, 1963), 133.

[460] See David N. Power, *Sacrament: The Language of God's Giving* (New York, NY: The Crossroad Publishing Company, 1999), 51–95.

[461] Donald L. Wallenfang, *Dialectical Anatomy of the Eucharist: An Étude in Phenomenology* (Eugene, OR: Cascade Books, 2017), 183. Emphasis added. "Dialectic" comes from the Greek noun *dialektikos* meaning conversation or *dialogue.* Wallenfang also refers to the Eucharist as a "double invocation of persons: the first addressed to humanity by God, the second addressed to God by humanity. The form of this double invocation may be called dialogue, or conversation. Another name for these two terms, similarly implying the notion of communion, is intercourse." Wallenfang, 185. Philosopher Richard Kearney also picks up on the importance of the face or *prosopon* in encounters with the divine. For Kearney, the *persona* of the divine manifests itself through the face of the other: "Not the other person as divine, mind you—that would be idolatry—but the divine in and through that person. The divine as trace, icon, visage, passage"; "Prosopon is the face of the other who urgently solicits me, bidding me answer in each concrete situation, 'here I am.'" Richard Kearney, *The God Who May Be: A Hermeneutics of Religion* (Bloomington, IN: Indiana University Press, 2001), 18.

analyzed the mediating function of ritual gestures within a dialogical frame. Here I will highlight three such studies. First, Thomas Csordas analyzed the ritual action of the laying on of hands in the Christian Pentecostal tradition where participant(s) place their open hands on a supplicant's head, shoulders, back, or an afflicted part of their body.[462] Csordas observed that ritual participants often experience a high level of energy or heat emanating from the healer's hands in these ritual acts but that the nature of this "flow" of energy is difficult to explain within traditional anthropological approaches because these approaches tend to divide the ritual action into objective and subjective sides, with the physical interaction between the subjects placed on the objective side and the meaning or significance of the interaction placed on the subjective side. The problem with this approach according to Csordas is that it "abstracts energy from the interaction"[463] and places it on the subjective side of the divide, further perpetuating the objective-subjective divide. In contrast to this approach, Csordas argues that any explanation of the experience of the healing energy through the laying on of hands must be grounded in the intersubjective embodied experience or intercorporeality that the subjects share in the ritual interaction. As Csordas suggests, it is only in the intersubjective "space 'between' its bearer and the participant," which is mediated by the bodily gesture of that laying on of hands, that the "healing energy of the Spirit" can appear.[464] The intersubjective space between ritual participants where the Holy Spirit or the divine can be present is consistent with the dialogic interpretation of ritual interaction that I am offering here and is an important part of ritual PUOH gestures which will be examined in the next chapter (see section 4.2).

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[462] Thomas J. Csordas, "Intersubjectivity and Intercorporeality," *Subjectivity* 22, no. 1 (2008): 110–21.
[463] Csordas, 112.
[464] Csordas, 113.

In the second study, Roman Katsman offers a dialogical analysis of the hand gestures that occur during the Torah recital ritual in the Yemenite Jewish tradition.[465] Katsman notes that the recitation of Torah is a highly ritualized practice but that the gestures that accompany the Torah reading are not formally prescribed and therefore not ritual gestures in the "strict sense." Katsman says, "No normative oral or written instructions on how to perform the gestures exist. They are not normative (I purposely refrain from using the term 'conventional'), but neither are they spontaneous."[466] Katsman uses Marcel Mauss's concept of "bodily techniques" to describe these gestures because they are "learned nearly unconsciously at a very young age through the performance of traditional religious practices, first and foremost through the recital of the Pentateuch."[467] Katsman identifies three sets of social interactions that are at the center of the ritual practice of reciting Torah: the interaction between teacher and student when the student is learning the Torah, the interaction between the Torah reader and his assistant in the synagogue during the reading of the Torah, and the mystical interaction between ritual participants and God. Katsman says that the third interaction between ritual participants and God is essential to understanding how the ritual gestures function in the Torah recital ritual: "It is likely that the Yemenite Torah recital gestures are also anchored in this mystical context of a (private and public) communion with God. The gestures in question should therefore be analyzed not just in the context of the two people who participate actively in the recital but also in the context of

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[465] Roman Katsman, "Gestures Accompanying Torah Learning/Recital among Yemenite Jews," *Gesture* 7, no. 1 (2007): 1–19. See also Roman Katsman, "Jewish Traditions: Active Gestural Practices in Religious Life," in *Body–Language–Communication: An International Handbook on Multimodality in Human Interaction*, ed. Cornelia Müller et al., vol. 1, 2 vols., Handbooks of Linguistics and Communication Science 38 (Berlin: De Gruyter Mouton, 2013).

[466] Katsman, "Gestures Accompanying Torah Learning/Recital among Yemenite Jews," 2.

[467] Katsman, 2. Elsewhere Katsman says: "The gestures are not normative; they are learned as part of a normative practice, become an integral part of ritualistic traditional behavior, and are transferred from one generation to the next, but they do not undergo canonization and are performed freely and almost unconsciously. The gestures constitute a body technique that at a very early age shapes the system of behaviors which make up the reading. They are an integral part of the reading, a physical-cognitive habit." Katsman, "Jewish Traditions," 322.

God's presence in the synagogue. The two participants do not only interact with each other but also show or present something to a Divine observer."[468] According to Katsman, an analysis of these ritual gestures must account for the interaction or dialogue or communion that occurs between ritual participants and God or a Divine observer.

Katsman identifies three essential functions of gestures in the ritual of reciting Torah: the mediation of a social interaction, the embodiment of the text, and the spatialization of the text. First, Katsman says that the ritual gestures are the "main mechanism" for maintaining the "real physical relation between the two people who participate in the recital…The movements of the body and the voice maintain a kind of symbolic union between the two readers (i.e., reciter and instructor), a union which symbolizes the mystical union between the people of Israel and God."[469] Second, Katsman says that "The gestures constitute a non-verbal means for realizing the word of God in historical and social context. Holy Scripture is realized both in the reading and recital themselves and through the gestures. Torah recital embodies the revelation in a physical-empirical-historical manner. On the ritualistic plane, it does not just embody the revelation in the past, but originates it in the here-and-now."[470] And third, Katsman says that the ritual gestures "also maintain a spatialization of the text. The main motive for this is ritualistic: to bring the text to life, to provide it with existence in the actual space in which it is being recited, to dramatize it. Because they are a means of visualization and spatialization the gestures become a channel for the realization of the relationship between man and God who becomes as a place (in Hebrew, one of the God's names: HaMakom = The Place)."[471]

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[468] Katsman, "Gestures Accompanying Torah Learning/Recital among Yemenite Jews," 10.
[469] Katsman, 12. Emphasis added.
[470] Katsman, 11.
[471] Katsman, 11.

The third study that analyzes ritual gestures within a dialogical frame is William Hanks's analysis of the "divination" ritual interaction between speakers of Yucatec Maya (located in the Yucatán Peninsula), where a ritual specialist or shaman addresses a group of spirits using "divining crystals" (also called sáastúun or light stones) on behalf of a patient who is seeking healing.[472] Hanks frames this divination ritual as "an interactive process between an expert, a nonexpert patient, a technical apparatus, and other consulting experts, in this case spirits."[473] According to Hanks, divination rituals combine "three distinct interactive frames: (1) the patient-shaman interaction, which occurs in ordinary Maya and may include other copresent parties, such as family members of the patient; (2) the shaman-spirit interaction in the ritual registers called *réesar* (prayer) and *chíikó'ob* (signs); and (3) the three-way interaction between patient, shaman, and spirits, which combines ordinary and ritual speech with the esoteric language of spirits (both verbal and visual)."[474] Hanks's primary interest in analyzing the divination ritual is to understand how "common ground" or joint understanding is achieved amongst the ritual participants despite the fact that the participants are often "separated by significant gaps or asymmetries in their respective knowledge."[475] The shaman, for example, interprets the meaning signs present in "images in the crystals and words that pass through his mind," but these signs are not perceivable to anyone other than the shaman.[476] Despite the inherent difficulties, Hanks argues that common ground between the ritual participants is achieved "through a combination of linguistic, semiotic, and perceptual resources combined over the time course of the episode."[477] Some of these resources include the ritual environment, material objects, indexicals,

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[472] Hanks, "Joint Commitment and Common Ground in a Ritual Event."
[473] Hanks, 301.
[474] Hanks, 301.
[475] Hanks, 300.
[476] Hanks, 306.
[477] Hanks, 302.

descriptive categorizations, gaze, and gestures. According to Hanks, the divination ritual is an interactive process that is mediated by gestures and speech in order to establish common ground between the participants so that they can arrive at a diagnosis for the patient and a joint commitment that the divination process worked or achieved its desired end. The shaman, the patient, and the spirits thus "coparticipate to derive a diagnosis that the patient will ultimately ratify" because it is through the ritual process and the establishment of common ground by means of gestures and other communicative resources that the "patient's participation is transformed, from an attentive overhearer called on to give precise public information (name and town), into an agent in his own diagnosis."[478] We will further explore the essential role that gestures play in establishing common ground between ritual participants when we look at the function of the gesture of raising the Eucharistic elements in the following chapter (see section 4.3).

3.3 Understanding the Metaphor of Ritual Dialogue

In the Christian tradition, "dialogue" is one of the most important metaphors used to articulate the nature of the interaction between God and humanity. It is said that God established his covenant with Abraham by *speaking* to him,[479] that God *heard* the cries of his people and *spoke* with Moses,[480] and that Jesus is the *Word* of God incarnate and the Bible is the *Word* of

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[478] Hanks, 313.
[479] See for example, Genesis 12:1-3 (NIV): "The Lord had said to Abram, 'Go from your country, your people and your father's household to the land I will show you. I will make you into a great nation, and I will bless you; I will make your name great, and you will be a blessing. I will bless those who bless you, and whoever curses you I will curse; and all peoples on earth will be blessed through you.'"
[480] The Catechism of the Catholic Church notes that God's encounter with Moses in the burning bush is dialogic in structure. Catholic Church, *Catechism*, n. 2063: "The covenant and dialogue between God and man are also attested to by the fact that all the obligations are stated the first person ("I am the Lord.") and addressed by God to another personal subject ("you")." See also Exodus 3:4 (NIV): "When the Lord saw that he had gone over to look, God called to him from within the bush, 'Moses! Moses!' And Moses said, 'Here I am.'"

God.[481] According to the second Vatican Council's "Dei Verbum," scripture and prayer are opportunities for God and humanity to be in *dialogue* with each other: "[P]rayer should accompany the reading of Sacred Scripture, so that God and man may talk together; for 'we speak to Him when we pray; we hear Him when we read the divine saying.'"[482] Joseph Ratzinger (later Pope Benedict XVI) said following the Second Vatican Council that the very nature of revelation articulated at the council is "seen basically as *dialogue.*"[483] Edward Schillebeeckx says that "Religion is above all a saving *dialogue* between man and the living God."[484] And Kevin Irwin says of the Word, the proclamation of the Scripture, that, "As an act of address, the Word demands a response. As an act of communication it demands a dialogue partner. To engage in liturgy is *to enact a word and to remember a relationship*…Thus the liturgy of the Word is best understood as a dialogue of call and response experienced through the Scriptures whose repeated reading is a *symbolic rehearsal of salvation.*"[485]

The argument of this chapter is that ritual gestures should be framed within the context of *dialogue* and that this framing allows us to incorporate the insights from the field of gesture studies into our understanding of the nature and function of ritual gestures. However, as already noted, there exists a strong conceptual and methodological divide between gestures as they occur in everyday face-to-face dialogue and gestures as they occur in formal ritual settings. In order to overcome this divide, I will rely on the theory of "conceptual blending"[486] developed by Gilles Fauconnier and Mark Turner to show why many religious traditions—particularly Christianity—

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[481] John 1:1 (NIV): "In the beginning was the Word, and the Word was with God, and the Word was God."

[482] Vatican Council II, "Dei Verbum: Dogmatic Constitution on Divine Revelation," November 18, 1965, n. 25, Vatican.va.

[483] Joseph Ratzinger as quoted in Christopher Collins, *The Word Made Love: The Dialogical Theology of Joseph Ratzinger/Benedict XVI* (Collegeville, MN: Liturgical Press, 2013), Chapter Two: "Revelation Seen Basically as Dialogue." Emphasis added.

[484] Schillebeeckx, *Christ the Sacrament*, 3. Emphasis added.

[485] Irwin, *Context and Text: Method in Liturgical Theology*, 87–88.

[486] Fauconnier and Turner, *The Way We Think*.

frame ritual performances as a dialogue or an encounter and how we can incorporate what we know about gestures in everyday dialogue into our understanding of gestures in ritual performances . In order to do this, though, we need to first understand the nature of the metaphor of "sacramental dialogue."

3.3.1 Mapping the Metaphorical Concept of Sacramental Dialogue

Metaphors have received a lot of attention in recent decades in fields like cognitive science and cognitive linguistics because metaphors offer clear evidence of how our bodies influence the structure of our language and thought. Conceptual metaphor theory, brought into prominence by George Lakoff and Mark Johnson,[487] is a theory of metaphor that attempts to explain how language and complex higher-order cognitive processes are structured by our bodily experience of the world. As Lakoff and Johnson put it, "Conceptual metaphor is a natural part of human thought…which metaphors we have and what they mean depend on the nature of our bodies, our interactions in the physical environment, and our social and cultural practices."[488]

According to conceptual metaphor theory, metaphors are not simply a linguistic expression but are rather a fundamental cognitive process through which we conceptualize "one kind of thing in terms of another."[489] Our cognitive capacity for metaphors is what allows us to "map" similarities or correspondences between two or more things based on our sensorimotor experience of the world.[490] In conceptual metaphor theory, the mapping occurs between a source

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[487] See for example: Lakoff and Johnson, *Metaphors We Live By*; Lakoff and Johnson, *Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought*; George Lakoff, *Women, Fire, and Dangerous Things* (Chicago: University of Chicago Press, 1987).

[488] Lakoff and Johnson, *Metaphors We Live By*, 247.

[489] Lakoff and Johnson, 5.

[490] Chilton and Kopytowska describe metaphors as "one group of cognitive abilities that have to do with conceptual transfer, merging, and association." Chilton and Kopytowska, "Introduction: Religion as a Cognitive and Linguistic Phenomenon," xli.

domain (usually but not always concrete) and a target domain (usually but not always abstract). The term *metaphor* is used to describe the mapping between the source and target domains and the term *metaphorical expression* is used to describe individual sentences that are an expression of an underlying conceptual metaphor.[491] For example, the *metaphor*, LOVE IS A JOURNEY,[492] maps the concrete concept of a journey (source domain) to the more abstract concept of love (target domain). *Metaphorical expressions* of this metaphor include "Look how *far we've come*," "The relationship *isn't going anywhere*," "We may have to *go our separate ways*," etc. Each of these metaphorical expressions are built on the underlying conceptual metaphor which maps one thing (source domain: a journey) to another (target domain: love). Consider also the conceptual metaphors HAPPY IS UP and SAD IS DOWN and the seemingly innumerable ways that these metaphors are expressed: "I'm feeling *up,*" "My spirits *rose,*" and "Thinking about her always gives me a *lift,*" and conversely, "I'm feeling *down,*" "My spirits *sank,*" "He's really *low* these days," etc.[493] The conceptual metaphors HAPPY IS UP and SAD IS DOWN use an up-down conceptual structure that is based on our bodily experience of a spatial world to make sense of non-spatial entities or abstract concepts such as happy and sad. As bodily creatures, our experience of space runs along three axes—up-down (vertical), front-back (horizontal), and left-right (horizontal). Up-down, front-back, and left-right are examples of image schemas or conceptual structures that organize our experience of the world. Image schemas are pre-conscious and tacit cognitive structures that are based on bodily patterns that recur in our

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[491] Eve Sweetser and Mary Therese DesCamp argue that instead of thinking of metaphor primarily in terms of concrete and abstract domains, "it makes more sense to think of metaphor as typically conceptualizing a relatively *less intersubjectively accessible* domain or frame in terms of a *more intersubjectively accessible* domain or frame." Eve Sweetser and Mary Therese DesCamp, "Motivating Biblical Metaphors for God: Refining the Cognitive Model," in *Cognitive Linguistic Explorations in Biblical Studies*, ed. Bonnie Howe and Joel B. Green (Berlin: De Gruyter, 2014), 10. In this way of thinking, a metaphor is a way to make a lesser known idea or entity more salient by speaking of it in terms of something more commonly known.
[492] The convention is to distinguish a metaphor from a metaphorical expression by capitalizing the metaphor.
[493] Examples are taken from Lakoff and Johnson, *Metaphors We Live By*, 14–21.

everyday experience.[494] Other examples of image schemas include part-whole, near-far, balance, containment, source-path-goal, etc. The up-down schema shows up in many common conceptual metaphors such as MORE IS UP, LESS IS DOWN; GOOD IS UP, BAD IS DOWN, LIFE IS UP, DEATH IS DOWN; VIRTUE IS UP, DEPRAVITY IS DOWN, etc., and it also figures prominently in our conception of God and our experience of ritual performances. We routinely think of God as being *above* us (e.g., God is "Most *High.*" Gen. 4:19; God is "high over all nations, and his glory is higher than the heavens." Psalm 113:4; "The Lord is God in heaven *above* and on the earth *below.*" Deut. 4:39)[495] and the architecture of liturgical spaces[496] and liturgical bodily movements[497] like kneeling, lifting one's hands, and the raising of the Bible or the Eucharistic elements reflect the important role that the up-down image schema plays in religious rituals and experiences.

In recent years, theologians and biblical scholars have increasingly relied on the work of cognitive linguists and cognitive scientists to show how theological and biblical language is rooted in our bodily experience of the world.[498] As theologian Robert Masson puts it, "There is

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[494] Image schemas differ from "body image," which is a concept that involves the perceptions, attitudes and beliefs that one has about their own body. For a more in depth discussion on the distinction between image schemas (or body schema) and body image, see Gallagher, *How the Body Shapes the Mind*, 24–30.

[495] Brian P. Meier et al., "What's 'up' with God? Vertical Space as a Representation of the Divine.," *Journal of Personality and Social Psychology* 93, no. 5 (2007): 699–710.

[496] Kashmiri Stec and Eve Sweetser, "Borobudur and Chartres: Religious Spaces as Performative Real-Space Blends," in *Sensuous Cognition*, ed. Rosario Caballero and Javier E. Díaz Vera (Berlin, Germany: De Gruyter, 2013), 265–91.

[497] See for example Patty Van Cappellen and Megan E. Edwards, "The Embodiment of Worship: Relations Among Postural, Psychological, and Physiological Aspects of Religious Practice," *Journal for the Cognitive Science of Religion* 6, no. 1–2 (2021): 56–79; Patty Van Cappellen and Megan E. Edwards, "Emotion Expression in Context: Full Body Postures of Christian Prayer Orientations Compared to Specific Emotions," *Journal of Nonverbal Behavior*, 2021, https://doi.org/10.1007/s10919-021-00370-6; Patty Van Cappellen, S. Cassidy, and R. Zhang, "Religion as an Embodied Practice: Documenting the Various Forms, Meanings, and Associated Experience of Christian Prayer Postures," *Psychology of Religion and Spirituality*, 2021, https://doi.org/10.1037/rel0000412.

[498] See for example Mary Therese DesCamp and Eve Sweetser, "Metaphors for God: Why and How Do Our Choices Matter for Humans? The Application of Contemporary Cognitive Linguistics Research to the Debate on God and Metaphor," *Pastoral Psychology* 53, no. 3 (2005): 207–38; Aleksander Gomola, *Conceptual Blending in Early Christian Discourse: A Cognitive Linguistic Analysis of Pastoral Metaphors in Patristic Literature* (Berlin, Germany: De Gruyter, 2018); Bonnie Howe and Joel B. Green, eds., *Cognitive Linguistic Explorations in Biblical Studies* (Berlin, Germany: De Gruyter, 2014); Erin Kidd and Jakob Karl Rinderknecht, eds., *Putting God on the*

no escaping the constitutive role of embodied mind in cognition and language. There is no 'stepping outside' our bodily, socially, and culturally constituted conceptual frameworks to gain a God's-eye view of reality independent from metaphorical and figurative conceptualizations. There is no escaping the constitutive role of embodied mind."[499] John Sanders similarly argues that our understanding of God and theological concepts is invariably shaped by our creaturely embodied nature: "In relating to us, God does not bypass our creaturely cognitive structures. Rather, God works through them."[500] Our bodies, far from being a mere container or vessel for the expression of language and thought, are a fundamental part of the structure of our language and thought. Because of this, Eve Sweetser and Mary Therese DesCamp argue that "Metaphor should therefore be expected to be a primary component of language about religious experience, both everyday worshippers' experience and mystics' or prophets' experience."[501]

While conceptual metaphor theory is helpful for identifying the fundamental role that our bodies play in cognitive processes, it also tends to map metaphors unidirectionally or asymmetrically from a source domain to a target domain without enough consideration for the many metaphors and forms of thinking that involve multidirectional mappings or a *blending* of two or more concepts together. Gilles Fauconnier and Mark Turner's theory of "conceptual blending" is an effort to account for these and other more complex forms of thinking and the

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Map: Theology and Conceptual Mapping (Lanham, MD: Lexington Books/Fortress Academic, 2018); Robert Masson, *Without Metaphor, No Saving God: Theology after Cognitive Linguistics* (Leuven, Belgium: Peeters, 2014); John Sanders, *Theology in the Flesh: How Embodiment and Culture Shape the Way We Think about Truth, Morality, and God* (Minneapolis, MN: Fortress Press, 2016); John Sanders, "Introduction to the Topical Issue 'Cognitive Linguistics and Theology,'" *Open Theology* 4, no. 1 (2018): 541–44. Stephen R. Shaver, "Metaphors of Eucharistic Presence: A Cognitive Linguistics Approach to an Ecumenical Theology of Bread, Wine, and the Body and Blood of Christ" (PhD Thesis, Berkley, CA, Graduate Theological Union, 2017); Sweetser and DesCamp, "Motivating Biblical Metaphors for God: Refining the Cognitive Model"; Ellen Van Wolde, *Reframing Biblical Studies: When Language and Text Meet Culture, Cognition, and Context* (Winona Lake, IN: Eisenbrauns, 2009).
[499] Masson, *Without Metaphor*, 55.
[500] Sanders, *Theology in the Flesh: How Embodiment and Culture Shape the Way We Think about Truth, Morality, and God*, 98.
[501] Sweetser and DesCamp, "Motivating Biblical Metaphors for God: Refining the Cognitive Model," 11.

possibility that new ideas or concepts *emerge* from multi-directional conceptual mappings across domains.[502] Similar to conceptual metaphor theory, conceptual blending involves the mapping of concepts across conceptual domains or what Fauconnier and Turner call "mental spaces."[503] Mental spaces are "small conceptual packets constructed as we think and talk, for purposes of local understanding and action."[504] Mental spaces are dynamic referential structures that are grounded in our bodies and are continually being constructed, altered, and combined to meet the needs of any mental operation. Mental spaces function similarly to source and target domains in conceptual metaphor theory in that they are mental representations or "packets of conceptual content"[505] that correspond to real entities or abstract ideas. Because mental spaces can only correspond to a limited number of elements that are associated with an entity or an idea, they are only ever partial conceptual models of the world. As Robert Williams puts it, conceptual models such as mental spaces are not a replication or reproduction of the world itself but "tools for reasoning about the world."[506]

A standard conceptual blend (See Figure 1) consists of four mental spaces[507]—though, as we will see when we consider conceptual blends that incorporate gestures, conceptual blends can consist of more than four spaces. Each circle represents a different mental space. The two "input" spaces function similarly to the source domain and target domain in the conceptual metaphor theory model. The "generic" space maps onto each input space and contains what the two input spaces have in common. The "blended" space is the product of the blend or integration

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[502] Fauconnier and Turner, *The Way We Think*, 41. Fauconnier and Turner refer to the multidirectional mappings between input mental spaces as "cross-space mapping."

[503] Gilles Fauconnier, *Mental Spaces: Aspects of Meaning Construction in Natural Language* (Cambridge: Cambridge University Press, 1994), 16–22; Fauconnier and Turner, *The Way We Think*, 40–42.

[504] Fauconnier and Turner, *The Way We Think*, 40.

[505] Robert F. Williams, "Gesture as a Conceptual Mapping Tool," in *Metaphor and Gesture*, ed. Alan Cienki and Cornelia Müller (Amsterdam: John Benjamins Pub. Co, 2008), 57.

[506] Williams, 61.

[507] See Fauconnier and Turner, *The Way We Think*, 39–50.

of the two input spaces. The solid lines in the diagram indicate mappings between elements in the two input spaces and the dotted lines indicate mappings between the input spaces and the generic space and blended space. What is unique about Fauconnier and Turner's understanding of conceptual blending theory is that the blended space has an "emergent structure" that is not present in either of the input spaces. The production of the emergent blended space involves "selective projection"[508] because not all the elements of the input spaces are projected into the blended space. Like each mental space, all conceptual blends are selective or only partial representations of a physical object or idea.
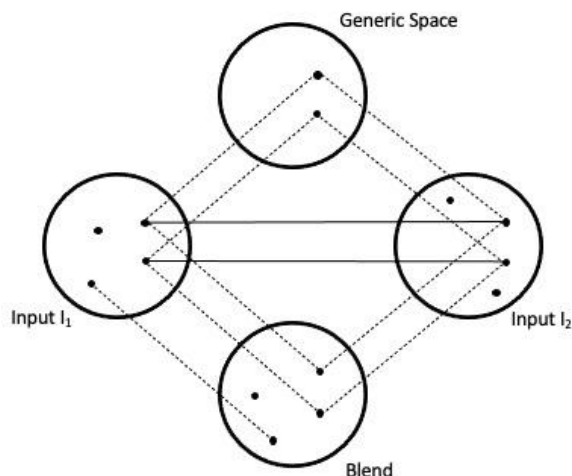
Figure 1. Basic Diagram of the Elements of a Conceptual Blend.[509]

Fauconnier and Turner give the example of the riddle of the "Buddhist Monk" to help explain how a conceptual blend works.[510] In the riddle, a Buddhist Monk ascends to the top of a

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[508] Fauconnier and Turner, 47.
[509] Figure adapted from Fauconnier and Turner, 46.
[510] Fauconnier and Turner, 39. Full riddle: "A Buddhist Monk begins at dawn one day walking up a mountain, reaches the top at sunset, meditates at the top for several days until one dawn when he begins to walk back to the foot of the mountain, which he reaches at sunset. Make no assumptions about his starting or stopping or about his

mountain at dawn and reaches the summit at sunset. After several days, the Monk descends to the bottom of the mountain at dawn and reaches the base at sunset. The riddle asks: Is there a place on the path that the monk occupies at the same hour of the day on the two separate journeys? To solve this riddle, one can imagine the monk "meeting himself" halfway along the journey at the midpoint of the day. This is the place that the monk occupies in the same place at the same hour on the two separate journeys. This imagined scenario of the monk meeting himself is the emergent product of *blending* the two separate journeys together. As Fauconnier and Turner put it, "The imaginative conception of the monk's meeting himself blends the journey to the summit and the journey back down, and it has the emergent structure of an 'encounter,' which is not an aspect of the separate journeys. This emergent structure makes the solution [to the riddle] apparent."[511] This blend is depicted in the conceptual blend in Figure 2.[512] In the blend, input spaces 1 and 2 represent the ascending and descending journeys, respectively. The upward journey occurs on travel day d_1 and the downward journey occurs on travel day d_2. The monk going up is a_1 and the monk going down is a_2. The generic space includes the common features between the two input spaces such as the slope of the mountain, the presence of the monk, the directional dimension of the journey, and the fact that each of the journeys occur during the daytime. In the blended space, the slope of the mountain and the movement and direction of the two monks is retained but the two days of travel, d_1 and d_2, are fused into a single day, d', so that it is possible to imagine the a_1' monk and a_2' monk moving *towards* each other and eventually meeting on the mountain side.

