Abstracted objects: the vernacular metaphysics of copyright law

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The vernacular metaphysics of copyright law

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Declaration

I hereby declare that the work presented in this thesis is my own, except where explicit reference is made to the work of others.

Abstract

Abstraction is the basic operation through which intellectual property construes its objects. Each intellectual property regime has its own techniques to abstract intangible essences from the fungible bodies that are held to token them, hence justifying separate treatment. This thesis problematises abstraction in copyright law through a close reading of three seminal works in the history and theory of intellectual property. In the first part, in dialogue with *A philosophy of intellectual property* by Peter Drahos, the thesis explores ways of grappling with abstraction in classical metaphysics. In the second part, the thesis turns to techniques developed historically and by and large internally to intellectual property discourse — discussed in *The making of intellectual property* by Brad Sherman and Lionel Bently and *Figures of invention* by Alain Pottage and Brad Sherman — to suggest that the way in which copyright law has come to make the cut between the tangible and the intangible owes less to philosophical abstraction than to the way in which commodities appear already as vernacular abstractions. By pulling in opposite directions, the two parts of this thesis open the space for a critical intervention in intellectual property theory. 'Ideas', 'forms', or 'concepts' do not need to be deported to a separate world — the Platonic neverland from which various critiques of intellectual property have drawn their appeal — they work their magic in everyday practices. The emergence of intangible property in eighteenth century Britain happened against a backdrop of a severance between intellectual and manual labour both in the actual division of labour and in the discourses that were built upon it. This thesis argues for the recognition of the centrality of the division of labour — and the techniques through which it was executed — in the emergence of modern intellectual property law. And points in the direction of its continuing relevance in the contemporary operation of intellectual property regimes.

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Doctoral research is, for its most part, a solitary profession. But there are exceptional moments too when one crosses paths with others who are generous enough to lend a hand, an ear, a book and help break away from a retreat to solipsism. Exceptional, yet not rare. Debts one can never fully satisfy, gifts one can never find the right words or the right gestures to thank enough.

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have expanded my horizons on what intellectual property might be and how it could be approached. In particular, I would like to thank Lionel Bently, Kathy Bowrey, Gabriel Galvez-Behar, Toni Lester, and Eva Hemmungs Wirtén for their generosity and intellectual stimulation.

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Contents

Abbreviations

The following abbreviations are used to refer to edited collections of fragments on Stoicism

I&G Inwood, B., & Gerson, L. P. (2008). *The Stoics reader: selected writings and testimonia*. Hackett Publishing.

L&S Long, A. A., & Sedley, D. N. (1987). *The Hellenistic philosophers, vol. 1: Translations of the principal sources with philosophical commentary*, (2003) *The Hellenistic philosophers, vol. 2: Greek and Latin texts with notes and bibliography*. Cambridge University Press.

The following abbreviation is also used in the text

Case of engravers	*The Case of Designers, Engravers, Etchers, &c. stated in a Letter to a Member of Parliament*, 1735. In L. Bently and M. Kretschmer (Eds.) *Primary sources on copyright* (1450-1900). http://www.copyrighthistory.org/record/uk_1735a
CDPA	Copyright Designs, and Patents Act 1988
CJEU	Court of Justice of the European Union

Introduction

(there are already too many things which do not exist)
Eduardo Viveiros de Castro (1998) p. 470

There is a striking scene in Apichatpong Weerasethakul's masterpiece 'Uncle Boonmee who can recall his past lives' where a strange figure timidly intrudes on a family meal on the porch of a rural Thai house at night. The figure comes in unannounced by suspenseful music or crafty sound effects, it just sits there at the table. A young man turns off the light and a conversation slowly unfolds. We learn this figure is a ghost. There is a certain reverence, but the living are neither scared nor thrilled. They patiently if awkwardly accommodate this new guest. I begin with this image, not without hesitation, as it captures a disposition to live with that which is hard to explain or make sense of, but whose presence is undeniable.

A second image will allow me to cross to the object of this study. This time a passage from a well-known book on intellectual property history where Brad Sherman and Lionel Bently (1999) write

> In a sense much of the history of intellectual property law can be seen as one of the law attempting to contain and restrict the intangible — to capture the phantom — only to find that the object of representation reconfigures itself in a new medium (p. 59)

Has theory fared any better in accommodating this strange guest that presents itself but keeps withdrawing? My answer would be: occasionally and only when it manages to

deal patiently with the idea of intangibility. By far the more common tendency is to attempt to explain the phantom away.[1]

The aim of this study is to learn from past attempts to deal with intangibility in copyright law, and through a dialogue with the literature, expand the legal imagination so that it may better accommodate the presence of something that will always resist capture. The restriction to copyright deserves an explanation, albeit a brief one. One thing we will learn about intangibles is that they can take up many forms, that their character is not exhausted by their ontological status. They present themselves to us through the techniques with which they are 'elicited' in the perfect expression employed by Pottage and Sherman (2010, p. 1). This craft of eliciting intangibles from a diverse range of materials and actions has developed historically in a compartmentalised fashion. An attempt to formulate an overarching theory would have to bear the cost of oversimplification; an attempt to formulate a multi-pronged approach, the cost of excessive length. These are costs I am unable to meet in this study.

In a world saturated by copyright, to borrow another perfect expression (Macmillan 2015), it is sometimes harder to appreciate material differences between two physical objects in a series, than to ascertain their sameness. That this creates some difficulties when discussing copyright issues is clear (e.g. claims to originality becoming contentious when there is a dispute as to whether the physical object inaugurates a new series or continues a previous one). What is less clear, however, is whether there is anything special about this difficulty in resisting the reduction of the many to the one in copyright or more broadly intellectual property.

Intellectual property scholars who have written explicitly about this issue, in one way or another, seem to respond in the affirmative, that there is something not only question-begging, but weird – even suspicious – in ascribing some form of identity to materially

[1] As van Dijk (2017) points out, critics 'usually stop short at the point where [certain] concepts are introduced into the law' failing to account for how they germinate there and explore the work they do. (p. 33) *Grounds of the immaterial* is itself, a good example of why lingering in the troubled assumptions of the law can provide important insights into its operations.

dissimilar objects. To use one recent example, Oren Bracha (2016) in his remarkable investigation of the formative years of American intellectual property law, writes

> observers and practitioners [of patent and copyright laws] postulate an abstraction, an intangible entity that forms the point of reference for legal protection. Modern lawyers use two terms of art to designate this abstraction: the 'work' and the 'invention'. Within intellectual property discourse, *unlike colloquial usage*, these terms refer to an intangible intellectual entity that is distinct from any physical object. (p. 14, my emphasis)

I find this passage exemplary of two wider trends. The first is to imagine a notional 'observer', 'practitioner', 'lawyer', 'proponent', 'advocate', 'mainstream' or 'dominant' theory, who would confidently — by sheer naivety or calculated mischief — assert a detailed ontological account of the nature of the objects of intellectual property rights.[2] The second is to imagine a non-juridical realm where things are just as they are, with little room for abstraction. As if an instruction to take one Aspirin twice a day would upset the metaphysical certainty that one cannot have one's cake and eat it too.

The gag is perhaps unfair, unkind even, but I think it puts one important point across: the banality of postulating abstractions. True, copyright law does require postulating an abstract entity to serve as the point of reference for legal protection but in that it is doing nothing ontologically more spectacular than when a book, play, song, photograph, etching, perhaps even a painting is given a title (Peukert 2021, pp. 50-57) or when a metal or paper token is given currency. And the analogy works, I think, at another level too, such abstractions can be postulated and put to use without requiring an explicit or even well-thought through ontology. My intention is not to deny intellectual property is weird, only to produce a more plausible account of how weird it is. The results will, perhaps, be less

[2] In her well-known critique of the exaggerated role Romanticism has played in critical commentary on copyright law, Anne Barron (2002) casts doubts on the plausibility of mapping legal concepts onto particular aesthetic theories ('the proposition that copyright law is the legal expression of a particular aesthetic theory is simply not sustainable.' p. 379). The same lesson should be taken as a warning against fantasising a stable theoretical ontological position that would provide an easy shortcut in the development of a critique.

spectacular than the revelation that the Emperor hasn't got anything on[3] but will, I hope, contribute to our understanding of the ways in which legal objects are rendered tractable and of the directionality of specific legal forms and techniques.

To do so, it seems to me essential to abandon any pretension that one understands the tangible better than the intangible. As Mario Biagioli (2014) puts it 'it could be that materiality is not (and has never been) as unproblematic a category as we take it to be: at least not less problematic than the apparently stranger notion of intangibility.' (p. 384)[4] If that distinction is a foundational postulate of contemporary intellectual property law, then both categories must be equally problematised.[5] In other words, we must do away with a picture of ontologically sturdy middle-sized dry goods on this (colloquial, non-juridical, material) side of the divided line, and a spectral mirror image on the other (fictional, juridical, or metaphysical) side. Because the ones on this side of the mirror are thought to have clear boundaries and a distinct presence, the lack thereof on the other is seen as problematic, even defective. Thus, when judges, as they must in adjudicating property claims, locate the allegedly infringing article or action inside or outside the scope of the owner's property they must, so the thought goes, be drawing a boundary somewhere. The problem with this way of thinking is that it leaves us with two very reductive alternatives. The boundaries are either 'discovered' as if the object were factual (albeit intangible); or 'imposed' as in a creative exercise of forging a fully-fledged fictional entity out of evidentiary and argumentative material supplied to the court.

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[3] 'In many respects, Hans Christian Andersen's fairy tale about the emperor's new clothes reads like a metaphor for intellectual property … many people believe that intellectual property has a physical existence that is independent of what society believes about it'. (George 2012, p. 6)

[4] Unfortunately, the paper says very little about intangibility, focusing instead on a distinction between abstractness and immateriality that fails to consider that in legal representations 'materiality' is always translated into a symbolic order and hence abstracted. Materiality as a general concept that picks out certain generic features of an object as being tied to material properties, should not be confused with concreteness which speaks to uniqueness (as in having a unique spatio-temporal location; or retaining identity through a given period of time).

[5] '[N]o-thing can legally be designated as a material embodiment of an immaterial object *without a problem*. It is this dimension of the problematic at the heart of legal practice that provides the site where these distinctions can first be made and where the material and immaterial are first mutually constituted.' (van Dijk 2017, p. 245, italics in in the original)

The first answer can only be taken seriously as the conceptual and necessary counterpoint to its alternative. That is, in order to show that copyright objects are fictional entities theory needs to imagine a 'practitioner', 'doctrinal', or 'mainstream' account which confidently asserts the copyright work (or patented invention) is a plain discoverable fact. But, if we are to take it as a plausible depiction of practice, there are far too many examples of cases where the question is either evaded or explicitly dealt with in a tentative and hesitating fashion for it to be swept under the rug.[6] That is, if one calls the copyright work a fiction expecting to uncover something that is not already in plain sight, I think the impact is far too limited. Fiction, if the word is to be used at all, needs to be treated as a specific technique. In such an account, the fiction can stand on its own and do away with the critical theory versus acritical doctrine binary. The interesting question is thus: what kind of fiction is it and how has it been constructed?

The second thing that we should attempt to do away with, to the greatest extent possible, is the paradigm of an object with limits or boundaries like those of middle-sized dry goods. It is a mistake to think that judges are asked to decree once and for all what the 'boundaries' of a specific copyright work are. At best, they may be called upon to illuminate areas of overlap, to shed light on specific instances where accused artefacts are held *to token* protected subject matter in conditions where the escape of independent origination is too narrow to merit the benefit of the doubt.[7] The limits of the object do not need to be all established in advance. Only the margins are policed and only relatively rarely for that matter. But doesn't this then confirm the question is apt? Am I not saying

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[6] See chapter 4, section e., below. Exploring the topic of hesitation in ip practice, van Dijk (2017, p. 39 f, pp. 68-70, p. 118). Whether such hesitations appear as sincere reflections or mere rhetorical flourishes is beside the point for my argument. I do not need lawyers — especially judges — to agree with me in finding intellectual property weird. I simply want to point out that confident ontological claims are not a common trope in the genre.

