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Design Thinking, Bullshit, and what thinking about Design could do about it

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Abstract:

Design thinking has been heavily promoted as a powerful tool for human-centred innovation and as a versatile problem-solving method for any issue involving sociotechnical systems. Recently, however, some critical voices within design and science & technology studies have called bullshit on the soundness of such claims, accusing design thinking of essentially trivialising design methods to serve purely commercial goals. Through an analysis of the recent history of design research and an overview of some (philosophical) accounts on the concept of "bullshit", this paper aims to clarify whether there are sufficient reasons to dismiss and belittle design thinking in such terms. Designers, educators, and anyone concerned with how obfuscatory and vacuous discourse threatens deep reflection on design perhaps will be interested in this account.

1. INTRODUCTION

1. Meaning the "open-ended and contradictory process of politically assisted market rule" (Peck 2010, xii).

2. As Graeber (2015, 9) notes, despite the contempt of neoliberals for government bureaucracy, any policy intended for reducing government interference, actually produces *more* regulations and bureaucratic procedures. Thus, as Peck (2010 xiii) puts it, far from being the antithesis of regulation, neoliberalization is "a self-contradictory form of regulation-in-denial".

Over the last four decades, in most countries, neoliberalisation[1] has gradually but steadily caused public and private power to merge "into a single entity", "rife with rules and regulations" (Graeber 2015, 17). This process of "total bureaucratisation"[2] has involved not only radical economic and political realignments, but also a cultural shift. Accompanying deregulations and privatisations, the idiom and practices that originally emerged in the "corporate bureaucratic culture" of financial and management circles have spread to every area of human activity where "people gather to discuss the allocation of resources of any kind" (2015, 21). Paradoxically, however, this bureaucratic takeover now comes disguised in the language of *innovation*. Change has been transformed — from a means — into an end in itself. Organisations of all sorts are now crowded with people (managers) who do not think of themselves as bureaucrats but whose only job is to constantly devise new procedures, regulations, and metrics to improve "accountability" or "productivity". Concocting such "hollow change" requires a constant "supply of new management fads and fashions" (Spicer 2017a); recently, those providing them have turned their attention to Design for inspiration. The idea roughly being that *design thinking* — i.e., approaching problems and constructing solutions the way designers supposedly do — can be learned and employed by anyone in any context and for any reason.

The most vocal proponents of design thinking characterise it as "a human-centered, creative, iterative, and practical approach to finding the best ideas and ultimate solutions" (Brown 2008, 92); as a seemingly unparalleled method to "innovate". This conflation between design thinking and innovation is recent, yet, both concepts have rich histories of their own — the latter's spanning for hundreds of years and involving several shifts in meaning (Godin 2015). The main ideas behind design thinking have been discussed at length by theorists such as Richard Buchanan (1992, 2009, 2015), Nigel Cross (2001, 2006, 2011), and Kees Dorst (2011), amongst others. The common theme in their accounts is roughly that Design is not only a creative practice but should be regarded as an epistemic approach halfway between the sciences and the humanities. Recently, however, some critical voices (Jen 2017; Vinsel 2017) have called into question — or rather, have *called bullshit* on — design thinking and the way some of its advocates promote it. They accuse them of being reductive, vacuous, uncritical, and of focusing on (simplistic) processes rather than on evidential outcomes. Since neither of these critics is a design scholar and the channels where they voiced their concern are not academic, it would be easy to dismiss their complaints as mere straw-man bashing or, worst, as a non-issue. Nonetheless, design thinking is indeed becoming popular amongst members of the neoliberal bureaucratic culture, who are often attracted to "business bullshit" (Spicer 2017a, 2017b). While name-calling rarely, if ever, leads to fruitful discussions, we can at least regard this blunt criticism of design thinking as an opportunity to gain some understanding about Design, and about bullshit as a phenomenon.

This paper does not (and cannot) offer an exhaustive and definitive account of design thinking. Instead, by surveying what can be understood by "bullshit" from a philosophical standpoint and by briefly looking at some of the theoretical foundations of design thinking, it aims to clarify whether the arguments of its critics are unfounded or not. The first part offers a synopsis of the main objections against design thinking. Next comes a summary of the origins of design thinking and an overview of the philosophical understanding of bullshit. The following section provides a discussion in light of the previous accounts. The main argument advanced by this paper is that design thinking is far from being a homogeneous concept or phenomenon. It contends that while some implementations of design thinking could indeed be accused of serving as a vehicle for the obfuscation of "the truth", this judgement cannot be generalised. Furthermore, it suggests that perhaps the problem is not design thinking

but the way the bureaucratic culture portrays and thinks about innovation and its relation to Design.

