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Arindam Dutta is Associate Professor of Architectural History at MIT. He is the author of The Bureaucracy of Beauty: Design in the Age of its Global Reproducibility (2006). upon which the arguments of this article are based. At present, he is at work on a book on the relationships between aesthetic theory and economic theory, entitled Ancestralities: Nature, Architecture, and the Debt. He is also writing a book on contemporary Indian art and its relationship to political and sectarian violence in India, entitled Sahmat: 1989-2009: Liberal Art Practice in the Liberalized Public Sphere. adutta@mit.edu ABSTRACT This article looks at the transition in notions of authorship from the Enlightenment to the industrial revolution. Key here is the shift in the formal status of the "copy," whose journey from classical mimesis to the reproductive technologies of the industrial revolution was given strong qualification by Kant. Kant's critique of the predicative autonomy of the subject can be seen to be conceptually necessary for the rise of "design" as an institutional prerogative in mid-nineteenth century Britain, a prerogative which moreover contravenes the anthropological nonreferentiality of the Kantian critique. Thus, on the one hand, the "universal" compass of Enlightenment thought provided nineteenth-century "design" with a predicative generalizability - a faculty that could apply to all objects. On the other hand, the putative universality of design

was simply an alibi for the creation of a global market for European goods, a market defined by its attendant sets of anthropological exclusion.

KEYWORDS: design, aesthetic philosophy, Kant, authorship, intellectual property, "Oriental" artisanry

"Design" - designers often forget that their use of this term is not different from the manner in which the word is used in other spheres of culture: as the formal imprint of discernible intent in an otherwise chaotic realm of phenomena. To wit today's cultural debate in the United States between Darwinian theories of evolution and "intelligent design," specifically the assertion that elements of the natural world are best attributed to an intelligent or supernatural creator (Figure 1). Similarly, we might consider the awarding of the 2007 Nobel prize in economics to theorists of "mechanism design," that is, mathematical models that maximize the role of incentives in a condition of asymmetric information among participants, thus mobilizing the spectral dogma of the "invisible hand" into the core of policy.

In each sphere, "design" operates as the sign of authorship, the marriage of subjective intention and objective, cognizable pattern gathered from a random "Nature" or phenomenality. The transitive element palpitates within the noun. Such is the sense in which Vitruvius, in the preface to Book VI, speaks of the Socratic philosopher Aristippus who, when shipwrecked and cast ashore



Figure 1

on the Rhodian shore, drew hope from geometric figures drawn on the sand, surmising them as signs of human habitation. This very scene is invoked by Immanuel Kant in his critique of teleologies, who argues that the cause for such a figure could not be "the sand [itself], the nearby sea, the wind, the footprints of any known animals, or any other non-rational cause ... only reason can contain the causality for such an effect, consequently that this object must be thoroughly regarded ... as a product of art" (Kant 2000a: 242). In this tableau of pattern on patterns, of regular geometry versus the random geometry of windswept dunes, the human imprint is distinct from the natural; and yet, it is precisely at this (for Kant's time) conventional distinction that the Kantian system steals a march over its Cartesian and empiricist precedents. It does not matter, Kant says, that rational schemas conceivable by humans are inadequate, as the empiricists correctly understand, to fully encompass the multivariate causality of nature. Likewise, the Cartesians are wrong to imagine that all natural phenomena can be seamlessly described by mathematical schemas, and that reason alone is sufficient to understand the adamantine workings of nature. Geometry's reference is to itself, not to sand dunes or other objective phenomena. And here we find the core of the Kantian critique: even if we cannot assume that the plenitude of nature derives from "design" - and Kant uses precisely this word, understanding fully well its implications for theology (Kant 2000b) - the limitations of human reason nonetheless demand that science move forward assuming nature as if drawing from design. Rational intention must move on the presumption that nature is rational, even if this is precisely what is under contention; to begin with any other presumption would undo the possibility of epistemic reflection itself. "Design" therefore indicates more than a mere regularity in objective pattern, whether writ on sand dunes or trees, but rather a symmetry between transcendent cause (assumed "as if" an intention) and objective effect. Kant uses the term in the same colloquial sense as Vasari's disegno, as commensurability of intention to product, whether of God or human. This tenuous (in)commensurability - Kant's "as if" - indicates to us the ruins of a world steeped in mimesis, the remnants of a classical world where human intentions would replicate those of nature, art would follow life.

In the transition from this Enlightenment resolution of the classical problem of intention to the conundrums of authorship posed in the industrial revolution a mere half-century later, we see something like a crisis in this representative schema. This mimetic worldview is literally torn, *materially*, we could argue, in the shift of the character of commodity production and global trade from "primary" *extraction* in the eighteenth century to "secondary" *manufacture* in the nineteenth, one which augurs a different structural status for "nature" as such. In the shift of epistemological paradigm from "nature" to "industry," from economy to economics, the world of mimesis, and along with it conceptions of art and design, can be seen to undergo a

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commensurate transformation. Consider then the following statement from the year 1854 (keeping in mind that the term "ornamentist" is here more or less interchangeable with "designer"):

