

# Boundary as Medium

## From Lines of Separation to Topologies of Transformation

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### Abstract

As well as physical division, boundary is often defined as a dividing line that marks the limits of categories. Boundaries create frameworks within which institutions and disciplines operate. In most cases they are established and solidified, in order to determine roles and clarify rules of interaction.

If Classical thought respected boundaries, the Modernists attempted to subvert them and create new ones based on new ideologies. Concerned with the disappearance of old boundaries, and the dominance of new ones, the Postmodernists suggested "complexity" and "double-coding." Thus, boundary transformed from limit, to frontier, then to interface.

The following paper is a philosophical reflection on the very notion of boundary, proposing that an alternative approach is possible, one that treats the boundary condition as an expansive topography to be explored and extended in search of new possibilities. To explore this space is to explore difference without hierarchy, and to engage in hybrid, evolutionary processes of "becoming other". This would be an unfamiliar, polemical approach that does not define boundary as a limit, but rather as a medium, a pliable in-between space that facilitates transdisciplinary transformations.

### Why Have Boundaries?

Boundary is often defined as a dividing line that marks the limits of categories. The etymology of the word can be traced back to Medieval Latin, to words associated with limits of land and territory.<sup>1</sup> A boundary line can be abstract or physical. A wall for example is a physical boundary that separates inside from outside. A surface on the other hand, can be physical or abstract, separating an object from another.<sup>2</sup> In much the same way, a border can be a physical or abstract boundary separating nations, counties, and cities. There are also temporal boundaries that polarise life. Births, deaths and marriages, are classic examples of such temporal boundaries.



*Fig 1: Different approaches to the notion of boundary: from barrier, to interface, to medium.*

Sometimes, the exact position of a boundary is unknown, difficult to determine or contested leading to speculation, debate, or even war. The Israeli/Palestine conflict clearly demonstrates the problematic nature of boundary. In other scenarios, boundaries are difficult to determine in a different way. For example, where is the exact limit of the spectrum colour blue before it transforms into green? Where is the boundary between the upper and lower half of a homogenous sphere? Where does Mount Everest end?

Whether sharp or blurry, abstract or physical, boundaries are central to our common-sense approach to the world. Boundaries create order by stabilising difference, helping humanity deal with the complexity of reality. They also create frameworks within which institutions and disciplines operate, and they offer a zone of safety or clarity, a place of belonging and a sense of order that is both useful and comforting. In most cases, boundaries are solidified in order to determine roles and clarify rules of interaction.

Yet boundaries are also deeply problematic. Not only are they often difficult to determine or enforce, but they are also capable of becoming rigid limits that inhibit freedom, exploration and progress. Moreover, as regulators of interaction, they sometimes *hinder* interaction, the flow of ideas and progress of disciplines by remaining unresponsive to evolutionary transformations. There is also the "border-line" syndrome with its negative connotations. Being associated with the boundary, with the margins of categories is not a desirable condition. In most nations, the majoritarian group holds "the centre of power" whilst the minoritarian categories occupy border-line positions. To be near the boundary is often to be away from the hearth: the pivotal centre; the essence of

things. It is also associated with a willingness to transgress, to go beyond limits in an act of rebellion, treachery or betrayal, since to cross borders is often to enter enemy territories. It is therefore not surprising that, traditionally, boundary conditions are defined as places of instability (war, chaos, contact with the unknown) and of illegal activity (drug-trafficking, human trafficking, smuggling). It is for these reasons that boundaries are fortified to prevent cross-contamination and to maintain the hierarchy of power and the order of things. In fact, throughout history, architecture has developed elaborate solutions to the fortification of boundaries, being by its very definition concerned with the demarcation of space.

### Evolution of Boundary: From Limit, to Frontier, to Interface

Throughout history, architecture has developed sophisticated styles for the design of boundary in its different manifestations: the architectural wall, surface, cladding, ornament and so on. The visual treatment of such boundaries is a significant aspect of architectural design, not only because it affects the quality of space, both inside and outside, but also because it relates architecture to its contextual milieu. In classical times, architectural styles were often linked to a particular religion, culture or nation, and regulated by strict rules that were passed down through generations. Such conditions, supplemented by the difficulty of free communication, necessitated faithfulness towards established traditions where the boundaries between different categories could be compared to a wall, a solidified limit that separated things (public/private, native/foreign, visible/intelligible and so on).<sup>3</sup> Thus, established (architectural) limits were honoured and followed with respect and loyalty, since boundaries (whether conceptual or otherwise) were barriers blocking transgression of light, movement, gaze, thought and so on.

