

Architectural Sketch: A Media[tion] of Dialogue

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This paper purports that all architects, in some way, depend upon the mediation of ambiguity that architectural sketches provide. The quick images made from the hand assist in design development, detailing and especially the flexible response that exhibits inspiration. This discussion will specifically disclose architectural sketches as a media and medium that encourages dialogue.

Architectural sketches epitomize the moment and the medium of the transitory process of design. As first concepts in the process they provide architects with quick thoughts that manifest themselves in brief, unfinished and ambiguous images. They are the half formed, vague allusions that imply possibilities. Because they are constantly changeable, sketches represent the ability of architects to loose themselves in the search for ideas and form. Additionally utilized throughout design for detailing, evaluating and design development, these mediating qualities assist architects in translating and utilizing their images in processes containing aspects of analogy, metaphor and association. As we know definitions are never static, the sketch in a "transtextual" mode conveys concepts through the medium of interpretation. Thus, sketches constitute the intermediary substance that both allows for the process of change, and expresses the concept that anything is possible. This discussion concentrates on the qualities of sketches that exhibit mediation, emphasizing a connecting link of design that will clarify a process essential to architectural imaging.

To "mediate" refers to the occupation of a middle position. It is also interposed between the extremes in order of time, place or rank. Mostly, the word "mediate" questions the instrumental and exhibits indirect causation, connection or relation.¹ The sketch as utilized by architects, acts in a comparative fashion. The middle position is one of ambiguity where the design is under consideration. It is susceptible to change and as part of a process, the "medium" contains the substance and is the material. This is both the technique and physical quality of the sketch (media), and the "medium" that evokes concepts of the magical. Additionally the sketch is an interval of dialogue where definition is elusive and design is in flux (mediation). This discussion is then twofold, first, sketches mediate between conceptual ideas and the process of design as a tool for thinking. Second, sketches are a medium (substance) within which architects play with concepts. The media is a non-committing substance to explore ideas.

An explanation of why the architectural sketch is a poignant example of mediation in design, begins with a definition of "sketch." The graphic media of sketches consists of a two-dimensional visual collection of marks that can be manipulated. Since they are easily transformable images, they play a major role in architectural thinking; they form and deform architectural ideas. Their representational qualities disclose their tangible and intangible aspects, making them fundamental in any process of design. A sketch constitutes a brief description or outline, "to give the essential facts or points of,

without going into details." Such a sketch can also be a two-dimensional or three-dimensional action documenting primary features of something or "as preliminary or preparatory to further development." For architects, sketches may or may not be quick in terms of time, or necessarily lacking in detail. Their value lies in the process, the manipulation for thinking.

A "dialogue" is a conversation, and exchange of ideas and opinions, a serious colloquy conducted or presented to entertain, or instruct. The learning aspect of this definition is similar to play, since it involves a "give and take" of presentation and evaluation. This play requires a challenge to stretch against and can be a logical interaction to find a sought-after conclusion.⁴ Although sketches may contain many conventions of architectural communication, they cannot always be "read" for universal meaning.⁵ While as a personal dialogue, sketches can be attractive, their beauty is not a question, it is not necessary that they be comprehended by anyone except the architect. As artistic or architectural representations, it does not matter how they look; their importance lies in how architects' use them. Their abilities to facilitate discovery, communication, recording, evaluation and interpretation stem from their relationship to architects' design activity.

Architects depend upon sketches as mediating dialogue for conceptual design to discover or to attain knowledge, to accompany brainstorming and to find allusions or associations. The sketch becomes the mode that communicates concepts to others in an office, and also helps express emotional or poetic concepts in a personal dialogue. Here the sketch plays a communicative role beyond that of a mere messenger. Architects use sketches to record; they can be used to record likenesses, or a momentary impression. They may be a travel companion to aid visual recollection or to register an emotion or thought. In another way, architects often employ sketches to visually test abstract conceptual forms. Sketches may be used to "try something out for fit," as a type of evaluation. Similarly, the sketch could help to conclude the formation of a mental image. These functional categories of the sketch depend on the way architects manipulate them, and assist in the interpretation of what is drawn. Louis I. Kahn discusses a relationship of images that promote understanding with reference to the sculptor Rodin.