The artist, it has been observed, has for his art the representation of beauty as it appears in its natural subject; the ornamentist, the application of beauty to a new subject. To the former, therefore, artistical [sic] imitation is an essential requisite... To the latter it is not an essential, but only a useful acquirement. The reason of this is obvious: in few words, the ornamentist refers to nature for the purpose of learning the contrivances by which she has adorned her works, that he may be enabled to apply the same forms and modes of beauty to man's handicraft... As he does not aim at that fictitious resemblance of nature which it is the purpose of fine art to effect, but, so far as he goes, at the identical repetition of natural forms and colours in some new material and for some new purpose, it is obvious that the power of representing objects in the form of diagrams is to him far more necessary and valuable than that of imitating them ... as an artist does. (DSA 1854: xvi-xviii)

This passage appears in the new introduction to the 1854 reissue – as the official textbook of the newly founded Department of Science and Art (DSA) in Britain - of William Dyce's Drawing Book of the School of Design of 1842-3. Pedagogical procedure or method is seen here as instantiating a certain direction of aesthetic intentionality, one particularly appropriate, as we shall see, to the unintentionality that appears to characterize mechanical production. Although both art and design are both seen as forms of human volition, for the mavens of the DSA they are seen to operate in distinctly different genres. Design eschews phenomenal precedent; rather, it inductively rehearses the modalities – the "contrivances" – of nature's generative forces, turning them to schemas for application "in some new material and for some new purpose," applications that are "far more necessary and valuable." Note that in this critique of mimesis, of the world of art and its "fictitious resemblance[s]," what is promoted here is *conceptual* rather than mimetic fiction, figuration whose material counterpart remains to be realized rather than being a replication of extant reality: the "diagram." Like Kant's patterns in sand, design is art thrust into nature, the remaking of nature by conceptual contrivance, but not of it.

What this putative distinction between "art" and "design" points us to is a scission within mimesis, a fracture in the realm of the aesthetic as it enters a new world of "identical repetition," the era of mechanized reproduction. The mundane identity of the mass-produced object to itself displaces it from transcendent identification, away from the replication of originals, turning it instead toward a production of pure effects, of "natural forms and colours" without natural prototype. Lurking behind this programmed dissociation from the replication of origins, as we will see, is a profound recalibration of the relationship between authority and authorship, endured as they are as functions of origin and intention, and the displacement of "design" from the a priori imprint of purposiveness to a kind of legislative rubric to privilege and authenticate particular kinds of intending subjects.

What is the mass-produced copy a copy of?

The introduction to the DSA's *Drawing Book* implicitly attempts a magisterial answer to that question, a question that one could surmise is being asked with increasing urgency in the institutional and commercial circles of the mid-nineteenth century. Consider again, in this context, the sudden resurgence of debates on the word "design" in the decades immediately preceding the Exhibition, certainly in the Schools so-named in Dyce's curriculum and founded in 1837 by the Board of Trade, but also the polemical magazine founded in 1849 by the intractable bureaucrat Henry Cole, *The Journal of Design*, to inveigh against the artistic biases of the Schools, or yet again, the *Manual of Design* comprising the writings of Cole's deputy, Richard Redgrave. Consider also, Cole's subsequent takeover, on the basis of these very arguments in the *Journal*, of the Schools, and the immense powers granted to him including that of stewarding the Exhibition and the establishment of the DSA.

The claims of this article comprise further reflection on the archival work for my book on the DSA, entitled The Bureaucracy of Beauty: Design in the Age of its Global Reproducibility (Dutta 2007). They are presented here as an effort to further churn the cauldron of queries that emerge with the term "design." Through a(n all-too brief) survey of the DSA archive, this article attempts to discern the shift by which the term "design," which in Kant and Vasari turns entirely on an ontological question, receives in the context of British "reformative" state apparatuses of Empire an anthropological resolution. Rather than remain suspended in the classical conundrum of whether things and thought are of design, the liberal response of the nineteenth century to the perceived lawlessness of the market was, increasingly, to legislate subjects and objects as if by design. In this shift to design as a form of managerial agency synthesizing commodity relations within the market, we see its aesthetic kernel distinctly shift to a form of subjective and objective discrimination (and, as we shall see, incrimination) that bears the formal force of law.

The first part of this article examines the critical implications of Kant's description of the aesthetic in a "disinterested" format, and the paradoxical implications of this disinterestedness when mobilized in a determinate manner for design as a form of intention operating within an indeterminate field – the market – in the industrial era. This paradox encompasses the contradictions by which the DSA, as a governmental body invested in the promulgation of design activity premised on a *singular* subject, could nonetheless be seen

as an administrative structure pertaining to a pluralism of subjects

Recount, now, that for most liberal observers of the transformations wrought by mechanized industry, design is particularly seen as addressing an increasingly plural, globalized market, a tour de force particularly brought home to metropolitan audiences by the Great Exhibition. Henry Cole spoke of the challenges of design in this transformed context as nothing less than a global vocation:

The designers in this country are just as likely to be called upon to frame a design which will suit the taste or the want of it, of the African savage on the coast of Mozambique, as that which may be necessary to meet the requirements of the inhabitants of Mayfair.1

Recount, also, that for most nineteenth-century observers the proliferation of consumers, consumption and commodities spelled nothing less than a phenomenal cacophony that ranged from the microcosm of the domestic interior itself to the profanation of public taste and morals. Gottfried Semper, professor of the South Kensington Normal school, wrote of the incongruities of the modern home, every part made by a different trade, assembled in a slapdash manner without any view to the conceptual whole: floors, walls, windows, doors, each furnished by a different trade (Semper 1989). Richard Redgrave, echoing a vast spectrum of Victorian critics who assailed the fickleness and easy capitulation of the masses to prevailing "fashion," berated the mind-set wherein "a pattern or design is known to be good, bad or indifferent, only after those who are supposed to be the best judges of such things, namely, the purchasers, have approved or condemned it ... There are no legitimate standards of taste or design except the demands of the day" (Redgrave 1853). Taste, the communion of "truth and beauty [has been relegated to nothing but] a price current."