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pace during the trips. Riddle: Is there a place on the path that the monk occupies at the same hour of the day on the two separate journeys?"
[511] Fauconnier and Turner, 40.
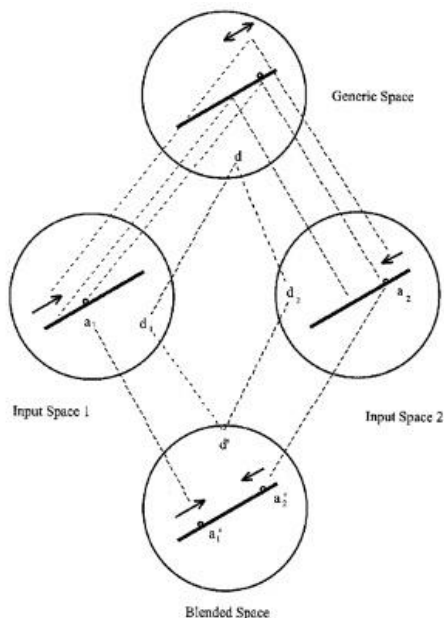[512] Fauconnier and Turner, 41–45.

Figure 2. Conceptual Blend of Buddhist Monk Riddle.[513]

Fauconnier and Turner identify four major subtypes of blends (or "integration networks")

depending on how the elements in the input spaces relate to each other: simplex, mirror, single-

scope, and double-scope.[514] Each of these subtypes have different features and characteristics but

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[513] Figure from Fauconnier and Turner, 43.

[514] Fauconnier and Turner, 119–35. Simplex blends are the simplest kind of conceptual blend. These are blends "in which human cultural and biological history has provided an effective frame that applies to certain kinds of elements as values." Fauconnier and Turner, 120. Family structures are an example of a simplex blend because the kinship of family provides an organizing frame within which the relationship between people in a kin can be readily understood (i.e. the relationship between a father and a daughter or a grandmother and a granddaughter will have the same structural relationship across family units). In simplex blends, one of the inputs doesn't provide an organizing frame so there is no conflict between the organizing frames of the inputs. Mirror blends are blends in which all the spaces share an organizing frame. The Buddhist Monk blend is an example of a "mirror network" blend because the organizing frame of a *man walking along a mountain path* is shared by both inputs and projected into the blend. Single-scope blends are blends with two inputs that have different organizing frames but only *one* of those frames is projected into the blend. Single-scope blends are thus asymmetric and function similarly to conventional source-target domain for conceptual metaphors. The input that provides the organizing frame for the blend is the "source domain" whereas the input that is the focus of the metaphor is the "target domain." Double-scope blends are blends with two input spaces that have different or contrasting organizing frames which get blended together to create a new and emergent frame that includes parts of each of the input organizing frames. The resulting blend is emergent because it has a structure that is more than the sum of the parts in the input frames. Fauconnier and Turner use a "Computer Desktop" as an example of a double-scope blend. A Computer Desktop is a blend between a "computer" (input space 1; a piece of technology) with an "office workspace" (input space 2; a physical space). The differing

each are defined by the relation of their "organizing frames."[515] An organizing frame is the conceptual structure that organizes or holds the input spaces together. Fauconnier and Turner describe an organizing frame as a "topology" because it "provides a set of organizing relations among the elements in the space."[516] Organizing frames provide stability for concepts and words that may otherwise have different meanings in different contexts. For example, in a workplace setting the word "chair" may refer to the leader of an organization or the organizer of a meeting but in a household setting the word "chair" may refer to a piece of furniture. Workplace and household settings are different organizing frames that have different topologies which frame or organize the meaning of elements within that setting.

According to conceptual blending theory, the metaphor of "sacramental dialogue" is an emergent concept that is the product of a conceptual blend between ritual performance and everyday dialogue which occupy the input or mental spaces in the blend. Sacramental dialogue is a "double-scope" blend because the organizing frames of the two input spaces have different or contrasting "organizing frames." The organizing frame of the first input space is "ritual performance": a prescribed, conventional, and formal practice which is in some respect set apart from everyday life. The accompanying elements that are part of the ritual performance include participants (both people and God), words, conventional gestures, and the immediate environment such as material objects and ritual space. The organizing frame of the second input space is "everyday dialogue": a spontaneous, face-to-face social interaction between two or more individuals. The accompanying elements that are part of everyday dialogue include interlocutors,

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input frames of "computer" and "office workspace" are blended together to create the new and emergent "desktop computer" blend which incorporates aspects of each of the inputs but with an emergent conceptual structure that is not present in either of the inputs. Users are able to interact with a computer *as if* it were a physical space by moving, opening, and closing files and folders even though there are no *actual* desks, files, folders, or trashcans on a computer. Fauconnier and Turner, 22–24.

[515] Fauconnier and Turner, *The Way We Think*, 123, 251–52.

[516] Fauconnier and Turner, 123.

speech, spontaneous co-speech gestures, and the immediate environment. In the blend, corresponding elements in the two input spaces are mapped with a solid line: ritual participants—interlocutors, words—speech, conventional gestures—spontaneous gestures, and immediate environment—immediate environment. The generic space of the blend includes all of the common features between the two input spaces, including the presence of subjects, language, bodily movement, and a physical setting. When the two input spaces are blended together, each of the input spaces are blended together creating the emergent concept of sacramental dialogue and the conceptual possibility that a sacramental ritual can be understood and experienced *as a* *dialogue*. In other words, ritual participants are able to experience the ritual as a dialogue or an encounter between ritual subjects because the organizing frame of everyday dialogue is blended with the organizing frame of ritual performance. This blend is depicted in Figure 3.
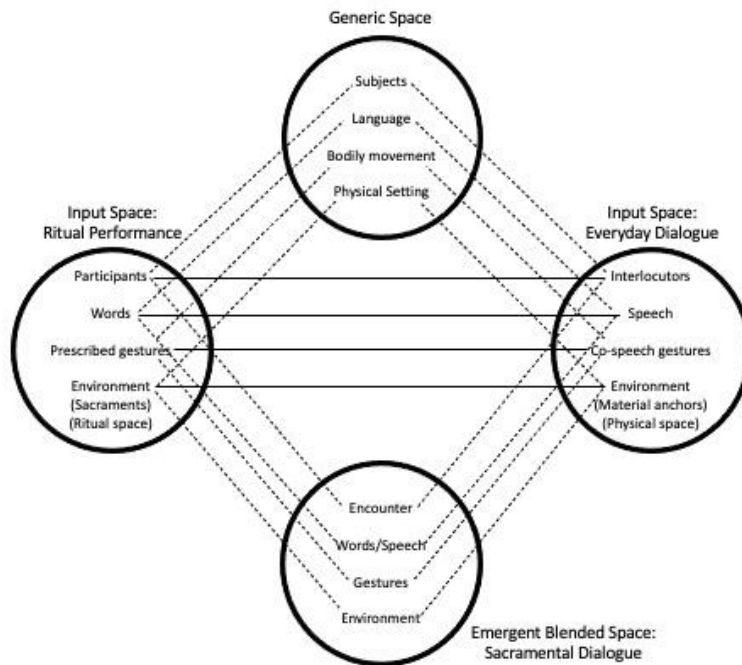

Figure 3. Sacramental Dialogue Conceptual Blend.

In the emergent blended space, elements from the ritual performance input space are given new meanings and are able to function in new ways, which is why ritual participants in the Roman Catholic tradition are said to not merely perform a prescribed, conventional activity but rather become interlocutors who enter into a dialogue with God and the Church anew with each ritual performance. As Kevin Irwin describes the newness of liturgical performances,

> Christian ritual is never the same although it is repeated. In fact, liturgy's ritual structure and repeated use of some texts enables us to enter into the liturgical action more fully and deeply. But the uniqueness of even a "repeated" liturgy derives from the fact that the situation of the Church and world are always new and that our personal and communal histories are always new.[517]

Within the context of sacramental dialogue, then, ritual elements like words, gestures and the material environment take on new meaning because they too are *part of* the sacramental dialogue. Prescribed words can function like dialogic speech, conventional gestures can function like co-speech gestures, and material elements can be tightly coupled with words and gestures in the context of a sacramental dialogue. Therefore, within the context of ritual dialogue, ritual gestures are not merely prescribed, conventional symbols that have their meaning apart from words (e.g., emblems), they can instead function like co-speech gestures in everyday settings because they mediate the ritual interactions between subjects and they can communicate content in ways that words cannot.

Paul Chilton and Monika Kopytowska suggest that ritual performances are dialogues which "are like the two-way communication that humans naturally engage in, but lack one feature, namely, the actual presence of an interlocutor. Since the interlocutor expected in the dialogue frame is not physically present, he or she has to be conjured up. That is to say, a supernatural agent—an interlocutor—has to be postulated."[518] According to conceptual blending

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[517] Irwin, *Context and Text: Method in Liturgical Theology*, 97.
[518] Chilton and Kopytowska, "Introduction: Religion as a Cognitive and Linguistic Phenomenon," xxix.

theory, God, the non-present interlocutor of sacramental dialogue, is "conjured up" or "postulated" in the conceptual blend with our embodied experience of everyday face-to-face dialogue. Conceptual blending allows us to see that within the context of sacramental dialogue, ritual gestures can take on some of the characteristics and functions of spontaneous everyday gestures in everyday settings even though the ritual gestures are themselves often prescribed and conventional.

3.3.2 Mapping Gestures in Dialogue

The benefit of using conceptual blending is not only that it allows us to map the metaphor of sacramental dialogue, it also offers a detailed method to analyze multi-modal discourses and to see how gestures and the material environment can be incorporated into the structure of the dialogue itself, which is something that conceptual metaphor theory is not able to do. Fey Parrill and Eve Sweetser consider conceptual blending to be an "invaluable" tool in the analysis of multi-modal discourses because "it allows the analyst to build a coherent representation of the unfolding discourse structure" in all its dimensions:

> Blending theory provides extremely general mechanisms for stating and analyzing mappings, or correspondences, between domains; it can therefore be used to express both correspondences between physical forms in space (hands, e.g.) and meanings (ideas, e.g.)—as well as the ways in which speech-expressed meaning content combines with gesturally expressed content to create a dynamically developing whole.[519]

As Sweetser also notes elsewhere, conceptual blending "gives us a single framework within which to model multi-modal communication."[520] This section will explore in greater detail the

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[519] Parrill and Sweetser, "What We Mean by Meaning," 198.
[520] Sweetser, "Looking at Space to Study Mental Spaces," 203.

nature of multi-modal dialogue so that we can conceptually map ritual gestures and the material environment within the metaphorical concept of sacramental dialogue.

3.3.2.1 Multi-modal Dialogue and the Environment

According to the field of gesture studies, communication is a rich multi-modal activity that integrates a variety of communicative resources into the nature and structure of the act of communication. For Lorenza Mondada, communication is comprised of various "situated embodied practices" which create "*complex multimodal Gestalts*"[521] that integrate a variety of resources for the purpose of communication. Some of these multi-modal resources include verbal resources (e.g., words, sounds, prosody), bodily resources (e.g., hands, arms, torso, legs, head, gaze, mouth, etc.), and the material environment (e.g., physical space, material objects, physical structures, etc.). The field of gesture studies has devoted a large amount of attention to the role that gestures play in mediating the complex relationship between bodily movement and the physical environment because communication is recognized as a situated embodied practice that is inescapably tied to its material context. This has not always been the case in the study of communication. Traditionally, communication has been "conceived in terms of a triadic relationship between a human subject, a sign, and the world to which the sign refers."[522] In this triadic framing of communication, "person and sign (and perhaps recipient) are placed on one side of a divide, the world about which we communicate on the other. Communication is thus separated from the world: it is portrayed as being about, but not of this world."[523] Jürgen Streeck

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[521] Mondada, "Challenges of Multimodality," 344: "Multimodal Gestalts arranged in space and time build emerging and changing positionings between the participants, whose relations, actions, and the rights and obligations related to them, are negotiated not only in discursive but also in embodied ways: an action can be aligned or disaligned verbally, but also bodily, disclosing subtle socio-interactional dynamics."
[522] Streeck, *Gesturecraft*, 83.
[523] Streeck, 83.

argues that this approach to communication is both "disembodied and worldless" and instead advocates for an approach that "situates the communicating person within his or her lived-in world, not apart from it."[524] Herbert Clark similarly advocates for the study of language *in situ,* language as it is used in face-to-face conversation, rather than the study of language *in vacuo,* ideal speaker-listener relations where language is *"stripped of its relation to particular speakers, addressees, places, times, and purposes."*[525] For Clark, "Every act of communication takes place in a material situation that plays an essential role in that communication."[526] As Herbert Clark puts it, "Communication is ordinarily *anchored* to the material world—to actual people, artifacts, rooms, buildings, landscapes, events, processes."[527]

One way that communication and thought are grounded in the material world is through the use of "material anchors." Material anchors are physical structures or material things in one's environment that support a person's cognitive processing and meaning construction. We use material anchors to "offload" cognitive tasks onto the material structures of the environment to make cognitive processing easier for ourselves. Edwin Hutchins suggests that material anchors give conceptual representations "stability" and to reduce cognitive load.[528] Frequently used material anchors in everyday life include things like clocks, maps, landmarks, buildings, gauges or technical instruments, money, constellations, graves, writing, other people, etc.[529] In theory, anything in the environment can be used as a material anchor: physical objects, space,

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[524] Streeck, 84.

[525] Herbert H. Clark, "Anchoring Utterances," *Topics in Cognitive Science*, 2020, 1–2.

[526] Clark, "Pointing and Placing," 244.

[527] Clark, 243. Emphasis added. See also Clark, "Anchoring Utterances," 2: "For communication to succeed, the participants must tie, or *anchor*, each of their utterances to the speaker, addressees, place, time, display, and purpose of that utterance and, possibly, to other entities as well."

[528] Edwin Hutchins, "Material Anchors for Conceptual Blends," *Journal of Pragmatics* 37, no. 10 (2005): 1555–77.

[529] Examples taken from Fauconnier and Turner, *The Way We Think*, 195–216; Hutchins, "Material Anchors for Conceptual Blends"; Edwin Hutchins, "The Distributed Cognition Perspective on Human Interaction," in *Roots of Human Sociality*, ed. N. J. Enfield and Stephen C. Levinson, 1st ed. (Routledge, 2006), 375–98; Stec and Sweetser, "Borobudur and Chartres."

topography, and other people can all function as a material anchors. One material anchor that we regularly encounter but seldom think about is a line of people queuing. The practice of queuing is a cultural practice which uses the location and orientation of people's body's in space to encode for the temporal order of arrival and service. The physical arrangement of bodies in space functions as the material anchor which encodes a temporal ordering of people. Hutchins uses conceptual blending to show how the concept of a queue involves the blending of two mental or input spaces (See Figure 4). One input space consists of the linear arrangement of bodies in physical space and the other input space consists of a "trajector" or the conceptual idea of directional ordering. When these two input spaces are blended, the concept of a queue emerges so that the arrangement of people's bodies in space encodes a temporal and directional ordering. As Hutchins puts it, the conceptual blend of these two input spaces "turns the line into a queue."[530] He goes on: "Not all lines are queues. Soldiers standing at attention in formation form a line, but not a queue. In order to see a line as a queue, one must project conceptual structure onto the line. The conceptual structure is the notion of sequential order."[531] What is important to note about this example is that material anchors or non-linguistic elements can occupy an input space and be part of a conceptual blend—the arrangement of bodies in space doesn't have to be translated into words to be incorporated into a conceptual blend.

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[530] Hutchins, "Material Anchors for Conceptual Blends," 1559.
[531] Hutchins, 1559.
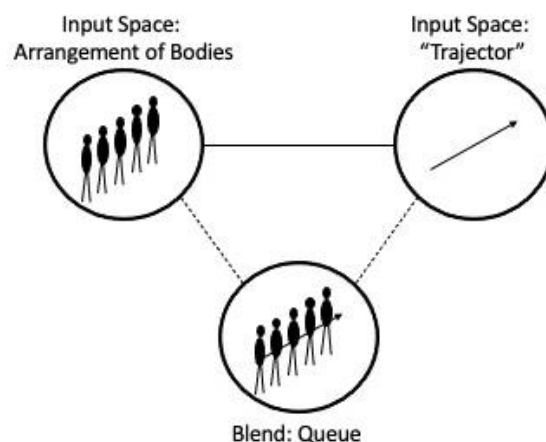
Figure 4. Queue Conceptual Blend.[532]

Scott Liddell and Eve Sweetser refer to mental spaces that are anchored to the immediate environment as "Real Spaces." Liddell defines a Real Space as a "person's mental representation of their immediate physical environment."[533] Real Space is not the physical thing itself but rather "our conceptual representation of these physical things."[534] Real Space is a mental space like other mental spaces but it differs in that its conceptual elements have locations in the immediate environment rather than in an abstract location like someone's thought. For example, if you were to think of something that is not physically present to you, like a childhood home, your mental representation of that childhood home would occupy a conventional mental space. However, if you were thinking about something that is physically present to you, like a table, your mental representation of that table would occupy a "Real Space" because it is a mental space that is grounded in the immediate environment.

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[532] Adapted from Hutchins, 1560.
[533] Liddell, "Blended Spaces and Deixis in Sign Language Discourse," 342. See also Scott K. Liddell, "Grounded Blends, Gestures, and Conceptual Shifts," *Cognitive Linguistics* 9, no. 3 (1998): 283–314.
[534] Liddell, "Blended Spaces and Deixis in Sign Language Discourse," 342.

Real Spaces are important because they ground or anchor language and thought in the immediate environment. Pointing gestures are an example of a gesture which creates Real Spaces during social interactions. Whether a pointing gesture is concrete or abstract, it utilizes Real Space because it grounds a conceptual idea in a physical space so that there is a close indexical relationship between the pointing gesture and its referent. Furthermore, in sign languages, signers frequently use the space around them to index an entity, like an absent person, in the immediate environment—say, in front and to the left of the signer.[535] For the remainder of the discourse (or until the signer changes the way that spatial location is designated), that spatial location—in front and to the left of the speaker—can be used by both the signer and any addressees to refer to that entity. If real entities are present in the environment then signs are directed toward that entity, not to a loci in the surrounding space. By doing this, signers are conceptually blending or projecting the entity unto a spatial location in the environment so that the entity is grounded or anchored in the immediate environment. Liddell has shown that Real Spaces are fundamental to the grammatical structure of sign languages and Parrill and Sweetser have built on Liddell's analysis to suggest the same grounding or anchoring process occurs with gestures during spoken dialogue.[536]

Material anchors and Real Spaces play an important role in rituals because the immediate environment is regularly incorporated into the meaning and function of the ritual performance. Gilles Fauconnier and Mark Turner[537] and Kashmiri Stec and Eve Sweetser[538] each highlight the important role that buildings and physical structures play in people's conceptual understanding

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[535] Non-present referents can be positioned relative to the signer as near or far, on the left or right, high or low, etc. Liddell also calls non-present entities that are referred to by the pointing gestures as "surrogates." Liddell, 336.
[536] Parrill and Sweetser, "What We Mean by Meaning."
[537] Fauconnier and Turner, *The Way We Think*, 207–10.
[538] Stec and Sweetser, "Borobudur and Chartres."

and experience of a ritual space. Fauconnier and Turner suggest that buildings like cathedrals function as material anchors which can associate ideas with specific locations in the physical environment.[539] A cathedral may contain many coordinated elements which can function as material anchors: "vestments, candies, special chairs and benches for special activities, confessionals, stations of the cross with their own use of the method of loci, altars, sacristies, visual images, graves, and books."[540] Fauconnier and Turner describe a ritual setting like a Gothic cathedral not merely as a building or a physical structure but as an emergent concept which blends together the physical topography of the environment with the theological ideas and histories of its religious tradition. To the uninitiated, a cathedral and its accompanying elements "can look like a bizarre and unaccountable assembly, but those raised in the tradition will have the means and competence to unpack and decompress what is actually a very powerful blend, culturally evolved through centuries of worship."[541]

Kashmiri Stec and Eve Sweetser similarly explore how the ninth century C.E. Buddhist monument of Borobudur in Indonesia and the medieval Christian cathedral church of Chartres in France function as material anchors that create "grounded blends"[542] which are capable of exerting "profound transformative forces"[543] on individuals. The material features of these structures, such as verticality, arrangement, and orientation, function as material or

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[539] Fauconnier and Turner characterize cathedrals as being part of a "method of loci" conceptual blend: "In the method of loci, someone needs to remember a complex organization of ideas, perhaps to deliver later in the form of a speech. She does this by associating the ideas with locations on some familiar path and then remembering and expressing the ideas by imagining that she is going through the locations on the path. One input space has the ideas, the other has the familiar path, and there is an Analogy mapping between two well-ordered sequences in the two input spaces." Fauconnier and Turner, *The Way We Think*, 207.
[540] Fauconnier and Turner, 209–10.
[541] Fauconnier and Turner, 210.
[542] "Grounded blends" are conceptual blends which uses conceptual representations of the immediate material environment (i.e. Real Space) as one of the input spaces in the conceptual blend. Stec and Sweetser, "Borobudur and Chartres."
[543] Stec and Sweetser, 289.

"tools" that aid in cognition and help to facilitate "perception and narrative retrieval" of the associated tradition.[544] In other words, these physical structures can function both as material representations of a tradition and as a material representation of the cognitive state of individuals. The physical structures "represent the cognitive state [they] embody"[545] so that the cognitive state or experience of the individual is guided by the structure and the features of the physical building. According to Stec and Sweetser, Borobudur and Chartres become "emergent concept[s]" when the social, theological, and historical ideas associated with those buildings are blended with the physical structure of the space: "[T]he physical shape of the monument, the conceptual structure which is laid over it, and the motion of the pilgrim interact to create the fully transformative, transcendent experience described here."[546]

Material anchors and physical structures in ritual environments don't become meaningful on their own accord—ritual participants must engage with the topology of the material anchors and structures through bodily movements and gestures. As Stec and Sweetser say regarding one's experience of Borobudur and Chartres, "Performatively, one does not only exist in a sacred space, one moves and acts towards it and in it" through bodily movement.[547] Gestures play a central role in establishing material anchors and grounded blends in our immediate environment through actions such as pointing, object manipulation, interaction with material things, demarcation of physical space, etc. Kevin Irwin argues that in Roman Catholic rituals, symbolic gestures such as "bathing, baking bread, pouring wine, dining, touching, and salving with oil…comprise an essential part of the anthropological foundation of liturgical rites" because they are coupled with ordinary material elements of everyday life, such as "earth, air, fire, water, oil,

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[544] Stec and Sweetser, 272.
[545] Stec and Sweetser, 280.
[546] Stec and Sweetser, 284.
[547] Stec and Sweetser, 282.

bread and wine etc."[548] For Irwin, ritual elements like material symbols and symbolic gestures provide the *context* for symbolic engagement with the liturgical texts.

Edwin Hutchins shows how language and cognition are anchored to the material environment through gestures in his analysis of the pointing and tracing gestures of two navigators on the bridge of a navy deck while they interact with a physical map.[549] Hutchins suggests that the physical map functions as a material anchor to support the conceptual representations of different possible routes which are superimposed unto the map by the pointing and tracing gestures. As Hutchins explains,

> By superimposing gesture on the meaningfully interpreted chart surface a navigator adds representations of motion to the visual system and representations of the trajectories of motion of the hand and fingers to the somatosensory system…The hands, guided by conceptually meaningful visual and motor representations, act in the world thereby producing new richer more complex and more integrated brain representations.[550]

For Hutchins, the navigators interacting with the physical map is a clear case of "distributed cognition" because each element of the interaction—the physical map, gestures, words, etc.—is part of the overall meaning of the social interaction. Each element forms a "tight web of interrelationships [which] is typical of real-world cognitive ecologies"[551] and cannot be properly understood if they are isolated from each other in analysis. Hutchins therefore argues that "the correct unit of analysis [in social interactions] is not one brain or even one semiotic modality, such as speech or gesture taken in isolation, but the entire system. The meaning of a complex emerges from the interactions among the modalities that include the body as well as material objects present in the environment."[552]

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[548] Irwin, *Context and Text: Method in Liturgical Theology*, 143.
[549] Hutchins, "The Distributed Cognition Perspective on Human Interaction."
[550] Hutchins, 389.
[551] Hutchins, 390.
[552] Hutchins, 390.

The materially anchored pointing and tracing gestures of the navigators are also examples of what Charles Goodwin calls "environmentally coupled gestures."[553] Environmentally coupled gestures are "gestures that cannot be understood by participants without taking into account structure in the environment to which they are tied."[554] Goodwin argues that language, the gesturing body, and the structure of the environment are each an indispensable part of any multi-modal communicative act. Without the environment, a speaker's gestures could not be understood, and without the gestures, a speaker's words could not be understood: "Each individual sign is partial and incomplete. However, as part of a larger complex of meaning making practices they mutually elaborate each other to create a whole, a clear statement, that is not only different from its individual parts, but greater than them in that no sign system in isolation is adequate to construct what is being said."[555] As Hutchins similarly puts it, "the identity of the elements and the nature of their relationship is not in the words alone; it is in the interpretation of the environmentally coupled gesture."[556]

Robert Williams has shown how environmentally coupled gestures function as "conceptual mapping tools" which *blend* together conceptual models with material structures.[557] In an analysis of the "instructional gestures" that a teacher makes when teaching young children how to tell time on an analog clock using a non-functional teaching clock, Williams shows that the teacher's gestures function by conceptually mapping an idea (i.e., time) with a physical thing in the immediate environment (i.e., the analog clock). In this instructional setting, the seemingly straightforward concept of a "clock" involves a conceptual blend between the teaching clock,

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[553] Goodwin, "Environmentally Coupled Gestures."
[554] Goodwin, 195.
[555] Goodwin, 199.
[556] Hutchins, "The Distributed Cognition Perspective on Human Interaction," 387.
[557] Williams, "Gesture as a Conceptual Mapping Tool."

which functions as a material anchor that the teacher uses for demonstration and an imagined

functioning clock. On its own, the teaching clock is merely a physical structure that has no

intrinsic meaning, but when it is blended with the imagined clock the teaching clock is made into

a "material anchor" that is "imbued with significance."[558] Each time the teacher interacts with

the teaching clock to do various things like change the time, trace the passing of time, or divide

the clock into halves or quarters, the teacher is using their "instructional gestures" as a

conceptual mapping tool to help students understand how to tell time on a real clock using the

teaching clock as a material anchor. Teaching or demonstrating how to tell time using an analog

clock would be significantly more difficult if the teacher was not able to utilize their gestures as

a teaching tool because gestures can be readily coupled with the material environment in ways

that words cannot. As Williams puts it,

> [T]he properties of gesture make it an efficient medium for indexing structures in
> the environment and superimposing outlines of conceptual entities directly over
> their relevant counterparts. Gesture is also well-suited to depicting paths and
> manner of motion. In short, speech, gesture, and material objects are different
> representational media with different properties. Speech is sequential and
> symbolic; gesture is visual-spatial, motional, and enactive.[559]

Similarly, in speaking about the way an architect uses their gestures to interact with and imagine

physical spaces, Jürgen Streeck says,

> These gestural practices are part of the very fabric of the architect's creative
> process: they are among the vehicles of his spatial reasoning and imagination.
> Gestures shape the terrain, put structures in place, mold them. They anchor the
> design process by making it a physical, repetitive, kinesthetic experience;
> enlivened structure is interiorized through movements of the hands.[560]

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[558] Williams, 60.
[559] Williams, 84.
[560] Streeck, *Gesturecraft*, 131.

In other words, gestures can be a helpful "conceptual mapping tool" and a resource for "meaning construction"[561] because gestures mediate between our conceptual models of the world and our interaction with material anchors in the world in ways that words cannot.

3.3.2.2 Metaphoric and Iconic Gestures

"Metaphoric" and "iconic" gestures also make use of material things and the immediate environment to depict the content of the discourse. According to David McNeill, metaphoric and iconic gestures are two of the most common types of gestures that occur in a discourse. Metaphoric gestures are images of an abstract idea and iconic gestures are images of a concrete object or event: "Some gestures are 'iconic' and bear a close formal relationship to the semantic content of speech…Other gestures are 'metaphoric.' These are like iconic gestures in that they are pictorial, but the pictorial content presents an abstract idea rather than a concrete object or event."[562] McNeill later describes metaphoric gestures as "the vehicle of the metaphor"[563] because metaphoric gestures are the visible and spatial means by which non-visible and non-spatial entities like abstract ideas are conceptualized and expressed. In conceptual metaphor terms, metaphoric gestures function as the source domain for a target domain.

As noted in the previous chapter (see section 2.2.2), metaphoric gestures provide strong evidence for the argument that metaphors are not simply a feature of language but are a general cognitive function that is modality independent and grounded in our bodily experience of the world.[564] Linguists and cognitive linguists like Ronald W. Langacker, Cornelia Müller, Alan

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[561] Williams, "Gesture as a Conceptual Mapping Tool."

[562] McNeill, *Hand and Mind*, 13–14.

[563] McNeill, *Gesture and Thought*, 45.