The drawings this great sculptor [Rodin] made took form with his eye on the final results in stone. Although working with seemingly sloppy washes and careless lines, he was always thinking in terms of his chisel and hammer. They are great drawings because they embody the hidden potentialities of his medium. They are the true visions of a creator. A biographer of Rodin explained that his drawing betrayed the divine impatience of the artist who fears that a fleeting impression may escape him.⁶

Although the end product was meant to be three-dimensional, Rodin worked two-dimensionally, thinking about stone. Similarly, the sketched images became the medium of dialogue for exploration.

Architects must comprehend their relationship to the substitute media they employ for design.⁷ Sketches, as a medium of design, encourage architects to visualize. This may relate to construction; for example, Renaissance artist and architect, Leonardo Da Vinci and contemporary architect, Santiago Calatrava both studied assembly through their sketches. With the substitute media they studied how elements join and form sequences of assembly. This sketch by Calatrava reveals the process of constructing a canopy. The diagonal diagram is a simple outline to visually explain a process difficult to define verbally. This image can be seen as a sketch, in a broad definition, since it is both an outline and shows only essential issues. The image is part of a process, a diagrammatic explanation.

As another technique, some architects draw and redraw in a frenzy of manipulation to match an image in their mind's eye, another form of substitute media. Erich Mendelsohn sketched many alternatives, some altered only slightly, to find a desired form. Because of the expense of construction, architects utilize alternate media to persuade their clients. This may encourage interaction and participation in another form of dialogue. The substitute media helps explore ideas, and when utilized with client participation promotes the role of architect as *divino artista*.⁸ Additionally, architects draw to see and subsequently understand, whether it is an observation of perceptual stimulus or from a mental impression conjured up by imagination. The substitute media facilitates the "figuring out." This understanding is expressed by Richard Wollheim when he writes: "[T]o see a drawing as a representation of something is no longer to take it, or to be disposed to take it, for that thing: it is rather to understand that thing by it."⁹ Carlo Scarpa expresses this concept well: "I want to see things, that's all I really trust. I want to see, and that's why I draw. I can see an image only if I draw it."¹⁰ In this way, the substitute media assists architects to visualize the tangible and the intangible aspects of their architecture. The flexible alteration of a substitute media is a distinct strength of sketches. The ability to view more is accomplished through the mediating substance of sketches.

CHANGE AS THE SUBSTANCE OF THE MEDIATING MEDIA

An important aspect of architectural sketches lies in their ability to encourage visual thinking through the act of alteration. A sketch contains the immediacy that allows change, usually existing on inexpensive paper and taking little time to produce, the sketch as a private dialogue promotes transition with minimal investment. The efficient alteration can be expressed in an adjusted detail or beginning conceptual outlines. This relates architectural sketches to broader concepts of "draft." For example a literary draft is an unfinished often basic outline. As "draw" and "draft" have the same root in *dragan* it is possible to view a similarity as a sketch encourages ideas to be drawn out, or pulled (from our imaginations or psyche?).¹¹ Here the draft instigates the change, the process of testing seen concepts. The architect perceives a line and responds with another. Many psychologists and philosophers believe it is reasonable to suppose that humans think in terms of images. Conversely, but consistent with theories of visual perception, there cannot be vision without the cognitive action of thought.¹² Change is not necessarily equated with progress, whether the image gets "better" is not at issue. It is rather a thinking process involving evaluation, where seeing constitutes thinking. As with the grotesque, sketches mediate in the half-formed, and the paradoxical.¹³ This interval of incompleteness inspires association and the act of imaging an idea initiates another.¹⁴ This response of mental impression might be related to the architect's current thinking or be a completely contrary idea. The draft, as a mediating medium, excels in the ambiguous material of a sketch.

It is through dialogue that architects employ images to both visualize and comprehend their concepts. Some scholars who write about perception, such as Rudolph Arnheim, believe the configuration seen on the retina in our eyes is an inverted image. Others such as James J. Gibson disagree with this assessment and believe we see a field of patterns, which he calls a sensory mosaic.¹⁵ This mosaic is an abstract pattern that is then translated by our brains as a form of interpretation. This theory would explain how easy it is to be fooled by optical illusion or *trompe l'oeil*. The ability of the brain to translate is crucial to our perception capabilities and additionally to how we comprehend our new or ambiguous items. When speaking only of perception, we cannot see an image as both confused and as a clear understandable "thing." Gibson expresses this concept well when he writes about visual perception and not symbolism: "... a picture cannot at the same time possess high fidelity for something concrete and high univocality for something abstract."¹⁶ Interpreting the mosaic can be compared to architectural sketches as architects translate and utilize what they draw. Thus, the dialogue of ambiguous images requires change as they become more defined, in a process that moves from concept to completed building.