[7] Copyright infringement requires actual (yet not necessarily conscious) copying. Save for admission, however, it is difficult for the plaintiff to show direct evidence of actual copying (or derivation). The problem is resolved by inference: that is, when similarities between the works are too strong and too many, the burden of proof is shifted onto the defendant to come up with a convincing story of independent origination of the similar work. See generally Goldstein and Hugenholtz (2019, p. 285), for the UK see Bently, Sherman et al. (2018, pp. 194-199).

there are no limits before they are, more or less, arbitrarily drawn by a judge? My answer to this objection would be simply that if intended as a captious question, it would do more to entrap the one raising it than any potential addressee. The issue, I claim, is not whether boundaries are clear or unclear, but identifying the techniques that carry the doctrinal burden boundaries do in relation to land.

My basic, ontological, question is not so much whether or not intangibles exist, but what existence might mean once intangibles become tractable items of property. Questioning how or by which techniques they exist rather than asking whether their existence is real or fictional, discovered or invented, allows for a more sustained and I hope more substantial answer.

Copyright ontology and methodological exorcism

This thesis will focus on three main contributions to the discussion of the character of ip objects: *A philosophy of intellectual property* (Drahos 1996), *The making of modern intellectual property law* (Sherman & Bently 1999), and *Figures of invention* (Pottage & Sherman 2010). This restrictive selection has nothing to do with the scarcity of attempts to critically examine the underlying ontology of intellectual property — still a common trope in the literature[8] — but instead with the perceived lack of sustained critical

[8] 'Attempts in this direction [critical examination of the ontology of intellectual property] have been surprisingly rare.' (Peukert 2021, p. 8, note omitted) 'Curiously, whereas the notion of "property" is heavily debated, what is little or not discussed is the notion of "intellectuality".' (van Dijk 2017, p. 10) '[U]nfortunately, while copyright law assumes some metaphysical basis to its objects, this basis tends to go largely uninvestigated.' (Hick 2011, p. 185) 'Despite the pivotal role that the work plays in modern copyright law, it has attracted remarkably little attention.' (Sherman 2011, p. 102, note omitted) According to Wreen (2010) to the 'question about the fundamental category of being that intellectual property fits under', '[b]oth the law and philosophy are virtually silent' (p. 435). 'Philosophical reflection on intellectual property (IP) is still very young. Though lawyers have written much on the topic, the vast majority of this writing is philosophically unsophisticated.' (Wilson 2010, p. 450) '[W]hile legal and philosophical discussion on copyright standardly revolves around its ethical and constitutional entailments, such debate tends to overlook the nature of its objects.' (Hick 2009, p. 399). 'It is surprising that this invitation [by

engagement with existing attempts to problematise the object of ip rights. A gap that can only be filled by conducting a close reading of a restricted sample of contributions. Despite their differences, the three works — and the accompanying literature that I will attempt to draw into their orbits — reveal a common trait which lies in the ability to accommodate the strangeness of ip without succumbing to the temptation of explaining it away. This is what sets them apart from a substantial part of the existing literature that attempts to cast out the metaphysical dimensions of intellectual property.

A first form of methodological exorcism is exemplified by radically reductionist theories, like that proposed recently by Alexander Peukert (2021).[9] In his attempt to explain legal practice 'without idealising abstractions that lead away from regulated reality' (p. 111), Peukert replaces the abstract copyright object with the figure of the Master Artefact and seeks to reduce findings of copyright infringement to an exercise of spotting similarities between two concrete artefacts (chapter 5).[10]

The Master Artefact refers to a concrete thing 'stored or otherwise preserved and given a special designation by the creator or third parties' (p. 102). And while ip rights are not directed to the Master Artefact *qua* tangible object (p. 117), Peukert insists on its centrality by reconstructing copyright infringement as an operation of comparison between this lump of matter and any other lumps of matter that will be brought forward as allegedly infringing articles or performances. As a result of such comparison, concrete artefacts that are 'temporally and spatially separate from the Master Artefact' (p. 117 f) if displaying 'so many similarities that the relevant legal requirements [of infringement] are met' (p. 121) will be designated under the name of the Master Artefact and hence be

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Joseph Story] to describe the metaphysics of intellectual property law has thus far not been accepted by philosophers.' (Koepsell 2000, p. 43)

[9] Other reductionist theories would include the tradition of Scandinavian legal realism in intellectual property (Rognstad 2018, pp. 47-51) and Andrea Bottani's (2010) nominalist account of intellectual property.

[10] 'Whether an infringement is present depends solely on whether the comparison of physical artefacts produces so many similarities that the relevant legal requirements are met.' (Peukert 2021, p. 121)

treated as Secondary Artefacts. The reduction is achieved by grounding the judgements of identity in copyright litigation on a comparison between concrete objects, allowing for a reconfiguration of copyright as a right to control the production and circulation of concrete objects or performances.

But the analysis soon runs into the difficulty of explaining the selection process of candidates to the title of Master Artefact.[11] More importantly, however, Master and Secondary Artefacts seem to display a dubious ontological character as simultaneously brute facts and abstractions.[12] This tension reveals the circular nature of the argument: something only becomes a Secondary Artefact after it has been designated as such through a comparison with the candidate that occupies the role of Master Artefact. The coherence of the theory is achieved at the expense of naturalising the process of comparison and ascription of the status of Secondary Artefact by maintaining that such an operation rests on naturally occurring similarities that can be simply read off the brute

[11] As Peukert (2021) clarifies, the Master Artefact need not be the work's first fixation or instantiation.

> Referring to the Master Artefact in the singular does not mean that there is always only one brute artefact X — such as a paper document, a digital file, a painting or a model — that can function as a Master Artefact Y. The final version authorised by the author … can be copied and modified. Moreover, it is often controversial and depends on legal formalities which copy counts or which version counts as the Master Artefact — for example, in the case of different language version of a European patent. In other words, the unity of the Master Artefact is not physical, but genealogical. (p. 111)

And while Peukert insists that this genealogy implies an 'empirically verifiable origin' (p. 112), the conditions for testing the pedigree of something other than the first iteration of the work remain unclear. The dispersed identity of the Master Artefact seems to undermine the plausibility of the appeal to brute reality.

[12] '[T]he Master Artefact …. [results from a] historically very old *abstractio*n, which runs from a multitude of similar artefacts to a general signifier. The Master Artefact is a *brute fact*, such as the original artwork, the final manuscript, a patent specification, a photo or other image recorder in a register, etc., which is named in a certain way and declared a Master Artefact.' (Peukert 2011, p. 111, emphasis added, note omitted)

artefacts.[13] This severely curtails the power of this critical intervention. By naturalising the process of ascription of such statuses, the conditions that make such ascriptions possible remain hidden from critical scrutiny.[14] How can a brute artefact appear in court prepared to exceed itself and act as a template for all those present and future Secondary Artefacts? The reduction of the copyright work to a Master Artefact naturalises this operation and oversimplifies two aspects of ip litigation — identified by Pottage and Sherman (2011) — the selection of materials and techniques of representation (modes of figuring-in) as well as the craft involved in ascertaining the scope of protection (modes of figuring-out), as I shall explain at greater length in chapter four.[15]

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[13] 'A different — both ontologically and legally more convincing — understanding of the subject mater of IP rights results if one understands its objective unity as a *similarity relation* between independently existing brute artefacts. This relation is established by a *comparison* between artefacts and sealed by a declarative speech act. A judge or other decision-maker *checks* whether the artefacts challenged as infringing (copies, performances, products etc.) have a sufficient relationship to the Master Artefact, because they refer to or are connected to the Master Artefact historically and/or display relevant similarities.' (Peukert 2021, p. 118, all italics in the original except for the final one, note omitted)

[14] Wreen (2010) seems to have anticipated this possibility. After laying out the classical philosophical objections to resemblance nominalism, he writes

> if resemblance theories are rejected, the nominalist's only recourse is to claim that sorting concrete objects as tokens of this or that type either (a) doesn't need an explanation, or, more radically, (b) has the wrong way around: it is the sorting, the applying of the words or concepts, that 'creates' the types or resemblances that we may mistakenly think exist independently of our classifying activities. (p. 447)

Peukert (2021) seems to have taken option (a), while Drahos (1996) seems to have opted for (b) as we shall see in the following chapter. On the weakness of resemblance as a technique to assess identity in copyright law, P. Taylor (2010: 'Any image resembles more than one thing.' p. 370).

[15] Bottani (2010) reaches a similar difficulty when keeping 'ancestral relation of copy to an individual artefact' as part of his definition of intellectual property rights framed as reducible to rights over material artefacts (p. 410). Not to mention that if 'copyright can only be an exclusive right over all copies of an original, tokens of a type, or realizations of an idea, instead of a right over the original, the type, or the idea themselves' (p. 409) then, the set should also include future artefacts, otherwise it would be difficult to make sense of injunctions in copyright law. For further arguments against reducing the ip object to the set of all particular embodiments considered together, see Wreen (2010, p. 439) and Wilson (2010, p. 452).

If the first mode of exorcism came in the form of a hasty denial of the existence of abstract objects, the second operates by assimilating ip objects to established categories of abstract objects that have been entertained in respected circles of analytic philosophy, and thus getting rid of any metaphysical spectres that might otherwise haunt a rigorous explanation of the law (R. Davies 2010, p. 340). While at times offering powerful tools to conceptualise the workings of copyright law (or ip more broadly) this approach also conceals the operations that permit judgements of identity in copyright practice.[16]

Darren Hudson Hick (2017), to use a recent example, lays out two necessary and jointly sufficient conditions to ground a judgement of prima facie copyright infringement (i.e. without considering potential defences that may be raised) they are: (i) atomic similarity; and (ii) a strong historical link between the works at hand. The first criterion — modelled on Nicholas Wolterstorff's conception of artworks as 'norm-kinds' — is to be judged according to the properties selected by the author as determining the 'criteria for correctness' for any of its potential tokens (p. 91). The second introduces a causal dimension, to accommodate copyright law's recognition of independent creation of identical or similar works. The presence of a strong historical link is determined by assessing whether the properties of the allegedly infringing work would have been different, had the alleged source work been different too. (pp. 93-96) A difficult counterfactual exercise, but even if one grants its operability, another problem emerges: on what basis should we take the author's 'criteria for correctness' as the basis to (i) identify the work; and (ii) select the relevant properties to assess the presence of a strong

[16] Wilson (2010) is alive to this problem when he points out the limitations of the type-token distinction as an explanatory tool for making sense of copyright practice. As he writes, 'presumably there will always be a sufficiently general type such that any two things count as tokens of it' hence the question in copyright infringement is not whether two artefacts token the same type but 'whether both pieces should count as tokens of the *relevant* type.' (p. 458, italics in the original) This is the well-known problem of levels of abstraction in ip practice, see generally Rognstad (2018, pp. 100-111). While not disqualifying the type-token distinction as a tool of analysis, it opens the possibility of a plethora of genuine types (of varying degrees of generality) that could be deployed in the ascription of legal positions and hence the possibility of having to take 'type' as an empty vessel ('ontology cannot determine what the relevant types are', Wilson 2010, p. 459). See also Reicher (2016, p. 74 f) for a similar argument on the availability of 'thin' and 'thick' conceptions of 'work'.

historical link? Furthermore, given that copyright lacks the form of specification required in patent law: on what basis, other than the claim in litigation, should we ground their identification?[17] By trying to establish the theory on a more solid basis than legal materials would allow — by in a sense fictionalising the authored work in the likeness of a patent specification — this approach equally conceals the craft of eliciting the work from the materials with which it is presented to the law.[18]

Despite remaining unconvinced about their claims to reduce away the strangeness of copyright, either by reductionist or analytical means, the contributions surveyed above offer important clarifications that are crucial to the development of my argument. As Peukert shows, designating a work with a title is already an operation of abstraction that expands the agency of an original manuscript allowing it to exceed itself and aggregate an open series of current and future artefacts that will bear the same name (Rognstad 2018, p. 48-51). Analytic contributions, on the other hand, highlight the banality of dealing with objects on an abstract register and provide a useful language — types and tokens — to articulate the relationship between the work and its embodiments. This is not to uncritically accept the analytical trope that certain things simply 'come in types and tokens' (Wetzel 2009, p. 1) but rather to suggest that a realist position does not need to commit to a dualist ontology where abstract objects are made to reside elsewhere (pp. 30-50).

