Adrian Stokes's contribution to architectural analysis is not just the psychoanalytic framework he brought to criticism, but the application of psychoanalysis to a theory of form. Moreover, he broadens the notion of architectural form to go beyond the traditional themes of proportion, geometry, shape and spatial sequence to include a re-reading of the architectural surface. This analysis of surface isn’t ignorant of its exclusions (interior spaces and composition), but sees the visual plane of architecture as unleashing another type of spatiality - one that is metaphorical, symbolic and populated by our projected psyche.

Stokes is operating in a psychoanalytic context that explicitly draws on Melanie Klein, but is also, I believe, consistent with the work of others engaged in psychoanalytic thought – in particular, Lacan and Deleuze/Guattari - whose theories of self-representation, image formation, and visuality are prefigured by Stokes. All – Klein, Stokes, Lacan, Deleuze/Guattari – participate in an epistemology of visual, if not formal flatness that is equated with a fascination with surface and its effects. All, likewise, endow the surface with a psychic depth that makes it highly unstable in its wavering between representational thinness and conceptual thickness.

Here is an example of Stokes's fascination with architectural surface taken from Smooth and Rough:

We partake of an inexhaustible feeding mother (a fine building announces), though we have bitten, torn, dirtied and pinched her, though we thought we have lost her utterly, to have destroyed her utterly in fantasy and act. We are grateful to stone buildings for their stubborn material, hacked and hewed but put together carefully, restored in better shape than those pieces that the infant imagined he had chewed or scattered, for which he searched. Much crude rock stands rearranged; now in the form of apertures, of suffusion at the sides of the apertures, the bites, the tears, the pinches are miraculously identified with the recipient passages of the body, with the sense organs, with features; as well with the good mother which we would eat more mercifully for preservation and safety within, and for our own….Colours, textures, smooth and rough planes, apertures, symbolize...
reciprocity, a thriving in a thorough partnership. The landscape’s center is fashioned by plain houses in a cobbled street, by the dichotomy of wall-face and opening. Dichotomy is the unavoidable means of architectural effect. It has, of course, many embodiments, a sense of growth and a sense of thrust, for instance, heaviness and lightness, sheerness and recession or projection, rectangularity and rotundity, lit surface and shadowed surfaces, a thematic contrast between two principal textures, that is to say, between smooth and rough. I take this last to symbolize all, because it best marks the “bite” of architectural pleasure upon the memory: the dichotomy that permeates our final impression. (II, p. 241-2)

Klein

Stokes’s writing of seeing is itself so persuasive that one hesitates to dissect it only for its intellectual content; the manner in which he writes, the position he takes up vis-à-vis the objects he scrutinized is itself such a large part of his unique voice. Nevertheless, his indebtedness to Klein, as well as Klein’s own contribution to “surface thickness”, is important to outline.

Amongst other things, Klein suggests that the super ego is in evidence much earlier than Freud had assumed. She said that while children can’t relate to whole objects like the father or the mother before the phallic stage and the Oedipus complex, they could nevertheless relate to “part objects” – in particular the mother’s breast - well before this. Klein came to believe that it isn’t merely the internalized father figure that peoples the inner life of the super-ego, but an entire world of part objects, both paternal and maternal – breasts nipples, tongues, penis’s etc. These part objects are powerful, threatening internal figures. Both they and the mechanisms of defense required to control them are violent. For Freud the main mechanism of defense is reparation, but for Klein, drawing on Abraham and Ferenczi, there are four principle mechanisms of defense. The first two are projection and introjection, both of which have their origin in the pure pleasure principal. The ego wants to introject into itself everything that is good and project everything that is bad. Projection, wherein the ego disowns its own impulses and attributes them to the exterior world, is characteristic of paranoia. Introjection is based on the earliest oral impulse to eat the object. The third is identification, which in one direction takes the object as its model and thus is a defense against the lost of the object (or its rivalry with it) and in the other direction takes the subject as
model and results in narcissism. The fourth is the splitting of the ego, which involves the bifurcation of the ego into the normal part, which attends to reality, and the other libidinal part that detaches itself from reality and plays its fantasy out. Splitting is associated with fetishism.