This regard for traditional boundaries has always been in tension with another impulse, one that continues to question their legitimacy.<sup>4</sup> Thus, if traditional thought respected boundaries, the Modernists attempted to create new ones based on new ideologies. Though modernism is often associated with the 20<sup>th</sup> Century, its principles are in fact centuries old.<sup>5</sup> All modernist movements propound a clean break from past traditions, but ironically remain tied to them in their opposition. In the early twentieth century, modernists theorised a stripping away of architecture's excessive ornamentation, only for it to be replaced by the ornamental "white walls"<sup>6</sup> or the glittering glazed walls of the International Style<sup>7</sup> that

expressed honesty (to materials,) purity (from excessive ornament) and transparency (of operation.). The Modernist manifesto was based on a refashioning of the architectural wall, not only through the exploration of new materials (concrete and glass) and construction techniques (steel-frame, industrial mass production) but also through its penetration (transparency) or thinning out (stripping of ornament) in order to expose structural logic or the interior of buildings.

The Modernists advocated the penetration of traditional boundaries, only to form new ones, which were more in tune with contemporary times. Whilst they succeeded in problematizing established architectural theory and praxis, their manifestos did not eliminate rules and limits. Instead, they merely pushed them further into new territories. Thus, in Modernist manifestos, *old barriers* transformed to *new frontiers* that were to be advanced beyond traditional lines. The Postmodernists reacted to such Modernist strategies. If the Modernists were concerned with "pushing boundaries," the Postmodernists problematized boundaries by including both sides of it. Concerned with the disappearance of old boundaries, and the dominance of new ones, the Postmodernists suggested "complexity" through irony and "double-coding."

Formulating an appropriate style for architecture's physical boundaries was a central theme to both Modernist and Postmodernist theory in twentieth century. As a reaction to the Modernists slogan of "form follows function"<sup>8</sup> and the deprecatory association of ornament with crime,<sup>9</sup> Venturi et al, (1977) proposed the "decorated shed" concept,<sup>10</sup> which signalled a shift from the Modernists' notions of "cladding" and "style" to the Postmodernist notions of "screen" and "communication." This was an attempt to allow architecture to participate freely within the visual flux of signs, billboards and screens of mass media that were quickly replacing the machinic structures of the industrial revolution as symbols of capitalism. It was hoped that by returning to complex visual communication, and by acknowledging the importance of popular culture, the desire for visual and conceptual clarity in the Modernist manifesto would transform into a desire for "complexity and contradiction."<sup>11</sup>

Though the "decorated shed" concept allowed greater freedom of surface expression, it nevertheless maintained, if not exaggerate, the boundary between ornament and structure as problematized by the Modernists' metaphors of clothing and cladding. As a reaction to Modernist

manifestos, some Postmodernists adopted stylistic historicism, which was *applied* to structures that rarely ventured beyond the shed concept. Critics however complained that such reference to past styles was "pastiche" and superficial, demonstrating a reductive simplicity of communication or a regurgitation of old motifs.<sup>12</sup> Others embraced theoretical criticality, expressed through "double-coding"<sup>13</sup> and irony, where architectural communication attempted to acknowledge two opposing points of view. In many cases, this second approach resulted in the erection of monuments to a critical commentary on architecture's established ways, which was often only understood by a few architects, theoreticians or historicists familiar with the (double) coded language. This approach threatened a return to the elitism of modernism and/or a reduction of architectural experience in favour of intellectual or textual delight.<sup>14</sup>

Nonetheless, the Postmodern manifesto allowed architects to engage popular culture whilst *maintaining* a relationship with their professional ethos. This was the effect of double coding facilitated partly by the decorated shed metaphor and partly by notions of irony as a "complex" form of communication. Thus, much of Postmodern architecture maintains a certain *schizophrenic* quality: at once acknowledging the intricacies of architectural theory whilst simultaneously trying to appeal to the demands of popular culture as presented through mass media.

This double-coded strategy signified a third approach to boundaries. If the traditional and the Modernist conceptions defined boundaries as limits (barriers or frontiers) the Postmodernist conception defined boundaries as *interfaces*. In the former, transgression was forbidden, while in the latter it became an important aspect of the boundary condition. Thus, by redefining boundaries as interfaces, the postmodernists advocated complexity and inclusion rather than purity through exclusion.