There are many techniques of sketching that reveal the nature of change for architects. For example, this page of sketches by Reima Pietila shows many nervous lines overlapping each other. The lines represent a "making and matching" process by Pietila as he draws and slightly alters the arc of the line until he feels comfortable with it.¹⁷ In fine arts a similar process of *pentimenti*, or *pentimento*, from "repentance" speaks about an obliterated painting subsequently revealed by reason of the overpaintings becoming transparent. This usually refers to a characteristic of linseed oil since its refractive index increases with age. Additionally this term refers to altering an image, or the "second thoughts" of the artist; an original versus a copy.¹⁸ Pietila may also be redrawing the line several times to allow time to think though the choice of the arc. The lines, almost parallel and certainly overlapping, reinforce his decision making and the comparison to the image in his mind's eye. We also view the variations of the connections at the bottom left hand corner. The adjacent sketches show two iterations for a detail, that question the alternatives for consideration. The sketches overlap possibly revealing the furor, and speed of thought, of his designing. Another example of this technique of change; can be seen in this sketch by Carlos Jimenez. The sketch contains many views of a project in a conceptual stage. The page has surprisingly simple sketches of the different views necessary to "understand" the concept or building. We view an axonometric, an elevation and several sections helping the architect to see the design from many angles. This could assist in viewing the image for evaluation and consistency. The minimal lines also contain such simplicity and vagueness to allow him to project conclusions onto the images.

A sketch by Thom Mayne of Morphosis reveals a simplicity expressive of the abstraction evident in first sketches. The sparse shape seems to convey the most pertinent information necessary to interact with the project. Almost representing a "parti" the diagram expresses an idea that became the impetus for the project. Here the image is so simple its possibility for change may encourage the architect to project his thoughts onto it. Rather than an illusion giving too much information, the sketch is an allusion allowing them to intercede with its suggestions. The ambiguity portrays the mediating medium where the images construct dialogue. A too developed image might stop the interaction so necessary at this juncture of the design process. Its "quickness" also reveals a wit and intelligence, finding a distilled essence of the idea.¹⁹ The time investment in the image is so low the sketch may be altered at any point. Dialogue can be a form of play, especially encouraging architects' interaction. Additionally, the sketch loses its value after the action of the play.²⁰ What is discovered in the thinking process does not need to be discovered again. The sketch, has in fact, helped reveal an idea and then the idea can be carried through some other mode to the rest of

the design. Thus, the ambiguity, reflecting its ability to change, is the value of the sketch for the design process.

THE MEDIUM THAT ENCOURAGES DIALOGUE

As the ability to quickly change epitomizes the transitory medium of the sketch, it also encourages creativity. This involves concepts of transformation where the ability to convert images from imagination forms new constructs. This entails taking things seen and translating them into useable concepts. Architects using sketches for conceptual inspiration will often draw what they know in an attempt to, through associations, find a new combination. In this way, imagination finds a certain shape or form to find an order out of chaos." As an example of how the mind can form connections Leonardo Da Vinci suggested that one good method of inspiration was to observe stains on rocks.²⁷ He felt there were multiple images in these stains which could provide stimulation for various compositions and scenes. Every child has experienced lying on the grass and finding animals in the shapes of clouds. Similarly Hubert Damisch has devoted a whole book to the theory of clouds.²³ He uses examples from painting to discuss semiotic issues, one concept seems relevant when discussing imagination comes from this study. He likens the vagueness of the cloud to infinity and consequently, the cloud then could be anything; it has endless possibilities. "[A] similar thought in connection with another group of chance configurations - clouds: 'The mind's own power to shape now boldly wakes, as definite from indefinite it makes'."²⁴ Here it is possible to comprehend the connection of images transformed again, in a creative act of association; these images are arbitrarily formed, later to be deciphered and translated. Projections onto a vague image lead into a more specific (named) image. Even though these sketches may not be completely arbitrary, architects can sort through the abstraction and project onto the images. Maurice Merleau-Ponty recognizes how images and 'lines' help architects to "see." "[T]he line no longer imitates the visible; it 'renders visible'; it is the blueprint of a genesis of things."²⁵ These vague images, in fact, might be preferable to a drawn illusion to spark imagination.