The impetus for the institutional paroxysm that was the DSA was the particular conjuncture of the relationship between Britain's industrial revolution at home and its financial control over the international payments system abroad, in addition to its lopsided control over bilateral trade with its colonies, which ran up heavy deficits through both increased absorption of metropolitan, mass-produced commodities and stringent price controls over expanded primary (raw resources) production. This resulted in a triangular system, where capital exports by Britain (garnered from its colonial surpluses) to countries on the European continent both fuelled their subsequent industrialization and produced the conditions for their "relative advantage," in David Ricardo's words, vis-à-vis industrial production in Britain (Patnaik 1995: 90).

Such were the circumstances – born out of this multilateral, competitive vein – that the Board of Trade invoked the term "design" in its patronage of the Schools, the Exhibition and the DSA: as a form of intervention into the market in order to keep up Britain's advantage in the global exports system. The principal argument underlying the DSA's particular mandate – a premise shared by all the world exhibitions – was the faith that the continued preponderance of British global trade hinged on the superior aesthetic attributes of its products. Rhetoric of reform aside, the incredible reach of the DSA's colossal corpus of practice, its pedagogical critiques, its theorizations of the aesthetic, its patronage by industrialists and manufacturers, its innovations of policy and financing, its strategies of display, its demographic understanding, and its proliferating schools can be pared down to one overwhelming conundrum that underlay its entire enterprise: how do economic markets move?

Market Intentions

Design was the new key word that emerged to capture this desired conformity, a conformity not only to be achieved among the various commodities that constitute common life, but also the "subreptive" one between a perceptual, imaginative unity and the formal diversity of material uses and shapes that make up everyday objects. Pedagogically, therefore, within the Schools of Design, the premise for this dispersed leviathan was, indeed, the plethora unleashed by mechanized production and its seemingly undiscerning mass reception: the promiscuous, incongruent, seemingly purposeless array of profiles, shapes, colors, and patterns of the commodity-form. Let us make no mistake, this mid-nineteenth century dispensation of the word "design," despite its deceptive etymological continuity with and invocation of humanist cognates or equivalents, is a far cry from its precapitalist conceptions. The relationship to the object of art is no longer merely one involving problems of conceptual transmission or synthetic facility invoked in the use of the word "disegno" (also draughstmanship, drawing) in Vasari's Lives and in the Florentian academy (Jack 1976: 3-20; Mirollo 1984) or, say, the concept of

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nakshā (map, schema) prevalent in the kārkhānās of the Mughal empire in India (Verma 1994; Dutta 2007).² The modern conception of "design," by contrast, is distinctly invoked as a *displacement* from the classical problems of mimesis; its key deployment is to intervene in the unruly vicissitudes of the marketplace. Contained in this modalizing relationship of design to the heterogeneous commodity is a radically transformed form-finding sensibility of control, directed toward the entire plethora of commodity-objects: chairs, chintzes, china, alike. In a speech at Manchester iterating the DSA's party line, Granville could describe design as deducible from the implicit symmetry in the very absent-mindedness of normative behavior (Kant and Vitruvius' patterns on the sand come once again to mind):

I believe, after all, there is design in the cutting out of a frock; and a friend of mine went still further, and suggested that to lay a knife and fork parallel to one another required the sort of eye which was perfected by a drawing lesson or so. (Granville 1857)

"Total design" - the terminology invoked recently by grandees such as Bruce Mau - is thus a consummate tautology: design in the industrial era is through-and-through a totalizing ideology; it pervades the totality of the commodity field (Mau 2004). Through "design," the indeterminate itinerance of capitalism and empire could be organized as Gesamtkunstwerk, a word not inappropriate given Wagner's coinage of this term in the immediate prelude to the Great Exhibition. We should notice that in the throes of the DSA's aspiration for the union of capital and intentionality, in this desired marriage, are the seeds of an intimate conflict: design is here set (nominally) in an adjudicatory role against the inveterately promiscuous tendencies of industrial production. The role of design, as orchestrated by the Department and the state, was as much to work against capitalism's dissipative ethos, attempting instead to "keep in the van of the public," lead it by the nose, so to speak, stimulating "research" into a methodology of the aesthetic by which the fickle vicissitudes of mass taste would be bridled. Design is thus the modalization of liberal desire as such: to insert discernment into a promiscuous field, discrimination into the indiscriminate bedlam of the market, intention back from its perceived loss in the eddies of mass taste.

Away from Mimesis

Indeed, it is in the desired capture of this everyday heterogeneity that we find the aesthetic topos in the DSA's pedagogy that presages the defining element of a modernism, so-called, well before its vaunted manifestos in the twentieth century. In the quote by Kant that we have read earlier, we have seen that "art" is defined primarily as the imprint of conceptual intention. This conflation of art and reason may appear confusing, given the former's conventional association with forms of extra-rational thought. We may remember that for Kant, art *is not* the privileged vehicle of the aesthetic, since the latter is identified singularly with forms of disinterested sentiment. As imprint of interestedness, art belongs rather to the conundrums of rational (and *only* in this specific sense, *extra*-rational) intent, to the *a priori* perceptions of synthetic unity. This dissociation between intention and the aesthetic, as we shall see, would be critical in orchestrating the authorial force implicit within design.