Klein replaced Freud’s three phases of the id with her structure of two positions, the paranoid-schizophrenic and the depressive. In the first, the child cannot take in whole objects extended in time and space but only the part objects of immediate sensory experience. These objects are either satisfying (as in the good breast that provides the milk) or frustrating (as in the bad breast that is denied). This position is characterized by the ego splitting into its good and bad parts or by confusion with the object in projective identification. The second position assumes a child who can recognize whole objects, especially the mother, as complete and enduring, as possessor of both the good and the bad breast. This is depresssing to the child not only because it learns about the non-purity of what it considered to be “good”, but because it apprehends its own destructive desires in attacking the mother or the breast. This is the onslaught of guilt, but also of a healthy, realistic approach to the exterior world, in which the ego is integrated and exposed to the conflict of the contradictory impulses.

The implication of Klein’s work on child psychology for visual theory is not spelled out by her, but she exploits those observations of Freud regarding ego and perception that point to visual results. One of these observations was that the ego was the perceptual organ in both the direction of the inner world and the direction of the outer world, i.e., that the ego’s essential role was the perceptual (not merely intellectual) mediation between what the person thought to be outside itself and inside itself. In this, the ego is depicted as the layer dividing inside and out; later, Freud writes that the ego is the outer crust of the id. Likewise, implicit in Klein’s work is Freud’s idea that sexual drive cannot be distinguished from its representation; lust does not exist prior to and independent of its object. And finally, she develops Freud’s notion of fantasy. Near the conclusion of the Interpretation of Dreams, he argues that “psychical reality” is different from, but no less significant than, “material reality”; he says that it is not real events that alone cause neuroses but fantasies.
Klein’s depiction of the child’s world, in which phantasized bodily parts are projected onto the outer world through the plane of perception (ego) and incorporated back into the inner world through that same plane is an elaboration of this Freudian manifold. Indeed, phantasy, the term she uses to describe the manner in which these sexual instincts represent themselves as appropriate objects (the biting mouth, the piercing penis, etc.), is precisely the collapse of the drive on to object; it is an “affective interpretation of the bodily sensations”. (While phantasy was the term she used for effect, symbolism was the term she used for the process itself.)

But Klein goes farther than Freud. In analyzing how the ego functions perceptually to manage the figures populating the id/superego inner world and their application onto and absorption of the external world, Klein, unlike Freud, depicts an ego that is almost entirely described by its image management. Her conceptual shift from Freud’s “stages” of development to her “positions” is significant not only because it is a spatial as opposed to temporal paradigm, but because it assumes a place taken up vis-à-vis the world, or, I might say, its visual unfolding. She also goes farther in depicting a particularly rich visual content. The floating, swarming bodily-parts that are the objects of the child’s lust are thick, aggressive, swarming, assertive. Vision in this case is the opposite of transparent; it is thick, robust, layered. Moreover, because the child has no real sense of itself as an integrated ego, the vagaries of these phantasies don’t just project from the child, they are the child. Thus, both what the child perceives of the outer world and experiences of itself in the inner world are fully fleshed, in/on the layer of sight.

Stokes

Another Stokes passage, from Venetian: an Aspect of Art, will now bring his visual “position” back into focus. Venice, written in 1944, is part of a trilogy with Inside Out (1947) and Smooth and Rough (1951), in which Stokes reveals his psychoanalytic indebtedness and “comes out” in the very traditional world of art history. This text is of particular interest because, writing during the war, he is working wholly from photographs of buildings in Venice. He doesn’t hide the fact that he is not talking about the buildings themselves but rather about their two–dimensional, black and white reproduction; indeed, he is liberated
by their flattened abstraction. While Stokes's vision would compress the three-dimensionality in any case, the photos heighten the implications of vision's obsession with the spectral plane. The photo's surface denies a "natural" hierarchy of the depicted objects' meanings (our knowledge, for example, that the building is more important than the birds or clouds) and allows an easy projection of the inner world. One should notice the manner in which Stokes positions (in the deepest Kleinian sense) himself vis-à-vis the object. He instructs us to search the terrain of the photograph. We, like him, visually finger the surface of the image. Then, because the surface of the thing being looked at collapses the three-dimensional world it depicts with our thick, plastic, "inner world", enormous pressure comes to bare on it. (It shouldn't be overlooked that the architecture of Venice is so essentially one of surface and facades as well.)

Here he describes "A Venetian House of the 17th Century."

