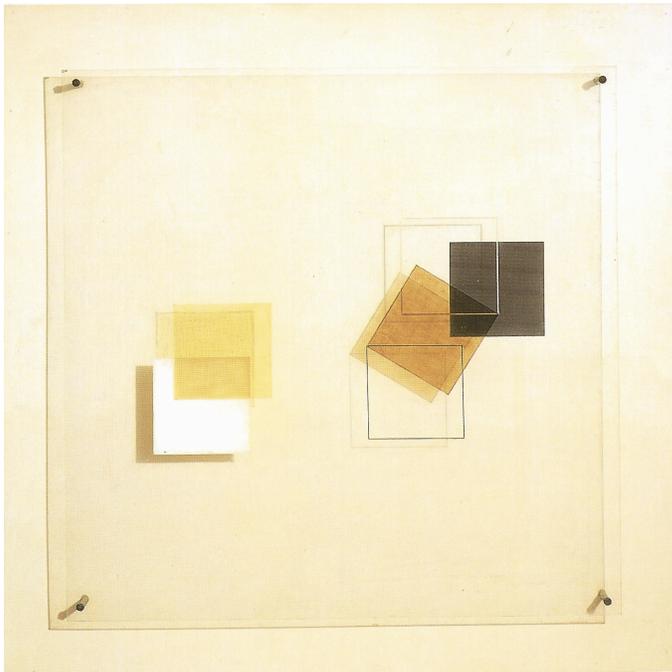


Soto and You

Sarah K. Rich

Consider a work like Jesús Rafael Soto's *Cube Composition: Metamorphosis of a Cube* (1955), a work of transparent Plexiglas suspended over wooden panel at a distance of about eleven centimeters. Made in Paris during one of the artist's most productive and innovative phases, it is an early example of the vitrine-like tableaux for which Soto would become famous.



Jesús Rafael Soto

Metamorphosis of a Cube

1955

Paint on Plexiglas and Wood

Search the object for the cube mentioned in the title, and you will find that it has indeed been changed, its six sides detached from one another and each rotated to face the viewer. The remaining squares' respective colors encourage you to deduce where each of the sides had been when still part of the cube and illuminated by a single light source:

A bright white square seems to have been the plane that was lit directly (we'll call it the front), the tan and transparent planes suggest those middle-tone surfaces that had been perpendicular to the white square at the front, and the black square still seems to retain the shadow in which it had been plunged while at the back of the cube (that plane is still at the back, in a sense, as it is painted on the board, while the other squares all float above it on the Plexiglas). When light penetrates the Plexiglas and casts shadows from the squares onto the board at the back, new cubes emerge. As long as the light source hits each painted square at an angle that is different from your perspective on that plane, the illusion of a cube will be produced by each square's shadow, which will fall somewhere to the side. If, however, you move to the spot where the angle of the light source is the same as the angle of your gaze, the shadow will be hidden from you, and the cube will appear to be a square.

Certainly we might say (and many are prone to say) that this work, like so many by Soto, is about the viewer, and even makes her aware of her behavior *as* a viewer, though the manner in which Soto's objects accomplish this self-awareness (and the full character of the self-awareness achieved) remains vague. Ariel Jiménez, in his interviews with the artist published in 2005, suggested to Soto that in his work, "...the artist's problem is not to express the emotions he feels in the creative work or in a specific experience, but to produce them in the spectator, or even better, to awaken reflection in the spectator."ⁱ Soto did not correct his interlocutor--but neither, unfortunately, did he elaborate.

So we turn to the object for guidance. In front of a work like *Metamorphosis of a Cube*, the viewer must become aware, to a certain extent, of her own contingency as a viewing subject. While choosing viewing positions that are at an angle from the light

source (while trying to make the shadow-cubes appear, in other words), the viewer becomes aware that there are other vantage points onto the object (for what is that projection of light onto the work but a manifestation of the Gaze), thus the object confirms for the viewer the plurality of subjectivities and views that run in excess of her own. The piece also interweaves two temporalities, both of which rely upon the viewer for their operation. First, through its title and form, *Metamorphosis of a Cube* pictures a sort of narrative time, in that it invites the onlooker to do the work of imagining what the cube once was (with all its planes connected) and what it has changed into. Second, while the cube in its earlier, pre-metamorphosed state (which is to say, in the virtual representation in which we imagine it previously existed) would not have registered the viewer's movement, there are now six cast-shadow cubes that seem to grow and decrease according to the real spatial and temporal conditions of the viewer's behavior in the present. So the work gathers a number of features, virtual and literal, spatial and temporal, not only to awaken the viewer to her perceptual experiences, but also to provoke her into examining, even analyzing the processes by which new perceptual experiences arise.