[564] Cienki and Müller, "Metaphor, Gesture and Thought," 493: "Gestures, while a co-verbal behaviour, involves a different modality of expression than speech and so provides another source of evidence for conceptual metaphors." And as Kawai Chui puts it, "The specific manifestation of a metaphor in the use of the hands thus provides

Cienki argue that metaphoric gestures affirm "the embodied nature of meaning and the grounding of abstract conceptions in perceptual and motor experience,"[565] that metaphoric gestures "illustrate that metaphors in fact do not depend upon a specific representational or symbolic modality,"[566] and that metaphoric gestures are "one of the domains of non-verbal behavior that has provided evidence for the claim that metaphors are part of thought, and not just verbal language, and that cognition has an embodied basis."[567] Cornelia Müller summarizes current research on metaphor and gesture by noting that "gesture analysis may add a significant facet to studying metaphors from an applied linguistics perspective, offering insights into the production side of metaphor use."[568]

Abstract pointing gestures are a good example of a metaphoric gesture that also incorporates the immediate environment into what is being communicated. Abstract pointing gestures are gestures that use the empty space around the speaker to refer to an idea, person, or entity so that space "metaphorically represent[s] *mental spaces* or areas of content."[569] The source domain of an abstract pointing gesture is the physical space being pointed at and the target domain is the conceptual idea or thing being referred to. Rafael Núñez and Eve Sweetser provide an interesting example of how pointing gestures can use space to metaphorically

independent visible evidence of metaphorical thinking, and supports the embodied nature of this pervasive cognitive phenomenon in communication." Kawai Chui, "Conceptual Metaphors in Gesture," *Cognitive Linguistics* 22, no. 3 (2011): 438. See also Cienki, "Cognitive Linguistics, Gesture Studies, and Multimodal Communication," 604: "What first convinced me and some other cognitive linguists of the importance of paying attention to multimodality in communication were the claims made by David McNeill in 1992 in Hand and Mind, a book which served to bring the research on gesture to a broad audience…The research topic in which I saw an immediate connection was that of conceptual metaphor theory: McNeill picked up on this research in its early years in the 1980s and argued that if metaphor has its basis in patterns of thinking of one domain in terms of another, we should see evidence of this in some way in speakers' gestures."

[565] Langacker, "Metaphoric Gesture and Cognitive Linguistics," 249.

[566] Cornelia Müller, "What Gestures Reveal about the Nature of Metaphor," in *Metaphor and Gesture*, ed. Alan Cienki and Cornelia Müller (Amsterdam; Philadelphia: John Benjamins Pub. Co., 2008), 226.

[567] Cienki, "Cognitive Linguistics, Gesture Studies, and Multimodal Communication," 608.

[568] Müller, "What Gestures Reveal about the Nature of Metaphor," 221.

[569] Sweetser, "Looking at Space to Study Mental Spaces," 210.

represent the abstract concept of time.[570] Núñez and Sweetser note that speakers regularly point to the space in front of themselves when referring to the "future," to the space behind themselves when referring to the "past," and to the place where they stand to refer to the "present." These abstract pointing gestures utilize the empty spaces around the speaker to refer to abstract concepts such as the future and the past. The future-past schema maps onto the front-back axis of the body and is evident in the conceptual metaphors FUTURE IS AHEAD and PAST IS BEHIND and NOW IS HERE. The vast majority of cultures follow this FUTURE IS AHEAD and PAST IS BEHIND schema to spatially represent time but Núñez and Sweetser observed that speakers of the native South American Aymara language actually flip this schema so that the future is spatially located *behind* the speaker and the past is spatially located *in front* of the speaker. Núñez and Sweetser suggest that the reason for this difference is that Aymara speakers understand time according to the conceptual metaphor KNOWING IS SEEING rather than FUTURE IS AHEAD. According to the conceptual metaphor KNOWING IS SEEING, the past is located in the space *in front* of a speaker because the past can be known and thus seen, whereas the future is located in the space *behind* the speaker because the future is unknown and thus unseen. What is important to note here is how gestures can manipulate space to metaphorically refer to abstract ideas such as time and that these ideas and uses of space can vary across cultures and languages.

A commonly used metaphoric gesture that we will explore in greater detail in the next chapter (see section 4.2) is the PUOH gesture where the palm of a flat-hand is held "open" in front of the speaker. This gesture is metaphoric because it depicts an abstract "idea" as a physical

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[570] Rafael E. Núñez and Eve Sweetser, "With the Future Behind Them: Convergent Evidence From Aymara Language and Gesture in the Crosslinguistic Comparison of Spatial Construals of Time," *Cognitive Science* 30, no. 3 (2006): 401–50.

object that can being held in the palm of the speaker's hand. The PUOH gesture therefore expresses the underlying conceptual metaphor IDEA AS AN OBJECT.[571] In social interactions, PUOH gestures can also be used to metaphorically "give" another person the idea that is in their hand by moving their open palm toward that other person. The directional use of the PUOH gesture functions similarly to prepositions like "to" or "from" in English and are a fundamental part of sign language grammar. What is interesting about most occurrences of the PUOH gesture—as well as many other metaphoric gestures—is that it communicates a metaphor (IDEA AS AN OBJECT) that is often not present in the accompanying speech. A transcription of speech without consideration of the accompanying gesture would miss this underlying metaphor. Another common example of a metaphoric gesture that often communicates something that is not present in the accompanying speech is when English speakers gesture from left to right while describing a process that occurred. Similar to abstract pointing gestures which use the space in front or behind the speaker to refer to the abstract idea of time, this gesture uses the space to the left and right of the speaker to spatially depict a process, where the space to the left of the speaker metaphorically represents the preceding state and the space on the right metaphorically represents the subsequent state. This left to right gestural orientation also coincides with the directionality of writing in English and other languages.[572]

Iconic gestures are historically the most contested type of gesture. As noted in the previous chapter, iconicity, traditionally understood as the resemblance between linguistic form and meaning, was one of the major stumbling blocks that prevented people from considering sign language as a genuine language and co-speech gestures as a part of speech. Traditionally, linguistic signs have been understood to be non-iconic or arbitrary because the meaning of a

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[571] McNeill, *Hand and Mind*, 14.
[572] Cienki, "Cognitive Linguistics: Spoken Language and Gesture as Expressions of Conceptualization," 187.

linguistic form is meant to be determined by convention alone. However, linguists and gesture researchers have challenged the criteria that linguistic signs must be non-iconic or arbitrary in both spoken and signed languages and iconicity is now more widely accepted as a "general property of language."[573]

In recent years, definitions of iconicity in linguistics have expanded from the semantic relationship between a linguistic form (i.e., sign) and its meaning (i.e., signified) to more embodied and cognitive informed definitions.[574] There are two main understandings of iconicity within these cognitive definitions of iconicity. According to the first approach iconicity is the link between embodied experience and linguistic form and according to the second approach iconicity is the relation between mental representations. These two approaches to iconicity are relevant for understanding ritual gestures because they provide an explanation for how visual and spatial forms can be understood as part of our cognitive processing and part of language itself. This section will provide an overview of these two approaches in order to form the basis from which we can map iconic and metaphoric ritual gestures within the metaphor of sacramental dialogue.

According to the first approach to iconicity, iconicity is thought of as the "bridge" or "link" between embodied experience and linguistic form because iconicity provides the "scaffolding for the cognitive system to connect communicative form with experience of the world."[575] Pamela Perniss and Gabriela Vigliocco argue that iconicity provides scaffolding in three crucial areas that are fundamental to linguistic capacity in humans: language evolution,

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[573] Perniss, Thompson, and Vigliocco, "Iconicity as a General Property of Language."

[574] Dingemanse et al., "Arbitrariness, Iconicity, and Systematicity in Language"; Emmorey, "Iconicity as Structure Mapping"; Perniss, Thompson, and Vigliocco, "Iconicity as a General Property of Language"; Perniss and Vigliocco, "The Bridge of Iconicity"; Perniss et al., "Mapping Language to the World"; Taub, *Language from the Body*; Wilcox, "Cognitive Iconicity."

[575] Perniss and Vigliocco, "The Bridge of Iconicity," 2.

language development, and language processing. In language evolution, iconicity helps to

achieve "*displacement*, the ability to refer to things that are spatially and/or temporally remote,

and contribute to development of the cognitive ability to maintain conceptual reference."[576] In

language development, iconicity "provides a mechanism for establishing *referentiality*, the

ability to map linguistic form to meaning, which is at the core of vocabulary learning."[577] And in

language processing, iconicity "is the vehicle for grounding language in neural systems devoted

to perception, action and affective experience—in essence, the mechanism by which *embodiment*

of language is realized."[578] In this embodied view of language, iconic mappings between

linguistic form and real-world referents "imply the engagement of sensori-motor systems in

processing the meaning of a linguistic signal."[579] As Perniss and Vigliocco put it, "language use

(i.e., production, comprehension, and acquisition) requires that linguistic form activate the same

systems used in perception and action. Without such activation, communication could not be

successful."[580] An embodied view of language and iconicity therefore argues that

"linguistic/communicative forms have meaning by virtue of being linked with real-world

referents. Meaning is derived from mental simulations/ representations of perceptual and motoric

experience with real-world referents."[581] In other words, iconic representations ground language

in the body and in the material world by virtue of their resemblance to real world referents.

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[576] Perniss and Vigliocco, 2. Perniss and Vigliocco suggest that *displacement* is "arguably the design feature of language that should be accorded primary status in jump-starting the communicative system that we now know as human language" because it affords the ability for people to conceptually refer to non-present things in their present context. Perniss and Vigliocco, 9.

[577] Perniss and Vigliocco, "The Bridge of Iconicity," 2. Perniss and Vigliocco propose that iconicity "provides an additional, critical mechanism for reducing referential ambiguity and therefore for promoting word/sign learning" because it allows child to make use of "a resemblance relationship between form and referent to link linguistic and conceptual form" and thus encourage language learning when referents are not present. Perniss and Vigliocco, 6.

[578] Perniss and Vigliocco, "The Bridge of Iconicity," 2.

[579] Perniss and Vigliocco, 8.

[580] Perniss and Vigliocco, 12.

[581] Perniss and Vigliocco, 8.

The second approach to iconicity defines iconicity as a "*structured* mapping between two mental representations."[582] As Sherman Wilcox puts it, "cognitive iconicity is defined not as a relation between the form of a sign and what it refers to in the real world, but as a relation between two conceptual spaces."[583] This approach to iconicity is no less grounded in our bodies and the material world but rather than trying to show how iconic linguistic signs link directly to our embodied experience of the world, the "structured mapping" approach attempts to explain how iconic linguistic signs are mental representations that *emerge* from our embodied experience of the world. As Karen Emmorey puts it, "it is suggested here that iconicity is better viewed as a *structured* mapping between two mental representations, rather than as a link between linguistic form and experience. A word or sign does not link directly to the world or to our experience of the world. Rather, the phonological form of a lexicalized concept maps to a mental representation (a schematization) that may be grounded in sensory–motor experiences."[584] Iconic mappings between mental representations are essential for being able to map gestures and other material phenomena into the structure of language. We will explore how this works in the following section (section 3.3.2.3) when we explore how iconic gestures can be incorporated into the sacramental dialogue conceptual blend.

An important part of the structured mapping approach to iconicity is the ability to explain how iconic forms emerge from our embodied experience of the world. This is what allows this approach to map the relationship between mental spaces and not just between the linguistic form and experience. Sarah Taub provides the most detail account of this process in her "analogue-

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[582] Emmorey, "Iconicity as Structure Mapping," 1. Karen Emmorey refers to this approach as "structure-mapping theory."

[583] Wilcox, "Cognitive Iconicity," 122.

[584] Emmorey, "Iconicity as Structure Mapping," 8. Sherman Wilcox characterizes this cognitive approach to iconicity similarly: "Thus cognitive iconicity is defined not as a relation between the form of a sign and what it refers to in the real world, but as a relation between two conceptual spaces." Wilcox, "Cognitive Iconicity," 122.

building model of linguistic iconicity" which explains how iconic signs are formed.[585] There are

three stages in Taub's analogue-building model: image selection, schematization, and

encoding.[586] Image selection is the cognitive process of selecting an "image" that will be used to

represent the referent. Image selection is not an objective fact or an "'all or none' property"[587]

that is determined by the structure of the referent, it is a cognitive process of "construal"[588] that

creates a mental representation of some feature of the world which depends on our embodied

experience of the world. Selected images are therefore motivated by metonymy because they are

restrained by their form and can only ever be a partial representation of their referent, meaning

that individual embodied experience and linguistic convention will invariably play a role in the

formation of iconic signs and representations.[589] As Taub puts it, "There is no such thing as

'resemblance' or 'similarity' in the absence of an observer who makes a comparison:

Resemblance is not an objective fact about two entities but is a product of our cognitive

processing."[590] Because of this, selected images can differ between individuals and linguistic

communities, which means that despite the persistence of the iconic relationship between the

image and its referent, "a high degree of arbitrariness is always present, even when the symbolic

structure is clearly iconic."[591] For example, consider the different ways that a bird is depicted in

ASL and Turkish Sign Language (TSL).[592] In ASL, the sign for bird depicts the bird's beak with

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[585] Taub, *Language from the Body*, 43–49. Taub's analogue-building model accounts for iconic linguistic forms in both spoken and signed languages but Taub is focused primarily on iconic signs in signed languages.
[586] Taub notes that this model is a model of the *creation* of iconic forms and not an account of the online cognitive processes that signers go through each time they produce an iconic sign. Once an iconic sign is created, it can become conventionalized and stored within a linguistic lexicon just like any other linguistic sign. Taub also notes that these stages are largely analytical and not necessarily distinguishable in real-life cognitive processing.
[587] Meir, "Iconicity and Metaphor," 873.
[588] Wilcox, "Cognitive Iconicity," 123.
[589] Taub, *Language from the Body*, 45. See also Müller, "Gestural Modes of Representation as Techniques of Depiction," 1692.
[590] Taub, *Language from the Body*, 21.
[591] Wilcox, "Cognitive Iconicity," 140.
[592] This example is taken from Emmorey, "Iconicity as Structure Mapping," 2. Another classic example of the relationship between form and meaning in sign language is the sign for "tree." In ASL, the hand and arm share a

the index finger and thumb placed in front of the signer's mouth (the other fingers are curled into

the palm of the hand) and repeatedly moved apart and together to simulate the movement of a

bird's beak. In TSL, the sign for bird depicts the wings of a bird, with the hands placed to the

side of the signer's body and repeatedly moved up and down to simulate the flapping of the

bird's wings. Both of these signs are iconic because their form resembles their referent (i.e., a

physical feature of a bird) but they differ because they each select a different feature or "image"

of the bird to represent—ASL selects the beak whereas TSL selects the wings.

Schematization and encoding are the subsequent stages in Taub's analogue-building

model that account for the encoding of the selected image into a linguistic sign according to the

phonological resources or modality of the given language. Schematization is the process of using

the phonological resources of the given language to represent the selected image. For signed

languages and gestures, these resources are visual and spatial because they rely primarily on the

hands to "image" the referent. For spoken languages, these resources are largely auditory.

Encoding is the process of establishing a physical form that will represent each element of the

schematic image.

To summarize using the example of the signs for bird in ASL and TSL, image selection is

the process of selecting an image (i.e., beak, wings) that will be used to represent the referent,

schematization is the identification of body parts and spatial positions that can be utilized to

represent the image (i.e., hands, mouth, side of body, etc.), and encoding is the process of

finalizing the selected image into a linguistic form. If the final linguistic form shares a

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visible likeness to a tree by depicting the shape of the tree. The forearm and hand of the horizontal arm acts like the ground, the forearm of the vertical arm is like the trunk of a tree and its hands and fingers are like the branches of a tree. In Danish Sign Language the sign for tree is also iconic but rather than the arm acting like a tree the signer uses their hands to trace the outline of a tree. In Hong Kong Sign Language, the iconic sign for tree involves tracing the fat tube of the trunk with two "C" hands forming a circle. Each of these signs are iconic but also conventional because they differ between sign languages. This example is taken from Edward Klima and Ursula Bellugi, *The Signs of Language* (Cambridge, MA: Harvard University Press, 1979), 21.

resemblance to the selected image, as is the case with the ASL and TSL sign for bird, the sign is said to be iconic because it shares a resemblance to its referent. The ASL and TSL signs for bird are iconic *and* conventional because they share a resemblance to its referent and they are dependent on their linguistic community for their shared meaning.

3.3.2.3 Mapping Gestures in the World and in Relation to Speech

Material anchors, environmentally coupled gestures, pointing gestures, metaphoric gestures, and iconic gestures all highlight how our linguistic expressions and conceptual understandings of the world depend on our bodies and our material environments. Bodily gestures and the material environment are *part of* the structure of language and thought and not merely an external accompaniment to it. However, mapping gestures within its multi-modal communicative context is more complicated than conventional linguistic concepts because the visual-spatial modality of gestures must be accounted for in a way that is not always necessary with linguistic expressions. For example, the two metaphor mapping strategies mentioned earlier in this chapter—conceptual metaphor theory and conceptual blending theory—generally map concepts along a single linguistic modality (i.e., words) because the relationship between the source and target domain or mental spaces is more readily non-iconic, meaning that the mapping does not need to account for linguistic form because it relies on convention. However, since speech and gestures can differ in the way that meaning relates to their linguistic form, they require different metaphorical mappings even though they may mean the same thing or share the same conceptual message.[593]

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[593] The example given in Chapter 2 (section 2.2.2) of speech and gesture sharing the same conceptual message (i.e. target domain) but differing in their modalities (i.e. source domain) was that of a speaker describing an issue in words as being "black and white" while at the same time performing a chopping gesture which conceptually divides the space in front of the speaker into two distinct spaces or categories. In this example, speech and gesture share a

To put it another way, the meaning of a gesture cannot be isolated from its form as readily as speech. Eve Sweetser gives the example of a speaker who gestures a clenched fist as they say the words "rock-solid argument."[594] The gesture of the clenched fist is both iconic and metaphoric because it iconically represents a solid physical object (i.e., a rock) and it metaphorically represents the idea that an argument can be sturdy like a rock. As Sweetser says, "Making a fist *is* an [iconic] instance of solidity…unlike the linguistic [expression] *solid evidence.*"[595] Alan Cienki and Cornelia Müller also give the example of a gesture where someone traces the shape of a person's body as an hourglass. In this example, the tracing of the hour glass shape is iconic but the gesture functions metaphorically because the hourglass shape represents a person's body rather than an actual hour glass.[596] These examples show that iconicity often plays an important role in the metaphorical capacity of gestures. As Parrill and Sweetser put it, "gestural metaphor can only exist by being layered upon iconicity."[597] The same layering also occurs with gestures that are instrumentally motivated (e.g., PUOH gestures *present* an idea) or tied to the material environment (e.g., abstract pointing gestures). Therefore, since many metaphorical gestures are iconically or instrumentally motivated as well as tightly bound to the co-occurring speech, any analysis of metaphorical gestures must account for all these sources of gestural meaning.

As a consequence, efforts to map metaphoric gestures or metaphoric signs in sign languages must preserve the iconic, instrumental or material sources of meaning because

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target domain (a moral distinction between wrong and right) but they differ in their source domains. The source domain of speech is the light/dark contrast expressed in words whereas the source domain of the gesture is the spatial division created by the gesture in front of the speaker. These metaphors, which share an underlying conceptual message, cannot be mapped along a single modality. Example taken from Cienki, "Why Study Metaphor and Gesture?," 14–15.

[594] Sweetser, "Looking at Space to Study Mental Spaces," 208.

[595] Sweetser, 219–20.

[596] This example was taken from Cienki and Müller, "Metaphor, Gesture and Thought," 485–86.

[597] Parrill and Sweetser, "What We Mean by Meaning," 216.

imagistic modalities cannot always be translated into words. Irit Meir refers to this limitation in mapping between modalities as the "double-mapping constraint": "A metaphorical mapping of an iconic form should preserve the structural correspondences of the iconic mapping. Double mapping should be structure-preserving."[598] Meir uses the metaphor "The acid ate the metal" to describe what she means. In this metaphor, the verb *eat* is used metaphorically to give the impression that the metal is being "consumed" by the acid. However, as Meir notes, the verb "eat" cannot be translated into sign language because the metaphor does not match the iconic mapping in sign language: "The meaning component that is active in the metaphorical mapping, the consumption, is not encoded by the iconic form of the sign ['to eat' in sign language]. And the meaning components of the iconic mapping—the mouth, manipulating an object, putting into mouth—are absent in the metaphor."[599] As Meir argues, iconic forms must be preserved in the analysis of metaphoric signs: "When an iconic sign is USED metaphorically, the two mappings, the iconic and the metaphorical, need to preserve the same structural correspondence; otherwise the metaphorical extension is blocked."[600] In order to properly analyze the metaphoric *and* iconic dimensions of a gesture, then, the iconic structure of the gesture needs to be preserved because the iconic or instrumental element of the gesture is essential to its meaning and function. In the following chapter, we will see why this is the case in more detail with PUOH gestures and the breaking of the Eucharistic bread.

There are two primary ways that metaphoric gestures have been mapped to try to preserve its iconic or instrumental structure: "base-sign-referent" mapping and "double-mapping." These mapping methods are similar in that each suggest that multiple mappings are

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[598] Meir, "Iconicity and Metaphor," 879.
[599] Meir, 878.
[600] Meir, 869.

needed to understand the relationship between the form and the meaning of a gesture. First, according to David McNeill's "Sign-Base-Referent" mapping strategy, "The Referent is the idea presented by the metaphor; the Base is the image in terms of which the Referent is presented; and the Sign is the overt form of the Base, here a gesture."[601] McNeill gives the example of a PUOH gesture which expresses the conceptual metaphor IDEA AS AN OBJECT. When the PUOH gesture is used in dialogue, it can express the idea that the speaker is "presenting" or "holding" an idea as if the idea is an object in the speaker's hand. According to the Sign-Base-Referent mapping strategy, "the Sign is the upturned open hand [PUOH], the Base is the conduit-inspired image of a bounded entity [IDEA AS AN OBJECT], and the Referent is the abstract idea of the next thematic unit of the story."[602] Herbert Clark offers a similar three-layer analysis of "depictive" communicative acts—which include but are not limited to gestures—which he refers to as "Base-Proximal-Distal" scenes.[603] According to Clark, depicting is a form of communication where people "create one physical scene to represent another."[604] Clark frames depictions within a larger theory he calls "staging theory" which is the idea that people "stage a scene for recipients to use in imagining the scene depicted."[605] According to Clark, there are "two well-established principles" of any act of depiction: (1) the "Pas-une-pipe principle" (in reference to René Magritte's famous "Ceci n'est pas une pipe" painting) which is that a depiction is *not* what it depicts; and (2) the "Double-reality principle" which is that a depiction always consists of two realities: "its base, or raw execution; and its appearance, the features that are intended to be depictive."[606] From these two principles, Clark argues that depictions "entail three

[601] McNeill, *Gesture and Thought*, 45.
[602] McNeill, 46.
[603] Clark, "Depicting as a Method of Communication."
[604] Clark, 324.
[605] Clark, 329.
[606] Clark, 327.

scenes: a base scene, a proximal scene, and a distal scene—with mappings from one scene to the next."[607] The base scene (cf. McNeill's Sign) is "the raw, observable, yet-to-be-interpreted physical features of the depiction as executed."[608] The proximal scene (cf. McNeill's Base) is a construction that is built on top the base scene: "It is what the depiction appears to be."[609] The distal scene (cf. McNeill's Referent) is what is depicted: it is the referent that the proximal scene is attempting to depict. The proximal scene is thus "a physical analog of the distal scene."[610] To give an example of the relation between these scenes, consider the gesture of using a closed fist to depict a ball. In this gesture, the base scene includes the physical features of the gesture itself (i.e., the closed fist), the proximal scene is how the closed fist gives the *appearance* of a round or solid object, and the distal scene is where the closed fist *becomes* a representation of the ball itself.

The second method used to map metaphorical gestures is the "double-mapping" method used by Sarah Taub,[611] Irit Meir,[612] Karen Emmorey,[613] and Fey Parrill and Eve Sweetser.[614] The double-mapping method maps ASL signs and gestures across two mappings between three mental spaces: the metaphorical mapping between the source domain (i.e., mental space) and the target domain (i.e., mental space), and the iconic mapping between the source domain of the metaphor and the linguistic form (i.e., Real Space). Similar to the structure-mapping approach to iconic gestures (see section 3.3.2.2 above), double-mapping takes a cognitive approach to metaphorical expressions which means that the mappings are always between mental spaces or

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[607] Clark, 327.
[608] Clark, 328.
[609] Clark, 328.
[610] Clark, 327.
[611] Taub, *Language from the Body*, 94-133: Ch. 6: Metaphor in American Sign Language: The Double Mapping.
[612] Meir, "Iconicity and Metaphor."
[613] Emmorey, "Iconicity as Structure Mapping."
[614] Parrill and Sweetser, "What We Mean by Meaning."

mental representations of an entity or idea. For example, to map the form and meaning of Eve Sweetser's example of a closed fist gesture that occurs with the words "rock-solid argument,"[615] it is necessary to account for both the iconic mapping between the fist and a rock and the metaphorical mapping between a rock and the argument: the clenched fist iconically represents a solid physical object like a rock (the source domain), and it metaphorically represents the idea that an argument can be sturdy like a rock (the target domain). This gesture needs to be mapped iconically and metaphorically domains in order to appreciate the various meanings embedded in this multi-modal communicative act. Linguists like Scott Liddell and Eve Sweetser rely on mental space theory and conceptual blending to provide the conceptual apparatus for double-mapping sign language signs and gestures.