There is no value in trying to imitate exactly. Photographs will serve you best of all, if that is your aim. We should not imitate when our intention is to create-to improvise... The capacity to see comes from persistently analyzing our reactions to what we look at, and their significance as far as we are concerned. The more one looks, the more one will come to see.²⁶

The act of translation is part of the quest for form. Although ambiguity encourages translation and transformation of images, it is judgment on the part of architects that makes the application of editing possible. This process brings formality and closure to the imaginative sketches. Evaluating the images constitutes a decision process, as the forms become architecture. This decision process involves the manipulation for "seeing-as" and representational projection." Again, this evokes concepts of how architects employ the magical substance of change in their substitute media. Seeing something as something else requires skills of transference. This medium of transference also conjures up the "never before seen" aspects of imagination. The transformation is easily accomplished in the uncertain medium of the sketch, this allows architects to think creatively and consider the numerous possibilities.

THE MEDIUM/MEDIATION OF "PURE POSSIBILITY"

The ability to produce the unseen is a faculty of the imagination that considers everything possible. "Pure Possibility" is a term used by Edward Casey to explain a function of the imagination. Casey

describes pure possibility: "... the 'purity' of imaginative possibilities lies precisely in their independence of the mutually exclusive alternatives of reality and unreality."²⁸ This aspect of imagination makes anything hypothetical and all things possible. Not every act of imagining provides such a unique outlet, but here it is feasible to comprehend the creative imagination.²⁹ It may be compared to brainstorming where everything imagined can be seen as possible. He feels humans cannot imagine anything completely new.³⁰ Instead we imagine things we know in new combinations, which is consistent with the associative mind. He also questions how new concepts and inspirations are brought to the front of our minds as mental impressions." With sketches, we can view the conscious and subconscious mind at work as the associative abilities of architect's imaginations allow all things to be considered. In a beginning design stage, epitomized by sketches, it is necessary for the architect's mind to wander and to view the many alternatives is necessary. In some cases, architects avoid intention and scribble in a method of "automatic writing." This technique enhances the evaluation process, where the abstract lines need to be deciphered for use." Pure possibility is similar but instead allows an architect's mind to defer evaluation until many possibilities are considered. Looking to some architectural sketches as examples it is possible to view aspects of pure possibility and the translation of ambiguity, encouraging mediation, that sketches contain.

At this point, it is important to illustrate the arguments for these issues of mediation in examples of architects' sketches. This sketch by Raimund Abraham represents an abstract image, one that conveys the concept of the project. The sketch is not definitive in the sense of "realism" but rather exploratory.³³ It is not necessary to decipher this sketch, it is an idea of form, and its functions come with more development. The sketch displays not only a perspective but seems to be combined with sections and transparency. Its simplicity of lines give it diagrammatic qualities. As a vague and diagrammatic image it requires translation. As an ambiguous element it speaks not about a building but instead the possibilities of a building as it evokes associations.

A sketch from the office of Coop Himmelblau, Wolf D. Prix and Helmut Swiczinsky, shows an ambiguous group of images. This page seems to be an impression for a building (Skyline Project, Hamburg). Again it is possible to view a drawing where the "type" of graphic projection is indeterminate. The sketch conveys concept; it is unnecessary to define its type. The sketch does not resemble "automatic writing," although vague it speaks of intention and possibilities. It lacks dimensions and the proportional qualities are vague, unnecessary in a "poetic" sketch.³⁴

The next sketch, a page of images by Mack Scogin, for the Buckhead Library reveals a method of evaluation. The simple stark images provide enough clarity for him to test their suitability for further study. The number of sketches suggests numerous variations. The plans and elevations are virtually indistinguishable in technique, they are only differentiated by a ground line. As other architects identify the most successful image by circling it, Scogin continues to rework the sketches, moving from one idea to another." Some of the sketches seem less complete as if they were rejected for another image as soon as he could "read" the concept extracted from them. He was making and remaking dependent upon a vision in his mind's eye or a solution that reflected the requirements of the program. His was a quest for form possibly anticipating the sketch that would translate best in the next stage of design development. Although the images are simple and vague he is projecting a future onto them so he can evaluate their effectiveness. This testing constitutes a searching for the potential in the forms, when he loses interest he abandons the play for another sketch. Again Scogin sketches different views, to provide himself with a full impression of the project. These images convey a momentary slice (medium) of his thought process.