Soto was in good company if he made work that was meant to, in Jiminez's terms, "awaken reflection," if by such a phrase we can suppose that his work was to produce not just a consciousness of the artwork but a greater and better self-consciousness through the artwork. In the late forties and early fifties Barnett Newman similarly hoped to encourage a viewer's self-consciousness through painting, primarily through techniques of sensitizing the viewer to his phenomenological situation. Famously asserting that his work should facilitate a viewer's realization that "Man is present," Newman produced canvases that, through plays with vertical symmetry, encouraged viewers to reconsider

their embodied vision in relationship to the very verticality and symmetry upon which human perception arguably depends.ⁱⁱ Years later Robert Morris would attempt to throw the artistic event back onto the viewer's perceptual apparatus through sculptural dynamics of reduction. According to Morris, his work promoted self-awareness through a combination of an object's Gestalt (the simple, unified form) and the viewer's kinesis:

“For it is the viewer who changes the shape [of the sculpture] constantly by his change in position relative to the work. Oddly, it is the strength of the constant, known shape, the gestalt, that allows this awareness to become so much more emphatic in these works than in the previous sculpture.”ⁱⁱⁱ

Like these artists, Soto produced an art that one saw, but also an art that one saw-one-self-seeing. But while his work, like those of the above artists and many others of the twentieth century, is clearly connected to the concerns of phenomenology, it is also, I think, connected to problems of epistemology. As Soto said, “I consider Art with a capital A (and I use the term unashamedly) not as a way of speculating about beauty, but above all as a form of knowledge, a kind of sensitive thought embedded in the general context of a culture that it directly helps to create.”^{iv}

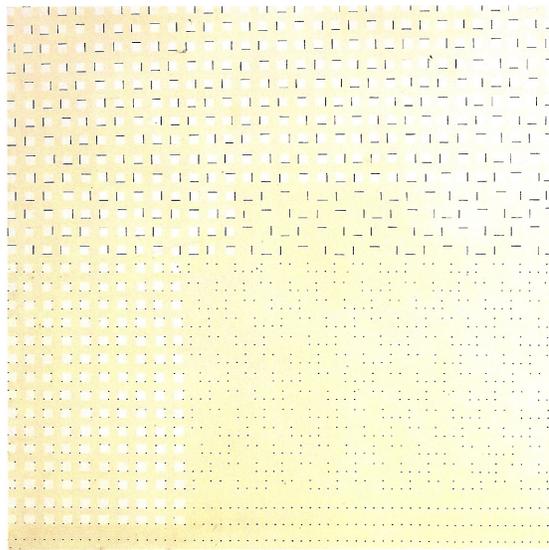
For Soto, the lesson of the art object deals with the issue of what we know, and even, I would argue, with our relationship to the very nature of “things known.” Such a distinction would have been ratified for Soto in his readings of Gaston Bachelard, whose book *New Scientific Spirit* Soto credited as crucial to his artistic development.^v Bachelard's studies, particularly those from the early decades of his career, characterized scientific knowledge as something that is subject to a historical development.^{vi} Drawing examples from scientific theory of the early twentieth century, such as those of Einstein and

Heisenberg, Bachelard described scientific knowledge not as a timeless accumulation of truths, but rather as a temporal progression in which new truths build upon the past accumulation of truths that are, paradoxically, then considered defunct. As a consequence, scientific law should be considered a mutable thing, a progress of thought. And even more important than knowledge in its current state is the shift in knowledge, the event of knowledge's changing, as well as the consequent awareness that knowledge is an historical thing: "This is where the dynamic history of thought is written," Bachelard wrote, "*It is when a concept changes its meaning that it is most meaningful.* For it is then that it becomes, in all truth, an event, a conceptualization."^{vii} To say that knowledge develops historically, however, is not to say that there is a teleology at work. There is no preordained goal toward which knowledge is supposed to transport us. Bachelard's is a model of knowledge that takes mutability, not destiny, to be a defining characteristic.