### **Evolution of Technology: From Machinic Order to Rhizomatic Complexity**

The development of technology has had an important effect in the transformation of physical and theoretical boundaries. In architecture, Modernist theory was inspired by industrial technologies of the early twentieth century. In their quest for a new style, Le Corbusier and other pioneers of Modernism drew inspiration from industrial silos, ships, aeroplanes, automobiles and other machinic assemblages that represented new technology and progress. The reduction of ornament and a conceptual emphasis on function and efficiency were legacies of the machine

metaphor, which followed an ordered logic and strict rules of operation to guarantee maximum efficiency and economy.<sup>15</sup>

The development of "post-modern" theories in the second half of the twentieth century was coeval with the rapid advancement of communication technology, where the increasing production and reproduction of visual phenomena inspired new metaphors. If early twentieth century was the "Industrial Age," the advent of new technologies of mass communication and electronic computation led many to consider the late twentieth century the "Information Age" in which capitalism transforms to "late-capitalism" through the transfer of information (images, sounds, texts and other data.)

In recent decades, computers have provided a platform upon which different disciplines mix. In most societies, the "machine for living in"<sup>16</sup> is challenged by digital networks and virtual reality environments in which images, sounds and texts flow. No longer bound to their physical locations, "users" are able to access information and experience distant events through the Internet -the global phenomenon that has spawned multi-million dollar companies by defying traditional cultural and national boundaries. Time Magazine's selection of YouTube.com, as the best invention of 2006 clearly demonstrates the shift from the old values of the "Industrial Age" to those of the new "Information Age."<sup>17</sup> The success of Google,<sup>18</sup> Facebook,<sup>19</sup> Second Life<sup>20</sup> and online multiplayer gaming networks has demonstrated the popularity of such virtual sites and alternative realities, the power of new media and digital technologies, and their significance for the generation of new economies. Thus, in this context of rhizomatic networks<sup>21</sup> and information flow, notions of machinic order is increasingly challenged, while the traditional concepts of site, context, place and home have become subject to further questioning.

For many, such new technological phenomena are intangible, spectacular and virtual, as opposed to real. If, in 1936, Walter Benjamin predicted the effects of new technologies as the "withering of aura" of works of art, by 1967, Guy Debord theorised the modern society as one in which lived life has come become a represented life through "an immense accumulation of *spectacles*."<sup>22</sup> Debord defined the spectacle as an "autonomous image," the "concrete inversion of life,"<sup>23</sup> "abuse of the world of vision" and "a product of the techniques of mass dissemination of images."<sup>24</sup> For Debord, modern society has transformed into one in

which the concrete life of everyone has been degraded into a *speculative* universe."<sup>25</sup> Separation becomes a key concept: separation of image from the real, or individual from society. This separation is argued to be accelerated with the technical gadgetry of TV, cinema, photography, virtual reality and other optical media that unremittingly split society into individual spectators and flatten the reality of life into spectacular images. The monologue of appearances thus turns into oppression: "The spectator's consciousness, [is] imprisoned in a flattened universe, bound by the screen of the spectacle behind which his life has been deported."<sup>26</sup>

Debord's concern for the negative effects of mass media, image and spectacular appearances continues in Jean Baudrillard's theories of 1985, which translates Debord's "Society of the Spectacle" into a *society of simulacra*, dominated by the superficial effects of the image, with no relationship to reality whatsoever.<sup>27</sup> Baudrillard states that in modern society there has developed a condition of appearances without reference to any origin or reality, and not merely a separation from the real. He calls this condition a state of "hyperreality" where truth and meaning is taken out of the equation and where images operate independently. Thus, images are defined as "murderers of the real"<sup>28</sup> where simulacra represent the "corruption of reality through signs"<sup>29</sup> or "*the radical negation of the sign as value*, from the sign as the reversion and death sentence of every reference."<sup>30</sup> The consequence of simulacra for society is argued to be a sense of nostalgia. The only way one can escape this world of hallucinatory simulations is through negativity, criticism and death.<sup>31</sup>

### Boundary as Line, Boundary as Surface, Boundary as Medium

Such theoretical reflections on the contemporary, media-saturated condition share a common theme: the hierarchical separation of image from reality. Following a traditional metaphysical model, such theories categorise media images as artificial *copies* of a natural reality that is primary and original.<sup>32</sup> Much like the walls of Plato's Cave, images and the new technologies that facilitate their (re)production, imprison humanity in a shadowy world of disillusionment. This would be a familiar model of thought characterized by the opposition between inside and outside and the opaque boundary that not only acts as a barrier, but also generates false appearances. This philosophical approach is characterized by a distinct hierarchical order and a *perpendicular* movement of thought that desires to penetrate, or surpass *marginal*

categories in order to arrive at the essence of things.