In the Kantian – i.e. pre-industrial – sense, "design" comprises the impeccable content of art. The primary feature of the aesthetic in the Kant of the third Critique is its disinterested and contra-purposive character. In other words, the aesthetic is inherently random, unanticipateable. It appears from founts whereof one knows not, and its psychic impact is somewhere in the range between surprise, astonishment, and in its furthest reaches, the "negative thrill" of the sublime. What the aesthetic cannot bear - and let us be clear here, since it pits it against its subsequent appropriation by nineteenthcentury art and design – is intention. To put it differently, intention is no longer trammeled within the bounds of a pre-given schema (i.e. God's intent) to which it must always conform in order not to subside into lawlessness. Rather, rational intention must carve out the determination of its own limits to determine the laws of a nature whose dimensions are increasingly seen as limitless. It is in this infinite scope of reason that the anti-tendential force of the aesthetic plays a defining role: the aesthetic supplements reason's setting of limits with a perception of limitlessness. The aesthetic operates as something like an extra-rational prosthetic of rationality, purposiveness without purpose, Zweckmässigkeit ohne Zweck. If Kant rules out art as the all-too-finite bearer of mimetic intent, in the aftermath of Kant art will increasingly be defined in precisely this new idiom: as a form of ceaseless activity as the constitutive element of personhood. Artwork becomes art work, a laboring in the anticipation of beauty that triggers concepts rather than the replication of natural profundity.

It would be critical for us to understand that the anti-mimetic force of the DSA's arguments on design were precisely posed in this post-Kantian ethos; this paradoxical employment might be said to exactly mirror capitalism's appropriation of romantic indirection as the defining trait of the individual. In the passage from Dyce's Drawing Book cited above, design's vocation to turn aesthetic purposiveness to "some new material and for some new purpose" bears also within it therefore an *expansional* determination, the potentially infinite activity – like that of reason – of bringing all phenomenality within its embrace. Here is Christopher Dresser, first student and then teacher at the DSA's "Normal" (teacher-training) School in South Kensington, laying out the scope of design in its industrial incarnation:

We shall thus be led to consider furniture, earthenware, table and window glass, wall decorations, carpets, floor cloths, window-hangings, dress fabrics, works in silver and gold, hardware, and whatever is a combination of art and manufacture. I shall address myself, then, to the carpenter, the cabinet-maker, potter, glass-blower, paper-stainer, weaver and dyer, silversmith, blacksmith, gas-finisher, designer, and all those who are in any way engaged in the production of art objects. (Dresser 1859: 3-4)

Every object of industry, in all their disparate, heterogeneous motive and motif, cause and calling, would potentially receive the impress of design. Design has no privileged object. And yet, and this is the crux of the argument here, the anti-objective reflection defining the Kantian ethos meets a significant obstruction, for the pure, anti-mimetic, force of design in the industrial era cannot be realized without an object. More to the point, an object that is already given, wrought by other determinations of use: a house, a cup, a coat, wallpaper, carpets, lamps. Design is through-and-through an objectdevising activity.

It is also this utilitarian demand that positions industrial design in the industrial era away from the fine arts, since the upright frame and normative repose of painting or sculpture does not allow itself to be used with the casual tipples and topples to which the everyday object of use was subject. Here is Redgrave: "It cannot be desirable to repeat even Turner's pictures, however beautifully rendered, over cottage-walls, fitting them into corners and round chimneypieces and windows, and cutting them to lengths and widths." The morphotropy³ of imitative art is at odds with the assembling logics of the domestic wall. The same problem lies in garments, made as they are to "hang full and in folds; thus the light, shade, and the very forms of the object which has been imitated, are confused and hidden, and that imitation which the manufacturer had been at such pains to produce is entirely lost and destroyed. The garment moves with every motion of the wearer, and any examination of this rare art, as we are enabled to examine the painter's work, is, in the use of this material, as impossible as it is desirable" (Redgrave 1853: 21, 23). Thus, in clothing, vertical patterns are to be preferred over horizontal ones, since these both accentuate and are accentuated by the human body in motion.

Thus – and it is here that we find its defining paradox– as opposed to art, design must produce effects that are as if unintended in objects that are otherwise entirely intentional, indeed formed by other intentions that are otherwise strong. The teacup must somehow reflect as much your prehensile abilities in its handle as the curve of your lips; design must both reflect that organic accord and coordinate the cup with all the other objects of the room – with the saucer, the tablecloth, the décor - with which it otherwise has little such organic

relation. Discontinuous realms of production are entangled within the same, unifying objective: this juxtaposition of the teleological with the non-teleological should give us pause, make us reconsider that old chestnut about design as the ideal amalgamation of science and art. Design is a non-purposive sensibility brought to a purposive object.

Again and again, the DSA's pedagogical tracts repeat this distinctly paradoxical impetus: design must methodize a countermethodological attribute. Take for instance the clearly worded polemic in William Dyce's introduction to the School of Design's *Drawing-Book*:

The outlines of ... ornaments are only approximations to scientific forms; nor is more required in art. The eye is satisfied with a degree of approximation attainable in practice, and, were it possible to work with mathematical accuracy, would be unable to appreciate the difference between the truth and the approximation. But it is precisely because forms and lines of the kind alluded to must in practice be drawn empirically, that ornamentists must undergo a study which can neither be ranked under the head of artistical imitation nor of practical geometry. (DSA 1854: xix–xxi)

The tyro designer need acquaint himself with the primary principles of *neither* art *nor* science, at least to the extent that each of them mimes a certain order of phenomenality. This is significant for a department that names itself on the hyphenated construct translated from the Aristotelian *techne*. Design *is neither art nor science*; it is only a rough approximation – without any proper frame of verifiability – of both.