Fey Parrill and Eve Sweetser provide a detailed analysis of a double-mapping conceptual blend of a co-speech gesture that makes use of the concept of Real Space understood as a person's mental representation of their immediate physical environment.[616] The gesture they analyze is the circular motion of the hand performed repeatedly at chest level in front of the speaker. Parrill and Sweetser identify this gesture as metaphoric because it depicts the co-occurring speech as an ongoing discourse that metaphorically moves along like a rolling object. As Parrill and Sweetser put it, "This circular motion in one location does not correlate with speech about a rolling object, but marks the speech segment as merely a backgrounded part of a longer, ongoing discourse."[617] To map this metaphoric gesture, two mappings need to occur across three input spaces: the *iconic* mapping between the linguistic form in Real Space (i.e., the gesturing hand) and the source domain of the metaphor (i.e., the moving entity), and the

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[615] Sweetser, "Looking at Space to Study Mental Spaces," 208.
[616] Parrill and Sweetser, "What We Mean by Meaning."
[617] Parrill and Sweetser, 203.

metaphoric mapping between the source domain (i.e., the moving entity) and the target domain of the metaphor (i.e., current discourse topic). A figure of this blend can be seen in Figure 5.
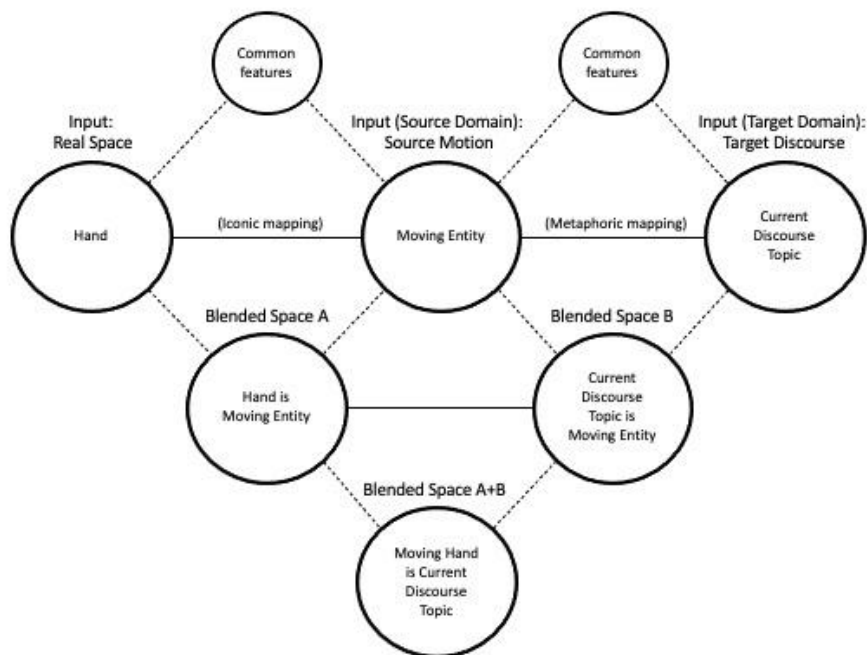
Figure 5. Moving Hand as Discourse Blend.[618]

The first mapping of this double-mapping blend involves the iconic mapping between the Real Space input and the source domain input. The hand, which is a physical entity in Real Space, is blended with the concept of a moving entity, producing an emergent concept where the hand represents a moving entity. Any commonalities between the inputs—such as the presence of some entity, that the entity is in motion, and that the motion has particular features—is located in the generic space. The second mapping maps the relationship between the source domain input (i.e., the moving entity) and target domain input (i.e., current discourse topic). When these two input spaces are blended, it produces the metaphorical concept that a discourse can be in motion. The blended spaces from the iconic and metaphorical mappings between the input spaces can

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[618] Adapted from Figures 4, 5, and 6 in Parrill and Sweetser, 204–5.

then be combined once more to clearly show how the gesturing hand in Real Space can function as an imagistic metaphor of the moving discourse. What is important to note here is that this double-mapping conceptual blend shows how a speaker's gestures can contribute substantive information to the discourse in ways that are not always communicated in words. Because of this, Parrill and Sweetser argue that "[g]estures are as much a part of this meaning as speech—they are part of a speaker's communicative goals … because they are part of language production."[619]

Double-mapping is not dissimilar to McNeill's Sign-Base-Referent and Clark's Base-Proximal-Distal mapping strategy as each method includes two mappings across three different domains or mental spaces. The iconic mapping between the linguistic form and source domain in double-mapping is similar to the mapping between McNeill's Sign-Base and Clark's Base-Proximal scenes and the metaphorical mapping between the source domain and the target domain in double-mapping is similar to the mapping between McNeill's Base-Referent and Clark's Proximal-Distal scenes. These mappings are always partial (i.e., metonymic) and they get their meaning as *part of* a larger multi-modal communicative act which includes speech, gestures, and the material environment. It is also worth noting that not all researchers think it is necessary to use double-mapping or conceptual blending theory to analyze gestural meaning. David McNeill, for example, remains critical of conceptual blending. While he says it is an "ingenious innovation"[620] he also suggests that it is "a kind of snapshot of the outcome of a dynamic process, but is not the process of change itself"[621] which therefore remains "beholden to

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[619] Parrill and Sweetser, 198.
[620] McNeill, *Gesture and Thought*, 74 n. 4.
[621] McNeill, 74 n. 4.

a synchronic conception of language."[622] For their part, Fauconnier and Turner recognize that mental spaces and conceptual blends are unavoidably static when presented in a diagram but they nevertheless maintain that mapping metaphors and complex forms of thinking according to conceptual blending theory remains a helpful analytical tool for understanding the structure of thought.[623] Edwin Hutchins relies on conceptual blending theory to understand the relationship between cognitive processes and the material environment (see section 3.3.2.1 above) but he remains unconvinced that "double-mapping" is necessary to understand how gestures and the material environment are incorporated into the structure of language and thought. For Hutchins, it is not necessary to posit an additional mental space onto the immediate environment—"Real Space" according to Scott Liddell and Eve Sweetser—because we can simply say "that the physical objects themselves are input to the conceptual blending process."[624]

My aim in this thesis is not to settle this debate. I have chosen to follow Eve Sweetser and Scott Liddell and others in using double-mapping to analyze ritual gestures because I think double-mapping more clearly shows the iconic and instrumental motivations for the form and

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[622] McNeill, 45. An important distinction in McNeill's approach to language is between what he calls the "static" and "dynamic" traditions. "In the *static* tradition, language is regarded *as a thing, not a process*." McNeill, 63. The static tradition explores the nature and structure of language in its synchronic form, as it exists in a particular form at a particular time and is characterized by Ferdinand de Saussure who classifies language as series of dichotomies— between langue and parole, synchronic and diachronic, signifier and signified, arbitrary and motivated, social and individual—which imply a static conception of language. In contrast, "In the *dynamic* tradition, language is regarded as *a process, not a thing*." McNeill, 63. According to the dynamic tradition, language is a dynamic process that cannot be fixed or turned into a static phenomenon without losing something essential to how language is used and "inhabited." For McNeill, the dynamic tradition is characterized by psychologist Lev Vygotsky who argued that meaning is a process that emerges in both language and thought. McNeill argues that the static and dynamic traditions represent real dimensions of language but that they exist in a dialectic with each other. McNeill's theory of "Growth Points" (mentioned in section 2.2.5) attempts to show how these two conceptions of language relate to each other in language expression.
[623] Fauconnier and Turner, *The Way We Think*, 46: "While this static way of illustrating aspects of conceptual integration is convenient for us, such a diagram is really just a snapshot of an imaginative and complicated process that can involve deactivating previous connections, reframing previous spaces, and other actions." Parrill and Sweetser also note that "Fauconnier and Turner explicitly claim that the constructs represented are fluidly evolving cognitive structures." Parrill and Sweetser, "What We Mean by Meaning," 206.
[624] Hutchins, "Material Anchors for Conceptual Blends," 1560.

function of gestures and is better able to take into account all the elements that may contribute to meaning in the discourse, such as speech, gestures, the material environment, etc.

3.3.3 Mapping Ritual Gestures in Sacramental Dialogue

To conclude this chapter, I want to show the metaphorical concept of sacramental dialogue according to a double mapping conceptual blend, taking into account Real Space and the iconic and metaphoric dimensions of ritual gestures (see Figure 6). Here, I will merely offer a general overview of the blend to show how Real Space can be incorporated into the sacramental dialogue blend. In the following chapter I will use the basic structure of this blend to examine PUOH ritual gestures in more detail.

In the sacramental dialogue double-mapping conceptual blend, there are two mappings across three input spaces. The first mapping involves the iconic mapping between the Real Space input and the ritual performance input. The entities in Real Space, such as people, gestures, and the immediate environment are blended with the ritual performance input to produce blended space A where ritual performances are grounded in Real Space. The second mapping involves the metaphoric mapping between the ritual performance input (source domain) and the everyday dialogue input (target domain). The blending of these two input spaces produces the emergent concept of sacramental dialogue in blended space B (see also Figure 3). The two blended spaces from the iconic (blended space A) and metaphoric mapping (blended space B) can then be combined to create an additional blended space that incorporates the physical and iconic elements of Real Space into the structure of the metaphorical concept of sacramental dialogue.
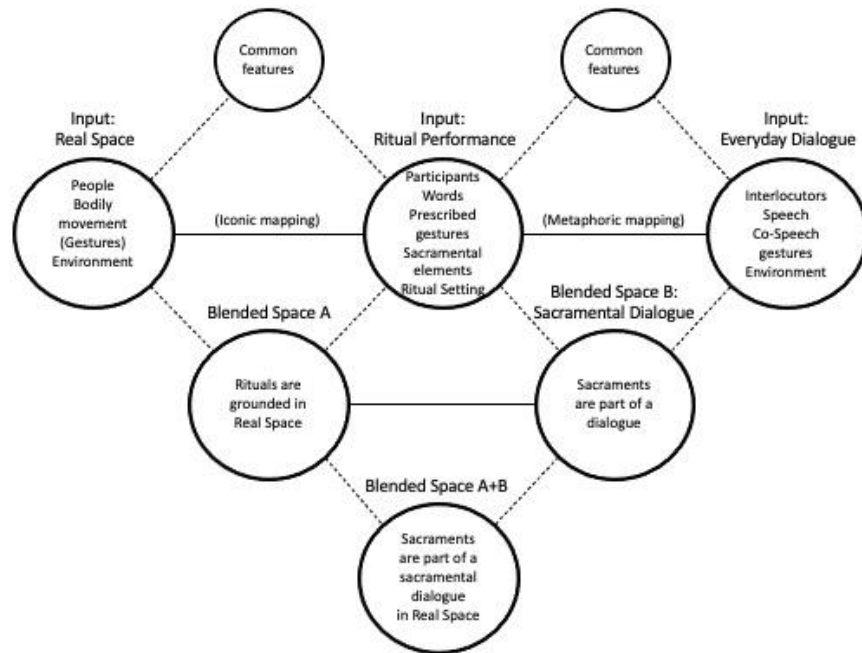
Figure 6. Sacramental Dialogue Double Mapping Blend.

Double-mapping and the concept of Real Space therefore give us a conceptual framework to map how the metaphorical concept of sacramental dialogue is grounded in and through ritual gestures and the material environment. In the sacramental dialogue, traditionally non-linguistic elements like ritual gestures and the material environment can be considered *part of* the sacraments themselves because they are blended with features from everyday dialogue. Ritual gestures, far from being merely conventional or symbolic bodily movements, can actually function *like* spontaneous co-speech gestures in everyday dialogue and be considered *part of* the content and structure of the sacramental dialogue between participants and God. Without conceptual blending, it would be difficult to show exactly how conventional gestures in ritual settings can function like co-speech gestures in everyday dialogue. In the following chapter, we will explore some of the implications of this in more detail by focusing on three ritual gestures

commonly performed in Roman Catholic sacramental rituals: PUOH gestures, the raising of the

Eucharistic elements, and the breaking of the Eucharistic bread.

Chapter 4: Sacramental Gestures in Light of the Field of Gesture Studies

4.1 Introduction

In chapter 2, we saw that the modern field of gesture studies defines gestures as communicative movements of the body—particularly the hands—that occur with speech in everyday settings such as face-to-face dialogue. This novel though narrow approach to gestures has helped gesture researchers to reconceptualize gestures as *part of* language and thought rather than as mere non-verbal or external accompaniments. It has been demonstrated that speakers use gestures in partnership with speech to do various things like depict communicative content, display and mark up aspects of a discourse, mediate social interactions, process information for thinking and speaking, and so on. In chapter 3, we saw that there are deeply entrenched assumptions about the differences between gestures in everyday dialogue and gestures in ritual settings that have contributed to a conceptual and methodological divide in how gestures are studied in gesture studies as well as in religious studies and theology. Whereas everyday gestures are largely spontaneous creations of the moment that are tightly bound with speech, ritual gestures are conventional actions that are socially pre-determined and largely independent of speech. However, we also saw in chapter 3 that gestures in ritual and everyday settings are not as different as they often seem because they both occur within the context of *dialogue.* The dialogical context of everyday and ritual gestures means that ritual gestures can actually have similar functions to everyday gestures. Ritual gestures, for example, can mediate a ritual dialogue between subjects in ritual settings in much the same way that everyday gestures mediate a face-to-face dialogue between people in everyday settings. Conceptual blending theory was used to understand the metaphorical structure of ritual dialogue and how gestures and the immediate environment can be incorporated into the structure of that dialogue.

This chapter will further explore the possibility that ritual gestures share similar functions to everyday gestures within the context of sacramental dialogue by analysing three gestures that are commonly used in Roman Catholic rituals: palm-up open hand (PUOH) gestures, the raising of the Eucharistic elements, and the breaking of the Eucharistic bread. By analysing these gestures, I hope to highlight the central role that gestures play in creating and mediating multi-modal ritual performances where people, language, and the environment each contribute to the nature and structure of the sacramental rituals. I also hope to show the value and the necessity of incorporating many of the insights from the field of gesture studies into our understanding of ritual gestures. The gestures examined in this chapter are just a few examples of this rich and complex process at work.

4.2 Palm-up open hand (PUOH) gestures and the sharing of ideas along a "conduit"

PUOH gestures are one of the most commonly used gestures in everyday and ritual settings. PUOH gestures are identified primarily by the shape and orientation of the hands: the palm is open, fingers are extended, and the palm is turned upwards. In everyday dialogue, PUOH gestures generally have two interrelated functions: a representational function and an interactive (or pragmatic) function. The representational function occurs when PUOH gestures metaphorically depict an idea as if the idea were an object that is held in one's hand. The interactive function occurs when PUOH gestures create a "conduit" where ideas can be shared across or a communicative space that interlocutors share. In this section, I will show how PUOH gestures in sacramental dialogue have similar representational and interactive functions: ritual PUOH gestures can hold an idea as if the idea were an object held in the person's hand and they can create a conduit in the ritual space so that ideas can be shared between subjects in the ritual.

In Roman Catholic ritual settings, PUOH gestures are commonly known as the orans posture (Latin *orans*: prayer; a gesture of praying with open and uplifted hands) which is used during prayer by both ritual leaders and participants. In the Roman Catholic liturgy, PUOH gestures occur frequently during the liturgy, such as when the Priest is greeting or welcoming the people during the Introductory Rites,[625] when the Priest recites part of the liturgy,[626] and most commonly when the Priest prays or calls on the people to pray.[627] In each of these instances, the hands are described as being *extended* but little detail is provided on the specific position (in front, to the side of the speaker, etc.), orientation (flat, angled, upright, horizontal, etc.), direction (outward, toward sagittal plane, etc.), and shape (fingers together, palm flat, fingers slightly curved, etc.) of the hands. Despite this ambiguity, common practice is to have the hands extended in front speaker, positioned slightly wider than the shoulders, raised to about shoulder

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[625] Catholic Church, *GIRM*, n. 124: "Then, facing the people and *extending* his hands, the Priest greets the people, using one of the formulae indicated." Emphasis added.

[626] Catholic Church, n. 127: "The Priest then calls upon the people to pray, saying, with hands joined, Let us pray. All pray silently with the Priest for a brief time. Then the Priest, with hands *extended*, says the Collect, at the end of which the people acclaim, Amen." Emphasis added.

[627] Some examples include: Catholic Church, n. 138: "At the very end, the Priest, with hands *extended*, concludes the petitions with a prayer."; Catholic Church, n. 146: "Returning to the middle of the altar, and standing facing the people, the Priest *extends* and then joins his hands, and calls upon the people to pray, saying, Orate, fratres (Pray, brethren)."; Catholic Church, n. 148: "As he begins the Eucharistic Prayer, the Priest *extends* his hands and sings or says, *The Lord be with you*. The people reply, *And with your spirit.* As he continues, saying, *Lift up your hearts,* he raises his hands. The people reply, *We lift them up to the Lord.* Then the Priest, with hands extended, adds, *Let us give thanks to the Lord our God,* and the people reply, It is right and just. After this, the Priest, with hands extended, continues the Preface."; Catholic Church, n. 152: "After the Eucharistic Prayer is concluded, the Priest, with hands joined, says alone the introduction to the Lord's Prayer, and then with hands *extended*, he pronounces the prayer together with the people."; Catholic Church, n. 154: "Then the Priest, with hands *extended*, says aloud the prayer *Domine Iesu Christe, qui dixisti* (*Lord Jesus Christ, who said to your Apostles*) and when it is concluded, *extending* and then joining his hands, he announces the greeting of peace, facing the people and saying, The peace of the Lord be with you always."; Catholic Church, n. 219: "In Eucharistic Prayer I, or the Roman Canon, the *Te igitur (To you, therefore, most merciful Father)* is said by the principal celebrant alone, with hands *extended*."; Catholic Church, n. 223: "It is appropriate that the commemoration *(Memento)* of the dead and the *Nobis quoque peccatoribus (To us, also, your servants)* be assigned to one or other of the concelebrants, who pronounces them alone, with hands *extended*, and in a loud voice."; Catholic Church, n. 226: "In Eucharistic Prayer II, the part *You are indeed Holy, O Lord* is pronounced by the principal celebrant alone, with hands *extended*."; Catholic Church, n. 237: "Then the principal celebrant, with hands joined, says the introduction to the Lord's Prayer. Next, with hands *extended*, he says the Lord's Prayer itself together with the other concelebrants, who also pray with hands *extended*, and together with the people." Emphasis added to the word(s) extended/extending; otherwise emphasis original.

height, hands slightly cupped, fingers more or less together, and the palms turned slightly inward toward the sagittal plane.

While PUOH gestures can be variable and their form is often context- and individual-dependent, they nevertheless exhibit recurring features that show a "family" likeness. Cornelia Müller suggests that PUOH gestures are best understood as "recurring gestures" that form a "gesture family" because they share a "common origin (the instrumental action of giving, offering, and of showing objects), on a recurring set of kinesic features (open palm, oriented upwards), on a specific mode of representation (acting as if one would give or receive some entity), and on a common meaning (as a result of the functional extension from the instrumental action and its use in a specific context)."[628]

One of the important features of the PUOH gesture family is their common origin in instrumental action. Cornelia Müller argues that PUOH gestures are derivative of two basic "domains of action": (1) "Giving, showing, or offering an object by presenting it on the open hand" and (2) "Receiving an object or displaying an empty hand."[629] These instrumental actions are metaphorically extended to the realm of communication where the PUOH gestures handle ideas or abstract entities *as if* they were material objects instead of actually handling real material objects. Müller notes that the first domain of action when the hand is perceived as full or as holding something is used in communicative settings "To present an abstract object as a visible and obvious one; To offer an abstract object for joint inspection; To propose a common perspective on a presented object."[630] The second domain of action when the hand is empty is used in communicative settings "To plead for a concrete entity; To request or ask for an abstract

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[628] Müller, "Forms and Uses of the Palm Up Open Hand: A Case of a Gesture Family?," 254.
[629] Müller, 236.
[630] Müller, 237.

entity; To express openness to the reception of some abstract entity; To express the fact of not knowing."[631] Through simple movements of the hands, ideas or abstract entities can be given, received, presented, shown, blocked, or brushed aside in the course of a dialogue. PUOH gestures are therefore "modulations of ubiquitous everyday activities of the hand (giving, taking, presenting, showing, pushing, throwing, holding, cutting etc.)" because "the basic instrumental actions plainly offer themselves as a practical, concrete derivational basis for communicative activities performed upon abstract entities."[632]

PUOH gestures rely on a collection of interrelated conceptual metaphors summarized by George Lakoff and Mark Johnson as "IDEAS (OR MEANINGS) ARE OBJECTS. LINGUISTIC EXPRESSIONS ARE CONTAINERS. COMMUNICATION IS SENDING."[633] According to Lakoff and Johnson, in the course of a dialogue, "The speaker puts ideas (objects) into words (containers) and sends them (along a conduit) to a hearer who takes the idea/objects out of the word/containers."[634] Examples such as "It's hard to *get* that idea *across to* him", "I *gave* you that idea", and "Your reasons *came through* to us" show the prevalence of these metaphors in everyday language. The specific metaphor of COMMUNICATION IS SENDING has also been referred to as the CONDUIT metaphor because communication is conceptualized as occurring along an imaginary path or channel in the space between two or more people.[635] David McNeill and others have shown that gestures like PUOH gestures—what he calls "conduit metaphoric gestures"—can actively create and maintain this metaphorical conduit and share communicative

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[631] Müller, 237.
[632] Müller, 236, 237.
[633] Lakoff and Johnson, *Metaphors We Live By*, 9.
[634] Lakoff and Johnson, 9.
[635] Michael J. Reddy, "The Conduit Metaphor: A Case of Frame Conflict in Our Language about Language," in *Metaphor and Thought*, ed. A. Ortony (Cambridge: Cambridge University Press, 1979), 284–324.

content across it.[636] Interactive (or pragmatic) gestures are usually closely connected to the

conduit metaphor because, according to Jürgen Streeck, they "articulate aspects of the process of

speaking in interaction (and interacting through speaking) as if it were a process of transaction of

physical objects."[637] These gestures treat the space between people not as discrete and

autonomous physical spaces in our physical environment but as dynamic and conceptually

meaningful spaces that are very much a part of a dialogue between people.

The representational and interactive functions of ritual PUOH gestures can be mapped

within the context of sacramental dialogue using the "double-mapping" conceptual blending

method. As described in the previous chapter (see section 3.3.2.3), in a double-mapping

conceptual blend, gestures are traced across two mappings: the metaphorical mapping between

the source domain and the target domain of the metaphor, and the iconic mapping between the

physical form of the gesture in "Real Space" and the source domain of the metaphor. Figure 7

maps the representational function of PUOH gestures across these two mappings and Figure 8

maps the interactive function across the same mappings. In Figure 7, the iconic mapping occurs

between the PUOH hand in Real Space and the imaginary object, and the metaphoric mapping

occurs between the imaginary object and the conceptual metaphor IDEAS (OR MEANINGS)

ARE OBJECTS. In its representational function, the PUOH gesture presents or represents an

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[636] McNeill, *Hand and Mind*, 147–50. See also McNeill, *Gesture and Thought*, 45–48. As McNeill puts it, "Conduit metaphoric gestures, however, can depict the imagery directly. Holding up a bounded container creates an image of the container (potentially filled with meaning)." McNeill, *Hand and Mind*, 147. McNeill is also careful to note that "The conduit metaphoric gesture is not universal…[but is] culturally specific. The schema for producing conduit metaphoric images appears in the gestures of some cultures but not others. We have found excellent conduit examples in English, Germain, Italian, and Georgian narratives (the latter a non-Indo-European language), but no convincing examples in Chinese or Turkana narratives (also non-Indo-European, but outside of the Western cultural tradition). These latter narratives contain metaphoric gestures of other kinds, but not gestures in which abstract ideas are presented as bounded and supported containers." McNeill, 151. He goes on: "In a context where an English or Georgian narrator would perform a conduit, the Chinese speaker created a bound*less* substance that she then patted down (this is a metaphoric gesture also used by English narrators, but it is not the conduit). The gesture creates an image of a substance without form." McNeill, 152.
[637] Jürgen Streeck, "Metaphor and Gesture: A View from the Microanalysis of Interaction," in *Metaphor and Gesture*, ed. Alan Cienki and Cornelia Müller (Amsterdam; Philadelphia: John Benjamins Pub. Co., 2008), 259.

idea or entity as if it were an object. An example of this representational gesture in a ritual

setting occurs at the beginning of the Eucharist prayer when the priest invites the people to "*Lift

up your hearts*" as "he raises his hands."[638] In this gesture, the hands are raised to metaphorically

represent the lifting up of the people's heart to the Lord who is metaphorically situated above

them in the ritual space.
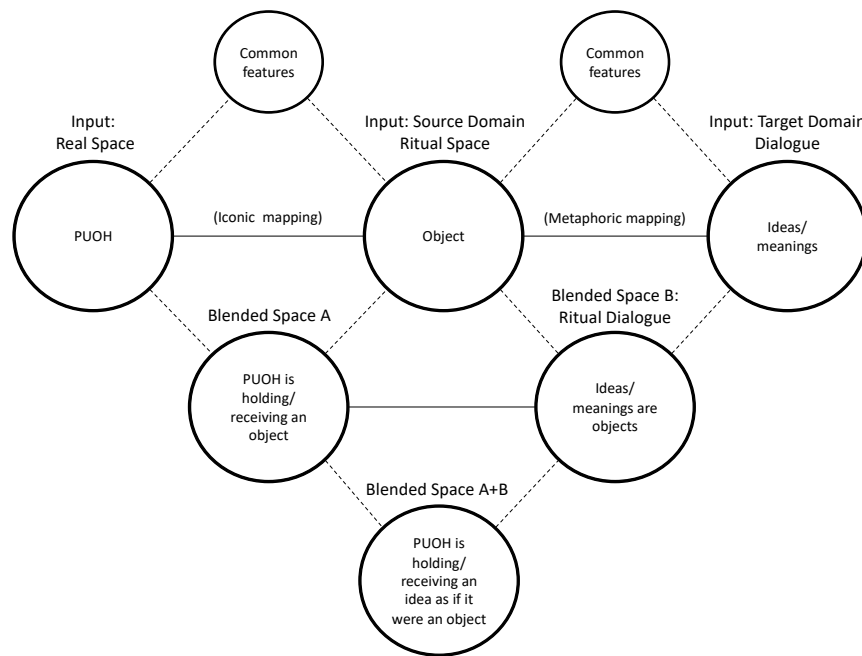
Figure 7. Metaphorical Structure of the Representational Function of PUOH Gestures

Figure 8 maps the interactive function of ritual PUOH gestures. The iconic mapping

occurs between the PUOH hand in Real Space and the shared space in the ritual context and the

metaphoric mapping occurs between the shared space and the conceptual metaphor that

DIALOGUE IS CONDUIT. In its interactive function, the PUOH gesture conceptually

transforms the space shared by ritual participants into a conduit that mediates the dialogue

between subjects. An example of this interactive gesture in a ritual setting occurs when the priest

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[638] Catholic Church, *GIRM*, n. 148.

invites the people to join in collective prayer, such as when the Priest says "*Orate, fratres* (Pray,

brethren)" during the liturgy of the Eucharist.[639] In this gesture, the hands are not holding a

metaphorical entity (e.g., one's heart) but are rather creating a conduit so that communication

can flow along the conduit to those physically present, such as other people, and those physically

non-present, such as God. In everyday settings, Jürgen Streeck describes these gestures as setting

the "stage" or creating a shared "narrative space" where an intersubjective encounter between

people can occur.[640] The same is true in ritual settings, where the PUOH gestures set the stage or

create a conduit between present and non-present ritual subjects so that a genuine dialogue or
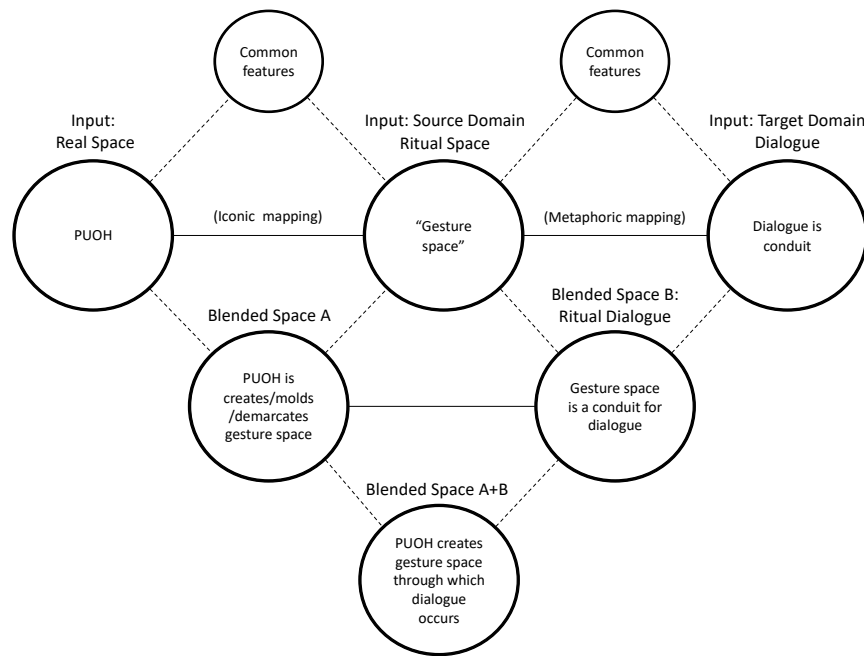
intersubjective encounter can occur.

Figure 8. Metaphorical Structure of the Interactive Function of PUOH Gestures

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[639] Catholic Church, n. 146.
[640] See for example Streeck, *Gesturecraft*, 59, 124, 131.

One of the most important functions of interactive or pragmatic gestures in social interactions which is relevant to ritual gestures is the "performative" function.[641] According to Adam Kendon, interactive gestures can fulfill important performative functions in a discourse because they "are often used as a way of making manifest the speech act or illocutionary force of what a speaker is saying."[642] Adam Kendon describes performative gestures as those gestures "in which the kinesic action expresses or makes manifest the illocutionary force of the utterance, as in showing whether a question is being asked, a request or an offer is being made, and the like."[643] Performative gestures are often described as "illocutionary" communicative acts which manifest or effect something through the communicative act itself.[644] In other words, performative gestures *accomplish* a communicative act rather than depicting or representing the content of speech or thought. For Kendon, gestures such as PUOH gestures, "praying hands" gestures, and the "finger bunch" gesture are examples of performative, illocutionary gestures which function as "devices for marking questions in Neapolitan speakers" which achieve the effect of asking a question or making a request.[645]

Sedinha Teßendorf identifies two main types of performative gestures: "speech-performative" gestures and "performative" gestures.[646] Speech-performative gestures are

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[641] Adam Kendon identifies four main functions of pragmatic or interactive gestures in social interactions: (1) *Operational* gestures, which relate specifically to what is being said (e.g., affirmations such as nods); (2) *Modal* gestures, which are used to provide an interpret frame for speech (e.g., "quotation marks"); (3) *Performative* gestures, which manifest a particular speech act; and (4) *Parsing* gestures, which punctuate or structure a discourse. Kendon, "Pragmatic Functions of Gestures," 170–72.

[642] Kendon, 171.

[643] Kendon, 168.