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[17] A related problem to do with the translation of images into pictorial statements is explored by P. Taylor (2010). A similar problem is raised by Shiner (2010, p. 403) in response to an attempt by Hick (2009, p. 405) to distinguish between plots (in-themselves) from their descriptions.

[18] In Hick (2016) we have a much more subtle and relational account of what may identify a given work — based on the concept of authorial sanctions (Irvin 2005). However, it is not clear how this technique for determining the authenticity of an artwork could be translated into a technique for determining the scope of an authored work — to use Hick's (2017) distinction between the art object and the legal object (p. 98 ff, suggesting that with regards to the same material artefact, the artwork may have 'some essential element that the authored work lacks', p. 100). Identity conditions of art works — even if they could be taken as a given — cannot be simply assumed to bear legal relevance. As Anne Barron (2002) has pointed out, there is no reason to expect copyright law's taxonomic approach to its subject matter to match contemporary artistic practice. See also chapter 4, section e., below. Roger A. Shiner (2010) put a similar point across in his response to Hick (2009), pointing out 'that intellectual property law has developed in order to manage [its] domain' rather than to accord with the prescriptions of the ontology of art (p. 401).

The language of types and tokens opens the possibility of conceiving copyright objects as trivial abstractions.

The detailed ethnographical work by Niels van Dijk (2017) presents a refreshing alternative to the forms of ip nominalism and ip realism discussed above. *Grounds of the immaterial,* refuses comfortable starting points (like norm-kinds or master artefacts) and argues instead that 'in legal geometries of disputes no point is ever pre-given, but has to be painstakingly established as a post-given beyond dispute in the dynamics of the legal fabric.' (p. 226, note omitted) It is not only the starting point that needs to be established (rather than found), but also the similarities and differences that may be held to characterise disparate artefacts. Differences and similarities between artefacts will not simply reveal themselves unaided. In his words, 'no invention speaks for itself *by itself* … but has to be made to speak for itself through the deployment of a plethora of techniques.' (p. 214, my emphasis). Immateriality for van Dijk — which is equivalent to my use of intangibility — is neither an essence the object carries with it to be extracted through the operations of the law, nor something imposed upon it, but rather something the object accrues 'through constantly being articulated by attorneys' (p. 44) until 'the court brings the proceedings of the matter of dispute to a (temporary) halt (*arrêt*).' (p. 226) In other words, the immaterial (or intangible) is that which needs to be articulated so that a claim can secure factual and legal grounds upon which to stand.

But my aims are different from those of van Dijk, like much of the literature reviewed in the previous paragraphs, my project is an attempt to address the question of what it is one owns when one owns copyright. This involves (i) understanding the function of the copyright object; (ii) discussing its ontological status; (iii) identifying the minimal ontological commitments of copyright law; and (iv) exploring the relationship between the copyright work and its tangible embodiments. But I do not understand these as 'philosophical' problems whose solution may assist copyright law in better regulating its domain of social practices and relations. Thus, rather than trying to identify parallels between philosophical and legal issues and model solutions along the lines of well-rehearsed paths in philosophical discourse, this study will begin by exploring discussions emerging within intellectual property theory, hence the focus on the three works mentioned at the start of this section.

Furthermore, contrary to a good part of the literature engaging in issues of copyright ontology, the point is not to clarify, resolve inconsistencies, or offer a foundation for copyright law (Wilson 2010; Hick 2009, 2010; Reicher 2016; Peukert 2021), but rather to problematise intangibility as a legal artefact (Shiner 2009; van Dijk 2017, chapter 2). Hence, the approach adopted here will depart from traditional ontology in three ways. First, it ascribes an experimental, rather than purely explanatory role, to ontology. Instead of attempting to fix a philosophically acceptable ontology for copyright law, it seeks to bring out different ways in which the copyright object can be thought. Second, in questioning the ontological status of abstract objects, an examination of linguistic practices will receive less attention than the conditions that allow such abstractions to take hold and reproduce themselves in a social environment. Finally, while at points the discussion veers toward an exercise in 'reason[ing] about the world's existence', I have reminded myself of Alfred Sohn-Rethel's (1978) advice: 'If ever … involved in arguments of this nature, the line to take is the historical-materialist critique of the standards of thinking on which the world's existence ever came to be questioned.' (p. 1999) That is to say, rather than reasoning about the existence of abstract objects, I took the line of examining the ways in which certain artefacts could be made to exceed their individual particularity. An approach that has a strong parallel in the ip literature in the form of the question that sets the tone for Alain Pottage and Brad Sherman's (2010) exploration of patent history

> what social and economic conditions, technical developments and doctrinal themes conspired to foster the assumption that in identifying the proper referent of a patent claim or specification patent lawyers are dealing with the two-dimensional representation of an existent but intangible object. (p. 5)

Strategic realism

After the closure of intangible property (chapter 3), any attempt to re-open the question of whether intangibles can be owned will be cast out as a fruitless theoretical exercise. It is thus, in examining the materials with which this closure was obtained and secured that a

serious critique can unfold. As I will argue, rather than inventing a whole new way of seeing objects in abstraction from their concrete materiality, intellectual property grew out from conditions in which the postulate of an immaterial essence was already well grounded. It was grounded principally in the social division of labour: the separation between design and execution.

As I am writing the introduction of this study, I am haunted by two diametrically opposed — but equally devastating — readings of its central thesis. If, on the one hand, it may be taken as trivial (it would be hard, after all, to deny that the language of authorship and originality is committed to a division between intellectually valuable — or originating — and instrumental — or derivative — labour), it can, on the other, appear like a hopelessly contrived attempt to ground the fictional tale that sustains the whole edifice of intellectual property on solid metaphysical terrain by appealing to social reality. Neither of these objections can be countered in the abstract. It is for this study as a whole to convey why thinking about ip in terms of the division of labour may prove useful and to convince the reader that there are interesting things to say about intellectual property when one resists reducing its objects to radical fictions sustained by exogenous factors.

The choice of exploring a realist hypothesis about copyright objects, is strategic rather than categorical. Descriptions of intellectual property (or the division between intellectual and physical labour) as fictional or ideological run the risk of congealing into a cliché that domesticates the strangeness of intellectual property. It is here that I want to shake things up and see what emerges from the intervention. Borrowing some famous words by Eduardo Viveiros de Castro, 'there are already too many things which do not exist' (p. 470), and I am not convinced that keeping intellectual property in that list is particularly useful. In one, very generic way, this study has some affinities with both critical and speculative realism, if only because it is open to entertaining the reality of things without closing *a priori* what reality might mean (Bensusan 2016, chapter 1; Collier 1994, chapter 6; Bhaskar 1998). For those living in a world saturated by copyright, the question should not be whether the distinction between intellectual and manual labour is real or imagined, but what their reality might mean in a world dominated by such an abstraction.

Entertaining this hypothesis requires difficult methodological choices in the attempt to find the right tone. Even as I want to take metaphysics seriously, given the limitations I sense in the reduction of copyright (and its foundational premises) to fiction, linguistic practices, or ideology; talk of metaphysics may suggest an attempt to reify and naturalise legal categories or those with which one weaves a critique. The task is thus to open metaphysical discourse to other possibilities. This task would seem impossible, were it not for the inestimable influence Adriana Cavarero's work has had on my own thinking about the deep questions that run through this study. Cavarero has a unique way of dealing ironically with the terms of philosophy that has taught me how to use the terms of the law in ways that could destabilise their meanings. And while her approach suggests a playful engagement with canonical texts and deeply engrained modes of thinking, it does not lack seriousness.[19] Likewise, I want to take time when dealing with apparently arcane topics — namely, Plato's forms, Stoic epistemology, Blackstone's radical immaterialism, Georgian uses of 'design', the philosophy of money, patent models, Wedgewood pottery, comic materialism, and the theology of the icon — to search for ways of expanding the repertoire of questions that can be brought forward in copyright theory.

Outline of chapters

As the previous section suggests, this study includes discussions of a wide range of topics that may be unfamiliar to most readers of works in copyright theory. Yet, all of these discussions emerge from a dialogue with three influential texts in the history and theory of intellectual property that form the central axis of this study and from which those themes spring out.

'A philosophy of intellectual property' by Peter Drahos will dominate the two initial chapters of this study, while 'The making of modern intellectual property law' by Brad Sherman and Lionel Bently and 'Figures of invention' by Alain Pottage and Brad Sherman are discussed in the final chapters. There is a sharp contrast between these two parts of

[19] See Cavarero (1995, 2016), Braidotti (1995), Cavarero and Bertolino (2008).

the thesis. The first proceeds in roughly analytical mode, engaging directly with the ontological status of copyright objects by questioning their possible modes of existence or inexistence and teasing out alternative ways of dealing with conceptual abstraction. In so doing, the first part of the thesis reconstructs Peter Drahos's opposition between Platonist and Stoic modes of dealing with abstraction in the form of the battle between the gods and the giants in Plato's Sophist. This is a largely aporetic discussion that attempts to show the implausibility of reducing the conceptual basis of copyright law to philosophical positions in metaphysics, but also to highlight that different modes of conceiving reality can have different generative potentialities for ways of imagining labour and the artefacts it produces. In short, it attempts to show the poverty of questioning the ontological status of stuff (real/nominal; tangible/intangible) when compared with the richness of techniques of fabricating not only abstractions but also ways of accounting for them. Although essentially aporetic, the two initial chapters point towards an important conclusion: to say that something is abstract or concrete tells us very little about the materials and techniques through which abstractions are forged.

The second part of this study shifts from the realm of metaphysical discussions to the history of intellectual property law. What brings the two works discussed in this part together and that justify the contrast with Drahos is their attention to legal detail and legal technique. Central to both works is a common sensibility to the materiality of legal concepts. In spite of their refusal to deal in metaphysics, I read these two works as a turn from philosophical metaphysics to a vernacular metaphysics with which legal form and its social legitimation and reproduction is articulated. The concept of real abstraction (Sohn-Rethel 1978) is the device with which I invert the refusal to engage in metaphysics and with which I develop a new mode of understanding legal ontology as well as justifying the centrality of the division of labour to the construction and operation of copyright law.

Part 1.

Ways of grappling with abstraction

Chapter 1. Plato, a misguided *reductio ad absurdum*

> nor is it anywhere in something else, as in a living thing or in earth or in heaven or in anything else; but itself by itself with itself it is eternally uniform, while all other beautiful things share in it in such a way that, as they come to be and perish, it becomes neither more nor less nor suffers any change.
>
> Plato, *Symposium* 210E-211B, as quoted in Kahn (1996) p. 342

In his influential book *A philosophy of intellectual property*, Peter Drahos (1996: hereinafter *A philosophy*) was, to my knowledge, the first ip scholar to explicitly attempt to give an ontological account of the objects of intellectual property (ip objects) 'using the tools of analytic philosophy' (p. xi). However, it is not easy to identify, in *A philosophy*, a complete theory about the existence (or mode of non-existence) of ip objects. The discussion is fragmented in three chapters (2, 5, and 7) where it is tangled with historical and normative questions. More importantly, it seems quite clear that the main focus of the book is not this ontological question, but rather the development of a critique of the proprietarian approach to intellectual property focused on the 'power of abstract objects'.