2. CALLING BULLSHIT ON DESIGN THINKING

In a recent talk, Natasha Jen (2017), a designer from Pentagram, denounced what she described as a "complete lack of criticism" of the "design community" against design thinking. She argued that a simple Google search showed how design thinking has been reduced in recent years to a process consisting of five (seemingly linear) colour-coded steps,[3] buzzwords and, above all, Post-it notes. Jen's main objection was that although the five-step model appears to be thoroughly reasonable, it lacks a crucial component: criticism.[4] Being a practitioner, she contends that critical feedback and evaluation throughout the entire design process are the *only* means to improve potential solutions to a given design problem. Jen's second objection concerns design thinking's apparent reduction of design tools to a single medium: Post-it notes. For her, this is a token of the extent to which promoters of design thinking have reduced the complexity of professional Design. She thus offers her definition of design thinking as something that:

> packages the designer's way [of thinking] by working for a non-designer audience by codifying their processes into a prescriptive, step-by-step approach to creative problem solving, claiming that it can be applied by anyone to any problems. (Jen 2017, min 4:14)

Being aware of the historical roots of design practice and the epistemic lineage behind design research, Jen contends design thinking was originally a rigorous framework for industrial design but has since then been latched-on and appropriated by other design fields. Mostly, she is concerned about the way business jargon is supplanting serious reflection about design methods and procedures. Unimpressed by examples of products supposedly developed with the aid of design thinking, Jen's third objection is its focus on processes rather than on results. Because, the way she sees it, genuinely successful designs (such as those created by Charles and Ray Eames) always involve a tangible "evidence" of the results. Therefore, she challenges design thinking promoters to prove, not procedurally but via concrete results, how and why their method can live up to the hype.

Expanding Jen's criticism, in a recent *Medium* piece, Science and Technology Studies professor Lee Vinsel (2017) compares the influence of design thinking to late-stage syphilis infection. While he is sympathetic to Jen's objections and relies partly on them to make his case, the primary targets of his acerbic critique are not design methods *per se*. Vinsel's first objection concerns the way design thinking promotes "innovation" — which he derisively qualifies as a "lipstick-on-a-pig idea of innovation". He is appalled by the suggestion that design thinking could become "the new liberal arts"[5] and thus be incorporated "into many other parts of education". Vinsel is unimpressed by such proposition and by the idea — advanced by some proponents of design thinking — that the ultimate goal of education ought to be "social innovation". Vinsel connects such ideas to what he calls the "*adolescent* conception of culture" that advocates of design thinking have promoted. Finally, he summarises his position by arguing that design thinking is not about design, the liberal arts, or meaningful innovation, but about commercialisation and "making all education a shallow form of business education".

For all their bluntness, Jen's and Vinsel's commentaries make valid points: openness to feedback is crucial for any creative enterprise and, in a field such as design, tangible outcomes are the *only* thing through which the merits of a given solution can be judged. Furthermore, innovation is a nebulous, relational concept, and shallowness is the least desirable feature one should hope to associate with education.

3. These are: 1. Empathise; 2. Define (the problem); 3. Ideate; 4. Prototype; and 5. Test.

4. This is no mistake, the critical component is absent by *design*, the reason being that bringing in criticism in an early stage may hamper the creative process, inhibiting the emergence of "out-of-the-box" ideas.

5. Vinsel cites a recent article in which history professor, Peter N. Miller (2015), discusses precisely that possibility.

However, name-calling and pungent commentaries only go so far when it comes to building fruitful criticism. Our goal here is to understand whether design thinking is being unjustly lambasted or not, and in the latter case, to contribute to preventing Design from becoming yet another source of "business bullshit" (see Spicer 2017a). Hence, perhaps it is best to clarify the terms involved in the controversy at hand. The following sections summarise the origins of "design thinking" and provide an overview of the (philosophical) criteria to determine whether we can reasonably dismiss it as "bullshit".