Essential to Bachelard's notion of knowledge's historicity was the idea of the "phenomenotechnique," which is the means by which new phenomena are not simply perceived, but rather are constructed in the very act of perception. Taking his cue from the study of sub-atomic phenomena in which "facts" are often produced by the perceptual technologies invented to find them, Bachelard developed his concept of the "phenomenotechnique" as a means of demonstrating epistemology's dynamic relation to perception.

Bachelard's description of scientific knowledge is helpful as we try to unpack the workings of Soto's objects, which put perceptual change to work not merely as a means of entertaining the viewer or providing her with the momentary thrill of destabilization (as was the case with many "Op" artists with whom he would eventually be linked), but as a means of promoting a certain understanding knowledge itself. A work like *Metamorphosis*

of a Cube helps us to see, for example, the ways in which Soto's geometrical figures might begin as emblems of a timeless universal fact, only for them (and such a static conceptualization of knowledge) to be subjected to transformation. The narrative of transformation (cube becomes a different kind of cube, the represented becomes literal, the static becomes dynamic), allegorizes the very ways in which knowing changes through time. The very means by which the viewer is, in other words, to decide she is looking at a cube relies upon different forms of judgment contingent upon shifting perceptual techniques.



Rotation (1951)

This investment in conveying a sort of knowledge in motion accounts, in part, for Soto's frequent attention to the before-and-after of forms, in which the viewer is invited to piece together the progressive formal logic of the work. With works like *Rotation* (1952), Soto challenged the viewer to puzzle out the composition in which formal changes proceed according to the direction of reading (left to right, up and down).^{viii} Upon

examination, the viewer perceives and understands the suggested the rotation of a square from the left to the right; the composition serially arranging squares around which a solid line appears to rotate, as each square shifts the line placement from the top, to the right, to the bottom and to the left side and around again. As in *Metamorphosis of a Cube*, there is a double transformation: the squares seem to roll to the right, but they also suggest a transformation of state, as the squares become progressively immaterial: dots at the corners replace the lines, and, in the end, even the squares disappear, leaving nothing but the suggestion of motion behind. Squares move dynamically through time, in other words, and so does our perception and understanding of that dynamic change.

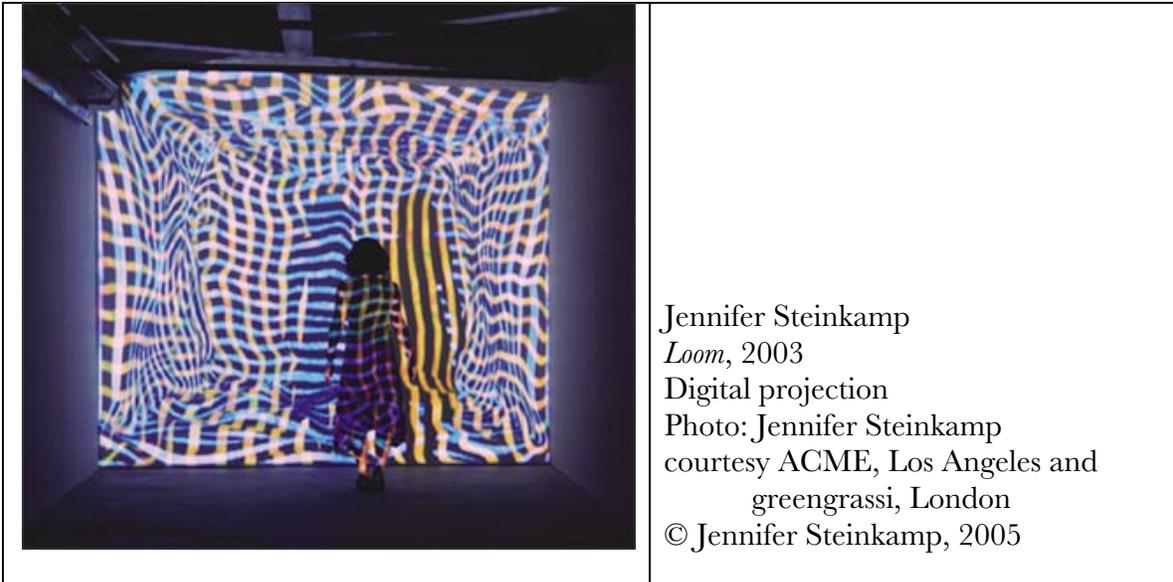
Even in later works, in which formal dissonances produce a dizzying effect, rarely do Soto's works rely purely upon perceptual events without allowing for an epistemological moment. The separate planes of Plexiglas in works such as *Transformable Harmony* (1956), for example, offer dissonant patterns that, yes, induce an optical buzz. This is in many respects a composition that exists less in the object than it does on the retinas. But those separated planes of Plexiglas will always ensure that the viewer will be able to step aside and analyze the causes of perceptual effect (a process that would not be possible if the forms were simply superimposed upon each other on a single plane, as is the case with so many other artists gathered, for better or worse, under the bracketing term of "Op"). The work, in other words, invites cerebral contemplation, processes of deduction, as well as perceptual stimulation. And the shifting back and forth between the perceptual and the epistemological invites the viewer to see those two categories in the way that Bachelard recommended—as inextricably intertwined.