By using the expression 'abstract objects' Drahos seems keen on bringing rigour to juristic talk of 'intangible' or 'incorporeal' objects. In the introduction to *A philosophy,* Drahos states that 'abstract objects' translates in 'lawyer's language' as 'incorporeal rights' (p. 8) and further clarifies that '[t]he objects to which these [incorporeal] rights relate and over which relations between individual actors are formed are abstract objects' (p. 153). In mobilising a 'philosophical notion' (p. 14) Drahos is also pointing to the philosophical debate between realists and nominalists about abstract objects.

The main elements for an ontology of intellectual property are to be found in chapter seven 'The power of abstract objects', although this discussion builds on some ideas

introduced in chapters two and five. What follows is a reconstruction of Drahos's argument through a close reading of these three chapters that takes its structure mainly from chapter seven.

The discussion of abstract objects, in chapter seven, begins by highlighting its 'focus of analysis' which is 'on intellectual property as a distinctive form of power and the effects of that power on areas of social life' (p. 146). The interest in the nature of the objects of intellectual property stems, I think clearly, from an interest not in the ontological question *per se* but on the real-life effects of the power relations these rights create, govern and enforce. This is an idea that had already been advanced in the preface and in the introduction, where Drahos draws a distinction between property in physical objects (e.g. 'a block of land or a car' p. 211) and property in abstract objects (e.g. '[a]n algorithm and the formulae for penicillin and its derivatives' p. 1).

Although this distinction between 'real property' and 'intellectual property' is carved out on the basis of their objects, since '[u]nlike real property law, intellectual property law posits rights in abstract objects' (p. 1),[20] the focal point of the distinction lies in the different 'relationships of interdependence that … are linked to such objects' (p. 1). What appears to make it interesting and thus a subject worthy of a separate analysis is that by attaching to such objects (i.e. abstract objects) intellectual property multiplies 'relations of dependency between persons' (p. 159) or, in other words, '[i]t swells the growth of private power.' (p. 1)

[20] It is not entirely clear whether 'real' is used here in the traditional English law sense of 'real property' roughly an equivalent to 'land law' and the opposite of 'personal property' (J. Penner 1997, p. 107 f); or in the sense of 'rights *in rem'* roughly rights in things (*rem* being the plural of *res*, Latin for thing) that can be physically possessed, as opposed to rights *in personam* as rights in the behaviour of a specific individual. Rights *in rem* would thus include rights in land and chattels, but exclude choses in action (p. 23). Both senses are essentially compatible with a rough distinction between intellectual property and everything else. But what seems clear, and is worth clarifying from the outset, is that 'real' should not be interpreted either in the sense of 'actual' thus non-imaginary property; nor in the Roman sense of right to 'things' (*res*) which could take the form of either *res corporalis* or *res incorporalis* (Drahos 1996, p. 16).

This is because, as Drahos explains, abstract objects may 'relate to [or be instantiated by] an indefinite number of physical [or concrete] objects' (p. 21) and thus 'the pattern of interference that intellectual property rights set up in the lives of others is far greater than in the case of other kinds of rights' (p. 211). And while Drahos concedes that all property rights may be characterised as 'negative rights and so can be said to confer a right to prevent other persons from doing things … this analysis of intellectual property rights remains incomplete because of the nature of the object to which the rights relate.' (p. 212)

Unsurprisingly, then, the section devoted to abstract objects, in chapter seven is only a fraction of a broader 'discussion of the connections between abstract objects, the mechanism of property, dependency relations and the threat power that arises in the context of such relationship.' (p. 147) I am mostly interested in what this chapter has to say about abstract objects, and for that reason the details of its account of 'property' will be omitted.

In the following sections, I will engage Drahos in a dialogue that begins by examining his negative thesis (i.e. the dismissal of Platonic forms) while preparing the ground for a critical engagement with his positive thesis (i.e. the Stoic alternative, in chapter 2 below). I will suggest that the negative thesis departs from a questionable reading of Plato, that not only over-simplifies the critique of philosophical realism about abstract objects but also misses the experimental character of Plato's thinking about abstraction. And while the aim of this chapter is not to suggest that we can find in Plato a plausible theory to deal with copyright objects, the discussion will attempt to learn from the multiplicity of ways in which Plato has grappled with abstraction.

a. IP objects as spooky entities

It is in the third section of chapter seven, that Drahos 'sets out to give a more complete answer to the question of what abstract objects are for the purposes of intellectual

property law' (p. 151). The answer to the question 'What are abstract objects?' (p. 151) is, however, surprisingly short.

The section begins by pointing to 'the beginning of one answer' that had been articulated in chapter two 'when it was suggested that abstract objects are subsistent entities or, putting it another way, convenient mental constructs' (p. 151).[21] At other points in the book, Drahos suggests that these are not merely mental constructs, but fictions or even more specifically legal fictions.[22] This raises some difficulties in understanding Drahos's position but I will leave them aside for the moment and concentrate on the idea that abstract objects (at least those with which intellectual property is concerned) are 'subsistent entities'. For my purposes, the central point in the chapter is the way in which the question about the nature of the objects of ip is framed, a question that in chapter two seems to be a historical one about the origin of the category of 'incorporeal rights', but in chapter seven appears as an ontological claim. Drahos asks

> By recognizing intellectual property rights, is the law forced also to recognize 'spooky' entities — universals? (p. 17)

The question comes in the context of Drahos's claim that the modern notion of 'incorporeal rights', of which intellectual property is an example, owes much to the Roman category of incorporeal things (*res incorporalis*) which in turn, it is claimed, probably denotes a Stoic influence. With this in mind, we come to understand why Drahos's reference to universals is framed in terms of Plato's 'ideas' or 'forms' (p. 17).

That the question is basically a rhetorical one seems clear, but to really understand the proposition, we have first to discern what the presumed negative answer would entail.

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[21] References to 'subsistent entities' are to be found mainly in chapter 2 where it is claimed that these are 'not existent, but rather subsistent' (p. 17), which is tied in with the Stoic notion of an 'expressible' or *lekta* (p. 18). Several references to 'mental constructs' permeate the book, in chapter 2 we can find references to 'mental figments' (p. 17), 'things superimposed by the mind onto the corporeal world' (p. 17), 'construct of the mind' (p. 18), 'mental constructs' (p. 18), 'mental projections' (p. 18); in chapter 5 we find a reference to 'universal mental constructs' (p. 111).

[22] See references to 'convenient legal fiction' (p. 4), 'convenient mental fiction' (p. 18, p. 109), 'fictional entities' (p. 153).

Are we being invited to reject the existence of abstract objects, universals or Platonic forms? My guess is that, at this point, we are only being persuaded to dismiss Platonic forms in favour of the Stoic account of incorporeals. The Stoic account will then be used to rule out both the possibility of universals and of abstract objects of any kind. This does not mean that the three concepts are unrelated. Platonic forms are understood by Drahos as abstract objects (p. 152),[23] and as a particular conception of universals (p. 17). Thus, Drahos's characterisation of abstract objects and the distinction he draws between Aristotelian and Platonic universals will be instructive to understand what is being rejected in this first part of the discussion.

To summarise, despite the lack of rigour in distinguishing between 'Platonic forms', 'abstract objects', and 'universals', Drahos seems, in this first stage, mainly concerned with showing that the Stoics provide a much better ground for the understanding of ip objects than a Platonist account could ever do. Underpinning the whole argument is the belief that any Platonic account of ip objects would be as absurd as Plato's theory of forms itself. The appeal of the argument draws mainly from a certain reading of Plato's forms as mysterious and incredible entities that reside somewhere beyond our earthly realm in some sort of Platonic neverland. Plato, and his theory, seem thus to be placed here as the reaching point of a *reductio ad absurdum*.

As we have seen, Drahos invites Plato's theory of forms to his account of the ontology of ip objects, only to casually dismiss them as 'spooky entities' and replace them with the Stoic notion of 'subsistent entities'. This invitation might seem a bit odd. After all, as we shall see in more detail soon, the primary examples of forms posited in the dialogues of the middle period of Plato's philosophy are the so-called 'normative trio' the just, the beautiful and the good, alongside 'logico-mathematical concepts' like one, many and similarity (Kahn 2013, p. 7). It would be hard to imagine anyone laying down property claims to this type of subject matter.[24] So it seems clear that what is being rejected here is

[23] Which is not something unique to Drahos. Kraut (1992) for instance also treats forms as abstract objects, although recognising the use as somewhat anachronistic (p. 8 and note 34).

[24] In his search for 'IP notions in ancient societies' — immediately following his expedition into 'IP notions among animal societies' — Ove Granstrand (1999) is aware of the difficulty of couching ip

not an explicitly Platonic account of the nature of ip objects. As far I know no such account has ever been seriously proposed in the literature on intellectual property;[25] the absence of any reference to such an attempt in the book is telling.

So, what is exactly being targeted in his discussion? Perhaps the best way to understand it is to acknowledge that what Drahos is offering here is not a rebuttal of an explicit account of ip objects — it should be recalled that Drahos's work was breaking new ground in ip scholarship[26] and thus it would have been difficult to identify any rival accounts to take issue with.[27] What he seems to be doing here is making a first move (a negative one) in order to build his positive account of ip objects. What is being rejected, at this point, is one possible way of conceiving the objects of ip that might obscure the power relations intellectual property entails, perhaps even an implicit doctrine that may undergird some approaches to intellectual property. We should thus work out what this negative thesis is trying to capture, which in turn leads us to a reconstruction of the sort of ip Platonism that Drahos wishes to both anticipate and block.

What follows may be read as a defence of Plato. Still, what I am trying to do here is not to say that we should believe in forms, much less that Platonic forms are the best way

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objects in Platonic terms. As he writes 'One can, of course speculate that Plato would not have approved of any private ownership of ideas that he thought of as universal, subject to discovery by noble men [*sic*] and belonging in some sense to a societal collectivity.' (p. 20)

[25] Seemingly unaware of Drahos's discussion, Burk (2000) makes a similar suggestion about the copyright object as 'a sort of idealized Platonic Form' (p. 128; also 2016, p. 47) but falling short of developing this insight in any detailed way. Hulll's (2003) Deleuzian reading of the *Phaedrus* in the context of copyright's reaction to digital reproduction should also deserve a mention, however the text is more concerned with authenticity (or authentication) than with the nature of the object of protection.

[26] In a book published in the same year as *A philosophy*, Ronald V. Bettig (1996) claims that 'Critical research on intellectual property, including the relatively unexplored history of copyright, is still pioneering work.' (p. 9) And while this may be an over-simplification, as Kathy Bowrey's (1996) contemporaneous critical historiography of copyright makes clear, it still reveals a highly fragmented intellectual landscape.

[27] Paul Goldstein's (1994) *Copyright's highway*, published only a couple of years before *A philosophy* (Drahos 1996), opens with a chapter misleadingly titled 'The metaphysics of copyright' but does not discuss the mode of being of copyright objects.

to conceive of the objects of intellectual property. In effect, as I shall argue, it is very difficult to reconcile Plato's concerns when positing forms with my own, which is to understand the aggregating function of the ip object. And while some parallels may be drawn between these two concerns at a very general level — in a sense, in both cases we are trying to understand the problem of 'sameness in difference', that is, the very 'possibility that things that are numerically different can nevertheless be the same' (Gerson 2004b, p. 237) — it seems to me that there is little to be gained in discussing Platonic forms in the context of intellectual property. However, as I have been arguing, Drahos is using Plato's theory of forms to lay out his attack on any realist account of ip objects. I thus worry that this quick dismissal may obscure the central aspects of his negative thesis. In other words, I am not sure I would have invited Plato's theory of forms to this party, but since Drahos did, I believe that, like all guests, it should be entertained.