Once again, the white squares of the thick stone surrounding the barred lower window, in a manner of clear and white arrest, epitomizes transaction within. The washing above hangs white and listless: but the liston below of the Isterian stone takes an added density as the sum of apparel. We see approximation and differences as in a family. The monolith Isterian jambs to the door give added density to the layer upon layer of thin transverse bricks and even to the worn horizontal planks of canal door. Yet brick and wood seem to partake of the stone from their intercourse. These static things appear teeming things arrested and ordered for the eye. In terms of distinctness, we have the sense of things fused. (II. p. 104-05)

Stokes's paradigm in all of the arts was work whose spatial essence was presented flatly and immediately for the eye, whether it be the stone of a sculpture or building façade, or the pigment and color of a painting. His hope for objects was that they would demonstrate and make us experience their otherness; only in its otherness would we both lose ourselves and ironically, find our selves. And vision was the sense par excellence for negotiating/providing this otherness. Only the eye allowed an immediate (whole, unsplit, unsequential) grasp of the object, and only in this grasping of and onto the object could the subject find the mirror, the essence of his/her inner world, his/her psyche. He also appreciated vision as a physical phenomenon. The body he noted was literally present in the physical housing of the eye in the torso. All of the ocular muscles, mucous and nerve-endings were experienced in the act of seeing and
prevented sight from merely “floating” around ambivalently. But ironically, or, again, dialectically, vision, as he liked to point out, is the one sense whose effects are not experienced as belonging to our bodies.

Likewise, the supposed flatness of vision was pivotal. Using but transforming the British empirical tradition of Berkley and Locke, in which vision’s two-dimensionality made it inferior to and dependent on touch, Stokes, like Ruskin, valorized the flatness as both an aspect of its immediacy and an essential condition for its ability to symbolize. Likewise, vision comes to us immediately. As such, it is not mediated by our (internal) intellect, but comes to us purely. At the same time, however, the full gamut of physical sensations were lodged in the eye. Despite Stokes’s insistence that the visual was superior to the tactile, the body was nevertheless wholly present in vision; vision absorbed the other senses into itself. This is his fascination with rough and smooth. As he writes in the book of this name, “In employing smooth and rough as generic terms of architectural dichotomy, I am better able to preserve both the oral and the tactile notions that underlie the visual.” (p. 243)

Certain formal preferences result from the Stokes-a la-Klein notion of vision and objective identification and contribute to an aesthetics of surface. Paintings should never be about their composition or their perspectival depiction of deep space; rather, they should register their layering. That is, the important relationships aren’t those that operate across the lateral surface of the painting, but those that imply a layered relationship from front (the eye of the viewer) to back (an implicit space in/on/behind the canvas in which actual, literal surface always dominates). Color should be “surface” color, not “film” color, where the former is understood to be “out there”, located on the object and not, like film color, experienced as floating a-spatially in our mind’s eye. In sculpture, “carving” was better than “modeling”, where the former, carving, understood that the material fights back (in layers and depth) and challenges the ego while the latter, modelling, allows the ego to just willfully mush things around. To a certain extent, this was a very literal understanding of carving in stone, and not just any stone, but limestone. Thus his love of the sculptor Agostino di Duccio, whose bas-reliefs ensured that not the figure, but the stone through the medium of the figure, is the content of the work. But in another sense, carving was a more general admiration of a tough, durable “otherness” of an object, whether words, landscapes or buildings; an otherness that allowed perception to be registered not in the body or psyche, but on the object itself.
In architecture, space is denigrated; inside and outside must collapse on a surface; all must proceed from the vertical plane, press from it or on it. Stokes dismissed, in other words, modernism’s interest in plasticity and space. In architecture, as well as sculpture, the textures are paramount and the juxtaposition of rough and smooth, especially around the apertures of a façade, are of major significance, again because this is where the exchange between an inside and an outside of a building is presented, always on a single surface. The registration of the exchange of inside and outside was important because it was the analogue of our own psychic exchanges of introjection and projection; and this metaphorical registration of the inside was of much greater importance than actual space, in which one could psychically flounder.