3. A (SHORT) GENEALOGY OF DESIGN THINKING

As a phenomenon, Design is "quintessentially modern" (Parsons 2016, sec. 1.4) — at least in the West; its historical origins, although contested,[6] lie somewhere in the early Industrial Revolution. For the past 250 years, Design evolved from a trade activity that displaced "tradition-based craft" (Parsons 2016) to a "segmented profession" to a "field for technical research" (Buchanan 1992) and scholarly discipline. While its philosophical roots are to be found in the Renaissance, Design as a genuinely independent practice only emerged in the twentieth century. For its part, theoretical reflection on the wider social, economic, and cultural implications of Design began to develop in the late nineteenth century with the Arts and Crafts movement. The Interwar period brought schools such as De Stijl and the Bauhaus, and the Postwar witnessed the rise and fall of the Ulm School of Design (*Hochschule für Gestaltung Ulm*) which, in turn, played a central role in the rise of the design methods movement and design science during the 1960s-70s. The last decades of the twentieth century brought design studies, and the early 2000s the prefiguration of what now may be called "philosophy of design" — see Galle (2002) and Love (2000) for a short overview.[7] Discussing at length each one of these approaches is beyond the aims and possibilities of this paper. Nonetheless, we could say that all of them regard Design more or less as a particular epistemological system mainly concerned with the built environment.

While the exact origins of the term "design thinking" are difficult to trace, a quick search in Google's Ngram Viewer reveals its usage first began to take off in the 1930s and grew more or less steadily throughout the following decades. In 1987, Peter Rowe published *Design Thinking*, a book that aimed to show how architecture, Design, and urban planning are manifestations of the same strategy of inquiry. Since the early 1990s, however, the incidence of the term shows a steep rise. Perhaps we can attribute this growth to a series of conferences organised around this time — such as the *Design Thinking Research* symposia, and to publications on the topic by theorists such as Cross and Dorst (see Cross 2001).

In the early 2000s, Todd Kelley and Tim Brown from the design consultancy agency IDEO branded their in-house "problem-solving" process as design thinking[8] and began promoting it as a new comprehensive strategy to foster innovation. By 2006 Kelley and his colleagues secured a generous donation from the German software businessman Hasso Plattner to establish the "Stanford d.school" (Miller 2015). Officially named the "Hasso Plattner Institute of Design", the d.school became the de facto think tank of what henceforth I will be referring to as IDEO-style design thinking. Through the d.school, Kelley and his associates have successfully popularised the (synecdochical) notion that buzzwords, rituals and practices associated with managerial culture, Post-it notes, and, above all, the five-step design process are the essence of design thinking. However, despite its simplification of Design and its commercial outlook, the d.school brand still manages to stay true to a notion that has guided design research since its origins.

The core assumption behind design thinking, in general, is that Design as an activity and practice involves a particular mindset: a "third way" (Brown 2009) to regard

6. As Parsons notes, some of the conceptual problems associated with the origins of Design concern the distinction between the craftsperson and the designer (2016, sec. 1.4).

7. Whereas design theory is mainly concerned with the practice of Design, philosophy of design is concerned with Design and its specific aims and problems "in light of the fundamental questions that philosophy examines: questions about knowledge, ethics, aesthetics and the nature of reality" (Parsons 2016, Introduction).

8. Reading Tim Brown's book, *Change by Design*, one gets the impression that the very concept of design thinking originated in the early 2000s during a casual conversation between him and Kelley (see Brown 2009, Introduction).

9. Defences of such epistemological middle-ground echo C.P. Snow's ([1959] 2012) "Two Cultures" account, as well as his latter, more conciliatory characterisation of a then-emerging "third culture" (Snow [1963] 2012).

10. Archer characterises design problems as "ill-defined", more or less following Horst Rittel's concept of "wicked problems", i.e. the kind in which there is no consensus about the definition of the problem itself nor its solution. For a more thorough discussion of wicked problems see Churchman (1967); Rittel and Webber (1973); and Coyne (2005).

11. One cannot avoid noting the resemblance between Cross' statement and Clement Greenberg's ([1940] 1999) quintessentially modernist defence of the "purity" of the artistic medium.

12. It is important to note that Cross partially builds this particular argument on the insights of Howard Gardner's ([1983] 2011) "theory of multiple intelligences".