Signature

In this absence of verifiability, this assertion of approximation, a critical problem arises, a problem proceeding not from design's derivation from the disinterested aesthetic, but for it, a problem that belongs in fact to its new field of activity in the capitalist sphere. To put it in the context of the conundrum faced by the liberal reformers of the mid-nineteenth century, this contradiction can be stated as follows: the aesthetic's lack of a defining materiality – design's description as a purely qualitative register - renders it incommensurable with measurement, and therefore valuation and exchange, making it impossible to evaluate its valorizing activity. Land can be mapped, cloth can be measured by lengths, gold can be weighed, but the ontological indeterminacy of design renders its value fraught in the calculus of trade, for one knows not in this extra-rational, aesthetic calculus what is being demanded and what is being supplied. Agitating for the introduction of greater proprietary rights in design - rather the substance comprising the commodity itself - the petition cited below, made by Manchester printers to Parliament in the early

1840s, indicates to us precisely this very indeterminacy. Note here the superlative value given to the ideational content rather than the material labor expressed in design, a point which will be crucial to my subsequent argument:

[While] the various fabrics themselves enjoy that natural protection which the law affords to property, yet, by a strange anomaly, the original designs or patterns which give to these fabrics a great portion of their value, and which are equally the produce of labour, skill, and capital, are left almost wholly unprotected, the inventors or proprietors of such designs having no proprietary interest in them beyond a few weeks, when they become the common property of the trade ... the real value of a design, that property in its exclusive use which it is the object of copyright to create and confirm, is by no means to be estimated by the actual outlay in wages upon its production, which may in some cases be a mere trifle in amount, [while] the merit of the idea, and the profit of its sale, may be of the highest class. (Tennent 1841: xi, emphasis mine)

The Board of Trade and the Cole circle understood well that any comprehensive effort to infuse better design norms in commodity production were unlikely to succeed if manufacturers who invested in better design found this advantage sloughed off by imitators who spared themselves the cost of hiring designers. The legal conundrum might be said, once again, to turn on the question of purposiveness and nonpurposiveness, couched in its utilitarian manifestation as the distinction between "use" and "nonuse": the first pertaining to patents, where a design was defined by its purported "utility;" the second to copyright, defining objects of artistic singularity (i.e. its lack of utility). This at least was the key predicament riving the twodecade-long campaign within and without Parliament by Cole and his aficionados – from the 1842 Ornamental Designs Act onward – to garner legal protection for designers, a campaign coterminous with the one on pedagogy in the Schools.

The inability for categorical discrimination between these two qualities is evident in the indiscriminate smorgasbord of objects filed under the 1842 Act - which defined "Ornamental Design" as determined by its "nonuseful" characteristic, as opposed to "Patents" - testifying to the fact that rather than adhering to the distinction itself, it had been used by manufacturers only because of its easier procedural requirements. Neither the registrars nor manufacturers appeared to know, or care about, how to discern these ontological differences. Indeed, Cole lamented the resultant hodgepodge of registered objects as symptomatic of the problems of distinguishing design as a valorizing activity from all other kinds of added value: "if the earliest registers of ornamental designs be consulted, they



Figure 2
Designs registered under the 1851 Act, on the eve
of the Great Exhibition, supervised by the Registrar
of Designs, then under the management of the DSA.

will show that files, horse-shoes, cistern-valves, taps, corkscrews, skates, gas-burners, and even steel-pens were registered as articles of ornament!" (Royal Society for the Encouragement of Arts, Manufactures and Commerce 1850–1853: 15, 23) (Figure 2).

Contrast this abhorrence of promiscuity against Christopher Dresser's bold claim about the totalizing or pluralizing eye of design that we have seen above - i.e. that design "addressed" itself to the "carpenter, the cabinet-maker, potter, glass-blower, paper-stainer ..." and so on. From the pedagogical, or at least hortatory, standpoint, therefore, design refers itself, unhindered, to the heterogeneity of objects: to the grain in wood, to brick-laying patterns, to motifs on cloth and paper. (Indeed, art has no such sanction, design is a useless facility appended to a useful object, while art is a useless facility appended to a useless object.) From the legal standpoint, however, as we see in Cole's remonstrance above, the carpenter, the bricklayer, the printer, the myriad agents of value-addition to the commodity, cannot as such be considered designers or embody the subjective determinations that define the designer. Their labor is all-too-determined by the mundane exigencies of use (or the indiscriminate eddies of fashion); it does not bear the enlightened, disinterested imprimatur of the aesthetic. In the words of the Manchester printers, they are devoid of the "merit of the idea."