The building, which provokes by its beauty a positive response, resuscitates an early hunger or greed in the disposition of morsels that are smooth with morsels that are rough, or of wall spaces with the apertures; an impression, I have said, composed as well from other architectural sensations. To repeat: it is as if those apertures had been torn in that body by our revengeful teeth so that we experience as a beautiful form, and indeed as indispensable shelter also, the outcome of sadistic attacks, fierce yet smoothed, healed into a source of health which we would take inside us ad preserve there unharmed for the source of our goodness: as if also…the smooth body of the wall-face, or the smooth vacancy within the apertures, were the shining breast, while the mouldings, the projections, the rustications, the tiles, were the head, the feeding nipple of that breast. (II, p. 243, Smooth and Rough)

Stokes can be understood as combining his aesthetic education/prejudices with his psychoanalytic education; he manages to make his need for projecting his phantastic inner world onto exterior objects conform to his aesthetic paradigms. But in this combination, he transforms Klein’s theory of visuality into a theory of surface. He introduces a picture of what precisely Klein’s phantasies should get projected on to, and thus depicts her epistemological framework in a concrete fashion with surface as its principle formal category. Thus, if there was already implicit in Klein a tension between the thickness of phantasy and the thinness of vision itself, it gets more pronounced in Stokes for being more physically described, logically unstable, and registered physically in art.

Lacan

Lacan was involved in the work of Klein in the 40’s and 50’s. Klein’s notion of part objects operates directly in the depiction of the Imaginary. The Imaginary - a pre-verbal register whose logic is essentially visual - is the condition of a six to eighteen month old child who does not yet have an ego or imago to
locate or originate images of itself. This child experiences a world of bodies and organs - Kleinian part-objects - which lack a privileged point of view. S Fredric Jameson says of the Imaginary: “(It will) require us to come to terms with a uniquely determinate configuration of space - one not yet organized around the individuation of my own personal body, or differentiated hierarchically according to the perspectives of my own central point of view - yet which nonetheless swarms with bodies and forms intuited in a different way, whose fundamental property is, it would seem, to be visible without their visibility being the result of the act of any particular observer, to be, as it were, already seen, to carry their secularity upon themselves like a color they wear or the texture of a surface.” As Lacan describes in “Subversion of the subject and dialectic of desire,” These objects have one common feature in my elaboration of them - they have no specular image, or, in other words, alterity. It is to this object that cannot be grasped in the mirror that the specular image lends its clothes. A substance caught in the net of the shadow, and which, robbed of its shadow-swelling volume, holds out once again the tired lure of the shadow as if it were substance “The very delineation of the ‘erogenous zone’...is the result of a cut (coupure) expressed in the anatomical mark (trait) of a margin or border - lips, ‘the enclosure of the teeth’, the rim of the anus, the tip of the penis, the vagina, the slit formed by the eyelids, even the horn-shaped aperture of the ear…”

In this Imaginary realm, a visual thickness is being described: vision is wrapped around the objects seen because there is no source from which it originates. Yet what it wraps around these external objects is robustly phantasized bodily parts. Indeed, the tension created by this thick-thin dichotomy, this surface that bares the weight of the part-objects aggressiveness, is heightened in Lacan’s hands. His depiction of the “mirror stage” which is associated with the working out of the Imaginary, demonstrates this. In the mirror stage, the child recognizes its image in the mirror and experiences the fundamental gap between this image and the experience of self, the first coherent, contained and singular, the second dispersed, uncentered and multiple. This mirror stage is the fundamental condition of narcissism and the source of aggression. In this picture, thinness of visuality is made even more brittle, less substantive for being posed as/on the mirror while the thickness of visuality is made more aggressive for its association with narcissism and anger.
But Lacan’s desire to place psychoanalysis in the linguistic register and his emphasis on the Symbolic Order that displaces the Imaginary ultimately downplays the role of vision-cum-phantasy so active in Klein. Despite his fascination with the notion of phantasy, his negative assessment of its role in how we approach and handle desire - phantasies, as “imaginary identifications”, block the chain of free association and resist the unfolding of speech - indicates a move away from Klein’s more visceral, perceptual play of images. Lacan emphasizes that phantasy and the part-objects that make it up is essentially a system of absence, where phantasy stands in for the missing real object. Phantasy is “set to work in the signifying structure” because it “robs (the subject) of its object.” As he puts it: “Phantasy, in its fundamental employment, is the means by which the subject supports himself at the level of his fading desire, fading to the extent that the very satisfaction of demand robs it of its object.” But even here in the Symbolic - a signifying rather than image-based Order - flatness dominates the epistemological structure. In as much as the Symbolic is a description of how we manage desire, Lacan says there is “a misrecognition of fullness where there is really nothing but a screen for our own narcissistic projections. It is that lack at the heart of desire that ensures we continue to desire.” Not only is lack depicted as the non-substance, the illusion or screen, but, because the objet petit a (the object of our desire) is nothing but such a screen, to come too close to it threatens to give us the experience precisely of the Lacanian Gaze, where the Real looks back at us. Thus, the visual, while thoroughly drained of actual perception, comes back in altered form, too. And if the differences between the articulation of this surface remain significant - Stokes’s unambiguous (if unstable) aesthetic depiction and his positive assessment of phantasy in contrast with Lacan’s abstract understanding of the “plane of desire” and his negative assessment of part-objects - both participate in, at approximately the same moment in history, an epistemological theory of surface.