13. As well as a commercial and popular success. As Hardcastle and Reisch (2006) note, despite being a typical, unassuming academic work, the book made the New York Times bestseller list — where it stayed for twenty-six weeks, guaranteeing Frankfurt an appearance in *The Daily Show* with John Stewart.

and address problems, which stands in-between intuition and (logical) rationality.[9] The design theorist L. Bruce Archer argued, for example, that "there exists a designerly way of thinking and communicating" that is different from those of the sciences and the humanities "when applied to its own kinds of problems" (1979, 17).[10] Archer contended the traditional division of scholarly subjects between these two domains "leaves out too much", in particular, competencies concerned with "material culture" (1979, 18), and hence called for the institution of a "third area" in education. Design "with a big D" would have equal standing in education alongside Science and the Humanities but it would comprise "the collected body of practical knowledge based upon sensibility, invention, validation and implementation" (1979, 20). Furthermore, whereas the "essential language[s]" of Science and the Humanities are, respectively, (mathematical) notations and natural language, Design would rely on models. In short, Design represents a distinctive "approach to knowledge" and "a manner of knowing" that are irreducible to either pole of the conventional Western epistemological framework.

Building upon and expanding Archer's ideas, Nigel Cross promoted the notion of a "designerly way of knowing" in a series of homonymous publications. There, Cross further characterised Design as a discipline concerned with the "man-made [sic] world" that values "practicality, ingenuity, empathy, and a concern for 'appropriateness'" (1982, 221–22); which normally deals with "ill-defined, ill-structured, or 'wicked'" problems (1982, 224). Cross defends the epistemological autonomy of Design, urging scholars and practitioners to "avoid swamping our design research with … cultures imported either from the sciences or the arts" (2001, 55).[11] He has sought to understand how and why designers think the way they do, and to show their epistemic stance is, in fact, a manifestation of a fundamental aspect of human intelligence in general (2006). More recently, echoing the title of Rowe's ([1986] 1991) previously mentioned survey of the relationship between design practice, architecture, urban planning, Cross (2011) published a book titled *Design Thinking*. There, he aimed to articulate the basic cognitive and creative skills that designers employ, characterising them as a kind of "natural intelligence"[12] (Cross 2011, chap. 8) that is available to anyone willing to develop it.

It is clear from the previous survey that design thinking constitutes a rather ample problem space, and that IDEO'S d.school is far from being its catalyser. We can now proceed to the following sections, which summarise the criteria for determining what counts as bullshit and also discuss Jen's and Vinsel's objections in light of what we have learned so far.

4. IDENTIFYING BULLSHIT

In everyday language, "bullshit" is unmistakably a derisive expletive, but in the mid-1980s Harry Frankfurt ([1986] 2005) turned it into a subject of serious philosophical enquiry. Originally published as an essay in 1986 and republished two decades later as a book, Frankfurt's *On Bullshit* is a seminal work on the study of this phenomenon.[13] Frankfurt begins his conceptual analysis by dissecting Max Black's (1982, 23) characterisation of "humbug" as (a deliberate) "deceptive misrepresentation… of somebody's own thoughts, feelings, or attitudes". While Frankfurt agrees humbug might share some qualities with bullshit (namely, the intentional misrepresentation of one's intentions), he contends Black's account is not sufficiently adequate nor accurate for describing "the essential character of bullshit" ([1986] 2005, 18). For in Frankfurt's view, such essence lies in a lack of concern for the truth; in the bullshitter's utmost "indifference to how things really are" ([1986] 2005, 33–34).

Humbug, like lying, is intentionally deceptive and insincere, but bullshit as Frankfurt sees it, *does not need to be false*. This feature makes it more culturally tolerable but also more ethically dangerous. Liars deliberately conceal the truth; what they hide

is their attempts to lead their audience "away from a correct apprehension of reality". In this sense, liars know (and care) about the distinction between true and false information. By crafting falsities, liars are "responding" to and — to such extent — being "respectful of the truth". Conversely, a bullshitter does not "care whether the things he says describe reality correctly". Bullshitters merely select, or "make up", information to suit their purposes ([1986] 2005, 55–56). Whereas a liar intentionally *rejects* "the authority of the truth", the bullshitter does not even *acknowledge* its existence. This omission makes bullshit "a greater enemy of the truth than lies" ([1986] 2005, 61). It follows that in Frankfurt's account, the *intention* — and hence, the mental state — of a person is the crucial factor in determining whether what he or she is saying can be qualified as bullshit.