Yet, there is another approach possible, one that flattens hierarchy and by defining the boundary condition as a *spatial topography*, promotes a horizontal and "nomadic" movement of thought that explores border-line conditions. This would be the characteristic of a *surficial philosophy* that relates to the Earth -to topology<sup>33</sup> and geology-<sup>34</sup> conjuring up a diversity of concepts, from the thickness of the crust to the "smooth" fluidity of the seas.<sup>35</sup> Surficial philosophy takes inspiration from univocity,<sup>36</sup> exploring the non-hierarchical difference across the "plane of immanence."<sup>37</sup> This would be an alternative metaphysical model and an unfamiliar mode of thought, which not only offers greater flexibility towards new possibilities, but also offers more sympathy towards creativity.

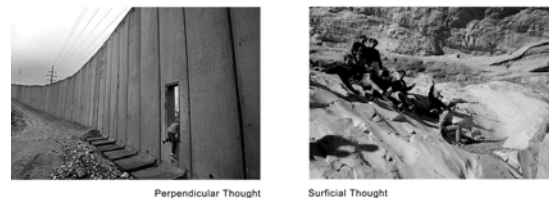


Fig 2: *Perpendicular thought vs surficial thought.*

In surficial thought, boundary is no longer an abstract line that is made sharper (thinner) and more rigid in order to stabilise categories. Instead, boundary is expanded to a continuous surface and an extensive topography that is explored in search of new hybrid categories. Difference is no longer in the opposition between the two sides of the boundary line, rather it occurs upon and within the surficial landscape of infinite transformations. This alternative model of thought necessitates a different movement of thought that is unlike the Platonic ascent to the height of "Ideas" (ideals) or the Nietzschean descent to the depths of experience (essence). Instead, surficial thought demands "lines of flight" inspired by a Deleuzian voyage across the smooth space of becoming (potential).<sup>38</sup>

If the traditional boundary is concerned with exclusion, the modernists' with expansion and the postmodernists' with double-coded inclusion, a fourth conception of boundary is possible that explores hybridity and evolution. In this alternative approach, interdisciplinary interaction evolves into *transdisciplinary transmutation* since the boundary condition is no longer a line of separation, but an expansive surface of exploration, a non-hierarchical space of transformation. This is where *boundary becomes medium*: the middle condition that is a means to an end. The in-between gains

a new significance not as marginal space of indifference, but as an active space of unexpected becoming. To engage with this new space is to explore difference without hierarchy "so as to let in a breath of air from the chaos that brings us the vision."<sup>39</sup> One way of exploring boundary as a medium is to traverse disciplines, countries, cultures, politics and so on. If the traditional definition of boundary evokes exclusion and inaccessibility where interaction does not threaten established categories,<sup>40</sup> this alternative definition of boundary is based on inclusion and hybridity, where smooth processes of becoming develop new hybrid categories. In this context, disciplinary dissolves into a liquid mixture, which catalyses unexpected discoveries.

In recent decades, new technologies have facilitated the becoming-other of architecture: becoming-virtual, becoming-sculpture, becoming-image, becoming-digital and so on. These developments require a shift of emphasis and an alternative movement of thought. No longer limited to the thinness of boundaries – the cross-sectional approach - architecture is gradually exploring the surface-scape of borderline phenomena; slowly transforming by mixing with the forces of new media, hyper-communication, virtual realities, images and screens. In this context of rapid visual productions, questions of style, ornament, image and appearance have gained a new significance, where the surfaces of media *re-production*<sup>41</sup> is increasingly becoming the very space of architectural production.