Deleuze/Guattari

We can continue this line of thought by moving to Deleuze and Guattari, who fall into this discussion of surface not because they are utilized by “blob” practitioners championing the forms of smooth surfaces, but because Deleuze/Guattari, too, have a Kleinian background and a developed epistemological theory that implicates if not vision, an epistemological structure of surface populated by bodies without organs.
Their position is ostensibly contradictory to that described above. Deleuze and Guattari are, indeed, specifically opposed to such (merely) representational ways of thinking subject-object relationships, and, in their anti-Oedipus, anti-traditional psychoanalysis, they are, even more adamantly than Lacan, anti-phantasy, suggesting that their “body without organs” conceptual framework is preferable for precisely rejecting the operations of phantasy.

There is an essential difference between the psychoanalytic interpretation of the phantasy and the antipsychiatric experimentation of the program. … The Body without organs is what remains when you take everything away. What you take away is precisely the phantasy, and significances and objectifications as a whole. Psychoanalysis does the opposite: it translates everything into phantasies, it retains the phantasy. It royally botches the real, because it botches the body without organs.

Likewise, their anti-psychoanalysis position – their thought that psychoanalysis wrongly cures us of a schizophrenia that in fact is the proper psychic state in capitalism - is in explicit rejection of Klein, who, for Deleuze and Guattari, appears consistently to be the premier negative example psychoanalytic work. If Lacan moves phantasy and part-objects away from the actual representational embodiment associated with Klein toward the more abstract functioning of the linguist register, Deleuze and Guattari move this register away from linguistic structuralism to that of capitalism, thereby distancing themselves even more from the originary corporeal nature of part-objects.

But Guattari’s years of analysis with Lacan and his practice as a Lacanian psychiatrist show through, as does the Kleinian heritage, as does the thick/thin surface model. While Lacan’s petit object a and his part-objects are, in Guattari’s hands, fragments of institutions and not corporeal parts or identity elisions, they nevertheless, in the positive role they seem to play in “tearing through capitalism’s surface”, recall the aggressive and critical function they served for Klein. As Guattari says in “Beyond the Psychoanalytic Unconscious,”

The schizoanalytic unconscious (of capitalism) implies a proliferation made up not only of typical “part-objects” - breasts, the feces, the penis; or mathemes like Lacan’s “a-oject” - but also a multitude of singular entities, fluxes, territories and incorporeal universes, making up the functional arrangements that are never reducible to universals.
In other words, one can read the endorsement of schizophrenia as an endorsement of the part-object, and while they may not resemble the Kleinian corporeal variety, they keep, even in their institutional nature, a presence that is organic, assertive, robust: a body without organs but a body nonetheless. The entire repertoire of affects, multiplicities, haeccties, rhizometrics, bodies without organs, etc. perform precisely the uncentered, unhierarchical, shifting realm of swirling swarming, mutating part-objects that Klein’s paranoid, schizophrenic position elaborates.

Moreover, despite the claims to a thinking that is non-visual - that is, doesn’t operate on visible representations or analogies - Deleuze and Guattari are dependent on a conceptual model of surface to locate the conditions (multiplicities, haeccties, rhizometrics) that are used to describe schizophrenia; indeed, one might say that because they have rejected claims to representational imaging, they require a “platform” for locating imaginative projections even more than might otherwise be the case. As they say so succinctly, “Psychoanalysis has no feeling of unnatural participation’s, nor for the assemblages a child can mount in order to solve a problem from which all exits are barred him: a plan(e), not a phantasy.”