In the absence of an explicit engagement with Plato's theory of forms, I must try to reconstruct Drahos's reading of Plato through the various characterisations he lays out in the text, and by connecting them with explicit readings that seem to conform to such views.

In what is perhaps his most explicit characterisation of Plato's theory of forms, in *A philosophy*, Drahos (1996) writes

> The theory holds that there exists an ideal and eternal world of perfect Forms of which the physical world is but an imperfect imitation. (p. 152)

Forms are further characterised by Drahos as 'eternal' (p. 17), 'transcendental', 'independent' and 'unobservable' (p. 18). Furthermore, as abstract objects ('for that is what Plato's forms are', p. 152) they would exist 'outside of spatiotemporal bounds that concrete objects inhabit' (p. 152). This, according to Drahos, raises the problem of how they can be known and how they can relate 'with the world of human action and knowledge' (p. 152). Despite this problem, as Drahos observes, forms connect 'to questions about the nature and basis of power' (p. 152) in that knowledge of the forms 'qualifies philosophers who can gain access to this knowledge to be rules of the Republic.' (p. 152)

What Drahos seems keen on targeting, in his discussion of Plato, is an understanding of ip objects as some form of reified universals that would exist eternally, somewhere beyond space and time.[28] In broad terms, this characterisation dovetails with a popular reading of Plato. To paraphrase Kraut's (2017) entry on Plato in the *Stanford Encyclopedia of Philosophy*, forms are understood as entities that populate that more real and perfect realm of existence that provides the structure and character of the imperfect and defective world that presents itself to our senses. This sort of reading commits Plato to an ontological dualism: a world of forms radically detached from the earthly realm we find ourselves in. Their postulation, therefore, coming from an earthly being could only be understood as some form of mysticism or blind belief, a conclusion that partly explains why the following of traditional reading of the forms has been quickly waning in more specialised circles (Welton 2002a, p. 6 f).

In the next section I will offer one — I believe failed, but still instructive — attempt to dispel the mystical penumbra this type of reading casts on Plato, by conceiving forms as 'theoretical entities'. This will be the first step in my attempt to present a more credible reading of Plato that may offer slightly more resistance to an uncritical acceptance of the Stoic alternative, on the one hand; and illuminate the central tenets of Drahos's negative thesis, on the other.

b. Forms as analytical tools: learning from a failed alternative

Drahos's characterization commits Plato to a sort of ontological dualism that has become known as the 'two worlds metaphysics' (Welton 2002a, p. 6). This reading has, however, been facing strong criticism especially in recent years. Francisco J. Gonzalez (2002) goes even to the point of stating that 'all modern scholars would agree that the forms cannot

[28] In the absence of an explicit explanation of the 'spookiness' of forms, in *A philosophy*, I have tried to characterise the forms in very broad terms, mirroring their traditional understanding as presented by Welton (2002a, p. 3 ff). The opposition drawn between Plato and Aristotle (Drahos 1996, p. 18) is also a common one. This is explored and critiqued in Gerson (2004b).

literally be said to exist in a place' (p. 71, note 45). But this in no way means that these scholars would agree on how to save Plato's philosophy from what they regard as a misreading of his dialogues. Without getting too technical, it would be instructive to point out some of the key internal reasons for resisting ontological dualism that are commonly pointed out in discussions of the 'two worlds theory', irrespective of the authors' disagreement on finer points.

First of all, this dualism is hard to fit within Plato's wider philosophical project, most notably in the *Republic* (Annas 1981, especially p. 193 f, pp. 209-213, and pp. 232-241);[29]

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[29] To put it shortly, Annas (1981) argues that if Plato's main point in the *Republic* is to show that philosophers are in a better position to rule over 'others who lack knowledge of what is right and best for them' (p. 194) then they must have some knowledge to direct others in the righteous path. However, if Plato had stuck to a 'two-worlds view' where knowledge is only possible in the world of forms, and that nothing more than ignorant belief is possible in the world of the senses, philosophers (as the Guardians of the Republic) could have no knowledge of people and actions. As Annas argues,

> if the just person's search for knowledge is to lead to a different cognitive world from that inhabited by the likes of us, … that search becomes an exercise in glorious self-frustration; knowledge turns out to be irrelevant to the problems that inspired the search for knowledge in the first place. (p. 194)

To put it in a way more congenial to my juristic mind, the Guardians would be something like a tribunal of Herculian judges (Dworkin 1986, p. 239 ff) that would understand the law with perfect clarity, and yet that knowledge would be utterly meaningless when facing actual disputes, as the realm of persons and actions would still be radically unknowable to them. And while this could make a wonderful panel to deliver preliminary rulings (of the kind delivered by the Court of Justice of the European Union) the problem would be that not even a Guardian judge would be able to use that wisdom in solving actual disputes. Such decisions would invariantly and necessarily be based on the judge's own ignorant subjective beliefs or moral impressions. Irrespective of the sympathy one might have for this bleak picture, it could hardly be Plato's. For Plato the many particular instances of justice or beauty, etc. (as opposed to 'the Just' or 'the Beautiful') suffer from the compresence of opposites (they are simultaneously just or beautiful in one way, but its opposite in another) and thus only those who access the forms — which are 'the unqualified bearer of a predicate [e.g. 'just' or 'beautiful'] which is applied to particulars only qualifiedly' (Annas 1981, p. 207) — are able to resist an 'unreflective acceptance of perceptual and moral impressions' (p. 220) about individual things, persons and actions. So while it is fair to say that, for Plato 'the objects of knowledge [i.e. the forms] are distinct from those of belief' (p. 209 f) such radical detachment between knowledge and belief, which is presupposed under the 'two-worlds view', seems incompatible with Plato's account of forms.

and difficult to reconcile with the final criticism in the *Parmenides* that 'if each form exists "itself by itself" … the forms can be related only to one another and not at all to things in our world … [thus being] unknowable and irrelevant' (Gonzalez 2002, p. 38). An argument to which Socrates, in the dialogue, finds no apt reply. Drahos seems well aware of this when he writes that conceiving forms as eternal entities residing in a separate realm raises the problem of how they can be known and how they can relate 'with the world of human action and knowledge' (p. 152). It is hard to believe that Plato would not have been alive to this problem.[30]

From this common starting point, many attempts have been made to work out an alternative reading of the dialogues that would do away with this sort of dualism. One such alternative has been to conceive of forms as 'theoretical entities'. This is the first to be mentioned here, precisely because it offers the strongest attempt to dispel the sort of 'spookiness' Drahos assigns to the theory. And although I have some issues with this sort of reading, it will open up a possibility of reading Plato differently. More importantly, by laying out what others have identified as the shortcomings of this type of reading I will be able to offer the foundations of my own reading of Plato.

Even those who reject that Plato holds a 'two worlds theory' will have to recognise, as Harte (2008) does, that such theory 'undoubtedly reflects some of Plato's own choices of images and language' (p. 206 f). Still, nothing obliges the reader to take everything Plato writes too literally. As we shall see in more detail later, Plato — despite his dismal view of poetry — was a very gifted writer and playwright, making extensive use of literary devices that we seldom encounter in philosophy textbooks. Harte (2008), for example, prefers to understand much of the transcendental images and language associated with the forms as essentially metaphorical in nature.[31]

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[30] Peukert (2021, pp. 28-34) relies on a similar argument to question the plausibility of conceiving ip objects as abstract objects (namely, tokens). For an anticipation and refutation of the argument see Biron (2010), also Reicher (2016, p. 65-68) and Wetzel (2009, chapter 2).

[31] On Annas's (1981) more nuanced view, this kind of language 'cannot be swept away as "mere" metaphor', but an overly 'mystical' reading of Plato's account should still be resisted (p. 238 ff).

Authors like Harte (2008), McCabe (1994), Fine (1993) and Gerson (2002, 2004a), in some way dismissing Plato's literary virtuosity, avoid a commitment to an otherworldly realm by presenting forms as 'theoretical entities' in the sense of 'entities whose claim to existence is justified or defended in the light of the theoretical work they do' (Harte 2008, p. 194).[32] In other words, they are posited not because of some mystical belief about the world, or as an act of faith, but because they play a role in explaining something about the world that cannot be satisfactorily explained otherwise. As McCabe (1994) puts it, forms 'are theoretical items — they are not sensible, visible, obvious objects, but constructs offered as explanations to particular problems.' (p. 78) For example: the possibility of explanation and knowledge (Fine 1993, pp. 57-61); or, in a different account, the problem of sameness in difference (Gerson 2002). In highlighting the explanatory role of forms, such readings develop an approach to Plato that can be traced back at least to Cherniss (1936). In his seminal 'The philosophical economy of the theory of ideas' Cherniss treats Plato's theory of forms as a hypothesis which was strategically devised to solve clearly determined philosophical problems. The same type of emphasis on the explanatory power of forms can be seen in Moravcsik (1976).

But, as many commentators have pointed out, this emphasis on explanation risks leaving out of the picture many interesting aspects of Plato's philosophy. There are three main objections that strike me as particularly insightful. The first one deals essentially with what appears to be an ironing out of interesting ambiguities, inconsistencies and incoherencies within the Platonic corpus (Annas 1981, p. 232 f). The second an overly dogmatic presentation of Plato (Annas 1981, p. 237; Gonzalez 2002, p. 32 ff). The third, an anachronistic detachment of ontology from epistemology and ethics (Hyland 2002). In the words of Julia Annas (1981) 'Forms (in the Republic; this is not a general claim about all the dialogues) form the basis of the good person's understanding, not part of a detachable "metaphysics".' (p. 238)

[32] '[W]here there is no theoretical work for Forms to do, there is no reason to posit them.' (Harte 2008, p. 194) Gerson (2002) seems in line with this position when he writes that the claim that 'forms exist' has to be understood as a hypothesis that must be understood as 'the beginning part of an explanation' and thus judged by its 'explanatory role' (p. 88).

I will not go into them in detail, but I hope a brief discussion of some of these critiques, together with a discussion of the difficulties posed by an interpretation of Plato (to be conducted in the following section) may give the reader enough to work out the main reasons against simplifying Plato's notion of forms to mere 'theoretical entities'.[33]

Julia Annas (1981) in her study of the *Republic* shows a reluctance to read Plato as positing forms as 'theoretical entities, brought in for their explanatory value' (p. 233) by emphasising, as we have seen, Plato's commitment to the moralising role that the grasp of forms has in those who are able to access them. And while this reading puts Plato closer to an *a priori* commitment to forms that may be 'uncongenial to our modern philosophy' (p. 237) it does not undermine the fact that forms, although not directly the object of a systematic treatise or even discussion (Alican 2012, p. 60), are still introduced as part of general argument and discussion, not merely posited as self-evident and closed to discussion. Alican (2012) captures this idea quite well when he writes: 'the best we can do is not to prove their existence but to understand the implications of that possibility.' (p. 88)

This last caveat in no way makes Plato's argument easier to accept, nor does it solve the debate between Plato's commentators as to whether forms are best seen as 'theoretical entities' or as some sort of *a priori* reality. I will make no attempt to address that question further since, as will become clear, it is not Plato (either in a purist or reconstructed reading) who will inform my own discussion of copyright objects. My attempt so far has been to give slightly more weight to Plato's position so that it can better stand up against Drahos's appealing, but ultimately unconvincing framing of the ontological question that uses the apparent or real 'weirdness'[34] of Plato's writing in a way that not only masks how equally weird some of the Stoic teachings sometimes appear to modern readers, but also contributes to a quick dismissal of modern ontological debates.

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[33] For an accessible introduction to the difficulties in, and different approaches to, reading Plato, Alican (2012, chapter 2, pp. 55-80).

[34] To use Anscombe's (1990, p. 5) famous remark.