CONCLUSIONS

In conclusion, although we may never know exactly what any of these architects are thinking, we can speculate about their intentions by inspecting the "traces of their hands" that are the marks they leave on paper.³⁶ If they are sketching and do so regularly, they are finding a service in the dialogue of images. The sketches are a recording device for thoughts and a medium to work through or mediate concepts. As unfinished, "temporary" texts they are the "intermediate stages of creation."³⁷ These half formed, in-process substances have resemblance to the transient text. "The rough draft is an essential link in the chain of transformations that have led from the project of the work to its definitive text..."³⁸ The draft in its state of incompleteness, always leaves openings for change. It allows the ability to take an alternate direction or finding inspiration from associations.

The intervening medium of the sketch perpetuates change. Architects require their images to remain as flexible as possible, for as long as possible, to allow for unforeseen circumstances, and to encourage the serendipitous "accidents" inherent in the process. Sketches with little investment of time or money, allow the inspiration, "freshness" if you will, to permeate the design. Illusionary images, the false image in contrast to allusion, provide an illustration of the finished work, but do not promote the changes necessary to evaluate the design. In fact, the illusion discourages movement, as psychologists explain that the longer we view an object the more we "like" it. This may be a conflict for architects, as most projects depend upon evolution. A sketch through its ability to provoke dialogue, is the intermediary that ties beginning to end, and can act in a manner reconciling divergent elements.

The sketch, being between two extremes may constitute the vague, that is neither one thing nor another. This vagueness propagates possibilities, and the sketch becomes the medium of thinking. The medium, substance of flux, contains very few boundaries. These limits are prescribed by the architect in a mode of design. The demarcation can be composed of program, form or concept; the fluidity evokes association or translation. Architecture requires possibilities to keep from being a tautological exercise. Recognizing the position of the architectural sketch in advancing possibilities finds its value in the medium that conveys the ambiguity necessary for interpretation.

The richness of this media/medium is the flux or the "magical substance" allowing the movement of thinking. Through this substance of mediation architects can better view their poignant imaginations and possibly understand more about architecture.

NOTES

- ¹ *The Compact Edition of the Oxford English Dictionary* (Oxford, London, Glasgow: Oxford University Press, 1985), p. 1758.
- ² *Ibid.*, p. 2846.
- ³ *Ibid.*
- ⁴ *Ibid.*
- ⁵ Many authors on art theory and the philosophy of art agree that sketching is not "artistic shorthand." Richard Wollheim specifically explains why art is not like language. *Art and Its Objects* (New York and Evanston: Harper and Row, 1971), pp. 113-117. This issue is also discussed by Robin Evans, "Translation from Drawing to Building," *AA Files*, Number 12, (Summer 1986):3-4.
- ⁶ Louis I. Kahn, *Writings, Lectures, Interviews*, edited by Alessandra Latour, (New York: Rizzoli, 1991), p. 11.
- ⁷ James J. Gibson, *Reasons for Realism; Selected Essays of James J. Gibson*, edited by Edward Reed and Rebecca Jones. (New Jersey: Lawrence Erlbaum Associates, 1982), p. 242.
- ⁸ Ernst Kris and Otto Kurz, *Legend, Myth, and Magic in the Image of the Artist* (New Haven, and London: Yale University Press, 1979). Kris and Kurz write about the image of the artist as

perceived by lay people through history.