Frankfurt's account, however, is not without challenge. In his essay, "Deeper Into Bullshit", G.A. Cohen argues that Frankfurt's "activity-centred" definition is "too narrow" (2002, 337). "Frankfurt-bullshit", Cohen notes, is "just one flower in the lush garden of bullshit"; it is exclusively concerned with "ordinary life", leaving out, for example, the type of bullshit "that appears in academic works" (2002, 323). Cohen calls into question Frankfurt's insistence on the "essential" features of bullshit because such definition is not, in fact, characterising the utterance itself, but the bullshitter's (morally questionable) state of mind. Cohen further questions Frankfurt's sharp distinction between bullshitting and lying. He argues that "it is neither necessary nor sufficient for every kind of bullshit" to be uttered by someone indifferent to the truth (2002, 332). An honest, truth abiding person could be, unbeknownst to her, uttering bullshit out of ignorance — or even due to self-deception or more charitable reasons, as we will see below. Cohen thus suggests a different criterion for identifying bullshit: "unclarifiable unclarity". Here, bullshit is discourse "that is not only obscure but which cannot be rendered unobscure", since any attempt to clarify it yields "something that isn't recognisable as a version of what was said" (2002, 332–33). Cohen thus places the blame not on the bullshitter but on the bullshit itself. In this way, what is criticised is the product of bullshitting, which is visible, rather than the process that led to it, which is opaque (2002, 336). In summary, in Cohen's "output-centred" approach, unmasking a bullshitter does not require proving that he did not care about the truth, but showing that his utterance, even when reformulated, makes no sense.

A kind of middle-ground between Frankfurt's and Cohen's accounts is offered by Scott Kimbrough (2006). Kimbrough agrees that Frankfurt's definition leaves out unintentional bullshitting, but he nonetheless endorses the notion that bullshit *results* from a lack of connection with the truth. Kimbrough objects that we should not and perhaps cannot eradicate bullshit because it would compromise many aspects of our social interactions. Bullshitting, whether we like it or not, is crucial for civility and politeness, at least in most Western societies. Frankfurt calls bullshit whenever the truth is disregarded, but while his definition is correct, it is also true that people often engage in bullshitting to avoid confrontation, to protect someone's feelings, or to socialise. In such instances, there might be justifiable reasons to disregard the truth. Kimbrough's thus contends that "bullshit must be recognised for what it is and restricted and sanctioned to truly justifiable uses" (2006, sec. 5.). Since the mere act of justifying why bullshit is preferable over truth in any given situation implies being able to distinguish between the two.

Kimbrough, nonetheless, cannot endorse Cohen's output-centred criterion, insofar as rejecting the product implies rejecting the process behind it and hence the people responsible for it. Despite Cohen's attempt to separate the bull from the shit, so to speak, "it's just not possible to call bullshit courteously" (2006, sec. 4.). As Kimbrough notes, qualifying something as bullshit means marginalising it and excluding it from serious discussion. Many people call bullshit not because they feel the truth is being disregarded, but because the object of their scorn threatens their beliefs or values.

Frankfurt's truth-centric definition remains valid because it circumvents such potential relativism. Kimbrough's way to reconcile Cohen's insight that bullshit can be produced unintentionally while retaining Frankfurt's truth-centric criteria is by shifting away from psychological processes (states of mind) and towards "methodology". In this manner, the way bullshit is produced continues to be the determinant factor: bullshit being the result of adopting "lame methods of justification, whether intentionally, blamelessly, or as a result of self-deception".

Bullshit constitutes a type of discourse which, depending on the context of utterance and the values of the audience, is judged as having neglected the truth for poorly justified reasons. The following section will discuss Vinsel's and Jen's objections against design thinking in light of the aforementioned criterion for identifying bullshit, to determine whether their criticism is indeed justified.

5. DISCUSSION

5.1. The epistemological problem of design

14. For a lengthy discussion on this problem see Galle (2011) and Parsons (2016, sec. 2.3).

Recapitulating, Jen's first objection concerns the absence of an explicit critical component in the five stages to which IDEO-style design thinking reduces the design process. Her decades-long experience informs her criticism as a professional designer who understands that creative improvements often come at the cost of relentless (and often harsh) feedback. This objection is not trivial; it is intimately linked to one of Design's most crucial problems; one that arguably stands behind every attempt to formalise and systematise design methods and processes: how can a designer be confident that what she creates will duly serve its purpose? That her solution will work?[14] The problem is epistemological — and involves a certain degree of futurology; it asks what kind of knowledge designers require to create adequate solutions for any given problem?