However appealing an ironing out of the apparent 'spookiness' of Plato's forms may be, such a reconstruction of Plato's theory has little room to accommodate important parts of Plato's philosophy. On a very basic level, such readings seem guided by an attempt to 'domesticate' Plato's philosophy in order to assimilate it to more modern discussions on ontology and epistemology (Moline 1981, p. 11). A laudable goal, but one that runs the serious risk of curtailing the radical potential of Plato's philosophy.

At a more specific level, such reconstructions raise difficulties that shall be explored in the following sections. Firstly, these readings assume that Plato has a theory. This has become a very contested topic in Platonist circles, and we shall look into it to start having a general sense of Plato's approach to philosophy. Secondly, these readings risk downplaying some specificities in method and style that distinguish Plato from most modern and contemporary philosophers. In so doing, they underplay the role of literary and dramatic elements in the dialogues. Finally, the emphasis on the explanatory role of forms promotes a fragmentation of Plato's philosophical project — by imposing, rather anachronistically, disciplinary distinctions (e.g. ontology, epistemology, ethics) — that make them less able to recognise its radical ambition. In that sense, I will try to avoid presenting what Annas (1981) pejoratively calls a 'detachable metaphysics' (p. 238). We must then search for a different reading of Plato that can be used to reconstruct Drahos's negative thesis, in a way that may illuminate important aspects for a discussion of the ontology of copyright works.

c. Reading Plato otherwise

To understand Drahos's negative thesis we need to construct some sort of ip Platonism that can offer a minimal basis for discussion. The point is not to offer a defensive reading — of the kind: 'that's not what Plato said' — but a constructive one that may offer a different way to think about ontology. To do so, we must find a way to zoom in on what the theory of forms may bring to an ontological account of the special kind of artefacts copyright deals with. This comes with a clear risk of reducing Plato's theory of forms to a set of ontological theses that will almost certainly obscure important aspects of Plato's

thought. To mitigate the risk and to avoid the prospect of advancing a purely speculative reading of Plato, I will try to contextualise the ontological aspects of Plato's theory, on the one hand; and to keep as close as possible to the academic literature on Plato — sometimes deviating from more orthodox interpretations, but only when I find this more fitting to the general argument made. In doing so I must inevitably resort to authors who do no not share all the hermeneutic assumptions I will lay out in the following paragraphs but can nevertheless offer important insights for the type of reconstructive work I am attempting here. In the end we may end up with a distorted picture of Plato — the sort of 'detachable metaphysics' criticised by Annas (1981, p. 238) — but since my main interest lies in Drahos, I hope this might be something the reader is able to tolerate.

I will start by discussing some of the hermeneutic difficulties involved in offering an account of Plato's theory of forms. This will be followed by an attempt to contextualise the introduction of the forms in the dialogues leading up to the *Republic* and isolate some of the ontological elements that can be gathered from the *Republic*, by examining Plato's 'metaphysical epistemology' (White 1992). These discussions will provide the basis for a reconstruction of Plato's middle period ontology, where an alternative to the two-world view of Plato's philosophy will be offered. This discussion aims to pave the way for a construction of a sensible form of ip Platonism with which we may engage Drahos in a more serious dialogue, something that can only be made after an examination of the challenges posed to the classical theory of forms in the *Parmenides* and the later dialogues.

To talk about Plato, or even about a more specific aspect of his philosophy is to enter an arena riddled with uncertainties, potential objections, competing schools and rival accounts. Gail Fine's (1984) lament at the beginning of her discussion of the idea of 'separation' in Plato's theory of forms is illustrative: 'It is surprising and disheartening that the central term in the debate about separation is not fixed.' (p. 253) Fine's lament is not unique (neither to her, nor to the specific problem she is addressing) and has become something like a literary trope in Platonist scholarship, revealing that the problem runs much deeper.

One of the most singular aspects of Plato's philosophy has to do with his genre of choice. Plato did not write treatises, he wrote dialogues (Kraut 1992, p. 3; Alican 2012, pp. 131-138) and was deeply suspicious of the ability of language to convey philosophical thought (Kahn 1996, p. 388 ff). Tellingly, at one point in the *Phaedo*, Socrates — explaining how sensibles relate to forms — 'mockingly apologises for "speaking like a textbook'" (Kahn 1996, p. 357, quoting *Phaedo* 102D 3.)[35] So the dialogues do not offer anything remotely close to the type of definition we may find in a Philosophy 101 handbook. As Charles Kahn (1996) points out 'What we have in the dialogues is … the gradual, partial, and diverse exposition of a complex view.' (p. 332)

Taken together these two elements raise difficult questions. Has Plato at any point presented a coherent theory of forms or was he just 'too distant to dogmatic solutions to have a theory of any sort'? (Alican 2012, p. 111) In trying to answer that question should we attend to his written or unwritten doctrines? (Alican 2012, pp. 81-83; Kraut 1992, pp. 20-24) Even if we settle for one set of answers to these questions, and stick to the written corpus in search of a Platonic theory, other questions emerge: has Plato presented a unified vision with regards to forms, or does the corpus present an incoherent set of doctrines, methodologies and approaches that can only be made sense of through a developmental account?[36] In any case, in which order should the dialogues be read? Should we take a roughly chronological approach (despite the severe difficulties in dating the dialogues)?[37] Should we attempt to situate and present the various dialogues within a scheme that tries to capture Plato's larger philosophical, educational and artistic project

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[35] In G.M.A. Grube's translation this is simply rendered 'book'. (Cooper & Hutchinson (Eds.)1997)

[36] For an overview and discussion of the division between 'unitarian' and 'developmental' readings of Plato see, from a unitarian perspective, Kahn (1996 pp. 38-42) and Annas (2002); from a 'developmental' perspective Dancy (2004, chapter 1), Kraut (1992), and Rickless (2007, chapter 1).

[37] Despite the difficulties in dating the dialogues (Alican 2012, pp. 148-188) there seems to be a consensus that *Parmenides* was written after the dialogues of the 'middle period'. To the extent that one believes that Plato has ever held a theory of forms, which is by no means pacific (Welton 2002a), the *Parmenides* mounts an open attack on the theory of forms of the 'middle period' leading some to believe that it signalled Plato's abandonment of the theory (Kahn 2013, p. 2; Kraut 1992, p. 14 ff; Annas 2002, p. 11 f).

(Kahn 1996, chapter 2; 2013, p. xii ff)?[38] Or should we instead take the dramatic order (i.e. the order of the events that unfold in the dramatic form) to appreciate the overarching story told by Plato in the dialogues? (Alican 2012, pp. 192-198) And what should we pay attention to in those dialogues? Should we restrict our analysis to the propositions advanced therein, or does the dramatic setting offer important clues to an understanding of Plato?[39]

These are not questions that I can seriously try to settle, but they lay bare the hermeneutic decisions that any reading of Plato has to make. In what follows I will make some assumptions, but in no way attempt to justify them — the reader is invited to dig deeper in the sources mentioned herein to understand and perhaps challenge these assumptions.[40] I will be satisfied if this reading is capable of illuminating aspects that are central to my discussion in a way that does not radically diverge from that of at least some of those who have spent their careers dealing with these issues.

I will thus assume that the place to start is the secondary literature that deals primarily with the written doctrines of Plato. My approach is shaped by the work of Charles H. Kahn in several aspects. I will assume that Plato holds a theory in the sense of 'a single underlying *vision of reality*' (Kahn 1996, p. 330).[41] I will also follow Kahn in the hypothesis

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[38] Alican (2012, pp. 188-192), offers a good account of Kahn's proposed schema which he calls a 'pedagogical order' with the *Republic* as its centre piece. And while Kahn (2013) offers a more careful reformulation of his 1996 thesis, there are no radical changes, except for the presentation of some earlier dialogues with which I am not concerned here.

[39] See Dancy (2004, chapter 1) for an overview and discussion of the division between 'literary' and 'analytic' interpretations of Plato.

[40] Alican (2012) and Welton (2002b) are excellent starting points.

[41] The question of whether Plato holds a theory of forms is, like almost anything we can say about Plato, subject to debate (Alican 2012, pp. 110-129). It seems clear that Plato introduces forms in several dialogues, especially the middle period ones, in order to say something about the world. Now, whether what Plato wrote amounts to a theory depends, on the one hand on what one thinks a theory should look like, and on the other on the degree to which one accepts that a reconstruction of the materials in the corpus can be allowed to bear Plato's name. It is quite clear that Plato did not offer, perhaps not even intended to offer (Annas 1981, p. 232 f), a systematic account of the nature or ontological status of forms, their range, and of how they relate to one another and to the sensible world (Gonzalez 2002), and that 'theoretical claims about' the forms (McCabe 1994, p. 78) are almost entirely absent from the dialogues. It should, however, be kept in

that the theory is coherent throughout the dialogues dealing with the forms, at least up to a point. In the post-Socratic dialogues (those after the *Republic* and the *Phaedrus*) Plato's attention turns to natural philosophy, with important consequences to the understanding of the classical theory of forms (Kahn 2013, chapter 1).

In that sense, up to the *Parmenides*, the theory unfolds rather than develops throughout the corpus. This has been described by Kahn (2013) as 'the progressive working out of a theoretical basis for what was at first an essentially practical concern: the ideal of virtue modelled on the figure of Socrates.' (p. xiv) This theoretical basis is given in the metaphysics of forms in the middle period, which still retains a clear ethical and political motivation while at the same time expanding to logico-mathematical forms — given the central role mathematics play in Plato's account of knowledge (Kahn 1996, pp. 294-296, or for a lengthier discussion Burnyeat 2000).

And since for Plato 'political power and philosophical wisdom should be joined in the same hands' (Kahn 1996, p. 51) we can understand the emphasis put on these two classes of forms: the normative trio (the just, the beautiful and the good) on the one hand; and notions of one, many and similarity on the other. We see here, then, an ambitious theory that ties together what we might now call ontology, epistemology, ethics, and politics. These central tenets, as Kahn (2013) argues, 'remain fundamental in all future variations of the theory.' (p. xiv) In the *Parmenides* the classical theory of the middle period will come under attack, not so much as to signal an abandonment of this central core, but as an

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mind that the lack of explicit arguments *for* the existence of forms may be explained by the method of hypothesis employed by Plato in his discussion of the forms (Rickless 2007, pp. 11-15; Kahn 1996, p. 330 ff). In any case, an attempt to provide explicit answers to at least some of those questions amounts to a reconstruction of what Plato has actually said (Silverman 2014, sec. 2.) that has to do more than piece together scattered passages from the corpus. It has to deal with real or apparent gaps, ambiguities and discontinuities. And while this may be a valuable disclaimer that should be read into any more or less analytic exposition of Plato's views on forms; when taken for more than that seems to create a problem for anyone who wishes to engage with Platonic forms to do something other than expose insufficiencies, contradictions and ambiguities in the dialogues. I thus follow Kahn's (1996) suggestion that 'If we bear in mind the etymology of *theōria* as a way of viewing or beholding the world, there seems no question but that Plato has expressed a coherent *theōria*.' (p. 330)

indication of the need to revise the theory in order to expand it towards an account of the natural world. (Kahn 2013, p. 2 f)

Finally, and again following Kahn, among others (Annas 1981, p. 238; McCabe 2006), my reading will be suspicious of attempts to disregard the formal, dramatic and literary aspects of Plato's writing as irrelevant to the understanding of his doctrines. But I am ultimately interested in those aspects for what they can contribute to a logical analysis of the doctrines exposed in the texts (See Rickless 2007, especially p. 6 f). Still, and because we should never lose track of what led us to Plato in the first place, our end point is not a 'true' (i.e. historically accurate, faithful to the text) reading of Plato, but a reconstruction of Plato's metaphysics that is aware of the artificiality of separating ontology from epistemology, ethics, politics, and aesthetics.[42]

But to really capture the difficulties in attempting to present a theory of forms, we must recognise that, as Kahn (1996) also notes, '[i]n general … Plato's arguments proceed *from* the Forms, not *to* them' (p. 331). That is, they are taken as a hypothesis that — even though open to scrutiny — will ultimately be demonstrated in its capacity to illuminate and guide all the aspects of the philosopher's life (pp. 329-332). So while it might be tempting, for explanatory purposes, to present the forms as theoretical tools aimed at solving various philosophical puzzles, we should resist readings that undermine the radical ambition of Plato's philosophical project. This seems that clearest limitation of Cherniss's (1936) attempt to reduce the centrality of the forms in Plato's philosophy to an idea of 'philosophical economy'.