Thus you can read A Thousand Plateaus as a celebration not just of the part-object position with all of its anthropomorphic and zoomorphic references, but of the plane, the surface itself on which that schizophrenia is played out: the plateau, the quilt, the piece of felt, the smooth, the striated, the stratified; the plane of immanence; the plane of consistency, etc. As they suggest: “There is a pure plane or imminence… (or).. composition upon which everything occurs, slows down, or accelerates…a unique plane of consistency or composition of the cephalopod and the vertebrate; for the vertebrate to become and octopus and a cuttlefish”.

A comparison with Stokes and Lacan can, again, be made. While Stokes’s model of phantasy was visual and literal in its search for surface upon which bodily projections were made, and while Lacan’s was epistemological in its understanding of how phantasy was a shadowy lining upon which were dispersed part objects, and while Deleuze/Guattari’s is institutional/political in its description of how the part objects of schizophrenia operate on and cut through the surface structure of capitalism - they all use the same model of a plane of perception/imagination/epistemology that feels the tension between its conceptual
thinness and substantive thickness. Indeed, one could say that as the “surface” in these three cases became less literal and less visual, the thinner and more brittle that surface becomes and the more the tension of its seeming thickness is felt.

**Observations**

In drawing these analogies between Stokes, Lacan, and Deleuze, and describing a shared concern for a deep surface epistemological framework, a number of things are being suggested. First, and most simple, that all participate in an elaboration of Melanie Klein’s visual structure, and the implications of her notions of phantasy and part-objects for perception and epistemology. In pointing out the similarities with which they have done this, I do not wish to claim any order of influence or originary rights to an idea; rather, I merely wish to point out an interesting coincidence of simultaneity that may or may not have to do with a moment in time in intellectual history. Perhaps the one figure it wishes to recast is that of Klein, who goes too unrecognized in the influence she had on both Lacan and Deleuze.

Secondly (somewhat contracting the above), I do wish to suggest that Stokes—obviously the least known figure of the three—should not be overlooked in a discourse of aesthetic surface and smoothness. In saying this, I mean not only to suggest a richer body of literature on the significance of surface on architecture, but also to place Stokes in an intellectual context that might help rescue him from obscurity, from being cast as a mere eccentric of early twentieth century art history. To this general plea for a reconstituted reputation, I would draw attention to a more particular similarity between Stokes and Deleuze that has to do with the idea of aesthetic reparation. Perhaps one of the least fashionable aspects of Stokes’s visuality was his belief that certain formal configurations (those that display and evoke a deep surface) contributed to mental health, and that it did so at least partially by landing our sensations outside of ourselves, by drawing our empathetic connection out onto the object. But it is an idea that is not dissimilar to one that Deleuze implicitly suggests in his sense of art and his use of the term “affect”. Deleuze describes affect as a kind of sensation, and, according to John Rajchman, he is impressed when, against the impressionists, Cézanne says that the sensations are in the things themselves, not in us; and he sees the violence of artistic sensations as directed against clichés of a
photographic sensationalism.; they are not to be confused with personal feelings; affects go beyond the subject s that pass through them and they are impersonal, almost inhuman. Art not only extracts such sensations, it puts them into a kind of construction, and “architecture”, one we inhabit only through transmutation or self-experimentation, a position from which we emerge, again to use Rajchman’s words, “refreshed as if endowed with a new optic or nervous system.”¹ Art works are not there to perfect us, or save us, but to complicate things. They revitalize the brain, releasing us from the heaviness of grounded identities and habitual forms.

Lastly, this paper wants to direct our attention to a more intellectually fulfilling exploration of “surface” than currently available in architecture discourse. The take over of Lacan and Deleuze for formal paradigms by those interested in the fold and the blob leaves the impression that these thinkers are motivated by formal concerns when in fact (obviously) the stakes are much higher. In particular, aesthetics, and the role that surface place in aesthetics, is located at a profound level of subjectivity. Likewise, while blob discourse seems to imply that the interest in surface is a new, avant-garde stance, this paper aims to show that its intellectual roots go farther back than is normally assumed and understanding this history can be helpful to our intellectual as well as aesthetic acuity.

¹ The Deleuzian Connections, p. 134.5