Design is, by definition, a projective and *poetic* activity. It does not seek explanation and prediction (like the sciences) nor insightful understanding (like art and the humanities), but it rather aims to change and (re)construct aspects of the world. Although definitions may vary, Design is more or less characterised as an activity concerned with "*the conception and planning of the artificial*", to borrow Buchanan's (1992, 14) words. Or, to put it in different terms:

> design is the intentional solution of a problem, by the creation of plans for a new sort of thing, where the plans would not be immediately seen, by a reasonable person, as an inadequate solution. (Parsons 2016, sec. 1.1)

To paraphrase Parsons (2016, secs. 2.1–2.2), Designers attempt to create plans for *novel* devices or processes that solve fundamentally practical problems. And they do so while taking into consideration the functional, symbolic, aesthetic, mediating, and even sociopolitical aspects and implications of their creations. In Design, there are no *a priori* judgements. Whether such fundamentally creative process can be effectively broken down into "objective" stages and procedures or will forever remain governed by the mysteries of intuition is the crux of the tension between design science and other approaches to design research.

15. The rationale for doing so is best summarised in the following quote: "design thinking involves a commitment of participants and facilitators to discouraging criticism in product development interaction [...] Deferring adverse judgments has been argued to fundamentally help improve creativity in idea generation processes" (Reimann and Schilke 2011, 53).

Jen's pragmatic way to overcome this epistemological dilemma is by focusing on tangible "evidence", on concrete assessable outcomes, rather than to muse endlessly over which might be the best solution to a given design problem. Conversely — and this answers another one of Jen's objections, the objective of IDEO-style design thinking is precisely to focus on the process. IDEO-style design thinking is (purportedly) a method for *coming up* with "innovative" solutions — however outrageous they might initially seem. Because it promotes a (dubious) kind of epistemological anarchism, this branch of design thinking *deliberately* excludes criticism,[15] here "thinking-out-

of-the-box" means anything goes, preferably if it involves a solution that has not been tried before.

As for the last of Jen's objections — i.e. the reduction of design tools to a single method, Brown (2009) is adamant that Post-it notes are just one of the many tools used in IDEO-style design thinking. However, reading through his accounts, it is clear that (a) Post-its play a central role in every one of the 5 "modes" of design thinking, and (b) that Brown is mesmerised by them. He describes them both as "important tools of innovation in and of themselves" and as unbeatable devices to "extract the intuition" of a group during "project reviews" (see Brown 2009, chap. 3).

Interestingly enough, Jen's and IDEO's way of understanding where the importance of the design process should be placed (either on the outcome or the process, respectively) overlaps with the ways Cohen and Frankfurt identify Bullshit. For Jen, the design process is too complex to be reduced to well-demarcated steps. The only potentially objective judgement we can make has to be done on the final object. Similarly, Cohen argues the processes that lead to bullshit are opaque and not necessarily intentional. Bullshit ought to be judged as a standalone product by its (lack of) clarity. Conversely, IDEO-style design thinking emphasises the "how" rather than the "what". The result is secondary because what matters is how it is achieved. Frankfurt's moral criteria for identifying bullshit also fits that description. Whether this connection can tell us something about ethics or epistemology, could perhaps be addressed elsewhere.

5.2. Design, liberal arts, and maker's knowledge

As noted in section two, Vinsel's first objection concerns what he calls design thinking's "lipstick-on-a-pig conception of innovation". Drawing on his scholarly knowledge of the history, dynamics, and socio-economical impact of technological change, he contends that "there is no evidence that IDEO, design thinking, or the d.school have contributed to deep [sociotechnical] change". Vinsel is particularly critical of the "superficial" way in which organisations such as IDEO employ the very term "innovation".

Indeed, a simple exploratory reading of IDEO-style design thinking literature shows that innovation is used extensively as a noun, verb, adjective, and more. However, finding anything even remotely similar to a definition of this term proves remarkably difficult. Consequently, it is perhaps best to assume that, "innovation" is used by promoters of design thinking as a slightly fancier substitute for (technological) "change". This kind of conceptual vagueness is a clear example of the "obfuscatory way of speaking" that Spicer (2017a) identifies with "business bullshit."[16]

Vinsel's second objection, as we saw at the beginning of this paper, concerns the proposition that design thinking could become the core of (a new strain of) liberal arts. This idea can be initially traced to the notion, discussed in section three — that design constitutes a particular epistemological framework midway between the sciences and the humanities. Vinsel's critique is mainly informed by Miller's (2015) article, wherein the latter ponders the potential benefits of the d.schools "anti-establishment" (i.e. unstructured) approach to training in design methods. Although seemingly seduced by the d.school's slogans, Miller is nonetheless careful to critique the way IDEO literature eschews virtually all "serious consideration on 'pastness'" in favour of present-tense problem-solving. Neither Miller nor Vinsel seem to be aware that the characterisation of design as a liberal art precedes the foundation of the d. school for at least a decade.