Adding to those difficulties, we must further recognise another aspect of Plato's theory that renders it so peculiar to a modern gaze. While it is true that Plato sometimes refers to the forms as hypotheses, they are often weaved into complex discussions as if the reader had already been familiar with the notion. As Moline (1981) puts it, Plato

> has an almost irritating way of writing as if we already understand what a form is and hence need no account of it … It is as if we had walked in

[42] In the double sense of its root word *aisthēsis*, identified by Miguel Tamen (2001), as (i) 'used to refer to the domain of sensory perception'; and (ii) 'used to refer to the domain of a special category of experiences associated with art' (p. 46).

> on the middle of a conversation. Socrates' interlocutors appear to know something we do not. (p. 80)

This raises the hypothesis — eloquently developed by Moline (1981) — that the contemporaries of Plato might indeed know something we do not. This could lead to an extremely technical discussion, but the main idea in Moline's account — one that appears in slightly different fashion in Havelock (1963) and Kahn (1996) — provides a useful starting point. To put it shortly, according to Moline (1981, chapter 4), an educated Greek upon encountering the dialogues would probably recognise in Plato's use of the forms some similarities with the way in which medical theories explained natural phenomena as the result of an interaction of different natural powers [*dynamis*] that communicated their characteristic qualities to the objects with which they interacted.[43] 'Such a cause', Moline (1981) goes on to argue, 'was a form or power, a quality-thing existing in larger and smaller detachments located in many places but nowhere confined.' (p. 88)[44]

Given all these hermeneutic difficulties, I guess that rather than attempting to define the forms and list their properties, the discussion should instead aim at providing a general impression of the theory. Theory is to be understood here, in Kahn's terms (see note 41, above), as a way of conceiving the world and the meaning of life in its totality. That is, something closer to a particular sensibility than to a closed set of principles. In doing so, this interpretative, or rather reconstructive, effort — however instructive this distinction might be in a thinker as distant as Plato — will attempt to minimise the eventual discontinuities, obscurities and tensions within the Platonic corpus for the sake of clarity.

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[43] The more recent and extraordinarily detailed work of Vivian Nutton (2004) seems to give more weight to the argument by presenting the cross-pollination between medical and philosophical thought in Ancient Greece. Of particular interest to the point made in the text is the way in which medical vocabulary, particularly concerning 'powers', carried 'overtly political messages', namely through the 'analogy between the human body and the body politic' (p. 48).

[44] Moline (1981) illustrates this characteristic way of conceiving the phenomenal world

> If Alfred is hot … [it is] not that there is something, hotness, which *he has*, but that there is evidently some power, the hot, which *has him*. It would suggest that he has been, as it were, infiltrated and captured by a power capable of fighting on many fronts at once — in his fireplace, on the sun, and so on. (p. 85, my emphasis)

Generalising a specific hermeneutic choice Kahn (1996) makes in his reading of the Socratic dialogues, we may say that 'the rigor of the argument … is perhaps less important than the major synthesis it achieves.' (p. 356)

To sum up, this brief digression into the hermeneutic difficulties posed by the Platonic corpus hoped to raise the reader's awareness to the choices any reading of Plato must inevitably make, thereby pointing to the limitations of what can be sensibly referred to as a *theory* of forms. By conceiving Plato's philosophical project as a unity, and his philosophy as an attempt to capture the totality of the human condition, the reading that will be proposed in the following pages departs considerably from attempts to explain forms as theoretical entities. And while this latter approach could offer more compelling arguments to dispel the phantasmagorical aura Drahos casts onto the forms, it would, I believe, foreclose the opportunity to engage with Plato in a deeper and more instructive way. The reader should, however, keep firmly in mind that this is not my ultimate goal. This dialogue with Plato is introduced here as a way to pin down the objections Drahos raises against a realist account of copyright.

d. Experiments in abstraction

Forms (*eidē* or *ideai*[45] or in the most technical formulations *to ho esti*, Kahn 1996, p. 150, p. 338; or *ta onta*: the beings, Harte 2008, p. 192) make their appearance in the early Socratic dialogues dealing with definitions of moral virtues (Rickless 2007, p. 10), where '[t]he Socrates we meet here is looking for definitions in order to determine how one ought to live' (Dancy 2004, p. 26). But as Rickless (2007) points out '[t]he Socrates of the early dialogues … never asks after the fundamental ontological and epistemological status of these entities' (p. 10), and thus the forms that appear in these earlier dialogues are not

[45] Although it should be kept in mind that these words were not coined by Plato and were not distinctive of his theory (Kahn 1996, p. 335, p. 354) and that Plato was far from having a stable and consistent terminology (Alican & Thesleff 2013, p. 23 ff; Kahn 1996, p. 385).

yet the strange metaphysical beings that will gradually be revealed in the dialogues of the middle period.[46]

Now, it is highly likely that the historical Socrates never bothered much with those kinds of questions (Kraut 1992, p. 3, p. 8; Rowe 2006, p. 18) but the more interesting point is this: since Plato did bother with them — and used the same character to address these questions in later dialogues — why is it that the dramatic Socrates of this period fails to address them? Had Plato not yet reached philosophical maturity and contented himself with simply passing on the ideas of his old master? (Kraut 1992, T. Penner 1992, Dancy 2006) Or was this a deliberate strategy of a mature philosopher and a gifted writer to prepare the way for the grand denouement where the reader comes to realise that those strange metaphysical beings (the forms) were that which the Socrates of the earlier dialogues had been chasing all along? (Kahn 1996, p. 354; Alican 2012, pp. 188-192)

This we will never know, but what we can do is appreciate how they work as hermeneutic hypotheses. According to the first view, we have a standard developmental account (see note 36, above) that highlights discontinuities between the works of the early and of the middle period, in a sense from the philosophy of Socrates to that of Plato (Rowe 2006, p. 16 ff). According to the latter, which is the one Kahn offered in his study of the Socratic dialogues (Kahn 1996),[47] it is in the light of a fuller, but by no means

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[46] These are the ones where transcendental forms play a crucial role, and clearly the ones Drahos has in mind (including *Phaedo*, *Symposium*, *Republic*, and to some extent *Cratylus*). For a similar use see Silverman (2014), Kraut (1992, p. 18), and Rickless (2007, p. 2). They should, however, be distinguished from what Kahn (1996) calls the 'middle dialogues' grouped according to common stylistic traits, within the context of the chronological organisation of the Platonic corpus (p. 44). Under this latter perspective, and given competing accounts, the four dialogues mentioned above may not occupy a middle position within the *corpus*, as is the case in Dancy (2004, p. 4 ff) and Kahn (1996, p. 47 f.; but see p. 40 f where *Symposium*, *Phaedo*, and *Republic* are considered 'the great middle works'). For a discussion on the status and implications of such divisions, especially its developmental bias Annas (2002).

[47] In the sequel to that book, Kahn (2013) offers a more cautious tale putting less weight on the suggestion that the various dialogues might have been written according to a fully worked out master plan and more on the idea that the dialogues relate intentionally to one another as signalling 'the progressive working out of the theoretical basis' (p. xiv) for a Socratic model of virtue in life and in politics.

complete, ontology and epistemology of forms in the *Phaedo* and *Republic* that a theory of forms linking these two sets of dialogues may emerge.[48] This view will be followed here because it provides a very compelling and illuminating understanding of the link between the dialogues in the early and middle periods, especially the role that ethics and politics play in the theory of forms.

Any presentation jumping from the dialogues on definitions to the *Phaedo* and *Republic*, will risk missing a crucial step that is quite possibly Kahn's most valuable contribution to the understanding of the theory of forms. In his luminous study of the literary and dramatic aspects of the *Symposium*, Kahn (1996) suggests that the theory of forms was designed to offer a totality which makes the forms not just theoretical entities posited to solve specific epistemological and ontological problems but as the object of the philosopher's love (or *erōs*).[49] In Kahn's own words

> Modern scholarship has tended to follow Aristotle in construing Plato's theory of Forms as a solution to the logical problem of universal terms or concepts … or, more generally, as a contribution to the theory of knowledge and reality … I do not intend to deny the fundamental importance of these concerns for Plato. But I want rather to suggest

[48] In 2013 Kahn talks about

> a clear progression from the Socratic moral position, as expressed in the *Gorgias*, to the search for a theoretical basis for this position, which we find in the dialogues [on definition] … namely, the notion of essences corresponding to the virtues … After the dialogues of definition we can recognize a further progression from an implicit ontology of essences to the explicit metaphysics of the Forms, beginning with the Beautiful … in the *Symposium* and culminating in the Good of the *Republic*. (p. xiii f)

And concludes

> Hence the view which I previously described as Unitarian can perhaps be more accurately formulated as the progressive working out of a theoretical basis for what was at first an essentially practical conception: the ideal of virtue modelled on the figure of Socrates (p. xiv).

[49] As well as playing an important role in Plato's moral and political philosophy, moral psychology, theology, theory of language, cosmology and philosophy of nature, and aesthetics. (Kahn 1996, p. 329)

> that the *Symposium* offers a different perspective on the function of the doctrine of Forms … In short it is not as a theoretical solution to specifically philosophical problems that Plato has chosen to present his doctrine of Form in the *Symposium*, but as a practical ideal, of vital importance for every human being's conception of what makes life meaningful. (p. 341 f)

It is thus in the *Symposium*, Kahn suggests, that we find 'the heart of Plato's metaphysics' (p. 343) and the point of entry to the discussions in the *Phaedo* and *Republic*.[50] Alain Badiou (2012) in his so-called hyper-translation on the *Republic* gives the following line to Socrates, neatly capturing this idea: 'Take my word for it, kids: anyone who doesn't begin with love will never know what philosophy is.' (p. 168, cf. *Republic* 471c-484B)

To take this starting point is to frame the forms as standing in for the object of the philosopher's love (*erōs*). This allows us to understand the classical theory of forms as principally concerned with separating the philosopher from the sophist, and thus proposing the path for a virtuous life and for the virtuous city. As Kahn writes, reflecting on his earlier study of the Socratic dialogues (Kahn 1996), '[t]he classical theory was designed as a framework for Plato's original project: to develop the moral and intellectual legacy of Socrates in the context of Athenian political life.' (Kahn 2013, p. xii)

To sum up, it is the revelation in the *Symposium* and the developments and clarifications in the *Phaedo* and *Republic* that will allow for a proleptic reading of Socrates' mention of the forms in the earlier dialogues dealing with definitions as dialogues about

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[50] This reading suggests a certain precedence of the *Symposium* in relation to the *Phaedo* and this is accepted in Kahn's pedagogical ordering of the dialogues (Kahn 1996, p. 47, p. 339 f; Alican 2012, p. 188 ff). As a chronological claim of precedence this would be contentious (Alican 2012, p. 163 ff). Kahn's (1996) main argument to locate the *Symposium* before the *Phaedo* is that in the latter,

> the metaphysical conception of Forms is taken for granted from the beginning of the dialogue, confidently expounded by Socrates and unhesitantly accepted as a general theory by all the interlocutors. But in the *Symposium* this same conception is only briefly presented in the final section of a single speech, as a total surprise, and as a deep mystery to which even Socrates can perhaps not be initiated. (p. 339)

the forms. These dialogues where the forms appear — albeit at a different, almost pre-theoretical stage — thus seem to form a coherent whole: namely of an unfolding classical theory of forms. Furthermore, the literary virtuosity with which the forms are presented (through both Diotima's and Socrates' speeches in the *Symposium*) underlines the importance of these extraordinary entities for Plato, not only as explanatory devices but as necessary components of the truly good life. That same virtuosity cannot, I believe, be taken literally as just mystical 'spookiness' (as Drahos seems to do) nor purely metaphorically as literary devices that can be done away with by a more down to earth reconstruction of the argument.[51]

We are now in a position to follow Kahn's (1996) claim that the *Republic* constitutes the meeting point of a 'network of thematic lines connecting the dialogues' (p. 65). And what better place to start articulating a general impression of a distinctively Platonic sensibility than the final part of book V, where topics such as virtue, politics, love, knowledge, and the structure of reality meet in little more than ten Stephanus pages?