## Notes

- 1 The term boundary can be traced back to Medieval Latin words such as *bodina*, *butina* meaning "boundary, boundary marker" or *bonnarium* "piece of land within a fixed limit." See Online Etymology Dictionary. [www.etymonline.com](http://www.etymonline.com)
- 2 See Avrum Stroll, *Surfaces*, Minneapolis: University of Minnesota Press, 1988, pp. 40-46
- 3 See also metaphors and analogies in Plato's dialogues: for example, "metaphor of the sun," "analogy of the divided line" and "the allegory of the cave" In Plato's *Republic*, Translated by Robin Waterfield, (507b-509c), (509d-513e) and (514a-520a).
- 4 The authority of the wall has always been subverted by the opening: windows, doors, fissures, cracks etc.
- 5 According to Charles Jencks, the first use of the term can be traced back to Modernism, used by 5th Century Christians who "claimed to be agents of progress fighting to overcome their corrupt predecessors." Charles Jencks, *Critical Modernism: Where is Post-modernism Going?* John Wiley & Sons, Chichester, 2007, p. 8
- 6 Mark Wigley has demonstrated that despite common belief, the white walls of modernism that replaced the ornamental styles of nineteenth century were not naked, nor were they any different in their ornamental operation. He writes: "Although everyone seems to be everywhere concerned with the beauty and purity of the naked body of industrialized structures, modern architecture is not naked. From the beginning, it is painted white. ... What cannot be seen is the obvious. No matter how thin the coat of paint is, it is still a coat. It is not simply inserted into the space vacated by clothing. It is itself a very particular form of clothing. And by sustaining a logic of clothing, modern architecture participates in many of the economies from which it so loudly announces its detachment." Wigley, *White Walls, Designer Dresses: The Fashioning of Modern Architecture*, p. xviii
- 7 The term "International Style" usually refers to the architectural style of the formative decades of Modernism. The origins of the term can be traced back to Henry-Russell Hitchcock and Philip Johnson's book written to record the International Exhibition of Modern Architecture held at the Museum of Modern Art in New York City in 1932 (which identified the common characteristics of modernist architecture.) See Henry-Russell Hitchcock and Philip Johnson, *The International Style*, W.W. Norton, Pennsylvania, USA, 1932.
- 8 The origins of this phrase can be traced to Louis Sullivan who wrote, "form ever follows function." See Louis Sullivan, "The Tall Office Building Artistically Considered" published *Lippincott's Magazine* (March 1896). The electronic version can be accessed at <http://academics.triton.edu/faculty/fheitzman>