Such a pedagogical model of self-awareness, Hegelian at its base, in which the art object is committed to the project of facilitating, even *teaching* a certain epistemological and perceptual development in the viewing subject, is difficult to maintain today. Such a project was a distinctly modernist one, and one might wonder if, in this postmodern age, the art object can maintain such faith in its pedagogical power to instruct or train the viewer (or if the art object is needlessly condescending to the already self-aware viewer when it tries to do so).^{ix} Further, one might wonder if the progressive politics of such a viewer-oriented mode of art making can still survive in the current environment. Instructing the viewer in a revolutionary modes of seeing and thinking was a vital goal of much anti-bourgeois art making in the twentieth century. But in this era of manufactured consumer desire, in which the domain of the visual is focused upon the project of convincing the viewer (quite dishonestly) that her needs and desires are central to the concerns of the corporate universe, it is not entirely clear that art objects which make the viewer more self-aware will do anything other than confirm the average viewer's already well-cultivated narcissism.^x

This is the problem with the works of many artists that have learned from the example of Soto and other mid-century abstractionists interested in the perceptually active viewer. The magnificent installations of Olafur Eliasson rely upon shifting temporalities and perceptions, such as his *One-Way Color Tunnel* of 2007, for example, in which the viewer passes through angled facets of acrylic with brilliant effects; colors shift and blend as the viewer makes her way through the work, seeing color through color, plane through plane. While the work derives some of its power from techniques for which Soto was famous (the interpenetration of light through multiple planes of transparent and reflective surfaces, the movement of the viewer providing the engine for

the work), the viewer is invited more to marvel than to analyze. The visual display is splendid, but perhaps more ingratiating than instructive.

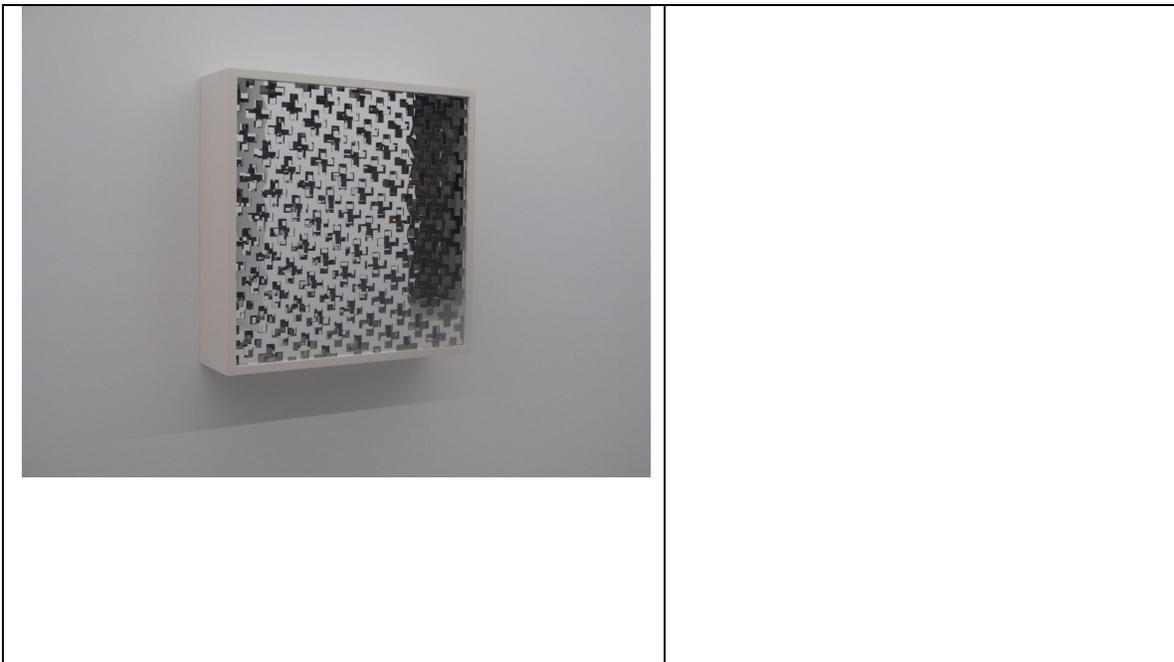
Artists developing effects similar to those of Soto (Eliasson included) have sometimes embedded the project of developing viewers' self-awareness within a larger social framework by working on a large scale that invites spectatorship.