[644] Illocutionary gestures are analogous to illocutionary speech acts as described by J. L. Austin. According to Austin, "illocutionary" speech acts are speech acts that effect something *in* the act of saying something (i.e., what was done in saying something). Examples of an illocutionary speech act include a request, a promise, a pronouncement, an order etc. Austin contrasts illocutionary speech acts with "locutionary" speech acts, the actual performance *of* saying something (i.e., what was said), and "perlocutionary" speech acts, what is achieved *by* saying something (i.e., what happened as a result, consequences). See Austin, *How to Do Things with Words*, 108–19.

[645] Kendon, "Pragmatic Functions of Gestures," 171.

[646] Teßendorf, "Pragmatic and Metaphoric--Combining Functional with Cognitive Approaches in the Analysis of the 'Brushing aside Gesture,'" 1553.

metaphoric gestures that interact with ideas of a discourse as if those ideas were physical objects that can be held or manipulated by one's hands. When used in social interactions, speech-performative gestures interact with the ideas of the discourse as if those ideas were objects that can be manipulated. Jürgen Streeck describes these gestures as "speech-handling gestures"[647] because they *handle* speech as if it were a concrete object. Two commonly used speech-performative gestures are PUOH gestures and "brushing aside" gestures, where the hand turns or waves repeatedly in the space in front of the speaker as if to brush an idea in the discourse to the side. PUOH and brushing aside gestures both express the underlying conceptual metaphor IDEAS (OR MEANINGS) ARE OBJECTS because they use their hands to interact with ideas as imaginary objects.[648] Similar to PUOH gestures, brushing aside gestures metaphorically interact with the ideas of a discourse by brushing or pushing them away as if the idea were an object that could be manipulated by one's hands. Many speech-performative gestures like PUOH and brushing aside gestures are metaphorical extensions of ordinary instrumental actions. Whereas instrumental actions handle material things, speech-performative gestures handle abstract entities (i.e., ideas) as if they are material things in such a way that "the communicative actions retain the functional characteristics of the instrumental actions."[649] Speech-performative gestures therefore perform a meta-linguistic or illocutionary function by *accomplishing* the intent that underlies the gesture: "the brushing aside gesture does not depict how someone brushes some arguments aside, but it *does* the brushing aside."[650] The ritual PUOH gestures which metaphorically present or receive ideas in a ritual dialogue, such as the PUOH gestures in Figure 7, are an example of a speech-performative gesture.

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[647] Streeck, *Gesturecraft*, 179.

[648] McNeill, *Hand and Mind*, 14. See also Lakoff and Johnson, *Metaphors We Live By*, 10.

[649] Müller, "Forms and Uses of the Palm Up Open Hand: A Case of a Gesture Family?," 237.

[650] Müller, "What Gestures Reveal about the Nature of Metaphor," 225 fn. 11. Emphasis added.

In contrast to speech-performative gestures, performative gestures are gestures that interact directly with an interlocutor during a discourse or communicative context. Whereas the target domain of a speech-performative gesture is something in the discourse (i.e., an idea or entity), the target domain of a performative gesture is "not necessarily discourse or communication but the behavior of someone else."[651] Performative gestures are often used without speech and as a result share characteristics with emblems which also regularly occur independently of speech. Because of this, gestures in ritual contexts are often characterized as performative gestures because they act on the behaviour of ritual participants often independently of speech. Sedinha Teßendorf suggests that ritual gestures such as "swearing of an oath in court, [and] the blessing or baptizing in church" are performative gestures which, "Through their constant use in strictly organized, ritual contexts, they may then be performed independently of speech within this surrounding, taking up the characteristics of traditional emblems."[652] However, as this thesis has argued, many of the gestures performed in ritual contexts are not actually performed independently of speech—swearing an oath and blessing or baptizing in church involves gestures that are closely tied to speech—and the context of the ritual itself is regularly framed as a dialogue so that gestures are always tightly connected to speech as a multi-modal communicative act. The ritual PUOH gestures which invite ritual participants to pray by creating a conduit in the shared ritual space, such as the PUOH gestures in Figure 8, are an example of a performative gesture that remains closely tied to speech.

Ritual PUOH gestures offer a clear example of the multidimensional way that physical space is conceived and used in ritual performances. Ritual PUOH gestures use space to both

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[651] Teßendorf, "Pragmatic and Metaphoric--Combining Functional with Cognitive Approaches in the Analysis of the 'Brushing aside Gesture,'" 1553.
[652] Teßendorf, 1544.

represent ideas and to create a conduit through which a dialogue or encounter can occur. As Thomas Csordas argues in reference to the gesture of the laying on of hands, it is often only through bodily gestures that the intersubjective spaces between ritual participants and the Holy Spirit or the divine can be established.[653] However, in theology, the nature and function of space has often been "marginalized or even absent in theology for long periods of its history."[654] Thomas Aquinas warned against spatial understandings of the Eucharist that would "localize" Christ in the material elements[655] and contemporary theologians such as John Milbank and Catherine Pickstock argue that modern "situational" approaches to space tend to reduce all of reality—including important theological understandings of temporality, eternity, and the sacred—to scientific and objective notions of space which, for them, is flat and devoid of the depth and temporality.[656] As Pickstock argues, modern notions of space have become a substitute for eternity, a "pseudo-eternity," and "without eternity, space must be made absolute."[657]

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[653] Csordas, "Intersubjectivity and Intercorporeality," 113.

[654] Sigurd Bergmann, "Theology in Its Spatial Turn: Space, Place and Built Environments Challenging and Changing the Images of God," *Religion Compass* 1, no. 3 (2007): 354.

[655] See Aquinas, *ST*, III, q. 76, a. 5.

[656] In *Theology and Social Theory*, Milbank argues that modern approaches to space produce a realm of "pure nature" and "pure power" that is demarcated from the temporal and by extension the theological because the sacred is not characterized as "a space, a domain, but a time." John Milbank, *Theology & Social Theory: Beyond Secular Reason*, 2nd ed. (Malden, MA: Blackwell Publishing, 2006), xxx, 9, 13.

[657] Catherine Pickstock, *After Writing: On the Liturgical Consummation of Theology* (Oxford: Blackwell Publishing, 1998), 49. In *After Writing*, Pickstock laments the late-medieval and early-modern loss of the liturgical and doxological structures of culture and society which also, ironically, results in the loss of temporality. In Pickstock's estimation, the modern turn toward spatialization treats space as a scientific and objective reality and stretches knowledge onto this flat objective reality which is devoid of spatial depth and temporality. The result is a modern "static schema of immanence" and a "suppression of temporality": "Space becomes a pseudo-eternity which, unlike genuine eternity, is fully comprehensible to the human gaze, and yet supposedly secure from the ravages of time." Pickstock, 48. Space then becomes a substitute for eternity because "without eternity, space must be made absolute." Pickstock, 49. Curiously, Pickstock frequently uses gestures as a metaphor to depict the negative consequences of the spatialization of the modern world and language. She calls the modern turn toward spatialization a "gesture of security against the void." Pickstock, 70, 198–99. She characterizes Jacque Derrida's insistence on written language as "a rationalistic gesture which suppresses embodiment and temporality." Pickstock, 4. She characterizes Baroque emphasis on space as "gestures of excess." Pickstock, 83. And she calls the modern retreat from death is a "double gesture of denial and mystification," a "necrophiliac gesture," an "Abyssal Gesture," and a "nihilistic gesture." Pickstock, 101, 104, 106, 112. It is not clear whether or not Pickstock was aware of her extensive use of gestures as a metaphor for modernity's turn toward spatialization and so it is not clear what exactly she means to communicate, but it is nonetheless telling and revealing that she chooses a very spatialized form of language (i.e., gestures) to serve as a metaphor for what she understands to be a very negative modern turn to toward spatialization.

Many of the approaches to the study of religion in the 20th and 21st century rely on the "situational" or modern notions of space that Milbank and Pickstock are critical of. David Chidester and Edward Linenthal characterize these spatial approaches as either "substantial" (also referred to as phenomenological or poetic) or "situational" (also referred to as locative or political).[658] The substantial or phenomenological approach, exemplified by Mircea Eliade,[659] understands the "sacred" as something inherent to a particular space or place. The sacred manifests or shows itself in the *sacrum*, the sacred place or temple, which is set apart from the profane which is located on the outside of the *sacrum*. For Eliade, the sacred and the profane are spatially grounded concepts that are represented in the architecture of temples or sacred places. In contrast to the substantial approach, the situational approach, exemplified by Jonathan Z. Smith,[660] thinks of sacred space primarily as the product of human activity. Smith is critical of Eliade's substantial conception of the sacred because it idealizes or essentializes space as a *sui generis* substance which prioritizes the "center" (i.e., the temple) at the expense of the "periphery" (i.e., the profane). Smith prefers to speak of "place" and "emplacement" rather than "space" in order to emphasize how space is in practice grounded in a particular locality. For Smith, ritual performances are practices of emplacement because they ground participants in a particular place and in doing so they direct people's attention to particular things in that place: "Ritual is, first and foremost, a mode of paying attention. It is a process for marking interest…It is this characteristic, as well, that explains the role of place as a fundamental component of ritual: place directs attention."[661]

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[658] David Chidester and Edward T. Linenthal, eds., *American Sacred Space* (Bloomington, IN: Indiana University Press, 1995).
[659] See Mircea Eliade, *The Sacred and the Profane: The Nature of Religion* (San Diego, CA: Harcourt Brace Jovanovich, 1987).
[660] Smith, *To Take Place: Toward Theory in Ritual*.
[661] Smith, 103.

Not all theologians are as suspicious of spatial ways of thinking as Milbank and

Pickstock. Theologians such as Jürgen Moltmann[662] and Sallie McFague[663] embrace the concept

of space and the possibility that God can be properly located *in* creation rather than *outside* or

apart from it. Christina Gschwandtner explores the spatial and phenomenological dimensions of

liturgy from an Orthodox perspective and notes how architecture can function as an active

element in organizing the movement of bodies in the performance of the liturgy. She says,

"Liturgy is performed rite, it involves bodies moving in—fairly organized and highly

decorated—space, as well as handling objects that have a place. The 'sacred' space is not only

the backdrop against which liturgical experience occurs, but it is itself an important element of

it."[664]

In recent decades, interest in the nature and function of space in theology and the study of

religion has increased, culminating in a "spatial turn"[665] which reconceptualizes space not as

merely a physical space or container for things but as an active element in the way that we

experience and conceptualize the world. This spatial turn in the study of religion has been driven

in large part by insights in geography,[666] cognitive science,[667] and social theory[668] but it has yet

to give adequate attention to the role that gestures play in creating and organizing shared spaces

in ritual performances. In the field of gesture studies, space is similarly not simply a feature of

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[662] Jürgen Moltmann, *God in Creation: An Ecological Doctrine of Creation* (London: SCM Press LTD, 1985).
[663] Sallie McFague, *The Body of God: An Ecological Theology* (Minneapolis, MN: Fortress Press, 1993).
[664] Gschwandtner, *Welcoming Finitude*, 58.
[665] Bergmann, "Theology in Its Spatial Turn"; Kim Knott, *The Location of Religion: A Spatial Analysis* (London: Equinox Pub., 2005); Kim Knott, "Spatial Theory and the Study of Religion," *Religion Compass* 2, no. 6 (2008): 1102–16.
[666] Edward Soja, *Thirdspace: Journeys to Los Angeles and Other Real-and-Imagined Places* (Hoboken: Wiley-Blackwell, 1996).
[667] Fauconnier, *Mental Spaces*; Lakoff and Johnson, *Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought*.
[668] Henri Lefebvre, *The Production of Space* (Cambridge, MA: Basil Blackwell, 1991).

the physical world but a "conceptual projection" which is often produced and manipulated by gestures. As John Haviland describes it,

> Space, no matter how immediate or unproblematically accessible it may seem, is always itself a construction, conceptually projected from not only where we are but who we are and what we know. Gesture makes use not of 'raw space' but of this projected conceptual entity. Gestures employ spaces for the characteristically dual ends of discourse generally: both to represent states of affairs, and to manipulate states of affairs.[669]

My argument in this section has been that the representational and interactive functions PUOH gestures in sacramental dialogue exhibit the dual ends that Haviland mentions here. PUOH gestures can represent the presenting and receiving of ideas in the discourse *and* they can manipulate the discourse by projecting a metaphorical conduit in the shared space between dialogue partners. Theologians and religious studies scholars have yet to give adequate attention to the role that gestures play in creating and organizing these shared spaces in ritual performances. The next gesture to be examined, the raising of the Eucharistic elements, will further explore the important role that space plays in the performance and experience of rituals.

4.3 Raising the Eucharistic elements and the establishment of "joint presence"

Many gestures in sacramental rituals interact directly with material objects in the immediate environment such as the Bible, the altar, vestments, candles, the Eucharistic elements and others. The gesture of raising the Eucharistic elements is one of the more prominent gestures in the Roman Catholic liturgy because the celebration of the Eucharist is the "centre of the whole of Christian life for the Church."[670] Ritual gestures which elevate material objects are not unique

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[669] Haviland, "Pointing, Gesture Spaces, and Mental Maps," 38.
[670] Catholic Church, *GIRM*, n. 16.

to the Christian tradition nor are they reserved for the handling of the Eucharistic elements.[671]

Mosche Barasch notes that gestures of elevation are commonly depicted in ancient texts and art

and that trophies and wreaths were ceremoniously elevated or placed high in a ritual act, often

symbolizing victory.[672] In the Bible, certain instances of the raising of hands can be understood

as a kind of "magic action," such as when Moses raises his hands during the battle with the

Amalekites (Exodus 17:9-13), or as an expression of worship (Let my prayers be set before thee

as incense / and the lifting up of my hands as the evening sacrifice, Psalm 141:2).[673] Barasch also

notes that in early Christian imagery the gesture of raising a sacred object began to carry "the

connotation of offering a sacrifice."[674] This connotation has remained in contemporary liturgy

because "the Priest may incense the gifts placed on the altar and then incense the cross and the

altar itself, so as to signify the Church's offering and prayer rising like incense in the sight of

God."[675] Because God or the divine is "exalted" and located "above" us or is seated on "high,"

the raising of the hands or a sacred object functions as a visible depiction of the metaphorical

understanding that God or the divine is spatially located on high. This metaphorical

understanding is based on the up-down image schema which is rooted in our bodily experience

of the world and is connected to many conceptual metaphors—GOOD IS UP, BAD IS DOWN;

LIFE IS UP, DEATH IS DOWN; VIRTUE IS UP, DEPRAVITY IS DOWN, etc.—that play an

important role in how ritual performances are understood and experienced (see section 3.3.1).

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[671] Other material objects like The Book of the Gospels, a cross with the figure of Christ, incense, and candlesticks are also raised and placed on the altar in an intentional manner during the liturgy. See also Catholic Church, nn. 75, 120, 122, 133.

[672] Moshe Barasch, "'Elevatio.' The Depiction of a Ritual Gesture," *Artibus et Historiae* 24, no. 48 (2003): 44–51.

[673] Barasch, 44–45.

[674] Barasch, 51.

[675] Catholic Church, *GIRM*, n. 75.

The ritual raising of a sacred object, therefore, "goes beyond mere demonstration…[because] such an act has something of the linking of the upper and the lower world."[676]

The primary function of the raising of ritual objects in the Catholic liturgy is to show or to direct people's attention to an object of interest.[677] The placing of a ritual object in a particular location in the shared ritual space, like when the Eucharistic elements are raised after the words of consecration at the altar, is done in order to direct people's collective attention to the elements so that the people may see it and adore it.[678] The raising of the Eucharistic elements has been infused with theological significance about the nature of Christ's presence in the elements since Berengar of Tours denied the real presence of Christ in the host in the eleventh century. In response to Berengar of Tours, the scholastic theologians of the twelfth and thirteenth centuries emphasized the doctrine of transubstantiation and the reality that Christ was fully present in the host. Barasch notes that this theological development also came alongside and was "perhaps even as the ultimate expression…the philosophical and theological trend in late medieval culture that gave primary significance to the body, to the experience of the senses, and to physicality in general."[679] As Barasch says, "Great importance was now given to seeing, to direct visual

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[676] Barasch, "'Elevatio.' The Depiction of a Ritual Gesture," 56.

[677] Catholic Church, *GIRM*, n. 84: "The Priest prepares himself by a prayer, said quietly, so that he may fruitfully receive the Body and Blood of Christ. The faithful do the same, praying silently. Then the Priest shows the faithful the Eucharistic Bread, holding it over the paten or over the chalice, and invites them to the banquet of Christ; and along with the faithful, he then makes an act of humility, using the prescribed words from the Gospels."

[678] Detailed instructions for the elevation of the Eucharistic elements after the words of consecration are spoken are provided in the Catholic Church, "Missale Romanum," trans. Dennis Duvelius, 1962, http://www.latinliturgy.com/howtotlm.html: "When he finishes the above-mentioned words, with his elbows placed upon the Altar, standing with his head inclined, he pronounces distinctly, reverently, and secretly the words of consecration over the Host, and at the same time, over all, if more are to be consecrated, and holding his own Host with his thumbs and index fingers, he says: P: HOC EST ENIM CORPUS MEUM. When this has been said, the Celebrant, holding the Host between his aforementioned thumbs and index fingers upon the Altar, with the remaining fingers of his hands extended, and at the same time joined (and with the Hosts, if more have been consecrated, in the place in which they were placed at the beginning of the Mass, upon the Corporal or in another Chalice), genuflecting, he adores It. Then he arises, and as much as he can comfortably do, elevates the Host in the air, and directing his eyes toward It (which is also done during the elevation of the Chalice), shows It reverently to the people, for their adoration."

[679] Barasch, "'Elevatio.' The Depiction of a Ritual Gesture," 52.

experience."[680] As a result of these theological and philosophical developments, the elevation of the Eucharistic elements became closely tied to the doctrine of transubstantiation because people wanted to be able to *see* the full reality of Christ present in the elements. Being able to see the raised Eucharistic elements allowed ritual participants to adore and revere those material objects which were—and are—considered to be the real person of Christ.[681]

While the nature and reality of the Eucharistic elements and the doctrine of transubstantiation has been one of the most debated theological topics in Christian history, the specific nature and function of the *gesture* of raising the Eucharistic elements apart from its close association with the doctrine of transubstantiation has not been explored in great detail. In this section, I will explore the nature and function of the raising of the Eucharistic elements in the light of the field of gesture studies in an attempt to show how this seemingly simple gesture performs important social and linguistic functions in a ritual setting. First, I will argue that gestures which raise material objects are best understood as pointing gestures. Second, I will show how these pointing gestures help establish "common ground" or "joint attention" between ritual participants so that the material elements may be "jointly present." And third, I will highlight how these gestures anchor the words of the liturgy—such as the words of consecration, "This is my body"—in ritual objects and ritual space.

As noted in chapter 2 (see section 2.2.4.2), pointing gestures are a type of indicating gesture which directs people's attention to something of interest. According to Herbert Clark, there are two basic techniques of indicating gestures: *directing-to* and *placing-for*.[682] Directing-to

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[680] Barasch, 52.

[681] See also Burkhard Steinberg, "The Theology of the Elevation in the Eucharist," *Theology* 113, no. 873 (2010): 183–91.

[682] Clark, "Pointing and Placing"; Clark, "Coordinating with Each Other in a Material World."

gestures "*direct* their addressees' attention *to* the object they are indicating"[683] and placing-for gestures "*place* the object they are indicating so that it falls within the addressee's focus of attention."[684] Directing-to gestures create their indexing site—they establish a new relationship between an addressee and the space where the referent is located—whereas placing-for gestures presuppose their indexing site—the relation between the addressee and the space where the referent is located is already established. Placing-for gestures are about manipulating material things in order to bring those things into attentional focus. In both cases, indicating gestures are often used pragmatically as a way to regulate or co-ordinate people's actions in a social interaction. Herbert Clark describes indicating as "a matter of social engineering. Speakers arrange for their addressees to locate and focus attention on a particular object, relying on intrinsic spatial connections between the index and object."[685]

Many ritual performances incorporate both directing-to and placing-for gestures into the ritual in order to organize the spaces where ritual performances occur. Directing-to gestures direct people's attention to particular things in the ritual environment, such as the altar or the Bible, and placing-for gestures bring particular things to people's attention in established ritual spaces, such as the placement of the Bible or the Eucharistic elements on the altar. I want to suggest that the gesture of raising the Eucharistic elements in the Roman Catholic liturgy is best understood as a placing-for gesture because it exploits the vertical axis of the ritual space above the altar by *placing* the elements in a presupposed indexing site in view of the people present. This indicating gesture helps to establish joint attention so that an object of interest—in this case, the Eucharistic elements—can be jointly present to the people present.

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[683] Clark, "Pointing and Placing," 248. Emphasis original.
[684] Clark, 248. Emphasis original.
[685] Clark, 247.

Clark notes that placing-for gestures have certain communicative advantages over directing-to gestures because they are able to "maintain" a communicative signal in a particular place for longer than directing-to gestures. Clark highlights five advantages but here I will just focus on the first two: (1) joint accessibility, where "The place of the object is accessible to everyone in a conversation for an extended period of time," and (2) clarity of signal, where "The continuing presence of an object makes it easy to resolve disputes about what is being indicated."[686] Directing-to pointing gestures can also achieve joint accessibility and enhance clarity of signal and much of the research that this section draws on is from research done on directing-to pointing gestures but Clark's point is that placing-for gestures achieve these functions more fully or completely. I want to suggest that the same is true for the gesture of raising of the Eucharistic elements: the gesture achieves joint accessibility and clarity of signal more completely than if the priest simply pointed at the elements on the altar with a directing-to pointing gesture.

One of the most important functions of ritual dialogue is to unify people through shared actions so that individuals become a community with common experiences and beliefs. Paul Chilton and Monika Kopytowska note how the establishment of "joint attention" around an action or an object is crucial to achieving unison in ritual dialogue: "Unison in ritual is crucial: aligned focus, joint attention (also crucial for dialogue) that is not reciprocal among participants but is focussed on an action or object. The ritual 'dialogue' is not between human participants but between participants focussed in unison (musically, spatially, linguistically…) on a single action—thus replacing the normal speaking self as individual with a group as 'self', dialoguing

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[686] Clark, 262–63. The full list of advantages includes: 1) Joint accessibility of signal; 2) Clarity of signal; 3) Revocation of signal: "Placement is usually easier to revoke than pointing"; 4) Memory aid: "The continuing presence of the object is highly effective as a memory aid"; and 5) Preparation for next action: "Placement generally leaves the object in an optimal place for the next step in the joint activity."

with an absent speaker/hearer."[687] One of the most important functions of the gesture of raising the Eucharistic elements is to unify the assembled people in their adoration of the host.

Pointing gestures have garnered a lot of research attention in recent years because pointing is considered by many to be *the* prototypical example of how people establish unison with each other. Pointing gestures have been called a "foundational building block of human communication,"[688] "ontologically primeval" expressions, [689] and a "primordial resource"[690] for the organization of human action because they are extremely salient and can be used to communicate without the use of words. Pointing gestures are the first communicative gestures that children perform around twelve months of age and they have been described as "the royal road to language" because pointing is a pre-linguistic bodily action that both predates and predicts language learning in children.[691] As Susan Goldin-Meadow puts it, "pointing gestures form the platform on which linguistic communication rests, and thus lay the groundwork for later language learning."[692] Pointing gestures also figure prominently in theory of mind debates— which are closely related to language learning—because pointing can be a visible display of an individual's mind or hidden intention or internal mental state.[693] When someone points to

[687] Chilton and Kopytowska, "Introduction: Religion as a Cognitive and Linguistic Phenomenon," xxx.

[688] Kita, *Pointing: Where Language, Culture, and Cognition Meet*, Chapter 1, 1-8.

[689] John B. Haviland, "Anchoring, Iconicity, and Orientation in Guugu Yimithirr Pointing Gestures," *Journal of Linguistic Anthropology* 3, no. 1 (1993): 12.

[690] Lorenza Mondada, "Pointing, Talk, and the Bodies: Reference and Joint Attention as Embodied Interactional Achievements," in *From Gesture in Conversation to Visible Action as Utterance: Essays in Honor of Adam Kendon*, ed. Mandana Seyfeddinipur and Marianne Gullberg (Amsterdam; Philadelphia: John Benjamins Pub. Co., 2014), 96.

[691] George Butterworth, "Pointing Is the Royal Road to Language for Babies," in *Pointing: Where Language, Culture, and Cognition Meet*, ed. Sotaro Kita (Mahwah, NJ: Lawrence Erlbaum Associates, 2003), 9–33. See also Cristina Colonnesi et al., "The Relation between Pointing and Language Development: A Meta-Analysis," *Developmental Review* 30, no. 4 (2010): 352–66; Susan Goldin-Meadow, "Pointing Sets the Stage for Learning Language--and Creating Language," *Child Development* 78, no. 3 (2007): 741–45.

[692] Goldin-Meadow, "Pointing Sets the Stage for Learning Language--and Creating Language," 741.

[693] Whether another person's mind or intention can be *directly* perceived by means of a pointing gesture or whether it must be *inferred* is a matter of debate. Massimiliano Cappuccio and Stephen Shepherd situate pointing and the phenomenon of joint attention at the center of the debate and identify two main camps or approaches to the debate: Theory of Mind (folk psychology, mental simulation) and embodied cognition (interactionist, enactivist, narrative-practice). Massimiliano Cappuccio and Stephen Shepherd, "Pointing Hand: Joint Attention and Embodied Symbols," in *The Hand, an Organ of the Mind: What the Manual Tells the Mental*, ed. Zdravko Radman

something, an observer is usually able to get *some* idea of what that person is thinking about or what they are attending to even though the pointing gesture itself remains somewhat ambiguous. This capacity to be aware of another person's intention by means of a pointing gesture appears to be a uniquely human capacity because humans appear to be the only animal able to point communicatively. While there are a few limited examples of apes being able to point under certain circumstances, there is very little evidence that apes can point with and for another ape or person in any way that resembles a human's capacity to point. According to Michael Tomasello, apes can't point because they don't have the capacity to establish "joint attention" or what he calls "shared intentionality." As Tomasello says, "only humans engage with one another in acts of what some philosophers of action call shared intentionality, or sometimes 'we' intentionality, in which participants have a shared goal and coordinated action roles for pursuing that shared goal."[694] Pointing, therefore, appears to be a uniquely human phenomenon that prepares people for speech and symbolic communication because pointing visibly displays or manifests an individual's intention and creates shared prelinguistic spaces of joint attention where unique human capacities like word-learning can occur. The capacity for joint attention—which has also

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(Cambridge, MA: MIT Press, 2013), 303–26. Although my analysis of the role of the elevation of the Eucharist as a form of pointing gesture that establishes common ground or joint attention between subjects does not depend on the details of this debate, I follow Cappuccio and Shepherd in taking an embodied cognitive approach where the mind or intention of a person can be directly perceived by means of a gesture. As Cappucio and Shepherd put it, "The [pointing] hand can thus symbolically represent the coattenders' 'jointness' in a minimal, prototypical, and embodied form, and does so through direct perception. […] [P]ointing, so understood, *invites* rather than *requires* inference, and does so without specialized cognitive resources." Cappuccio and Shepherd, 305. This embodied cognitive approach to gestures is deeply indebted to the philosophical tradition of phenomenology. For example, David McNeill, quoting Maurice Merleau-Ponty, affirms that language has a "gestural or existential significance" because "It presents or rather it *is* the subject's taking up of a position in the world of his meanings." McNeill, *Gesture and Thought*, 92. For McNeill as for Merleau-Ponty, gestures like pointing gestures inhabit meaning, rather than being an external accompaniment or representation of meaning.
[694] Tomasello, "Why Don't Apes Point?," 516.

been referred to as "joint attentional frames",[695] "intersubjectivity" or "intercorporeality",[696] "participation frameworks",[697] and "joint presence"[698]—and symbolic communication is something only humans can achieve and it appears to be grounded in a fundamental way in the act of pointing. As Tomasello says, "many of the aspects of language that make it such a uniquely powerful form of human cognition and communication are already present in the humble act of pointing."[699] Some, including Raymond Tallis, a neuroscientist and self-professed atheist, considers pointing to be such a powerful tool of cognition and communication that they liken our capacity to point to our capacity for the "transcendent," because both are rooted "in the intuition of the hidden, in the presence or reality of that which is the unobserved, absent, beyond."[700]

That the "humble" pointing gesture might have the capacity to direct our attention to things unseen is one reason why pointing gestures are prevalent in ritual performances and why pointing is frequently used as a metaphor for the nature religious signs: religious signs, like pointing, refer to something beyond the sign itself. Augustine, for example, used pointing as a metaphor to describe how the sacraments and the prophecies of the Old Covenant "point" to the future,[701] and in the prologue to his book, *Teaching Christianity*, Augustine uses the metaphor of an "outstretched finger" pointing at the moon or heavenly bodies to describe the way that

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[695] Michael Tomasello, *The Cultural Origins of Human Cognition* (Cambridge, MA: Harvard University Press, 1999).