- ⁹ Richard Wollheim, *On Art and the Mind* (Cambridge and London: Harvard University Press, 1974), p. 24.
- ¹⁰ Francesco Dal Co, Giuseppe Mazzariol, *Carlo Scarpa, The Complete Works* (New York: Electa/Rizzoli, 1984), p. 242.
- ¹¹ Walter W. Skeat, *The Concise Dictionary of English Etymology* (Hertfordshire: Wordsworth Editions, 1993), 124.
- ¹² Gibson, op. cit., Gibson is in good company; many other writers and philosophers agree that we can think in terms of images. As examples see (to name a diverse few); Aristotle (*De Memoria*, 449b31) and Italo Calvino, *Six Memos for the Next Millennium* (Cambridge: Harvard University Press, 1988), p. 92.
- ¹³ Aspects of the grotesque: intermediary qualities, the known and the unknown, ambiguous, fragmented, multiple interpretations, transition, paradox, metamorphosis and rebirth. See Geoffrey Galt Harpham, *On the Grotesque; Strategies of Contradiction In Art and Literature* (Princeton: Princeton University Press, 1982), Frances K. Barasch, *The Grotesque; a Study in Meanings* (The Hague: Mouton and Co. Publishers, 1971), Wolfgang Johannes Kayser, *The Grotesque in Art and Literature*, translated by Ulrich Weisstein (Gloucester: Indiana University Press, 1963): and, Mikhail Bakhtin, *Rabelais and His World* (Cambridge and London: The MIT Press, 1968).
- ¹⁴ The path of association is continuous, as everything can be reminiscent of something else. Casey, Edward S. *Remembering; A Phenomenological Study* (Bloomington/Indianapolis: Indiana University Press, 1987), p. 101.
- ¹⁵ Gibson, op. cit., p. 261.
- ¹⁶ Gibson, op. cit., p. 248.
- ¹⁷ E.H. Gombrich, *Art and Illusion* (Princeton: Princeton University Press, 1984), p. 29.
- ¹⁸ Fine Art Technique
- ¹⁹ Calvino, op. cit.
- ²⁰ Play involves absorption in the activity, give and take and boundaries. See James S. Hans, *The Play of the World* (Amherst: University of Massachusetts Press, 1981); Gregory Bateson, *Steps to an Ecology of Mind* (Northvale and London: Jason Aronson, Inc., 1972); Hans-Georg Gadamer, *Truth and Method* (New York: Crossroad, 1989); Johann Huizinga, *Homo Ludens, A Study of the Play Element in Culture* (Boston: Beacon Press, 1955); and, Roger Caillois, *Man, Play and Games* (New York: The Free Press, A Division of MacMillan Publishing Co., Inc., 1961).
- ²¹ The mind is always looking for order and tries to find logic in what it sees.
- ²² David Summers, *Michelangelo and the Language of Art* (Princeton: Princeton University Press, 1981), p. 122.
- ²³ Hubert Darnisch, *Theorie Du Nuagel, Pour une Histoire de la Peinture* (Paris: Editions Du Seuil, 1972), pp. 277-311.
- ²⁴ *Ibid.*
- ²⁵ Maurice Merleau-Ponty, *Primacy of Perception* (Northwestern University Press, 1964), p. 183.
- ²⁶ Kahn, op. cit., p. 11.
- ²⁷ Wollheim, *On Art and the Mind*, op. cit., 22. Wollheim uses the term "seeing-as" to express representational seeing.
- ²⁸ Casey, *Imagining*, op. cit., p. 113.
- ²⁹ Casey, *Imagining*, op. cit., p. 183.
- ³⁰ We can imagine an unicorn, because we can imagine both a horse and a horn.
- ³¹ "Mental Impression": the image viewed on the imaginative mind.
- ³² See the work of Expressionist architect Hermann Finsterlin. He sketches abstract forms that look to be scribbles that he later deciphers to be architectural forms.
- ³³ Philosophers have long debated what is real and how to prove what is real.
- ³⁴ A poetic sketch is generally referred to as one that expresses

emotions rather than information.

³⁵ Erich Mendelsohn uses this technique to indicate a choice of image.

³⁶ "If he [the architect] has not set down his purpose in writing and his age has left no substantial body of theoretical writing or criticism to help us gauge his intent, we must follow the traces of his hand preserved in those drawings that are records of his mind

and spirit." James Smith-Pierce, "Architectural Drawing and the Intent of the Architect," *Art Journal* 27, (Fall 1967):59.

³⁷ Michel Contat, Denis Hollier and Jaques Neefs, Editor's Preface, *Yale French Studies*, Drafts, " 89:4.

³⁸ *Yale French Studies*, op. cit., 27 Pierre-Marc De Biasi, "What is a Literary Draft? Toward a Functional Typology of Genetic Documentation."