In his article *Wicked Problems in Design Thinking*, Buchanan (1992, 5) contends design "should be recognized as a new *liberal art of technological culture*". For him, a liberal art provides above all an "integrated understanding of human experience" and, seen under such terms, the hypothetic role of design would be to "integrate useful knowledge from the arts and the sciences alike" (1992, 6). Buchanan draws

16. An even less charitable interpretation is David Graeber's. He identifies the "new bureaucratic language" inspired in the (Esalen Institute's) "'self-actualisation' philosophy" as a "kind of individualistic fascism" due to its insistence on the ideas that "we live in a timeless present, that history means nothing, [and that we] ... create the world around us through the power of the will" (2015, Introduction).

heavily on John Dewey's (pragmatist) understanding of "technology" as an "art of experimental thinking" (1992, 8), rather than meaning the artefacts themselves and the knowledge required to produce them. By "liberal art" Buchanan explicitly means a "discipline of thinking" that may be shared by everyone, and that could be mastered by a few individuals "with distinctive insight". In other words, Buchanan is reframing the kind of literacy, or rather "design awareness", that Archer (1979, 20) had envisioned a decade before. Both Archer and Buchanan regard Design as an "architectonic" field capable of providing a type of insight that is not accessible to traditional humanistic or scientific disciplines: something akin to a "maker's knowledge" wherein practical and theoretical know-how complement each other to reach "full and useful *episteme*" (see Floridi 2011, 288).

6. CONCLUSIONS

The most salient implication arising from the previous accounts is that design thinking is by no means a homogeneous concept or phenomenon. By itself, this conclusion could be sufficient to suspend our judgement on whether design thinking is bullshit. Nonetheless, if we go beyond the synecdochical portrayal of design thinking promoted by IDEO and the d.school, *some* forms of bullshit begin to emerge. A simple skimming of IDEO-style design thinking literature shows that it is filled with (obfuscatory) business jargon which their promoters rarely clarify. This feature partially meets the criteria of Cohen-bullshit.

Some of the ideas advanced by IDEO-style design thinking indeed have their roots in the products of rigorous design research. But either their focus on "innovation", academic sloppiness, or ignorance prevents a significant number of promoters of IDEO-style design thinking from acknowledging their sources and honouring conceptual clarity. This carelessness meets the criteria of Kimbrough-bullshit. Beyond these and other similar infractions, it would be quite difficult to give more reasons to call bullshit on IDEO-style design thinking without a more extensive account of the methods they promote. Thus, as a summary, we could say that after a superficial analysis, IDEO-style design thinking does not meet the criteria of the stronger and more morally-reprehensible Frankfurt-bullshit. However, its promoters do occasionally engage in more tolerable forms of bullshitting, but whether they do it out of self-deception or carelessness remains an open question.

Jen and Vinsel's critique, although blunt and incomprehensive does manage to touch on core issues of contemporary design research. Before deciding whether design thinking could be dismissed entirely as bullshit, it was necessary to establish *which kind* of design thinking we were talking about. As we have seen, design thinking is a rather heterogeneous notion. By promoting a synecdochical (and unacknowledged) identification between their brand of design thinking and the one supported by traditional design research, IDEO and the d.school have hijacked the meaning of the term. As a result, many complex ideas underpinning historical design thinking have been washed off, forgotten, or supplanted by business jargon. In the eyes of those who stumble upon IDEO and d.school literature, and who possess little or no knowledge of the rich history of design research, design thinking appears (depending on their leanings) as a seductive tool or as yet another management fad. Unbeknownst to them, is the fact that "traditional" research on design thinking represents, to borrow Buchanan's words, a sincere attempt to recognise and elevate the dignity and importance, not only of design but of *maker's knowledge* in general. Such state of affairs calls for a stronger and broader critique of IDEO-style design thinking and the concepts it promotes (such as innovation and creativity) because it contributes to trivialise the aims and history of an entire field of research. But also to safeguard the actual potential contributions that design, as an epistemological field, can bring to other domains of human activity.

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