[696] Christian Meyer, Jürgen Streeck, and J. Scott Jordan, "Introduction," in *Intercorporeality: Emerging Socialities in Interaction*, ed. Christian Meyer, Jürgen Streeck, and J. Scott Jordan (Oxford: Oxford University Press, 2017), xv–xlix.

[697] Goodwin, "Environmentally Coupled Gestures."Charles Goodwin

[698] Engelland, *Ostension: Word Learning and the Embodied Mind*, 131–50.

[699] Tomasello, "Why Don't Apes Point?," 516.

[700] Raymond Tallis, *Michelangelo's Finger: An Exploration of Everyday Transcendence* (New Haven, CT: Yale University Press, 2010), 119.

[701] Saint Augustine, "Contra Faustum," in *Nicene and Post-Nicene Fathers, First Series*, ed. Philip Schaff, vol. 4 (Buffalo, NY: Christian Literature Publishing Co., 1887), Book 19.14, http://www.newadvent.org/fathers/1406.htm: "In former days faith was dim, for the saints and righteous men of those times all believed and hoped for the same things, and all these sacraments and ceremonies *pointed* to the future." Emphasis added.

words—especially the words of scripture—"point" to something beyond the words themselves.[702] Theologian Paul Tillich also categorized many religious symbols as "pointing" symbols which "are distinguished from other [symbols] by the fact that they are a representation of that which is unconditionally beyond the conceptual sphere, they *point* to the ultimate reality implied in the religious act, to what concerns us ultimately."[703]

However, ritual pointing gestures are not always seen as having this transcendent capacity because ritual pointing gestures are often understood as a prescribed action that anticipates a predetermined response rather than a communicative action which depends on joint attention or common ground between subjects. In studies on pointing gestures, it is common to make the distinction between imperative and declarative pointing. Imperative pointing is "performed in order to make the addressee do something for the subject" whereas declarative pointing is a "means for the subject to achieve joint reference with the addressee."[704] More scholarly attention has been given to declarative pointing gestures because, according to Ingar Brinck, "Only declarative pointing is intersubjective. Imperative pointing does not require recognition of the intentions of other individuals and is based in behaviourally motivated regularities."[705] Directing-to and placing-for gestures can each be imperative or declarative depending on the way they are used in the communicative context. In ritual settings, directing-to

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[702] Augustine, *Teaching Christianity*, Prologue.3, 103-104: "[W]hat I can say to those who do not understand what I write is this: I am not the one to be blamed because they do not understand. It's as though they wished to see the old or the new moon, or some very dim star, which I would be pointing to with my outstretched finger; but if their eyesight was not good enough for them even to see my finger, that would be no reason why they should get indignant with me. As for those who have learned these rules and grasped their import, and even so have been unable to fathom the dark depths of the divine scriptures, they should count themselves as indeed being able to see my finger, but unable to see the heavenly bodies to which it is pointing. So both these and those others should please stop blaming me, and should rather pray that God may grant them light to see with. After all, while I am able, no doubt, to use my finger to point to something, I am not also able to sharpen people's eyes so that they can see either me pointing or the objects I am wishing to point out."

[703] Paul Tillich, "The Religious Symbol," *Daedalus* 87, no. 3 (1958): 3. Emphasis added.

[704] Ingar Brinck, "The Pragmatics of Imperative and Declarative Pointing," *Cognitive Science Quarterly* 3, no. 4 (2004): 430.

[705] Brinck, 431.

and placing-for gestures are regularly assumed to have an imperative function rather than a declarative function because they are thought to rely on ritualized behaviours or "behaviourally motivated regularities" that encourage people to turn their attention to material things like the Eucharistic elements regardless of their intention in the moment. By lifting their gaze to the elevated Eucharistic elements, ritual participants aren't necessarily expressing their individual intention to participate in a communicative act as much as they are aligning their intentions with the intention of the church because it is an action that they are asked or expected to perform by the Church. Without denying the possible imperative function inherent in the gesture of the raising of the Eucharistic elements, I want to suggest that the elevation of the Eucharist also has an important declarative function which depends on thinking about ritual actions within the context of a dialogue between subjects. If the raising of the Eucharistic elements is understood in the context of a sacramental dialogue, then the function of the raising gesture can take on a declarative function rather than just an imperative function, which means that the raising of the Eucharistic elements and the turning of people's gaze to those elements is not simply a ritualized behaviour but a means for establishing joint attention for shared understanding and unison of intention.

The phenomenon of joint attention is dependent on cultural and social factors. Mark Turner notes that "What the participants in a scene of joint attention know is highly culture- and sub-culture and micro-culture dependent and requires constant and impressive cognitive work to construct, and is fallible, which is one of the reasons that communication comes with so many procedures for repair, negotiation, and accommodation."[706] The possibility of joint attention

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[706] Mark Turner, "Multimodal Form-Meaning Pairs for Blended Classic Joint Attention," *Linguistics Vanguard* 3, no. s1 (2017): 1.

depends on what Herbert Clark calls "common ground,"[707] which is the moment-by-moment coordination of shared knowledge between two or more people engaged in a social interaction. Common ground is similar and often indistinguishable from joint attention but they are not necessarily the same thing, since it is possible to share common ground without attending to the same thing at the same time. Judith Holler and Janet Bavelas define common ground "as the knowledge, beliefs, and assumptions that interlocutors share, combined with their mutual awareness that they share this particular common ground."[708] Common ground is a necessary requirement for shared understanding and meaning and it requires collaboration between individuals to maintain. Without common ground, individuals will be unable to have mutual understanding or be able to take joint actions together. As Clark describes it, "When a speaker produces an utterance, both the speaker and the addressees treat its content as provisional and open to revision. It takes their joint effort to reach closure on the content—to establish the mutual belief that the addressees have understood the speaker well enough for current purposes. Evidence shows that people try to minimize their joint effort in reaching closure. It is this process that is called grounding."[709] The process of establishing and maintaining common ground is a collaborative and multi-modal process between dialogue partners. Bavelas et al. describe grounding as a "rapid three-step interchange between participants" that is continuous through an interaction: "The person who is speaking at the moment *presents* some information, the addressee *responds* with an indication or display of understanding (or not), and then the speaker *acknowledges* this response by indicating that the addressee's understanding was correct

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[707] Herbert H. Clark and Susan E. Brennan, "Grounding in Communication," in *Perspectives on Socially Shared Cognition*, ed. Lauren B. Resnick, John M. Levine, and Stephanie D. Teasley (Washington: American Psychological Association, 1991), 127–49; Clark, *Using Language*, 92–121.

[708] Judith Holler and Janet Bavelas, "Multi-Modal Communication of Common Ground: A Review of Social Functions," in *Gesture Studies*, ed. R. Breckinridge Church, Martha W. Alibali, and Spencer D. Kelly, vol. 7 (Amsterdam: John Benjamins Publishing Company, 2017), 214.

[709] Clark, "Anchoring Utterances," 8.

(or not). These steps can involve words, gestures, nodding, gaze, or other actions, singly or in combination."[710]

People produce different types of pointing gestures to establish common ground depending on the amount of knowledge, beliefs, and assumptions people share with each other. For example, Enfield et al., describe two types of pointing gestures that people regularly perform in local interactions in rural Laos: "B-points," which are big movements that usually involve the whole arm and are aligned with the speaker's gaze, and "S-points," which are small movements that often only involve the speaker's hand.[711] B-points are the prototypical directing-to or placing-for gestures and they are usually foregrounded in relation to speech because their purpose is to provide primary information relevant to the discourse topic. In contrast, S-points are usually backgrounded in relation to speech because they carry secondary information relevant to the discourse topic. The raising of the Eucharistic elements in the ritual space after the words of consecration are larger movements that carry a large amount of the communicative burden in the liturgy. The raising of the Eucharistic elements therefore functions like B-points because they foreground important information (the Eucharistic elements) which is relevant to the discourse (celebration of the Mass). The benefit of this type of gesture is that it lessens the communicative burden or cognitive load of the words of the liturgy and it allows people to establish common ground around a publicly shared material object even if those people do not share a language or if they do not have spoken language at all, such as infants, the deaf, or the cognitively impaired.[712] As William Hanks detailed in his analyses of the establishment of

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[710] Janet Bavelas et al., "Dyadic Evidence for Grounding with Abstract Deictic Gestures," in *Integrating Gestures: The Interdisciplinary Nature of Gesture*, ed. Gale Stam and Mika Ishino, vol. 4 (Amsterdam: John Benjamins Publishing Company, 2011), 51. Emphasis original.

[711] Enfield, Kita, and de Ruiter, "Primary and Secondary Pragmatic Functions of Pointing Gestures."

[712] See Belcher, *Efficacious Engagement: Sacramental Participation in the Trinitarian Mystery*.

common ground in divination rituals (see section 3.2.6), the common ground that occurs as a result of the raising of the Eucharistic elements involves a combination of different "interaction frames"—such as the interactions between Priest-participant, Priest-Christ, and participant-Christ—that depend on an interactive or dialogical understanding of the ritual.[713]

Chad Engelland's phenomenological approach to pointing or ostensive bodily actions offers another way to understand how common ground or "joint presence" is established through the ritual gesture of raising the Eucharistic elements. For Engelland, ostension isn't simply a referential action of pointing *at* something, it is a bodily action that *makes* something publicly available or *present* to another person's attention. Engelland distinguishes between two accounts of ostension from the point of view of the observer: Ostension Inference (OI) and Ostension Manifest (OM). In the OI account, ostension *infers* or posits the intention of another based on visible bodily movement. According to Engelland, "[Ostension Inference] accepts the Cartesian bifurcation of internal and external evidence, but it looks to inference…to close the gap between someone's outside and his hidden inside."[714] In contrast to the OI account, which "assumes a flawed framework in which the terms *inside* and *outside*, *private* and *public*, *self* and *other*, are mutually exclusive,"[715] the OM account argues that the target of another's intention can be directly perceived through bodily movement. As Engelland says, "the other is genuinely given in his bodily movement"[716] and "Ostension works because bodily movement makes intentions perceptible—there is no need to infer the presence of invisible intentions."[717] Engelland also prefers the term "joint presence" instead of "joint attention" to describe the way that two or more

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[713] Hanks, "Joint Commitment and Common Ground in a Ritual Event."
[714] Engelland, *Ostension: Word Learning and the Embodied Mind*, 136.
[715] Engelland, 138.
[716] Engelland, 132.
[717] Engelland, 131.

people can attend to the same object because "the term 'joint attention' is too mental, and it suggests the coordination of two private things."[718] In other words, joint attention is too closely aligned with an OI account of ostension. In contrast, the term "joint presence" implies "that the same item (thing, aspect, event, etc.) is present to both of us together"[719] through bodily movement. As Engelland says, "'Presence' suggests the manifestation of an item as a result of movement. The target of joint presence is an item in the public world."[720] Therefore, what makes a pointing gesture or ostensive bodily movement successful is not an inference about someone's internal or hidden mind based on a visible ostensive movement but that the ostensive bodily movements *makes* some publicly available thing "jointly present" to two or more people. Engelland's framing of ostension as the establishment of joint presence explains from a phenomenological perspective how material things "become present to us intersubjectively."[721] "Without ostension," Engelland argues, "we cannot explain how our intentions become mutually manifest prior to words."[722] Ostensive manifestation is especially important for word learning because pre-linguistic children need to be able to perceive the communicative intention of others before they are able to understand what a word means: "Bodily movement as manifestation of intention is the crucial understanding that enables word acquisition through shared attention. We acquire shared conventional terms on the basis of the natural manifestation of bodily movement."[723] The gesture of the raising of the Eucharistic elements is an important instance of ostensive manifestation because it allows ritual participants, especially those who may not

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[718] Engelland, 145.

[719] Engelland, 143. For Engelland, "'Presence' suggests the manifestation of an item as a result of movement. The target of joint presence is an item in the public world." Engelland, 143.

[720] Engelland, *Ostension: Word Learning and the Embodied Mind*, 143.

[721] Engelland, 25.

[722] Engelland, 35.

[723] Engelland, 86. Also: "Animate, embodied actions advertise one's mind to other animate, embodied actors. Ostension requires that minds be available to others in a prelinguistic way." Engelland, 152.

understand the words or symbols of the liturgy like children, newcomers, or the cognitively impaired, to perceive the communicative intention of the Church and achieve joint presence around the Eucharistic elements without necessarily needing to cognitively understand the meaning of the words or symbols of the liturgy. The intention of the Church is made *present* or intersubjectively available in a prelinguistic way through ritual action. In the same way that pointing gestures prepare children for language, the raising of the Eucharistic elements prepares people for the words of the liturgy by creating shared prelinguistic spaces of joint presence where individuals can learn the meaning of the words and symbols of the liturgy. In other words, the establishment of joint presence through gestures like the raising of the Eucharistic elements enables individuals to learn the words and symbols of their liturgical tradition because it grounds the words and symbols in an intersubjectively available ritual environment by means of bodily actions that are prelinguistic or prior to words.

The second advantage of raising the Eucharistic elements in the ritual performance is the clarity it affords. The raising of the Eucharistic bread, for example, occurs immediately after the words of consecration—*hoc est corpus meum* ('this is my body')—in order to signify as clearly as possible that the intended referent of the deictic *hoc* ('this' or 'this thing') is the material object that the priest holds above the altar. Deictic words such as this, that, here, and there are inherently ambiguous and therefore are frequently coupled with bodily gestures which ground the words in the immediate environment to help disambiguate their referent. Furthermore, because the words of consecration in the traditional Catholic liturgy are sometimes spoken by the priest secretly,[724] the raising gesture of the Eucharistic elements carries a large communicative

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[724] See Catholic Church, "Missale Romanum": "When he finishes the above-mentioned words, with his elbows placed upon the Altar, standing with his head inclined, he pronounces distinctly, reverently, and secretly the words of consecration over the Host, and at the same time, over all, if more are to be consecrated, and holding his own Host with his thumbs and index fingers, he says: P: HOC EST ENIM CORPUS MEUM."

burden, perhaps even more than the words themselves, because it is the raising gesture that signifies that the bread has been transformed into the person of Christ to most of the people present.

As already mentioned, the raising of the Eucharistic bread emerged out of a medieval theological framework that centered around the doctrine of transubstantiation. Paul Chilton and David Cram note that this medieval framework focused on the deictic word *hoc* ('this' or 'this thing') in the words of consecration because the word *hoc* highlights the real presence of Christ in the material bread that was made visible to the people. Chilton and Cram refer to this medieval framework as "*radically pragmatic*" because the words of consecration are grounded first and foremost in the local and concrete context of the ritual performance. In contrast to this approach, the "early modern hermeneutic approach," which has persisted to the present day, focuses on the predicate of the words of consecration, the words *est corpus meum* ('is my body'). Chilton and Cram refer to this approach as "*radically semantic* in the sense that it starts out from the lexical meaning of the word 'body' and goes on to investigate how, if at all, this may be contextually modulated, e.g. taken metaphorically rather than literally."[725] In other words, the semantic approach focuses on whether the word *corpus* ('body') should be taken literally or metaphorically—that is, whether the bread is literally or metaphorically the body of Christ.

Chilton and Cram provide a cognitive analysis of the words of consecration which focuses on the deictic word *hoc* ('this' or 'this thing') because this word provides our "pragmatic orientation in space and time…[and] the starting point for our construction of meaning."[726]

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[725] Paul Chilton and David Cram, "Hoc Est Corpus: Deixis and the Integration of Ritual Space," in *Religion, Language, and the Human Mind*, ed. Paul Chilton and Monika Kopytowska (Oxford: Oxford University Press, 2018), 408.

[726] Chilton and Cram, 407. In contrast, the semantic approach which focuses on the word *corpus* ('body') takes "word-meaning as a primitive notion and modulation of meaning in context as a derivative process." Chilton and Cram, 407.

Consideration of the whole ritual performance, including especially the gestures and immediate environment, is necessary for understanding the meaning of the words of consecration: "The meaning of the deictic word HOC (*this thing*) depends on its integration in the actually performed ritual—a lived mental event in the minds of the participants."[727] Chilton and Cram's analysis represents an attempt at a "multimodal account of how the consecrational formula is imbued with meaning by virtue of the way the words employed inter with other cognitive components of the liturgical event—spatial, temporal, gestural, and so on—all of which are anchored in the primary deictic matrix."[728] Interestingly, Chilton and Cram note that their cognitive, deictic approach aligns more closely with the medieval pragmatic approach than the early modern hermeneutic approach because the medieval pragmatic approach better appreciates the multi-modal context within which the words occur. Chilton and Cram even go as far as to suggest that the medieval approach actually foreshadows modern cognitive approaches to language because the medieval approach is more multi-modal and broader in its "semiological scope" than semantic approaches to language.[729] The medieval pragmatic approach also does not "trigger" controversy over literal or metaphorical understandings of the words of consecration as easily as the semantic approach because it is not abstracted from its local and concrete context.

Chilton and Cram root their deictic analysis of the words of consecration on Chilton's Deictic Space Theory (DST), which is a cognitive theory of deixis that is based on spatial cognition and conceptual blending theory. The advantage of DST, according to Chilton and

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[727] Chilton and Cram, "Hoc Est Corpus: Deixis and the Integration of Ritual Space," 419.
[728] Chilton and Cram, 407.
[729] Chilton and Cram, 415. For example, Chilton and Cram note that in the certain medieval and cognitive accounts of meaning, "the meaning of words are conceptual schemata that can be filled in by ideas relevant in the particular context in which they occur." Chilton and Cram also suggest that the medieval concern for what happens in the minds of participants during the Eucharist celebration and how "concepts are merged in real time in response to a linguistic utterance brings us rather close to the theory of cognitive blending in cognitive linguistics." Chilton and Cram, 415.

Cram, is that it "takes orientation of self in experienced space-time as its starting point" for "modelling highly abstract concepts, without losing touch with their bodily basis, and also linking them to linguistic and other semiotic input from a context."[730] Deictic space "is a conceptual space, not a physical one. It is the conceptual space that language systems use to represent many kinds of conceptualisations by way of words, parts of words, and grammatical constructions—conceptualisations that need not be literally to do with spatial objects at all but which are derived from our brain's representation of them."[731] The specifics of Chilton's mapping of deictic space are beyond the scope of this analysis but the theory is worth mentioning because it highlights how we conceptually use space to structure the way we think about abstract ideas and how those ideas remain rooted in our physical and psychological experience of the world.[732] "The important point," according to Chilton and Cram,

> [I]s that conceptualisations experienced through language structure (and other semiotic structure) are *abstractions* from human perception of the spatial environment, particularly the structure of the visual field and the experience of reaching, grasping, and manipulating objects in front of us. Space-based abstractions can be spatially manipulated in the mind—referents can be moved 'closer' or 'further away', axis systems can be added, embedded within one another, linked, and merged.[733]

In other words, speech and thought are always grounded in a social material context and the features of that context, such as ostensive bodily movements in space, are essential to our conceptual understanding of speech and thought itself.

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[730] Chilton and Cram, "Hoc Est Corpus: Deixis and the Integration of Ritual Space," 416. Chilton and Cram also argue that the "theoretical modelling [of DST] can be a way of getting at concrete roots. DST gives us some clarity about the physical and physiological basis of the psychic sensations that we think are entirely abstract." Chilton and Cram, 418.

[731] Chilton and Cram, "Hoc Est Corpus: Deixis and the Integration of Ritual Space," 416.

[732] Chilton conceptually maps three conceptual dimensions of deictic space along three abstract axes: the a-axis (or the attention axis), which positions entities according to whether they are in the foreground or background of someone's attention; the t-axis positions entities according to whether they are in the past or the future; and the m-axis (modal axis) positions entities according to whether a person judges an entity to be real or unreal.

[733] Chilton and Cram, "Hoc Est Corpus: Deixis and the Integration of Ritual Space," 418.

Chilton and Cram rely on Faucconier and Turner's model of conceptual blending to explain how non-linguistic elements such as space and the material context contribute to the meaning of the Eucharist celebration. Chilton and Cram identify two "reference frames" (or mental spaces) at this moment of the liturgy: the here-and-now reference frame of the present ritual space and the past reference frame of the original ritual act and the historical tradition which continuously re-interprets the original event.[734] These "reference frames are not simply physical and spatial; they are constructed mentally with reference to evoked vantage points in space, time, and reality; and reference frames can be cognitively combined and shifted."[735] The here-and-now reference frame of the priest and people participating in the ritual is equivalent to Scott Liddell and Eve Sweetser's concept of Real Space, which is a mental representation of the immediate environment (see section 3.3.2.1). When the Eucharistic elements are raised by the priest, the here-and-now reference frame is blended with the past reference frame of Jesus speaking the words "*This is my body*" at the last supper to create an emergent conceptual blend where a past event and a physically absent person are experienced as being present in the ritual space or in the actual Eucharistic elements. This blend involves a *temporal compression* similar to the Buddhist Monk blend (see section 3.3.1).[736] In the blend, the *hoc* ('this') refers to two spaces simultaneously: it refers both to the bread held by Jesus and to the bread held by the priest. A priest is able to act *in persona Christi* because the conceptual blend integrates the past reference frame of Jesus and the here-and-now reference frame of the priest in the ritual setting. Furthermore, according to the doctrine of transubstantiation, the bread in both reference frames is blended with Jesus's body so that "*the whole Christ is truly, really and substantially*

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[734] Chilton and Cram, 421.
[735] Chilton and Cram, 421.
[736] Chilton and Cram, 428.

contained."[737] The conceptual blend of transubstantiation involves the blending of different temporal reference frames as well as the incorporation of linguistic and non-linguistic elements into the liturgical act. Chilton and Cram suggest that the conceptual blend of the doctrine of transubstantiation may "be an attempt to rationalise a cognitive experience generated by a ritual device that is both linguistic and non-linguistic."[738] As Chilton and Cram further describe it,

> Jesus' deictic present is transformed […] into the present of priest and people; his temporal coordinate is now that of the priest and the priest's hearers. […] At the point where the verbal input *hoc est corpus meum* occurs, it combines with the non-verbal ritual apparatus, and is indeed already contextualised by it. The non-verbal apparatus prompts the 'presencing' frame shift in the mental representation set up by the verbal input. A key bit of the non-verbal action is the handling of the wafer by the priest […] followed by 'elevation'—the priest raises the wafer into the upper visual field. As you see the wafer aloft, the cognitive-linguistic 'presencing' shift takes place: both Jesus and host are 'present' cognitively. In cognitive terms, we have a complex 'blend' mentally constructed from linguistic and structured sensory prompts.[739]

We can go even further still and connect Chilton and Cram's conceptual blend of the words of consecration to the phenomenon of joint attention using Mark Turner's concept of "blended classic joint attention."[740] Blended classic joint attention (BCJA) is similar to classic joint attention (CJA) in that involves two or more people attending to the same thing but BCJA differs from CJA because in BCJA people not be present in the same place at the same time. Turner gives the example of a TV news anchor who speaks to their audience as if they were present in the same place at the same time when they say things like, "It's good to have you

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[737] Catholic Church, *Catechism*, n. 1374: "In the most blessed sacrament of the Eucharist 'the body and blood, together with the soul and divinity, of our Lord Jesus Christ and, therefore, *the whole Christ is truly, really, and substantially* contained.' 'This presence is called "real"—by which is not intended to exclude the other types of presence as if they could not be 'real' too, but because it is presence in the fullest sense: that is to say, it is a substantial presence by which Christ, God and man, makes himself wholly and entirely present.'"

[738] Chilton and Cram, "Hoc Est Corpus: Deixis and the Integration of Ritual Space," 429.

[739] Chilton and Cram, 429.

[740] Turner, "Multimodal Form-Meaning Pairs for Blended Classic Joint Attention"; Mark Turner, Maíra Avelar, and Milene Mendes de Oliveira, "Blended Classic Joint Attention and Multimodal Deixis," *Signo* 44, no. 79 (2019): 3–9.

here" and "*Now* we have a special announcement coming up for you *here.*"[741] In these instances, it is not clear what *here* and *now* refers to because "here" is not a single shared space and "now" is not a single moment in time. Nevertheless, many TV news broadcasts are an instance of BCJA because the TV audience can feel as if they are attending to the same thing at the same time as the news anchor because they conceptually blend the TV broadcast with their own experience of CJA. As Turner puts it, watching a news anchor on TV "is tractable and familiar because it draws on our understanding of classic joint attention."[742]

I would argue that the celebration of the Eucharist involves not only instances of CJA amongst the active participants as already mentioned, but also instances BCJA, such as when the priest acts *in persona Christi*. It is obvious that during the celebration of the Eucharist the ritual participants do not attend to the same material objects as Jesus and his disciples did two thousand years ago but because people have the ability to conceptually blend the here-and-now with the past, ritual participants can experience the ritual *as if* they were attending to the same thing at the same time. The celebration of the Eucharist is therefore not merely a routine performance passed down through generations. It can be, rather, an active dialogue between present and non-present subjects which incorporates many communicative resources such as words, gestures, material objects, and physical space into the structure and content of the dialogue itself. The raising of the Eucharistic elements is a multi-modal communicative act that not only aims at producing a certain emotion or disposition *in* people but also at establishing common ground and mutual understanding *between* people, so that people can jointly attend to a publicly available shared object even if those people are not physically present in the same space at the same time.

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[741] Examples taken from Turner, "Multimodal Form-Meaning Pairs for Blended Classic Joint Attention," 3.
[742] Turner, 3.

4.4 Breaking the Eucharistic bread and "manifesting actions"

The manner in which the Roman Catholic liturgy is to be celebrated is important to the meaning and significance of the liturgy itself. The GIRM says that bodily movement "must be conducive to making the entire celebration resplendent with beauty and noble simplicity, to making clear the true and full meaning of its different parts, and to fostering participation of all."[743] For example, the altar is to be shown reverence "with a *profound bow*,"[744] readings "are to be pronounced in a *loud and clear voice*"[745] and "are to be listened to *reverently* by everyone,"[746] silence should be incorporated as part of the liturgy "so that all may dispose themselves to carry out the sacred celebration in a *devout and fitting manner*,"[747] and the sign of peace should be given by a handshake or bow "in a *sober manner*."[748] For the Eucharist, it is written that "the wondrous mystery of the real presence of the Lord under the Eucharistic species…is proclaimed in the celebration of the Mass, not only by the very words of consecration by which Christ is rendered present through transubstantiation, but also with a sense and a demonstration of the g*reatest reverence and adoration* which strives for realization in the Eucharistic liturgy."[749] How exactly these reverent and devout displays are meant to be performed is not always clear. In many cases, it is up to the individual to ensure that their actions in the liturgy are done in a reverent manner befitting the liturgy.

This section will examine the manner in which liturgical gestures are to be performed and its theological implications by looking specifically at the gesture of breaking the Eucharistic

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[743] Catholic Church, *GIRM*, n. 42.
[744] Catholic Church, n. 49. Emphasis added.
[745] Catholic Church, n. 38. Emphasis added.
[746] Catholic Church, n. 29. Emphasis added.
[747] Catholic Church, n. 45. Emphasis added.
[748] Catholic Church, n. 82. Emphasis added.
[749] Catholic Church, n. 3. Emphasis added.

bread. In the liturgy, the breaking or fraction of the Eucharistic bread occurs after the gesture of peace and before the communion procession, all of which are intended to establish unity between the participants (the ecclesial body) and between the participants and Christ himself (the Eucharistic body): "[T]he gesture of the fraction or breaking of bread…will bring out more clearly the force and importance of the sign of the unity of all in the one bread, and of the sign of charity by the fact that the one bread is distributed among the brothers and sisters."[750] The breaking of the bread is a sign of unity which "signifies that the many faithful are made one body (1 Corinthians 10.17) by receiving Communion from the one Bread of Life, which is Christ."[751] Theologian Louis-Marie Chauvet suggests that the gesture of breaking the bread is a "sacramental rite of the first order"[752] and "a fundamental rite of Mass"[753] because Christ is not present in the bread but rather in the bread "as broken (or destined to be broken)."[754] He says, "the gesture of breaking the bread is *the symbol par excellence* of the *ad-esse* of Christ giving his life."[755] This is exemplified for Chauvet in the story of the disciples on the road to Emmaus in Luke 24, where Jesus walks and talks with the disciples and yet is not recognized until the moment when Jesus breaks the bread in their presence.[756] For Chauvet, the presence of Christ in the broken bread "is not as a closed and compact thing, but as reality-for-sharing,"[757] which is enacted through the gesture of breaking the bread:

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[750] Catholic Church, n. 321.