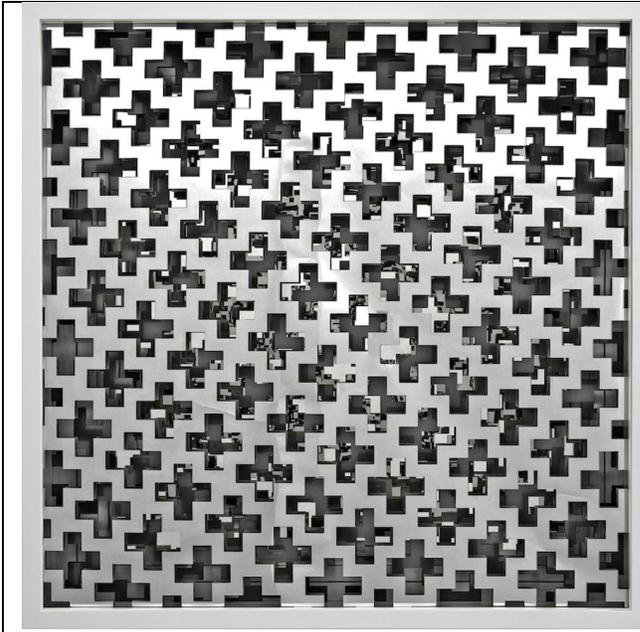


Jennifer Steinkamp's large-scale video projections offer one example. Her *Loom* of 2005 derives some of its resonance from its formal and chromatic similarity to the paintings of Vasarely, but its overlapping systems of parallel lines (which the viewer is invited to conceptually disentangle) pay tribute to works like Soto's *Transformable Harmony*. In Steinkamp's work, two animated sequences are projected on top of each other—one featuring vertical lines, the other horizontal lines, both of them wavering as if on the surface of a windblown pool. As viewers move toward Steinkamp's installation, two silhouettes appear—one formed of vertical lines when the viewer blocks light from the projection of horizontals, the other formed by blocking the projection of verticals. The consequent *rückenfiguren* multiply the viewer and divert representations of her body to the

sides, away from her central position. In the process, the viewer sees herself, and even sees herself seeing, but always at an oblique angle, as if the bodies that mimic her posture of spectatorship are not quite her own; she is, in other words, not quite in possession of her own gaze. At the same time, given the scale of the work, this entire operation is viewed by others. We watch her watching. The social body bears down on the consciousness of the viewer and, aware of this *external gaze*, the subject understands her own perceptual act as something that is subject to a social scrutiny, woven into a larger collective whole.

But the contemporary art objects that approach Soto's example most successfully, I'd argue, are those that problematize the very project of awakening perceptual and epistemological self-awareness in the viewer. *Chris Box* (2006) by Carla Arocha and Stéphane Schraenen, makes use of some of Soto's favorite devices, particularly in its deployment of abstract forms in a vitrine format, now with multiple planes parallel to the wall.^{xi}