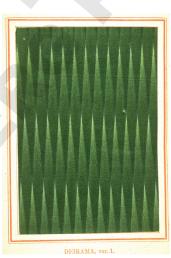
Indeed, it is in the legalizing, formalizing claims of this disinterested, ideated intention within an objective morass that we see design's principal claim come alive, as a signature of intention within a randomized field, particularly in the juridical impetus to discern the (legitimate) original from its (illegitimate) copy in an otherwise

burgeoning sphere of copies or mass-reproduction.⁴ In the legal debates on copyright in this period, we witness an extraordinary staging of design as a model of ideated intentionality: it is categorically described as a linear progression from a mental projection into its denomination as exceptional object, *beyond* mimesis. That intention was still indeterminable in this context is significantly evidenced in the following passage of a seminal tract by the copyright and patent lawyer Thomas Webster, who described design in the following way:

[In] design the subject of registration rests simply in pattern, shape, or configuration; it is, in the language of the geometrician, strictly linear... A design when transferred to or exhibited on paper is complete; the mind that conceived it and the hand that embodied it must obey the same will... Thousands of designs may exist of the same style and character, but each different from the other. It may be doubted whether two independent minds ever produced the same design; identity of design is an evidence of piracy. (Webster 1852: 4)

Thus, if on the one hand the carpenter or the garment-maker reproduces common uses of the commodity without regard to aesthetic discernment, by contrast the copier or counterfeiter who repeats the higher aesthetic without having realized it from within himself, merely reproduces the effect, without taking on the labor of assembling the cause (Figure 3). Mere formal coincidence is thus a map of (criminal) intentionality; whether the artisan/copier intended to copy or chanced upon a coincidence is a matter of secondary







adjudication, with the burden of proof on the copier. What is critical here is the dehiscence, a split, produced within two senses of the concept of artifice, between making and faking, between what is made and what is made up, two conventionally coeval terms that are now thrust into two completely different legal spheres, that of the original as the imprint of idiosyncratic intention, and of the copy or the reproduction or the coincident as the inauthentic product of a disingenuous, dissimulating, or devious individuality: the duplicate as the emblem of duplicity. The artisan is here vulgarized, while the counterfeiter (also an artisan) is criminalized: the artisan copies unknowingly, at best automatically, the counterfeiter copies by intent, illegitimately.

We may say that Benjamin had it exactly backward: the "aura" of art is produced precisely in the age of mechanical reproducibility. Indeed, what the permutational description of the original achieved was the formalized transposition of objective idiosyncrasy as the signature of subjective singularity. This post hoc recuperation of a linear intention rules out tout court the possibility of accidental or chance figurations of intention, an epistemological construct that would be upended within a generation, with some force, by Darwin.

We must attend carefully to this formalization, since it is tantamount to nothing less than the authorization of the author. This is the key difference between the copy in an era of mimesis and of the copy removed from mimesis. The original no longer resides in some adamantine, elusive totality of which all reflection must only be a pale, even deceptive, shadow; rather here it has been secularized - literally, "made worldly" - into a predication that bears the fullness of volition. As subjective "effect," the object exhausts, toto caelo, the myriad propensities of subjective cause, inasmuch as intention finds itself curtailed into a productive commensuration. It would be important to note that this is not merely the legalization of authorial intention; guite to the contrary, this formalization of the author is the basis for the very making of law as such. Without such positive delineation of intention or volition, in fact, positive law would be impossible. The words "authority" and "authorization" are derived from "author," not the other way around.

Global Passages: Designer and Artisan

The emergence of the designer instantiates this formalizing shift, pulling the frames of art away from its artisanal forebears. The premodern world has designs, it lives in a universe conceived by design, but it has no *designers*; the rise of "design" as a term in the industrial period thus signally privileges a volitionary model of intention. Even as this displaces the founts and the frames of the aesthetic, it also creates a portcullis, a restriction and description of certain forms of authorship by which certain conceptions become "original," others "copy," and yet others, "fake," "counterfeit," or simply "unoriginal." By end of the nineteenth century, the difference

between original and copy had been irrevocably transposed into the potential distinction between legitimacy and fraud. Design's purported unifying or pluralizing function implicitly carries within it a segregative demarcation, whose adjudications proceed under force of law.

The global effects of this demarcation are not innocuous, indeed they signal a scission in the different worlds of making from which we have not yet extricated ourselves, or indeed may well be at a loss to discern in terms of its myriad effects of exclusion, particular in terms of authors whose conceptions might bear the imprint of some other intention(s), including that of mimesis. Recount now Henry Cole's anticipation that the laws on intellectual property passed on the eve of the Exhibition would have "important results on industry, both abroad and in our colonies," and that they would "affect inventive rights, more or less over the whole world." The uneasiness by international exhibitors to exhibit at the world exhibitions, publicly exposing their trade secrets, triggered a wave of legislation from the Great Exhibition onward whose compass increasingly moved toward multilateral restrictions on intellectual property. These exercises culminated in the Paris Convention on patents (signed during Patent Congress as part of the 1878 Exposition Universelle) and the Berne Convention on copyright of 1886, both active to this day, the latter - reader beware! - binding on this very article. Cole, one of the earliest legislators in this movement, had been prescient about the implications of these laws at the venue of the 1851 Exhibition itself:

The beginning of the reform of our Patent Laws, or laws for the recognition of the rights of intellectual labor, which I foresee may have great international results on industry, is due to the Exhibition ... Imperfect as this law is, it will have important results on industry, both abroad and in our colonies, and will affect inventive rights, more or less over the whole world. (Cole 1853: 432)

And yet, take for instance the Indian section of the Great Exhibition (Figure 4), second only in size to the British galleries. None of the extensive deliberations and concerns on matters of IP leading up to the Great Exhibition were deemed relevant to its Indian displays. The exhibition triggered a wave of passion for Oriental designs which was handily exploited by British and European designers, who routinely copied or adapted Oriental designs, copyrighting them under their own name, relegating Indian and Asian artisans into a kind of creative anonymity (Figure 5).