[751] Catholic Church, n. 83.

[752] Louis-Marie Chauvet, "The Broken Bread as Theological Figure of Eucharistic Presence," in *Sacramental Presence in a Postmodern Context*, ed. Lieven Boeve and Lambert Leijssen (Leuven; Sterling, Va: Leuven University Press; Peeters, 2001), 251.

[753] Chauvet, 260.

[754] Chauvet, 260.

[755] Chauvet, *Symbol and Sacrament*, 406.

[756] Chauvet, 161–78. According to Chauvet, "These ritual gestures are not mere accessories, but structuring elements of the faith…we are invited to recognize him in the ritual gestures the Church continues to carry out in his name…the ritual gestures made by the Church in his memory are in fact his own gestures." Chauvet, 164.

[757] Chauvet, "The Broken Bread as Theological Figure of Eucharistic Presence," 260–61.

> For the *breaking of the bread* unites symbolically in one action the aspect of *communion between the members* (but 'in the charity of Christ') expressed by the sign of peace, and the aspect of *communion with Christ himself* (but in brotherly and sisterly charity), expressed by the rite of Communion. The breaking of the bread, inasmuch as it is a sharing between members and for their unity of one body broken for all, sacramentally manifests the indissoluble bond with Christ and with others which it joins sym-bolically.[758]

Chauvet understands the reality-for-sharing of the broken Eucharistic bread as a symbolic and communicative act which cannot be reduced to the physical reality of the bread itself or to any sort of instrumental action. Paradoxically, Chauvet argues that it is precisely the sensible materiality and exteriority of the broken bread that functions as "the highest figure of the defence against idolatry which is imposed on [the Eucharistic elements]."[759] As he says, "The eucharistic body of Christ, in its materiality and exteriority, represents well, in this perspective, the most resistant dam against such idolatrous reduction: the mystery of Christ and of the Gospel resists the multiple imaginary attempts to reduce it to what is said or experienced of it."[760] However, despite Chauvet's assertion that the "presence" of Christ is enacted through a "set of verbal, gestural and material elements"[761] which constitute the Eucharist rite, his symbolic approach to the rite conceptualizes all aspects of the ritual in terms of words or texts. He suggests that the gestures of the breaking and giving of the Eucharistic bread "have to be considered as 'incorporated words'"[762] and that the rite itself "constitutes the 'pre-text' of the text, the page in a way on which the text is written."[763] In this section, I want to suggest that such a symbolic approach is not reflective of how the gesture of the breaking of the Eucharistic bread functions in

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[758] Chauvet, *Symbol and Sacrament*, 407.

[759] Chauvet, "The Broken Bread as Theological Figure of Eucharistic Presence," 257.

[760] Chauvet, 257.

[761] Chauvet, 255: "From the phenomenological standpoint, the intentionality of 'presence' comes to light in a way from the figure formed by this set of verbal, gestural and material elements."

[762] Chauvet, 255. In *Symbol & Sacrament*, Chauvet refers to gestures as "'enfleshed words' which belong to the ritual order." Chauvet, *Symbol and Sacrament*, 392.

[763] Chauvet, "The Broken Bread as Theological Figure of Eucharistic Presence," 249.

relation to the liturgical words, the material elements, and the theological reality that the gesture enacts. I will argue that the gesture should be understood as a "manifesting action" which retains aspects of its instrumental origin and discloses realities about the material world which cannot be disclosed by words alone.

As the GIRM states, the breaking of the bread is meant to be "carried out with proper reverence, and should not be unnecessarily prolonged or accorded exaggerated importance."[764] It is clear from this statement that the performance of breaking of the bread walks a fine line between inadequate reverence and exaggerated performance. As noted in Chapter 2 (see section 2.2.3), gesture researchers make a distinction between informative (or instrumental) and communicative bodily actions. Informative (or instrumental) bodily actions are bodily movements that "give off" information regardless of intention and communicative bodily actions are bodily movements where information is intentionally given to someone else. Gestures are communicative bodily movements that are deemed to be intentionally designed, consciously or not, for someone else. According to this distinction, the breaking of the bread is a communicative gesture because it is performed in a particular manner for someone—in this case, the members of the church. However, this gesture nevertheless retains some of the features of an instrumental action, such as its goal-oriented purpose because the breaking of the bread is performed in order to be *given* to people and not just shown to them. The label that Herbert Clark gives to certain actions which often perform both communicative and instrumental functions is "manifesting actions", which are actions that are performed "*in a time, place, or manner intended to be recognized as marked or special.*"[765] I suggest that the breaking of the Eucharistic bread is a "manifesting action" because of the time, place, or manner in which it is performed.

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[764] Catholic Church, *GIRM*, n. 83.
[765] Clark, "Coordinating with Each Other in a Material World," 513–14. See also Clark, *Using Language*, 167–68.

Clark classifies manifesting actions as a type of indicating gesture because "it directs the observer to that action for a reason recognizable in these circumstances."[766] There two things that a manifesting action can manifest or direct the attention of an observer toward: (1) the action itself and/or (2) the material world. Clark's description of manifesting actions focuses primarily on the action itself. He says that the manifesting action is not the action itself but the "non-standard" way in which the action is performed.[767] In other words, a manifesting action is the unique manner in which someone performs an action which is communicated to someone else. The examples that Clark gives of manifesting actions include a person "mincing" or exaggerating their steps as they enter a lecture hall a few minutes late in order to "signal to those watching that she was trying not to disrupt the speaker,"[768] and the way two pianists "synchronize their playing by manifesting their actions to each other with an exaggerated manner or with conspicuous timing."[769] Manifesting actions align with Cornelia Müller's "acting mode" of gestural representations[770] and are often tightly bound with what Kensy Cooperrider calls "action-referring demonstratives" which are words such as like this, like that, like so, and thus which "draw attention to the characteristics of the action or gesture itself."[771] The words or the manner in which the gesture is performed can "offer overt evidence that the speaker intends the gesture as central to the message."[772]

Manifesting actions can also draw attention to something in the material world by interacting directly with the material environment as a type of "environmentally coupled

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[766] Clark, "Coordinating with Each Other in a Material World," 514.
[767] Clark, 514.
[768] Clark, 513. Their manifesting action was intended to be both conspicuous and inconspicuous at the same time.
[769] Clark, 515.
[770] According to Müller, "In the acting mode, a modulated action stands for an instrumental action. It is abstracted from the underlying action and renders a schematized version of it." Müller, "Gestural Modes of Representation as Techniques of Depiction," 1693.
[771] Cooperrider, "Foreground Gesture, Background Gesture," 182–83.
[772] Cooperrider, 183.

gesture."[773] The action cannot be understood without consideration of the material environment itself. Manifesting actions draw people's attention to something in the material world when it is performed as a modulation of an instrumental action: "A small segment of the action is selected and formally elaborated [so that] the object is thereby marked as crucial and in need of further attention."[774] The example of a manifesting action that draws attention to a material object given in Chapter 2 was the lifting up of a cup to take a drink. If this action is exaggerated, embellished, or repeated, or if it is part of a demonstration, then the action could be understood as accomplishing two goals at once: an instrumental goal because the action can retain its origin or instrumental purpose (i.e., satisfying thirst) and a communicative goal because the action is intended to communicate something to someone.[775] The breaking of the Eucharistic bread is an example of a manifesting action that draws people's attention to something in the material world as a communicative gesture while retaining its origin in instrumental action.

However, the gesture of breaking the Eucharistic bread is doing more theologically than simply drawing people's attention to a material object—it is, as Chauvet suggests, *disclosing* the presence of Christ through the gesture itself. The possibility that our gestures may be able to *disclose* realities of the material world is familiar to those who take a more phenomenologically-informed approach to gestures. Jürgen Streeck, for example, argues that our hands and gestures have the unique ability to "make sense" or to "disclose" realities of the material world that are hidden or otherwise unseen: "By pointing, by pushing and pulling, by picking up tools, hands act as conduits through which we extend our will to the world. They serve also as conduits in the other direction: hands bring us knowledge of the world. Hands feel. They probe. They practice.

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[773] Goodwin, "Environmentally Coupled Gestures."
[774] Streeck, *Gesturecraft*, 75.
[775] Jürgen Streeck notes that "Communicative enhancements of practical action can be built via operations such as repetition and exaggeration, or small gestural components can be inserted into the practical act." Streeck, 75.

They give us sense, as in good common sense, which otherwise seems to be missing lately."[776] It

is *through* our hands that we interact with the world and *manu*-facture meaning in the world: "No

part of our body (except the eyes) is as important as the hand in providing us with knowledge of

the world, and no organ (except the brain) has played a greater part in creating the world that

humans inhabit."[777] Streeck gives special attention to our hands because of their ability to *grasp*

things in the world, both physically and conceptually. Grasping is a *prehensile* bodily action that

is closely related to cognitive prehensile acts such as ap-*prehension* or com-*prehension*. The

word prehension comes from the Latin root –*hendere*, which means "to seize, take." To *prehend*

or to *grasp* something is to "catch hold of, to seize." Conceptually, *grasping* can mean to know

or to understand something—to com-*prehend*. We know something when we get a *handle* on it,

a *grasp* of it. The physical and conceptual load that grasping bears is why Streeck considers

grasping to be "without doubt the raison d'être of the human hand…Grasping is, as the

metaphorical use of the word reminds us, a cognitive act as much as a physical one."[778] He says

later, "grasping exemplifies what is meant by 'embodied knowledge': underlying our routine

abilities to grasp, hold, reorient, and transport objects is a wealth of knowledge not only about

objects and the prehensile postures that suit them, but also of the mechanics of tasks in which

objects are handled."[779] When we engage with the world with our hands we enact what we know

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[776] Malcolm McCullough, *Abstracting Craft: The Practiced Digital Hand* (Cambridge, MA: MIT Press, 1996), 1.
[777] Streeck, *Gesturecraft*, 4. Streeck argues that the human capacity "to oppose the thumb to *all* other fingers and the ability to perform forceful and shape-adaptive precision grips" Streeck, 43. is unique to humans and is "considered the most important [evolutionary] change on the road to humanity prior to the evolution of speech." Streeck, 40. See also: "[G]estures are made by the organs that give us our world: hands are not only organs of action and expression, but also of cognition and knowledge acquisition; much of our acquaintance with the world comes from the actions and perceptions of our hands." Streeck, 39.
[778] Streeck, *Gesturecraft*, 40.
[779] Streeck, 51.

about the world *through* our hands. Our hands are not simply an "object" of study or a "thing" in the world but rather a vehicle for "being-in-the-world."[780]

Streeck identifies six distinct "gesture ecologies" or "six different ways in which gestural activity can be aligned with the world, with concurrent speech, and with the interactants": (1) making sense of the world at hand; (2) disclosing the world within sight; (3) depiction; (4) thinking by hand: gesture as conceptual action; (5) displaying communicative action; (6) ordering and mediating transactions.[781] The two gesture ecologies that are most relevant to the gesture of breaking the Eucharistic bread are (1) making sense of the world at hand and (2) disclosing the world within sight. Streeck suggests that gestures which fit into these gesture ecologies, similar to manifesting actions, "arise as a by-product of and in the service of practical action, disclosing features of the immediate scene, or otherwise involving the touching, feeling, grasping, and handling of whatever is at hand, and maybe the making of something from it."[782] In this framing of the relationship between our hands and our knowledge or conception of the material world, our hands are not simply an organ of instrumental action or of communication, they are a means for us to sense, explore, and discover aspects about the world that may otherwise be hidden from our awareness. According to Streeck, our hands *disclose* the "extractable features" of the material world so that they can be "shared with others in the act of gesturing."[783] Streeck calls this process a number of different things including "gestural

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[780] Elena Cuffari and Jürgen Streeck, "Taking the World by Hand: How (Some) Gestures Mean," in *Intercorporeality: Emerging Socialities in Interaction*, ed. Christian Meyer, Jürgen Streeck, and J. Scott Jordan (Oxford: Oxford University Press, 2017), 173–202. See also Merleau-Ponty, *The Phenomenology of Perception*, 202–32.
[781] Streeck, *Gesturecraft*, 7–11.
[782] Streeck, 8.
[783] Cuffari and Streeck, "Taking the World by Hand: How (Some) Gestures Mean," 175.

clearing",[784] "gathering meaning",[785] and "appropriative disclosure."[786] What is important for Streeck is the role that gestures play in "[transforming] a given environment into a richly layered and selectively presented 'space of possibilities.'"[787] Through a manifesting action which engages directly with the material world, an observer "can infer *invisible* features of the object from the *visible* properties of the act. This multimodality of manual action forms the basis for its communicative potential."[788]

In light of the disclosive capacity of our hands and the characteristics of gestures like manifesting actions, I want to suggest that the gesture of breaking the Eucharistic bread is a manifesting action that *discloses* hidden or unseen or "iconic" theological realities about the nature of the Eucharistic bread. As Chauvet puts it, it is through the materiality and exteriority of the Eucharistic elements that "[o]ne is then brought to think that, far from coming under the status of the idol, the eucharist comes under that of the icon, being understood that this latter intends to preserve the alterity of what it yet wants to allow to be seen."[789] Theologically, the breaking of the Eucharistic bread brings about or *manifests* the reality it signifies. One reality that the broken bread signifies is the unity of the Church. *Lumen Gentium*, the Dogmatic Constitution of the Church of the 2nd Vatican Council, says that the Church is made "*manifest* in

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[784] Drawing on Martin Heidegger and Hubert Dreyfus, Streeck describes this process as "clearing", whereby "an objective, merely existing, uncomprehended setting is transformed into a field that is jointly known and understood by the parties." Cuffari and Streeck, 59.

[785] Streeck, *Gesturecraft*, 60–61: "The term *gathering meaning*, in contrast, that I take from Ingold (2000) and prefer, emphasizes that meanings are not usually brought into existence by indexical practices, but that these methods aid in selecting disclosing, emphasizing, and elaborating meanings that are already inscribed in the world, residues of prior human action."

[786] According to Cuffari and Streeck, "*Appropriative disclosure* is a two-tiered principle that notes the doubled perspective coenacted by gesturer and gesture recipient. Hand gestures are bodily acts oriented toward something in the world…They are also communicatively intentional, as they select and stylize features of the world for someone, even if that someone is one's self or a distant other." Cuffari and Streeck, "Taking the World by Hand: How (Some) Gestures Mean," 176. Emphasis original.

[787] Cuffari and Streeck, 176.

[788] Streeck, *Gesturecraft*, 71.

[789] Chauvet, "The Broken Bread as Theological Figure of Eucharistic Presence," 257.

a concrete way that unity of the people of God which is suitably signified and wondrously brought about by this most august sacrament [the Eucharist or Holy Communion]."[790] Another reality signified in the broken bread is the presence of Christ himself. As Chauvet puts it, "The rite of the breaking of the bread is of primary importance in this respect, in that it manifests that if the presence of Christ is indeed inscribed in the bread and the wine, it is not circumscribed there."[791]

Ritual manifesting actions in the Roman Catholic tradition can also perform a *performative* function. Eve Sweetser's description of "performative representations" is helpful for understanding how the gesture of breaking the Eucharistic bread *manifests* the unity of the Church and the presence of Christ. According to Eve Sweetser, there are two basic types of representations: descriptive (or depictive) representations and performative representations. The difference between these two types of representations lies in what John Searle calls the "*direction of fit* between Word and World."[792] In descriptive (or depictive) representations, "the word fits a real or imagined world. A description…may be true or false, depending on its fit with the world in question."[793] The world, therefore, is "ontologically prior" to the descriptive (or depictive) representations of the world. In contrast, performative representations "are attempts to make the world fit the words."[794] Performative representations (e.g., directives, requests, declaratives, etc.) "can be successful or unsuccessful, felicitous or nonfelicitous; but it cannot be true or false, because it does not involve a fit of word to world, but rather an attempt to make the world fit the words."[795] In descriptive (or depictive) representations, the world exists prior to

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[790] Vatican Council II, "Lumen Gentium: Dogmatic Constitution on the Church," November 21, 1964, n. 11, Vatican.va.
[791] Chauvet, "The Broken Bread as Theological Figure of Eucharistic Presence," 259.
[792] Eve Sweetser, "Blended Spaces and Performativity," *Cognitive Linguistics* 11, no. 3–4 (2000): 308.
[793] Sweetser, 308.
[794] Sweetser, 309.
[795] Sweetser, 308–9.

words, but in performative representations, "the words bring about the described world state, and are thus ontologically and causally prior to it."[796] Performative representations, whether it is in the form of spoken utterances or actions, enact the world that is being represented. Sweetser relies on mental space theory to explain the "fit" between a conceptual representation (i.e., Word, what is said) and the corresponding represented space (i.e., World, what is represented in what is being said). If the representation in the mental space fits the represented space, then the relation between the mental space is descriptive or depictive. On the other hand, if the represented space is causally influenced or changed by the representation by virtue of its performance, then the relation is performative.

Descriptive (or depictive) representations and performative representations are extremely prevalent in ritual settings. Many ritual elements, whether spoken utterances or ritual actions, can both represent things other than themselves (i.e., descriptive or depictive) and they can actually do things in the world by bringing about the thing they represent (i.e., performative). In the Roman Catholic tradition, the sacraments do not simply refer to something beyond themselves, they actually *participate* in the reality that they signify and can effectively bring about or manifest that reality. As the Catechism of the Catholic Church says, "[The sacraments] are 'for the Church' in the sense that 'the sacraments *make* the Church,' since they manifest and communicate to men, above all in the Eucharist, the mystery of communion with the God who is love, One in three persons."[797] Furthermore, ritual gestures which are said to bring about the unity of the church, such as the gesture of peace, the breaking of the Eucharistic bread, and the communion procession, aren't just depictive representations which depict the unity of the church,

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[796] Sweetser, 310.
[797] Catholic Church, *Catechism*, n. 1118. Emphasis added.

they are performative representations because they enact the unity of the church through the performance of the gestures themselves.

Sweetser gives the example of a ritual that is performed in some Italian village communities of carrying a new born infant "up a flight of stairs as soon as possible after birth, so that the child might socially 'rise in the world' in later life."[798] This ritual is both a depictive representation—based on the conceptual metaphors STATUS IS UP and GAINING STATUS IS RISING, carrying the infant up the stairs (source domain) depicts the concept of gaining status in society later in life (target domain)—and a performative representation—the ritual act attempts "to influence a future state of affairs."[799] For Sweetser, the performative dimension of this ritual act is an example of our human capacity to "use representations to influence the world outside the representational system."[800] Many ritual actions, like many spoken utterances, are therefore not just symbolic representations but also be performative representations that actually *do* things in the world because they bring about the thing they represent. Other examples that Sweetser offers of ritual actions or elements that can be both descriptive (or depictive) and performative include white garments,[801] wedding rings,[802] kneeling,[803] and Christian communion.[804] The

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[798] Sweetser, "Blended Spaces and Performativity," 312.

[799] Sweetser, 312.

[800] Sweetser, 306.

[801] Sweetser, 306–7: "The colour white is often used as a representation of purity. In a marriage ceremony, the bride wearing a white dress is a depictive representation (true or not) of the bride's virgin status. Wearing white at a bride's second marriage is taboo because it is a knowing mis-representation of the bride's virgin status. In penitent rituals such as Yom Kippur in the Jewish tradition, however, the colour white is not just depictive but also performative because white garments are a "causal aid to bringing about a state of purity."

[802] Sweetser, 314: "The circular shape of a ring metaphorically represents the unending permanence of marriage; but its use in a wedding ceremony is to bring that permanence into social being, not just to describe it. The ring's status as performative, not simply depictive, is confirmed by many wearers' superstitions about taking it off or losing their wedding rings."

[803] Sweetser, 314: "Does kneeling to a divinity metaphorically represent the already extant differential in power and status between worshipper and god (a depictive use), or help to bring the worshipper into the right state of humility (a performative use)? Perhaps both."

[804] Sweetser, 314: "A Christian communion service may likewise be seen as metaphorically depicting, in the physical uniting of the blessed bread and wine (metaphorically representing Christ's body and blood) with the bodies of the worshippers, an already extant spiritual union between human and divine; but it certainly must also be seen as intending to causally bring about this spiritual union via the consumption of the bread and wine."

Christian sacraments have often been characterized as either descriptive (or depictive) representations of something other than itself (i.e., symbolic) or performative representations that causally bring about the reality they signify. While both Protestant and Catholic theologies of the sacraments affirm both types of representations in different ways, their differences can be broadly mapped along this distinction. Whereas Protestant theology tends to characterize the sacraments as descriptive or depictive representations of something other than or prior to the sacraments themselves (i.e., grace is given prior to the performance of the sacraments), Catholic theology tends to characterize the sacraments as performative representations which bring about the reality they signify (i.e., grace is given through the performance of the sacraments).[805]

Within the Roman Catholic tradition, the gesture of breaking the Eucharistic bread is a manifesting action that functions as a performative representation because the world (i.e., the material reality of the bread) is made to "fit" the reality that the words of consecration and the gesture of breaking the Eucharistic bread represent and not the other way around. This manifesting action is an environmentally coupled gesture and is a central part of a multi-modal ritual act which involves words, gestures, the immediate environment (i.e., the altar), and a material object (e.g., the bread). The manner in which the gesture is performed—its timing, its place, its close relationship to words, and the way in which the bread is handled and broken by the priest—allows the gesture to play a central communicative role and to direct people's attention to the Eucharistic elements and to disclose the theological reality enacted by the breaking of the bread. To characterize this gesture or any part of this ritual primarily or solely in

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[805] Eve Sweetser highlights this delineation when she says, "Both [Catholics and Protestants] see the Eucharist as performative in that it brings about union with God via a metaphorical blend with the real space consumption of bread and wine. However, the Catholics differ from the Protestants with respect to the causal nature of the consecration part of the ritual: they see This is my body and This is my blood as being performative, while the Protestants see these phrases as metaphorically depictive." Sweetser, 324.

terms of symbols or words is to overlook the communicative function of each element in this multi-modal communicative act and how many of these elements have their origin in instrumental action. So, while ritual gestures are always *more than* mere bodily movements or an instrumental actions, they nevertheless remain a bodily movement and retain many of the features of instrumental actions. In the same way that our gestures are able to disclose extractable features of the material world to others, ritual gestures are able to disclose theological features of the material world to others. Gestures have this capacity because and not in spite of their origin in instrumental action through their engagement with the material world.

To conclude, I want to suggest one additional way that gestures can disclose something about the material world which is applicable not only to our understanding of the nature and function of ritual manifesting gestures in the Roman Catholic tradition but also to the nature of the theological disclosure through the sacraments in general. In theological discourse, there remains a gap between linguistic (i.e., language and words) and non-linguistic forms (i.e., gestures and the material world) forms of religious or theological knowledge. These two "poles" of religious knowledge are often referred to as "proclamation" and "manifestation" where proclamation represents the linguistic pole and manifestation represents the non-linguistic pole.[806] According to Paul Ricoeur, proclamation is concerned with the "hermeneutics of religious language" and the "accent is placed on speech and writing and generally on the word of God."[807] Ricoeur says that an emphasis on this linguistic accent "is particularly true of Judaism, Christianity, and Islam."[808] Theologically, the word proclamation carries a linguistic, verbal,

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[806] Paul Ricoeur, "Manifestation and Proclamation," in *Figuring the Sacred: Religion, Narrative, and Imagination*, ed. Mark I. Wallace, trans. David Pellauer (Minneapolis, MN: Fortress Press, 1995), 48–67. See also David Tracy, *The Analogical Imagination: Christian Theology and the Culture of Pluralism* (New York: Crossroad, 1981), 193–229; Wallenfang, *Dialectical Anatomy*, 26–37. Other concepts used to describe similar poles of religious knowledge include the verbal and visible, word and action, word and image, spiritual and material, and symbolic and real.
[807] Ricoeur, "Manifestation and Proclamation," 48.
[808] Ricoeur, 48.

hermeneutic, non-participatory and word-centered connotation. The word proclamation comes from the Latin word *proclamare* which means "to cry out" or "call before." Donald Wallenfang describes proclamation as a concept that "signifies the phenomenality of language, speech, text, law, rhetoric, history, interpretation, hermeneutics, prophecy, testimony, and ethics" and that it "includes terms such as word, voice, said saying, conversation, dialogue, call, response, witness, meaning, news, message and kerygma."[809]

In contrast, manifestation is concerned with the "phenomenology of the sacred" and the universal experience of the numinous or the sacred and how it appears or is manifested in and through material things in the cosmos.[810] Ricoeur says that manifestation emphasizes a sacred power or reality that is before or beyond speech and is often closely associated with a ritual "mode of acting" which "underscores its essential 'nonlinguistiality.'"[811] Theologically, the word manifestation carries a non-linguistic, non- or pre-verbal, imagistic, participatory and phenomenological connotation. Wallenfang describes manifestation as a concept that emphasizes vision and that it "includes terms such as event, disclosure, epiphany, revelation, gift, unconcealment (*alétheia*), appearance, apparition, visibility, presence and showing."[812] When manifestation is used to describe the sacraments, it often implies being struck or seized by a divine or invisible reality which is made visible or present in the sacraments. In the Eucharist, Jesus Christ is said to be *manifested* or made visible or present in the material elements of the bread and wine. *Lumen Gentium* of the 2nd Vatican Council states that it is through the Eucharist or Holy Communion that the Church is made "*manifest* in a concrete way that unity of the people of God which is suitably signified and wondrously brought about by this most august

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[809] Wallenfang, *Dialectical Anatomy*, 29.
[810] Ricoeur, "Manifestation and Proclamation," 48.
[811] Ricoeur, 50.
[812] Wallenfang, *Dialectical Anatomy*, 28.

sacrament."[813] The CCC also says that "The sacrificial character of the Eucharist is *manifested* in the very words of institution: 'This is my body which is given for you' and 'This cup which is poured out for you is the New Covenant in my blood.'"[814] The word manifest comes from the Latin word *manifestus* which has its roots in the words *manus* which means "hand" and *festus* which means "struck" or "able to be seized", and thus literally means "seizing something with one's hand." Not coincidentally, then, there is a close conceptual association between the movement of one's hands and the phenomenon of manifestation. To put it another way, the *disclosure* of invisible features of the material world that occurs through our gestures in everyday dialogue is analogous to the *theological disclosure* that occurs through ritual gestures and the material world in ritual dialogue. Words and gestures are therefore closely intertwined in Roman Catholic sacramental theology: the reality of the words of the liturgy are grounded in gestural ways of being in the world—that is, the reality of the sacraments is *mani*-fested through bodily action.

Proclamation and manifestation are often seen as theological concepts that are diametrically opposed to each other. Donald Wallenfang notes how these concepts have been viewed as "hostile", "oppositional", "mutually exclusive", and "by nature at war with one another."[815] Christian traditions are often divided along this theological divide, with Protestants and their emphasis on preaching in the proclamation camp and Catholic and Orthodox traditions and their emphasis on the sacraments and ritual in the manifestation camp.[816] Attempts to bridge the gap between these concepts and theological traditions have characterized these concepts as existing in a dialectical relationship with each other: proclamation and manifestation are

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[813] Vatican Council II, "Lumen," n. 11.
[814] Catholic Church, *Catechism*, n. 1365. Emphasis added.
[815] Wallenfang, *Dialectical Anatomy*, 34–35.
[816] Tracy, *The Analogical Imagination: Christian Theology and the Culture of Pluralism*, 193–229.

opposing concepts that continuously and inescapably interact with each other as people attempt to understand the realities these concepts represent. Ricoeur suggests that proclamation and manifestation exist in a dialectic because, as he says, "I cannot conceive of a religious attitude that did not proceed from 'a feeling of absolute dependence.' And is this not the essential relation of humankind to the sacred, transmuted into speech and, in this way, reaffirmed at the same time it is surpassed?"[817] Wallenfang suggests that Ricoeur's dialectic between manifestation and proclamation can also be "characterized as a nonlinguistic $\leftrightarrow$ linguistic dialectic, as a preverbal $\leftrightarrow$ verbal dialectic, as an event $\leftrightarrow$ meaning dialectic, as a phenomenology $\leftrightarrow$ hermeneutics dialectic."[818] Wallenfang takes a similar dialectic approach but adds a third element, "testimony," to make what he calls a "trilectic" between proclamation, manifestation, and testimony.[819]

I want to suggest that the study of gestures in everyday dialogue can provide a helpful analogy for understanding this dialectical relationship between proclamation and manifestation. For example, in sacramental theology, gestures are frequently used as a metaphor for the visible, *mani*-festive dimension of the sacraments. Augustine described the sacraments as signs that *point* like an outstretched finger to something beyond the sign itself[820] and he referred to visible signs

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[817] Ricoeur, "Manifestation and Proclamation," 65.