Carla Arocha and
Stéphane Schraenen

Chris Box
2008
Madreperla acrylic, mirror and MDF
100cm x 100cm x 25cm

As in Soto's works, *Chris Box* delivers information to the viewer about her movement and participation in what she sees: the viewer passes in front of the box and enjoys the silvery surfaces and shadowy planes of the shifting latticework. But there is something about this work that also seems to reference all too explicitly the narcissism into which this kind of modernist subject-oriented work might devolve today. The preciousness of the material is the first clue— the shiny surfaces speak of expense and luxury, as do other shimmery vitrines from this series that enjoy a value-adding titles like *Gold Box* and *Diamond Box*. And while in Soto's work the viewer's self-awareness derives from an awareness of shifting perceptions and consequent reasoning through, here the mirrored surfaces might occasion a more superficial inspection of one's skin and make up application. But any gleeful self-enjoyment is interrupted, perforated, in fact, by crosses—a loaded form, both in its religious connotation and in its connection to the history of abstraction. This mirror provides at once too much information and not

enough. Add to this combination of attributes the fact that the *Chris* of the title is none other than comedian Chris Farley, and the crosses refer to the rosary found next to the comedian's body after a fatal overdose. The luxury of this object, therefore, is as much a part of the *vanitas* tradition as it is an indictment of the indulgent subjectivity which art-about-the-viewer can devolve. This is Soto's work turned into a cautionary tale. And if to Soto's vitrine format Arocha and Schraenen have added the Warholian tinge of celebrity death, it is, in part, out of their own interest in historicity of viewing. Their work asks what is left today of the modernist mission whereby the object invited the viewer to consider her own procedures of perceiving and knowing. Soto saw those two processes of relating to the world as dynamic and historical. So, perhaps, do Arocha and Schraenen—it just so happens that these processes are connected to specific historical content—to the peculiar state of self-understanding at this brief, passing moment—with which we all, even you, are subject.

ⁱ Ariel Jiménez, *Conversations with Jesús Soto*, Evelyn Rosenthal, trans., (Caracas: Fundacion Cisneros, 2005), 165.

ⁱⁱ See Yve-Alain Bois, "Perceiving Newman," *Painting as Model* (Cambridge, MA: MIT Press, 1991): 187-214.

ⁱⁱⁱ Robert Morris, "Notes on Sculpture," part II, orig. 1966, reprinted in Gregory Battcock, *Minimal Art: A Critical Anthology* (New York: Dutton Press, 1968), p. 234.

^{iv} Jesús R. Soto, "The Role of Scientific Concepts in Art," trans., Barbara and Yves Lemeunier, *Leonardo* 27, no. 3 (1994): 227.

^v "It was everything I was looking for," Soto gushed when speaking of Bachelard's work to Ariel Jiménez in *Conversations with Jesus Soto*, p. 166. Soto explained that it was artist

David Madalla who first gave him Bachelard to read. See Gaston Bachelard, *The New Scientific Spirit* (orig. 1934), trans. Arthur Goldhammer (Boston: Beacon Press, 1984).

^{vi} On Bachelard's concept of the historicity of scientific knowledge, see: Cristina Chimisso, "From Phenomenology to *Phenomenotechnique*: The Role of Early Twentieth-Century Physics in Gaston Bachelard's Philosophy," *Studies In History and Philosophy of Science* 39, no. 3 (September 2008): 384-392; and Hans-Jorg Rheinberger, "Gaston Bachelard and the Notion of 'Phenomenotechnique'" *Perspectives on Science* 13, no. 3 (2005): 313-328.

^{vii} Bachelard, *New Scientific Spirit*, p. 54

^{viii} Other works like *Optical Wall* (1951), according to Soto, approximated Cézanne's tendency to develop pictorial density from left to right; Jiménez, *Conversations with Jesus Soto*, p. 155. Soto's frequent reference to Cézanne as a formative influence also comes, I think, from Cézanne's accomplishment of reconciling through painting the changing relation between what we see and what we know.

^{ix} See, for example, Jacques Rancière's recent book *The Emancipated Spectator* (London and New York: Verso, 2009), which argues that the common viewer is already equipped with critical capacities that previous "pedagogical" art objects have underestimated.

^x On the tendency of commercial culture to produce within the subject the illusion that the world exists to attend to its desire, see Jean Baudrillard, *The System of Objects* (orig. 1968), (New York and London: Verso, 2006).

^{xi} While *Chris Box* was first publically exhibited in 2008 under Carla Arocha's name, Arocha insists that it and works like it were made while she and Schraenen had already begun their collaboration. The author thanks Ms Arocha for her comments in e-mails in the Spring of 2011.