The very appreciation on the one hand of these Indian and "Oriental" decorative wares, and on the other their legal anonymity, makes patent to us a considerable ambivalence in the understanding of design as a function of singular intention. This celebration of



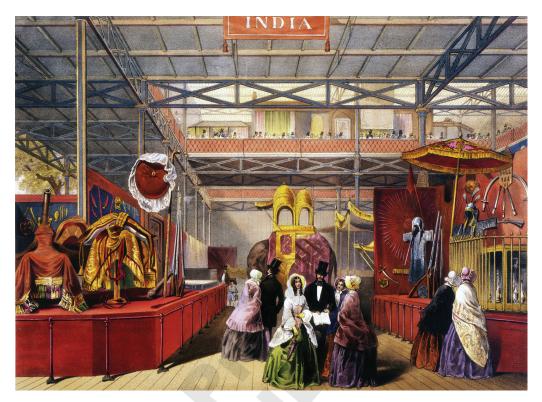


Figure 4 Indian Court, The Great Exhibition, by W. Goodall. London, England, mid-nineteenth century. © V&A Images/Victoria and Albert Museum, London.

collective or anonymous authorship in Oriental production may appear contradictory given the Cole's circle's protracted attempts to establish the rights of intellectual property on what appears to be an individualist basis. This contradiction may be revealed as only apparent, however, if one considers that what the Cole circle was attempting to achieve was less invested in the rights of individuals per se than in the instrumentality of these rights in achieving cohesiveness of intention in aesthetic inspiration, the commensurability between intention and effect through whose aggregation a superior public domain of taste could be orchestrated. Indeed from this point of view, the Oriental artisan poses little problem for this desired cohesion; quite to the contrary, the artisan represents its unlapsed, superlative essence. "[F]ashion, which [in the West] is as fickle as the wind, is in the East as steady as their monsoons, and has fortunately preserved some of the manufactures in their pristine excellence" (Royle 1849). And here is Owen Jones:

In the Indian Collection, we find no struggle after an effect; every ornament arises quietly and naturally from the object decorated, inspired by some true feeling, or embellishing some





Figure 5 Carpets disinterred from Indian palaces by colonial officials in order to obtain and circulate their patterns in the global market.

real want. That same guiding principles, the same evidence of thought and feeling in the artist, is everywhere present, in the embroidered and woven garment tissues, as in the humblest earthen vase. There are here no carpets worked with flowers, whereon the feet would fear to tread, no furniture the hand would fear to grasp, no superfluous and useless ornament, which a caprice has added and which an accident might remove. (Department of Practical Art 1851: 6-7, emphasis mine)5

Note again the emphasis on totality: taste is "everywhere present." If modern industrialism threw up a profligate public sphere gone awry at the hands of ungoverned taste, what the East presented to its Victorian purveyors is both a mode of production untainted by mass taste and a presumed unity of conception stemming from unlapsed, aggregate forms of authorship (Pugin and Ruskin's celebration of the medieval guild being its Occidental counterpart). Likewise, the felicity of Oriental patterns for industrial design thus made it a critical

component of the DSA's pedagogy, evincible in the entire array of its prescribed textbooks from Jones's *Grammar of Ornament* onward.

We forget the first line of Benjamin's essay: "In principle, a work of art has always been reproducible." Indeed, the resurrection of unruffled organum or undivided numen of the Oriental or medieval craftsman, instead of being waived as a nostalgic or lapsarian ethos, should point us to a defining, albeit clandestine, organicism nestled within the very singularity of the designer. "Design" inevitably carries within itself a residue of the bespoke as the norm of taste: the mass-produced object must always be reduced to the one, the singular (intention) - therein lies the gauge of its authenticity, its power of innovation. What is defined legally as (mere) mathematical permutation of objective definition must nonetheless be covered over by a cultural construct of collectively orchestrated genius. It is in this bi-faceted definition that we find the flip-side of the copier or counterfeiter - as willful subverters of authentic intent - in the anthropological construction of the Oriental artisan: as authentic copiers without willful or conscious intent. Take for instance Jules Bourgoin in the foreword to his book on "Arabic Art." a lavish production of Arabesque patterns prescribed to metropolitan workers. What is more noticeable is the contrast that the etiology provided poses against Thomas Webster's conception of the "linear" (Figure 6):

The application of these principles essentially constitutes what we mean by the "line" in Arabic art. Now this application is entirely subordinate to the skill of the artisan and in no way supposes reasoned, scientific knowledge of geometry. In fact, we should not imagine that the Orientals, in the period when they constructed the buildings, had a well-defined theory on which to base their richly varied intention. The Arabs made use of geometry without any understanding of the science of geometry and when they invented stalactite vaulting and interlace this was not the deduction of a hitherto unknown theory – and this is particular to their art – the simultaneous perception of pure form and of the work to be accomplished.⁶

Think now of the extraordinary contortions effected in the above paragraph to Kant's characterization of patterns in the Vitruvian tale. Here, the cohesiveness of intentionality in the Oriental artisan is presumed to proceed from conceptual *unenlightenment*, from the absence of "well-defined theory;" thus the artisan, while epitomizing the productive ethic to which design must aspire, cannot himself aspire to the status of "author," since his products present an aesthetic coherence of effect without ability for reflexive cause. In contrast to Kant's investing in geometrical pattern the signature of a rationality above that of the animal, the Oriental artisan is as if an aesthetic automaton, producing patterns exemplary for the improvement of