[818] Wallenfang, *Dialectical Anatomy*, 37.

[819] Wallenfang refers to his heuristic method as the "'trilectic of testimony,' implying the threefold matrix of testimony: (1) the self-testimony of that which is given (manifestation), (2) hermeneutical testimony that interprets and brings to recognition that which is given (proclamation), and (3) testimony of the third part witness to the manifestation $\leftrightarrow$ proclamation dialectic." Wallenfang, 42.

[820] Augustine, "Contra Faustum," Book 19.14. In the prologue to *De Doctrina Christiana*, Augustine also used pointing or an outstretched finger as a metaphor to describe how words function as signs that "point" to something beyond itself: "[W]hat I can say to those who do not understand what I write is this: I am not the one to be blamed because they do not understand. It's as though they wished to see the old or the new moon, or some very dim star, which I would be pointing to with my outstretched finger; but if their eyesight was not good enough for them even to see my finger, that would be no reason why they should be indignant with me…After all, while I am able, no doubt, to use my finger to point to something, I am not also able to sharpen people's eye so that they can see either me pointing or the objects I am wishing to point out." Augustine, *Teaching Christianity*, Prologue.3, 103-104.

like gestures and flags as "visible words."[821] Karl Rahner called the Church and the sacraments

"gestures" of God.[822] Edward Schillebeeckx used gestures as an analogy to describe how the

sacraments mediate an encounter with God as "love's expressive gesture":

> In human encounter love's visible expression is an appeal and an offer, not the
> production of a physical effect. Love is freely given and must be freely accepted.
> Therefore, love's expressive gesture is appealing, inviting, seeking; it is the
> making of an offer. This gesture of love has a certain effect. It is not an indifferent
> sign of love; it is a compelling sign. The firm handshake just naturally draws the
> firm grip in reply. Within the confines of the limited influence of one man upon
> another the expressive gesture of love is a *signum efficax*, a sign that effects what
> is signified.[823]

Schillebeeckx also spoke of infant baptism as a "sacramental gesture" which is similar to that of

a "maternal gesture" of a mother because God's offer of grace is an expression that is meant to

elicit or effect a response: "every loving gesture of motherly watching by the cradle, represent an

eager expectation of response."[824] Donald Wallenfang describes the Eucharist as having a

"*prosopic* trait" ("relating to the person or face") because it involves people in face-to-face

dialogue.[825] Conor Sweeney likens the "foundation of sacramental presence" to a "mother's

smile."[826] At the beginning of her book, *Extravagant Affections*, Susan Ross quotes Annie

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[821] Augustine, *Teaching Christianity*, II.3,4, 134: "Of the signs, therefore, with which human beings communicate their thoughts among themselves, some are directed to the sense of sight, most of them to the sense of hearing, very few to the other senses. Thus when we beckon, we are only giving a sign to the eyes of the person whom we are wishing by this sign to acquaint with our will. And some people do indeed signify a great many things with the gestures they make with their hands. And vaudeville artists are able to give signs to the cognoscenti by the movements of every part of their bodies, and to carry on a kind of conversation with the eyes of their audiences. And military flags and banners signal the will of commanders to the eyes of their men; and all these things are rather like visible words."

[822] Karl Rahner, "Questions on the Theology of Sacraments," in *Theological Investigations*, vol. 23 (New York: Crossroad, 1982).

[823] Schillebeeckx, *Christ the Sacrament*, 111. See also 73-78.

[824] Schillebeeckx, 110.

[825] Wallenfang, *Dialectical Anatomy*, 183. Emphasis added. Philosopher Richard Kearney also picks up on the importance of the face or *prosopon* in encounters with the divine. For Kearney, the *persona* of the divine manifests itself through the face of the other: "Not the other person as divine, mind you—that would be idolatry—but the divine in and through that person. The divine as trace, icon, visage, passage"; "Prosopon is the face of the other who urgently solicits me, bidding me answer in each concrete situation, 'here I am.'" Kearney, *The God Who May Be: A Hermeneutics of Religion*, 18.

[826] Conor Sweeney, *Sacramental Presence after Heidegger: Onto-Theology, Sacraments, and the Mother's Smile* (Eugene, OR: Cascade Books, 2015), 198–99, 225-239. Emphasis added.

Dillard to express how the sacramentality of the natural world is an "extravagant gesture": "If the landscape reveals one certainty, it is that the extravagant gesture is the very stuff of creation. After the one extravagant gesture of creation in the first place, the universe has come to deal exclusively in extravagances."[827] Books such as *Gestures of God: Explorations in Sacramentality*[828] and *Sacraments: The Gestures of Christ*[829] similarly express this same metaphor. The abundance of gestural metaphors for the sacraments could be attributed to the many similarities that gestures and the sacraments share: they both function as communicative *signs* that occur in the context of dialogue; they are both visible things that are *tightly bound* with words; they both *mediate* interactions or encounters between subjects; they are both actions that *do* things in the world; they both *point* to things beyond the signs itself; they both have the capacity to *bring about* the thing they signify in the very act of expression; they both *publicly* display a subject's intention; they are both *spatial* phenomenon; and they are both inherently *non-dualistic* because they cut across traditional boundaries between the external and internal, the visible and invisible, the body and the mind, and in the case of the sacraments between the material and spiritual, the real and the symbolic, and the world and God. Gestures, therefore, are a natural phenomenon which has already been frequently used, consciously or not, to articulate the nature of the relationship between the verbal and visible, proclamation and manifestation dimensions of the sacraments.

What theologians who have employed gestural metaphors for the sacraments have not yet considered, however, is the insight from the field of gesture studies that the non-dualistic nature

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[827] Annie Dillard, *Pilgrim at Tinker Creek* (New York: Harper & Row, 1974): 9 quoted in Susan Ross, *Extravagant Affections: A Feminist Sacramental Theology* (New York, NY: Continuum, 1998), 19.
[828] Geoffrey Rowell and Christine Hall, eds., *The Gestures of God: Explorations in Sacramentality* (London: Continuum, 2004).
[829] Denis O'Callaghan, *Sacraments: The Gestures of Christ* (London: Sheed and Ward, 1964).

of gestures doesn't just cut across the boundary between the external and internal or the material and the spiritual but that gestures also cut across the boundary between the non-verbal and the verbal or the non-linguistic and linguistic. As detailed in Chapter 2 (see section 2.2.5), David McNeill describes the relationship between gesture and speech as an "imagery-language dialectic"[830] within which gesture and speech are "inseparable: a joint system with these two components was part of the evolutionary selection of the human brain."[831] As he says, gestures form an "unbreakable bond" with speech because "*language is inseparable from imagery*."[832] In other words, rather than being in competition with each other, gesture and speech are inseparable at the most basic level of thought. McNeill's characterization of gestures as the "images" or "material carriers"[833] of speech and thought shares a number of similarities to the way that the sacraments are conceived of as iconic manifestations or material vessels of the Word. What if, following the insights from the field of gesture studies, theological concepts like manifestation and proclamation are not in opposition to each other but are tightly-bound in an imagery-language dialectic similar to gestures and speech? What if the visible, material dimension of the sacraments is a "material carrier" of the verbal, invisible dimension in the same way that gestures are the "material carrier" of speech and thought? I would argue that the analogous relationship between gesture and speech and between manifestation and proclamation is already reflected in the ways that many theologians talk about the sacraments and that the insight from the field of gesture studies that gestures are part of language and thought can provide a helpful corrective to the interpretation that the two poles of religious knowledge—proclamation and manifestation— are fundamentally distinct or opposed to each other. According to the field of gesture studies,

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[830] McNeill, *Gesture and Thought*, 87–127.
[831] McNeill, 16.
[832] McNeill, 4.
[833] McNeill, 98.

gestural ways of knowing and being-in-the-world resist the long held assumption that non-verbal and verbal or non-linguistic and linguistic expressions represent an ontological divide within language and thought. As I have shown throughout this thesis, this assumption is not reflective of how language or thought works and should therefore not serve as a model for ritual action or religious knowledge.

Chapter 5: Conclusion

As the modern field of gesture studies has demonstrated, gestures are not merely non-verbal actions that exist outside the bounds of spoken or written language; they are, instead, an indispensable part of language, capable of communicating ideas and mediating social interactions in ways that words cannot. The main argument of this thesis is that this capacity of gestures is available for both everyday *and* ritual gestures. As a result, the ritual gestures of Roman Catholic sacramental rituals should be understood as a fundamental *part of* the content and structure of the sacramental dialogue that occurs between ritual subjects.

In Chapter 2, we explored how the modern field of gesture studies defines gestures as communicative movements of the body—particularly the hands—that occur in everyday face-to-face dialogue and how those movements are tightly bound to or co-constituted with speech and thought. In Chapter 3, we explored the differences between ritual and everyday gestures and how, according to conceptual blending theory, ritual gestures can function similarly to everyday gestures because ritual and everyday gestures both occur within the context of *dialogue*. In Chapter 4, we explored the implications of a dialogical approach to ritual gestures by examining three sacramental gestures in the Roman Catholic tradition: palm-up open hand (PUOH) gestures, the raising of the Eucharistic elements, and the breaking of the Eucharistic bread. We saw that these gestures are not merely non-verbal conventional symbolic actions but that they also play a vital role in mediating the sacramental dialogue that occurs between Priests, ritual participants, and God.

As this thesis shows, ritual gestures are rich multi-modal communicative actions that cannot be reduced to symbolic meanings (i.e., language or words) or to digital functions (correct-incorrect, successful-unsuccessful, etc.). Ritual gestures contribute to the structure and content of

the sacramental rituals in a variety of ways that words cannot, such as depicting ideas in a visuo-spatial modality, establishing common ground between ritual subjects, incorporating the material environment into the sacramental dialogue, enacting the realities that the sacraments signify, and so on. It is reductive, therefore, to understand ritual gestures either apart from words as non-verbal accompaniments or in terms of words as symbols. Five general takeaways from this thesis that relate to the nature and function of ritual gestures can be summarized as follows:

1. *Ritual gestures are embodied*. Every ritual is performed and made meaningful through the movement of people's bodies. The embodied dimension of ritual gestures challenges many of the entrenched dualisms between the mind-body, subject-object, and thought-action that are often associated with ritual action.

2. *Ritual gestures are interactive*. Ritual gestures are capable of mediating interactions between ritual subjects (present and non-present others like God or spirits) and between ritual subjects and their material environments.

3. *Ritual gestures cannot be reduced to symbols or words.* As part of a multi-modal ritual dialogue, ritual gestures are inescapably imagistic and spatial.

4. *Ritual gestures are not non-verbal or non-linguistic*. Ritual gestures are often tightly bound with ritual words, so much so that many ritual words cannot be adequately understood apart from ritual gestures.

5. *Ritual gestures can be both communicative and instrumental at the same time*. Many ritual gestures have their origin in instrumental action and therefore must be understood in relation to instrumental action without succumbing to magical or technical explanations of action.

While this thesis has focused on ritual gestures, the implications of the arguments of this thesis and of the insights in the field of gesture studies extend well beyond the nature and function of ritual gestures. It is my hope that this thesis can encourage religious studies scholars and theologians to further explore the fundamental role that gestures play in all aspects of religious practice and thought. A few avenues for future research that would build on the work in this thesis include:

Comparative study of ritual gestures. While gestures are a universal feature of communication and ritual performances, the meaning and function of gestures can differ greatly depending on their cultural context. Ethnographic and comparative studies of ritual gestures, both within religious traditions and between religious traditions, are necessary to fully appreciate the dynamic and varied role that gestures play in religious thought and practice. For example, what is the prevalence of spontaneous gestures within prescribed rites? Where do those gestures arise and what function are they serving?

Gestures and religious experiences. As "windows unto the mind," gestures have the capacity to carry the communicative burden of our thoughts and experiences when words fail us. Because of this, gestures provide a unique opportunity to study religious experiences which are by nature ineffable and beyond words. How do people use gestures to depict the content of their religious experiences? What do people's gestures tell us about their conception of God and other abstract ideas like heaven, eternity, unity, and so on? Do gestures capture elements about religious experiences that words cannot? Well established methods

in the field of gesture studies like microanalysis provide ideal tools for answering

some of these questions that no one to my knowledge has investigated.

Gestures and material culture. Despite the fact that gestures play a

fundamental role in mediating people's interaction with their material

environment, the field of gesture studies has largely been overlooked in the study

of material culture. One important contribution that the field of gesture studies

could offer is a richer understand of the role that bodily movement and gestures

play in people's experience of material texts. Texts are *made* meaningful through

intentional bodily movements, either through the bodily movements that produce

the text or through the bodily movements that perform the text. What would it

look like to think of writing and reading as gestural acts? Is it helpful—or even

possible—to think of texts as artifacts that exist apart from bodily gestures? And

how might gestures mediate or bridge the dichotomy between orality (speech-

oriented cultures) and literacy (text-oriented cultures) that is prevalent in the study

of material culture?

Gestures and ethics. Because gestures mediate social interactions between

people, they have unavoidable ethical consequences. Giorgio Agamben describes

gestures as "*the exhibition of a mediality*" which "allows the emergence of the

being-in-a-medium of human beings and thus it opens the ethical dimension for

them."[834] What are the ethical dimensions of ritual gestures? How do gestures

enact the authority structures within a community? How do submissive ritual

gestures such as bowing or kneeling map onto power structures and gender roles

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[834] Agamben, "Notes on Gesture," 58.

within a community? How do ritual gestures form the social identity of those who perform them?

   Gestures and theology. This thesis has given various examples of how ritual gestures contribute to the theological significance and efficacy of the sacraments and how gestures are often used as a constructive metaphor or analogy for thinking about the sacraments. For example, in Chapter 4, the unique relationship between gestures and speech was used as an analogy to understand the relationship between the theological concepts of manifestation and proclamation. The goal of this thesis, however, was not to comprehensively explore the theological implications of the insights of the field of gesture studies. There is, therefore, a lot of work that could be done to better understand the vital role that gestures play in Christian thought and practice. Possible research questions include: What do gestural metaphors tell us about the role of the body in the formation of theological concepts? How do gestural metaphors vary between theologians and across traditions and what insight might that offer on the character of their theology? How might the inclusion of gestures into our understanding of language reframe how theologians think about foundational theological elements like language, words, images, material things, etc.? For example, if Christ is the image of the invisible God (cf. 1 Cor 1) and gestures are the images of our thoughts, is there an analogy to be made between Christ's incarnation and bodily gestures? If the Church is the body of Christ, how does the linguistic capacity of the body influence the way that the Church is understood in relation to Christ? If divine revelation is God's self-communication in the world,

how does the multi-modality of human communication influence how we understand divine revelation? In what ways does God communicate through gestures and images and not just words? How might gestures inform theological traditions like apophatic theology, which highlights our failure to speak of the divine? Can gestures express aspects of the divine that cannot be articulated in words? How might the field of gesture studies inform the way that biblical scholars interpret the gestures and actions of biblical characters? What is the theological capacity of sign language? What advantages might sign languages offer or what problems might they encounter given that theological concepts are often highly word- or text-dependent? How are those in sign language communities already encountering and addressing these issues?

One of the primary aims of this thesis is to build a bridge between the field of gesture studies and the fields of religious studies and theology to provide an opportunity for more interdisciplinary work to be done on the nature and function of ritual gestures. Because gestures are a complicated and multi-faceted phenomenon that can be difficult to study, I have included a guide or heuristic for religious studies scholars to help them better understand and analyze the nature and function of ritual gestures. I have identified six dimensions of ritual gestures that are present to varying degrees in any ritual performance: (1) Relation to the ritual context; (2) Relation to ritual speech and texts; (3) Relation to ritual participants; (4) Relation to the material environment; (5) Gestural mode of representation; (6) Form features. These six dimensions are not rigid or mutually exclusive categories nor will they be equally relevant to every ritual gesture. Similar to the approach taken by most gesture researchers to gesture categorizations, these six dimensions are meant to be a heuristic device to help researchers identify the different

facets and component parts of ritual gestures and not a rigid taxonomy of the different dimensions of ritual gestures.

(1) *Relation to the ritual context*. Ritual context is the dimension that has traditionally been the purview of the field of ritual studies. Ritual context includes the process or stage of the ritual, the authority structures, the local context, and so on. Every ritual gesture finds its meaning in close relation to this ritual context. Clarifying questions to help assess a gesture's relation to its ritual context include: Does the ritual depend on the gesture being performed correctly according to the ritual tradition? How does the gesture contribute to the formation of the participant's subjectivity? Does the gesture affirm (e.g., kneeling) or undermine the ritual authority structures? In what way does the gesture index the ritual tradition, the participant's affective, emotional, or psychological state, or the participant's social status in the local sociocultural context?

(2) *Relation to ritual speech and texts.* Ritual gestures have traditionally been understood to be non-verbal or external accompaniments to ritual speech and texts. However, as this thesis has argued, this understanding does not adequately appreciate the ways that ritual gestures are actually a fundamental *part of* ritual speech and texts. Nevertheless, it is not always clear how exactly ritual gestures can be understood to be part of ritual speech and texts. While any analysis of the relation between ritual gestures and ritual speech and texts must be done on a case-by-case basis, there are four primary ways in which this relation can be analyzed: (i) Conventionally, (ii) Temporally, (iii) Semantically, and (iv) Pragmatically.

Conventionally, ritual gestures can be placed along Kendon's continuum similar to co-speech gestures: with spontaneous gestures that depend on speech at one end and lexicalized signs that do not depend on speech at the other end. In between these two ends are gestures that are variably conventional and variably dependent on speech, such as pantomimes, recurrent gestures, and emblems. Ritual gestures can fall anywhere on the continuum—as spontaneous gesticulations or as lexicalized signs or anywhere in between. Traditionally, ritual gestures have been characterized as emblems or lexicalized signs because they are viewed as formal gestures that can be easily separated from speech or texts as non-verbal actions. As formal gestures, ritual gestures are largely invariant and the individual gesturer is not the author of his or her own actions. However, formality is not always the primary determinant of conventionality. As shown in this thesis, it is possible for highly formal or conventional ritual gestures to function in similar ways to non-conventional or spontaneous gestures in everyday dialogue. Because of this, the vast majority of ritual gestures are likely going to be at least partly conventional and partly variable, in form or meaning or both. A category like recurrent gestures is an especially helpful category for understanding ritual gestures because recurrent gestures are conventional gestures that have a recurring form and meaning and yet they can be spontaneous depending on the manner in which they are performed in a given context. Different types of ritual gestures which could form different recurrent "gesture families" include PUOH gestures, indicating gestures (e.g., directing-to, placing-for, etc.), submissive gestures (e.g., kneeling, bowing, prostration, etc.), object manipulation gestures (e.g., holding,

elevating, eating, etc.), and locomotive gestures (e.g., walking, procession, queueing, etc.), etc.

Temporally, ritual gestures can be analyzed according to whether the gesture is performed in the absence of speech or concurrently with speech. Does the ritual gesture precede or follow the corresponding speech or text? As with many co-speech gestures, many ritual gestures that precede the corresponding speech perform an important preparatory or staging function for speech.

Semantically, ritual gestures can be analyzed according to how they represent the content of ritual speech or text. Ritual gestures can share, supplement, or contradict the content of ritual speech and texts by indicating the referent (see raising the Eucharistic elements, section 4.3), depicting the referent (e.g., the sign of the cross, etc.), or enacting or bringing about the speech act itself as a performative gesture (see the breaking of the Eucharist bread, section 4.4). Metaphorical gestures, for example, regularly supplement the content of speech because they communicate something abstract in a visuospatial modality that is not present in speech or texts (see PUOH gestures, section 4.2).

Pragmatically, ritual gestures can be analyzed according to how they relate to the ritual context and the structure of the ritual dialogue. Does the ritual gesture structure the discourse by marking moments of transition? Is the ritual gesture foregrounded in the discourse in relation to speech (e.g., raising of the Eucharistic elements, section 4.3) or backgrounded? Does the ritual gesture carry a large or small communicative burden in the discourse? Does the ritual gesture interact

with speech as if it were an object that can be held or manipulated (see PUOH gestures, section 4.2)?

(3) *Relation to ritual subjects*. One of the primary functions of ritual gestures is to mediate the dialogue or interaction between ritual subjects. Most ritual dialogues involve three ritual frames that are blended together in the ritual performance: self, present others (e.g., other ritual participants), and non-present others (e.g., God, spirits, deceased, etc.). Ritual gestures can be analyzed according to how they relate to subjects in these different frames. Clarifying questions here are: Is the gesture private or public? Who performs the gesture: an individual or a group? Who is the gesture directed toward? Is the gesture instructive (e.g., musical gestures) or expressive?

(4) *Relation to the material environment.* Rituals are rich multi-modal performances that regularly engage with the material environment. Bodily gestures play an essential role in incorporating the material environment into the structure of the ritual itself. While all ritual gestures are in some way grounded in their material environment, not every ritual gesture uses space or the material environment as a conceptually meaningful part of the ritual performance. Here I have identified five types of ritual gestures that actively *ground* or *anchor* ritual performances in a conceptually meaningful material environment: (i) World-at-hand gestures; (ii) World-within-sight gestures, (iii) Locomotive gestures, (iv) Conduit gestures, (v) and Up-down gestures.

(i) World-at-hand gestures are the first of Jürgen Streeck's gesture ecologies.[835] World-at-hand gestures are gestures that actively engaged with the material world that is within the reach of the gesturer. World-at-hand gestures can direct attention to or disclose features of the material world by heightening a person's sensory experience of the material world. Examples of world-at-hand ritual gestures include eating or drinking, touching, grasping/holding, object manipulation (i.e., preparation of ritual elements), elevating objects, immersion in water, etc.

(ii) World-within-sight gestures are Jürgen Streeck's second gesture ecology.[836] World-within-sight gestures are indicating gestures that direct people's attention to something of interest in the material world that is beyond the reach of a person's hands. Directing-to pointing gestures are the prototypical world-within-sight gesture. These gestures can be concrete (they point to something present in the immediate environment) or abstract (they point to an empty space in the immediate environment to refer to a concept or person).

(iii) Locomotive gestures are whole body movements that move someone from one place to another in the ritual space. Examples of locomotive gestures in ritual settings include walking, queuing, processions, etc.

(iv) Conduit gestures are gestures that use the space around ritual participants as a "conduit" to facilitate the dialogue or social interaction between ritual subjects. The conduit can exist between present ritual subjects and present and

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[835] Streeck, *Gesturecraft*, 8.
[836] Streeck, 8–9.

non-present ritual subjects. Common examples of conduit gestures include palm up open hand (PUOH) gestures, orans gesture, palm away gestures, etc.

(v) Up-down gestures are gestures that are oriented around the up-down vertical axis in the ritual space. Up-down gestures regularly represent or enact the metaphorical dimensions of ritual authority structures inherent in many ritual practices (e.g., those in authority are conceptualized as being high or upwards and those without authority as being low or lowly). Examples of up-down ritual gestures include kneeling, bowing, prostration, etc.

(5) *Gestural mode of representation.* As visual, spatial, and kinesic bodily actions, gestures are inescapably tied to a person's bodily experience of the physical world. As a consequence, the communicative capacity of a gesture is constrained by its form and its form is inescapably part of its meaning—the form of a gesture cannot be separated from its referent. Identifying the gestural mode of representation attempts to answer two basic questions: What does a gesture represent? And how does a gesture represent that thing? What exactly a ritual gesture represents must be analyzed in close connection to speech or texts, other subjects, and the material environment because it can be difficult or impossible to decipher what a gesture represents in isolation from these ritual elements. There are three basic categories of things that a gesture can represent: an entity (i.e., a person or object), an action (i.e., a bodily movement), or an abstract idea. A gesture can be a representation of one of these categories by function as a physical analog (i.e., an iconic depiction of a physical entity or a virtual or simulated depiction of an action). Gestures which represent something more than or other

than its physical analog are metaphoric (e.g., when a gestural depiction of a physical object is used to represent an abstract idea). The meaning or referent of a metaphoric gesture goes beyond its physical analog but its gestural form remains inescapably tied to its physical analog.

An analysis of gestural modes of representation requires the researcher to ask questions like: How does the gesture emerge from our bodily experience of the world? What is the relationship between the form of the gesture and what it represents? What is the source or original of the gestural form? What is the physical analog of the gesture? What particular aspect of a gesture's form represents the particular aspect of its analog and/or referent? For analyzing purposes, I suggest that researchers follow Virginia Volterra et al.'s four strategies of sign language or gestural representation because it appreciates gestures as whole-body and multi-modal phenomena and not just hand gestures: (1) Own-body or enactment; (2) hand as hand; (3) hand as object; (4) and shape and size.[837] Own-body or enactment and hand as hand modes of representation are used to mime or re-enact instrumental actions. Within this mode, gestures can also be analyzed according to their quality as a manifesting action (i.e., according to their level of embellishment, exaggeration, conspicuousness of an instrumental action). Additionally, researchers should also consider the viewpoint from which the gesture is performed: Character viewpoint (first-person) or observer (third person) viewpoint.[838]

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[837] Volterra et al., *Italian Sign Language from a Cognitive and Socio-Semiotic Perspective*, 21–22.
[838] McNeill, *Gesture and Thought*, 34.

(6) *Form features*. As noted in (5) *Gestural mode of representation*, the representational capacity of a gesture depends on its form as a bodily movement. The four basic form features of gesture and sign language research include: handshape, orientation, location, movement. To adequately analyze the form features of ritual gestures, I suggest that handshape should be broadened to "body part" to better account for whole-body and non-manual ritual gestures.

Body part can include any part of the body such as the hands, head, face, shoulders, whole-body, etc. Relevant features of the hands include the choice and number of fingers, the position of the fingers, the interaction of the fingers with each other and thumb and palm of the hand, etc. Relevant features of the face include the part of the face (eyebrows, eyes, nose, cheeks, mouth action, opening of the jaw, etc.) that performs the communicative action. Eyes, for example, can have a variety of forms including open, wide open, half-open, closed, shut tight, batting eyelashes, etc. Whole-body gestures include dynamic movements such as walking or bowing as well as static bodily postures that can be held for extended periods of time such as sitting, standing, kneeling, etc.

Orientation refers to the position of a body part relative to the speaker and their environment. Orientation aligns with directional axes such as up-down, away-toward, front-back, and left-right. For example, the palm of the hands can be orientated up or down, away from or toward the gesturer, perpendicular or parallel to the floor, etc.

Location is the position of gesture relative to the gesturer's torso or their "gesture space,"[839] the space wherein the arms move which is approximately from the gesturer's waist to above their head and laterally left and right. A gesture can be located in the from the center to the periphery, to left or right, high or low, and near or far.

Movement is the most complex category of gesture form features. Volterra et al. identify seven movement categories for sign languages which are also applicable to gesture movement:[840] Type (straight, curved, circular, axial, zigzag, etc.), direction (straight, diagonal, clockwise and counterclockwise movement of the wrist, of the knuckles, of the fingers), contact (touching, grasping, hitting, brushing against, rubbing), interaction (hand-hand or hand-body interactions: simultaneous, alternating, consecutive, etc.), speed (slow, relaxed, tense, rapid), amplitude (narrow, neutral, larger, larger), and reiteration (from none to an indefinite number of repetitions).

It is hopefully evident from this thesis that ritual gestures are no trivial or straightforward phenomenon—they are rich multi-modal communicative actions that contribute to the structure and content of the ritual performances in a ways that words cannot. Ritual gestures have the capacity to depict ideas, mediate ritual interactions, incorporate the material environment into the ritual, enact the unseen realities of the ritual, and more. In the Roman Catholic tradition, ritual gestures are a fundamental part of the structure and content of the sacramental dialogue which cannot be adequately understood apart from words as non-verbal accompaniments or in terms of

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[839] McNeill, *Hand and Mind*, 89.
[840] Volterra et al., *Italian Sign Language from a Cognitive and Socio-Semiotic Perspective*, 71–72.

words as symbols. My hope is that this thesis can help researchers in both religious studies and gesture studies understand the complexity and heterogeneity of ritual gestures so that they may give more attention to the role that gestures play in religious thought and practice.

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