- /tallofficebuilding.html accessed 20th March 2009.
- 9 See Adolf Loos, "Ornament and Crime (1908)" in *Crime and Ornament, The Arts and Popular Culture in the Shadow of Adolf Loos*, edited by Bernie Miller and Melony Ward, XYZ Books, 2002, pp. 29-36. See also Mark Wigley's *White Walls, Designer Dresses: The Fashioning of Modern Architecture*, The MIT Press, London, 1995.
  - 10 See Robert Venturi, Denise Scott Brown, and Steven Izenour. *Learning from Las Vegas: The Forgotten Symbolism of Architectural Form*. MIT Press, Cambridge, Mass., 1977, p. 87
  - 11 See Robert Venturi, *Complexity and Contradiction, The Museum of Modern Art Papers on Architecture*, 1966.
  - 12 Charles Moore's *Piazza d'Italia (1978)* and Michael Graves' *Portland Public Service Building (1982)* are examples of this.
  - 13 Charles Jencks writes: "Today I would still partly define Post-Modernism as I did in 1978 as double coding: the combination of Modern techniques with something else (usually traditional building) in order for architecture to communicate with the public and a concerned minority, usually other architects." Charles Jencks, *Critical Modernism*, Wiley-Academy, 2007, p. 51
  - 14 James Stirling's addition to the *Neue Staatsgalerie in Stuttgart (1983)* or Peter Eisenman's "*House VI*", (1975) are examples of this approach.
  - 15 Much of these concepts could be found in the theoretical discourse promoting the International Style of early twentieth century which promised a modern future inspired by new industrial technologies.
  - 16 See "The house is a machine for living in." *Le Corbusier, Vers une architecture, 1923*.
  - 17 See <http://www.time.com/time/2006/techguide/best-inventions/inventions/youtube.html> accessed 20th March 2009.
  - 18 Google.com is an online search engine that generates almost all of its revenue through advertising related to Internet search, e-mail, online mapping, social networking, and video sharing services.
  - 19 Facebook.com is a free-access social networking website that currently has more than 175 million active users worldwide. Like Google, Facebook generates revenue from advertising. See Facebook statistics <http://www.facebook.com/press/info.php?statistics> accessed January 17th 2009.
  - 20 Second Life is a virtual world that allows its users to explore and interact with each other through avatars. Residents are also allowed to create and trade virtual property with each other. See [http://wiki.secondlife.com/wiki/Main\\_Page](http://wiki.secondlife.com/wiki/Main_Page) accessed 20th March 2009.
  - 21 These digital networks form a rhizomatic system that is difficult to control. It is not so much a tree structure with clear lines of lineage, but what Deleuze and Guattari call a rhizome as a complex network that represents a chaotic complexity that abolishes hierarchy. See Deleuze and Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, pp. 7-25
  - 22 Guy Debord, *Society of the Spectacle*, trans. Ken Knabb, Rebel Press, London, 2006, 1
  - 23 Debord, *Society of the Spectacle*, 2
  - 24 Debord, *Society of the Spectacle*, 5
  - 25 Debord, *Society of the Spectacle*, 19
  - 26 Debord, *Society of the Spectacle*, 218
  - 27 Baudrillard's four phases of the image are as follows: first is when image is "the reflection of a profound reality". This is called good appearance where "representation is of the sacramental order." The second phase is where the image masks and denatures reality. For Baudrillard, it is "an evil appearance", where it is "of the order of malfeasance." Debord's conception of the spectacle falls into this category. The third phase is the masking of the absence of a profound reality, in which case the image becomes "of the order of sorcery." This is where the image exploits the desire for the existence of reality, but masks the absence of it. In a way, masking the absence of a reality is still dependent on reality, albeit dependant on the absence of it. Finally in the fourth phase, the image is no longer "of the order of appearances, but of simulation." See Jean Baudrillard, *Simulacra and Simulation*, Ann Arbor, University of Michigan Press, 1994, p. 6
  - 28 Baudrillard, *Simulacra and Simulation*, p. 5
  - 29 Baudrillard, *Simulacra and Simulation*, p. 27
  - 30 Baudrillard, *Simulacra and Simulation*, p. 6
  - 31 "Power floats like money, like language, like theory. Criticism and negativity alone still secrete a phantom of the reality of power...One must not resist this process by trying to confront the system and destroy it, because this system that is dying from being dispossessed of its death expects nothing but that from us: that we give the system back its death, that we revive it through the negative." Baudrillard, *Simulacra and Simulation*, p. 24
  - 32 See Plato's elaboration on the difference between image and appearance in, *Sophist*, trans. Benjamin Jowett, Kissinger Publishing, Montana, pp. 82-3
  - 33 Topology (from Greek *Τοπολογία*, from *τόπος*, "place", and *λόγος*, "study") is a major area of mathematics that has emerged through the development of concepts from geometry and set theory. Topology investigates geometries such as the Möbius strip, which has one surface and one edge!
  - 34 Geology (from Greek: *γη*, *gê*, "earth"; and *λόγος*, *logos*, "speech") is the science and study of the solid and liquid matter that constitutes the Earth.
  - 35 See Deleuze and Guattari's conceptions of "smooth space" and "nomadic voyage" of thought in *A Thousand Plateaus: Capitalism and Schizophrenia*, pp. 480-3
  - 36 Deleuze adapts the doctrine of univocity to claim that being is, univocally, difference. He modifies John Duns Scotus and Baruch Spinoza's conceptions to highlight an alternative univocity, one that is not based on similarity, but on difference. See John Duns Scotus' "Univocity of Being" in Richard Cross, *Duns Scotus*, Oxford University Press, Oxford, 1999, p. 39 and Baruch Spinoza's

- univocity in "Ethics," in *The Collected Writings of Spinoza*, trans. Edwin Curley, Princeton University Press, Princeton, 1985, propositions 1-15
- 37 Gilles Deleuze and Felix Guattari, *What is Philosophy?* trans. Hugh Tomlinson, Graham Birchill, Verso, London, 1994, p. 41
- 38 This nomadic voyage encourages becoming other: becoming minoritarian, becoming-molecular, becoming-animal, etc. See Deleuze and Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, p. 291
- 39 Deleuze and Guattari, *What is Philosophy?* p. 204
- 40 In other words, the boundary is so strong that the categories it defines are never in danger of mixing or transforming beyond their limits.
- 41 Re-production rather than reproduction is used here because the latter evokes copying, duplication or replication. Re-production on the other hand, emphasises creativity and the production of something altogether different.
- John Duns Scotus, "Univocity of Being," *Duns Scotus*, Trans. Richard Cross, Oxford: Oxford University Press, 1999.
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## Illustrations

Figure 1: Different approaches to the notion of boundary: from barrier, to interface, to medium.

Sources:

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<http://i83.photobucket.com/albums/j309/vmcburney/minority-report.jpg> +  
[http://www.capetownview.com/assets/images/s\\_cuba\\_diving.jpg](http://www.capetownview.com/assets/images/s_cuba_diving.jpg)

Figure 2: Perpendicular Thought vs Surficial Thought.

Sources: <http://www.doobybrain.com/wp-content/uploads/2009/02/wall-opening.jpg> +  
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