Figure 6 "Arabic" pattern, Achille-Constant-Théodore-Émile Prisse d'Avennes, The Decorative Art of Arabia (1873).

design but divorced from the cognitive considerations that beset designers in its secularized sense. In 1882, Abdul Rahman and Rahumtoolah, both "mistrees" from Rourkee in the North-Western Provinces, jointly filed a patent claim for the "improvements" they had made on sugarcane mills. After much deliberation on the issue, the details of which were considered significant enough to publish in the India Home Proceedings, patent commissioners turned it down on account of its lack of novelty (d'Avennes 1989: 18).7

The reasons given for rejection are interesting in their own right. Detailing out each element, the commissioners wrote:

The slotting teeth proposed in their improvement was invented in 1660, 223 years ago, by Dr. Hooker. It was modified in 1808 by Mr. White of Manchester, and has been in use in India

from time immemorial to couple and drive sugar rollers made of wood. It is not an improvement on cog wheels properly proportioned, and *is not a novelty*. [These elements can be found] ... in almost every village [and is therefore public property]. (emphasis added)⁸

Authorship for the same object can be attributed to two radically different agencies, in the metropole to the individual ("Dr. Hooker" and "Mr. White"), and in the colonial indigene to "time immemorial." It is in this contortion that we see the reductional armature of industrial production effected by the exceptional status accorded to the designer. The implications of this contortion are not trivial, if one considers that under the British Empire large parts of the world were nonetheless subject to these critical blind spots of affirmed subjecthood within British jurisprudence on matters of production of which the "designer" was effectively the cultural hero. In the long run, the supposedly "non-cogitative" artisans – the bulwark of economic production - in the mostly nonindustrialized areas of Britain's vast colonial domains were effectively rendered illegitimate in this new, centralized economic calculus, to all intents and purposes no different from that of counterfeiters in being unable to appropriate or enter the strictures of modern law.

To conclude with a caveat, we return to the title of this journal. The liberal attitude tends to construe "design" and "culture" as countervailing or supplementary forms of agency: design as working out the conundrums of rational intent, and culture as the catchword for extra-rational behavior in the aggregate. This putative contrast belies the fact that the genealogies of these terms are in fact coterminous, indeed of a kind. It is important to realize that it is precisely in the very period design rises into the commercial and legislative ascendant in the apparatuses of Empire that "culture" also emerges as the compensatory rubric by which liberalism attempts to valorize the motors of extra-rational expression. (We remember that Kant's third Critique is followed by his foray into anthropology.) This is not the place to rehearse a bibliography by which we can see the starkly simultaneous appearance of culture as a "keyword" (Raymond Williams is apposite here) in the varied juridical texts of the 1850s and 1860s: from Matthew Arnold to Henry Sumner Maine, or in the anthropology of Edward Tylor to the resurrection of the Brehon law tracts in Ireland as proto-legal precedent.

We have here reviewed the shift from what we may call a Critical (i.e. Kantian) understanding of design to its liberal recoding in the industrial era as bearing force of law. If, in that transition, the assumptive element of Enlightenment thought was translated into a positive, discriminative framework, today, in the transition to *neo*-liberalism, we see – for instance, in the elucidation of "design" in the TRIPS agreements within the World Trade Organization – its hardening into

a policing, retaliatory mechanism within the putatively trade-induced comity of nations. The role of "culture" as a terminological addendum in securing that comity – as in UNESCO – suggests that culture operates no less as a discriminative apparatus. But this has better be taken up at some other point (Dutta 2007).

Notes

- 1. See Department 1853, Appendix to the Report of the Proceedings of the Designs Office from the 1st July 1829 to the 31st December 1852, furnished in conformity with the Directions of the Lords of the Committee of Privy Council for Trade.
- 2. For an operative explanation of nakshā, see Dutta 2007: 208–12.
- 3. For a theorization of the term "morphotropy" see ibid.
- 4. For greater detail on this subject, see "Of AbOriginal and CopyRight" (Dutta 2007).
- 5. The Bureaucracy of Beauty (Dutta 2007) devotes several chapters to this relationship of the DSA to Indian and Oriental aesthetics and administration. For a full bibliography of this relationship, see the 67-page document on my website: http://architecture.mit.edu/people/profiles/biblio dutta.pdf
- 6. Original text in Jules Bourgoin. Les Arts et le trait général de l'art arabe (1873), translated and published in d'Avennes 1989: 18.
- 7. On the government's side, the deliberation centered precisely on its jurisdiction in terms of being able to determine the terms of novelty, "It has, however, been suggested to the Government of India that it is doubtful whether, in making such enquiries into the novelty of an alleged invention, the Executive Department is not in reality traveling beyond the province assigned to it in the patents act" (India Office Library: Home, Revenue and Agricultural Department Proceedings, July 1883).
- 8. India Office Library 1883. This case is not unique in the intellectual property rights (IPR) annals of rural India. In the case of Rajaram Dass, iron founder, native of North Bantrah in the district of Howrah, another claimant for a sugar mill in 1882, a similar reason was given for rejection, "Sugarcane rollers made of wood have been in use in India from time immemorial ... The conclusion I arrive at is that sugarcane rollers, for which the petitioner seeks a patent, is not a patentable article in itself, it having been used in wood and iron for years in India, and that it is public property. Therefore [it] cannot be considered a novelty" (India Office 1883).

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