But before delving into book V of the *Republic*, it is worth stressing once again what has led us to Plato in the first place. Peter Drahos opens his discussion on the nature of ip objects with a brief remark that frames Plato's theory of forms as the reaching point of a *reductio ad absurdum* of any attempt to conceive the objects of intellectual property as something more than radical fictions. We have thus turned to Plato to gain a sense of what a Platonist account of ip objects might look like, in order to better understand the first (negative) step in Drahos's argument. That the question is an ontological one seems clear but trying to answer it by presenting Plato's theory of forms as a metaphysical one is risky. As we have seen, Plato's theory is much more ambitious than that and any attempt to build a 'detachable ontology' (Annas 1981, p. 238) from it risks missing the point. So,

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[51] Although in a different context, a study of the *Republic*, Julia Annas (1981) shares this broader methodological approach when she writes

> It has often been stressed that Plato shows sometimes towards the Forms the kind of attitude that is best described as 'mystical', talking of them in the central books in the language of religious faith and conversion … These ways of talking about Forms are indeed prominent, so prominent that they cannot be swept away as 'mere' metaphor (p. 238).

we should start by acknowledging that the modern distinction between ontology and epistemology is not likely to have been shared by Plato, as we shall see in more detail.

In the final part of book V of the *Republic* [471c-484d][52] we meet Socrates reluctantly advancing the idea that philosophers should rule the Republic.[53] Or to put it in Socrates' (the character) own words, that 'political power and philosophy should coincide' [473c-d]. This reluctance reveals an awareness to the initial gut-reaction against the proposal. The main goal of this discussion is thus, as Kahn (1996) puts it, 'to draw the line between genuine philosophers and false claimants to this title.' (p. 359)

These false claimants to the title are the 'lovers of sights and sounds' [475d] — conventionally called 'the sight lovers'. They resemble philosophers in being lovers; but it is the object of their love that sets them apart. As Socrates explains, while 'the lovers of sights and sounds like beautiful sounds, colours, shapes and everything fashioned out of them' [476b], the philosophers 'love the sight of truth' [475e] indeed the just, the good, the beautiful 'and all the forms' [476a] rather than the many things in which the forms appear or 'manifest themselves … in association with actions, bodies, and one another' [476a]. We can see here how the notion of forms is introduced, without further explanation, as something with which Glaucon (Socrates' interlocutor) is familiar. Since these sight lovers are 'unable to see and embrace the nature of the beautiful itself' [476b] they are described as 'living in a dream' [476c], as opposed to those who by directing their love towards the forms and being guided by them — the philosophers — are in a wakened state. This dreaming state consists, ultimately, in taking appearances as reality.[54]

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[52] I am roughly following Badiou's (2012) division, one that extends slightly into book VI, where Socrates draws the obvious conclusions of the preceding paragraphs. Other commentators prefer to restrict it further (e.g. Fine (1978) locates the argument in sections 473c11 to 480a13, p. 67). I do not believe these classificatory divisions matter much to the overall discussion, but in any case I think Badiou's division helps to contextualise the main arguments made in the central sections. All quotes from the dialogue, unless stated otherwise, refer to G.M.A. Grube's translation, reviewed by C.D.C. Reeve in Cooper and Hutchinson (eds.) (1997).

[53] Books VI and VII are essentially destined, as Kahn (1996) points out, 'to justify a course of training that will permit the philosopher-kings to achieve an understanding of what is good for themselves and for the city.' (p. 359)

[54] It is hard not to see here an anticipation of the allegory of the cave that will appear later on in book VII, or even a parallel with the idea of fetishism or how 'the products of the human brain

From here, the argument develops into a more complex, and rather intricate, discussion where Socrates attempts to devise a strategy to convince the sight lovers into acknowledging their limitation, while at the same time protecting them from the shattering realisation that they are living in an illusion. In so doing Socrates aims to demonstrate that their claims to knowledge are no more than opinions and beliefs. And while this passage raises many interpretive difficulties that cannot be addressed here, the general aim of the discussion seems quite straightforward. As Kahn (1996) points out

> What is entirely new is the mapping of … three terms (knowledge, opinion, ignorance) [earlier called 'the epistemic framework' of the *Symposium*] onto the corresponding ontological framework of Being and Not-Being, with a middle term as object for *doxa* [opinion or belief], construed in Parmenidean language as 'what is and is not' (479b) (p. 360).

In general terms, what have here is an illustration of what is sometimes called Plato's 'metaphysical epistemology' (White 1992), according to which the ability to know (*epistēmē*) has the forms as its object; while the ability to opine (*doxa*) has its object in that which is perceived by the senses. Thus, those who restrict themselves to what can be gathered by the senses are not able to transcend the domain of opinion or belief and achieve the knowledge that only a true philosopher is able to attain. It is this capacity to know what the Good is, that entitles the philosopher to rule.

Of the many questions that could be asked at this point, two seem particularly relevant for a clarification of the character of this onto-epistemological distinction drawn by Plato. The first has to do with the kind of knowledge Plato requires from his philosopher-kings. The second, with the metaphysical foundations of this distinction between knowledge and opinion.

We should begin by understanding that Plato does not work with the modern distinction between ontology and epistemology (White 1992), nor does he detach these problems from those we currently treat as the separate domains of ethics and political

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appear as autonomous figures endowed with a life of the own' (Marx 1990, p. 165).

philosophy. As far as Plato is interested in accounting for knowledge or *epistēmē* — to us a purely epistemological question — he is so, especially in the *Republic*, because *epistēmē* is the marker of the true philosopher, the one who is in the best position to govern the city (Annas 1981, p. 190). We can thus see, as Pradeau (2002) aptly puts it, 'the aim of … [the *Republic*] was to establish philosophy as true knowledge of what is and also to merge it with the government of the city.' (p. 78)

To understand that Plato here is not simply advocating technocratic rule (Schofield 2006, chapter 4; Pradeau 2002, p. 52 f) we must understand the ways in which Platonic *epistēmē* differs from modern conceptions of knowledge.[55] As Moline (1981, chapter 1) eloquently shows, in an unfortunately underrated work, the Platonic concept of *epistēmē* differs considerably from modern conceptions of knowledge (Gerson 2003, p. 158 makes a similar remark), particularly in that Plato seemed to know no strict boundaries between cognitive and motivational states, on the one hand, and between these and virtue, on the other.[56] To that extent, Moline (1981) considers *understanding* a better, if not perfect, way to translate Plato's uses of *epistēmē* since it retains the double sense of an epistemic improvement on knowing something, and a judgement on one's character (as in 'being an understanding person' as opposed to a person who knows a lot, p. 29). So, what are Plato's views on knowledge? On one influential account, Plato conceives knowledge 'as a high-level cognitive condition, one that goes beyond mere true belief'. (Fine 2003a, p. 3) Given the likely political motivation of Plato's theory, we could start by asking why merely having true beliefs would not be sufficient to render one able to govern the city. To start

[55] While the conception of knowledge in Plato presented here is heavily influenced by the work of Jon Moline (1981) where he makes the choice to use the term in Ancient Greek (ἐπιστήμη), to emphasise the discontinuities between Plato's and modern account of knowledge, I have opted to use the Romanised version '*epistēmē*', to facilitate reading. Quotes taken from Moline's work reflect this choice.

[56] On a similar tone, Pradeau (2002) at various points makes strong connections between philosophical and dialectical understanding (or knowledge), on the one hand, and virtue and political excellence on the other. Knowledge is presented as the cause of virtue (p. 54); as an 'inclination of the soul to desire to structure all that concerns it in accordance to such perfection as it can conceive' (p. 64); grounded on such knowledge 'psychological excellence and political excellence become merged' (p. 66).

with, someone who merely gets it right would not be sufficiently dependable. M.-K. Lee (2008) captures this idea quite nicely when she writes

> true belief is presumably just as good as knowledge as long as it 'stays put.' But true belief is easily dislodged; someone who only has true belief and not knowledge will easily be persuaded of the falsity of her belief (p. 420).

We should, of course, be careful not to mistake 'staying put' with stubbornly holding on to one's own convictions. This would run against the dialectic method of the *elenchus* (Annas 2002). But we should equally resist the temptation to reduce knowledge to mere certainty. Julia Annas (1981) — in a formulation that seems to resonate with Moline's (1981) account of *epistēmē* that I have been following thus far — argues that 'it is *understanding*, and not certainty, that is the mark of knowledge, and the person with knowledge is contrasted … with the person who, for practical purposes, takes over true beliefs in an unreflective and second-hand way.' (p. 193, my emphasis) This account lends itself to a characterisation of the true philosopher not as someone who merely knows more things ('a sort of omnivore of learning' Annas 1981, p.194) or knowns them more profoundly than her fellow citizens, but someone who knows *differently*. Whether this difference lies in the knower's disposition, in the objects of knowledge or in both is not entirely clear (Annas 1981, p. 193). In any of the formulations it does however reveal something important about Plato's figure of the philosopher, vividly captured in Malcolm Schofield's (2006) depiction and that I find useful to quote at length

> The Platonic Socrates' explanation of what a philosopher is appeals to the two elements in the construction of the world *philosophos* — *philos*, sometimes 'friend', but here 'lover', and *sophia*, 'wisdom' — and their interrelation. The basis of the whole argument ['that philosophers and only philosophers will be suitable rulers for the city'] is a point about lovers. Properly speaking, lovers don't count as real lovers unless they love everything about the object of their affections — not cherishing one kind, but rejecting another. True lovers of wine, for example, will find something to attract them in *every* kind of wine. By the same token, philosophers are those who have a passionate desire

> for every kind of wisdom: they want to know anything and everything that can be known (*Rep.* 5.474C-475C). Socrates will soon describe that desire not merely as *philia* but as *erōs*, erotic passion. The philosopher will not cease to feel its pangs or desist from it 'until he grasps the nature of each thing — what it is in itself — with the part of the soul that is akin to it.' That involves 'approaching and joining in intercourse with what is really real, and so giving birth to understanding and truth' (6.490B). (p. 159 f, note omitted).

For all the complexities involved here, it seems fair to say at least that knowledge is an improvement on true belief — although this position is not without its critics. The kind of improvement knowledge constitutes on true belief, following Moline (1981), can be captured firstly by understanding that 'the two conditions [knowledge and true belief] have different origins (persuasion, as contrasted with learning) and are proof against different challenges.' (p. 38) While true opinion might be tested against an *ex-post* examination of what actually is the case, the challenge Plato sets for knowledge is only met by surviving a dialectical test of the Socratic type (Moline 1981, pp. 37-46) usually known by *elenchus* (Annas 2002, pp. 2-8). Seen this way, knowledge is a form of 'justified true belief' that 'requires explaining why things are so' (Fine 2003a, p. 6). In a sense, Plato is not merely concerned with knowing *that* something is such and such (e.g. beautiful), but knowing what *such* a (e.g. beautiful) thing is.[57] So far, I have tried to emphasise the explanatory dimension of knowledge, but it is equally important to clarify that the kind of explanation or cause that Plato requires is not of the garden variety.

Finding or 'reasoning out the cause' of something (Moline 1981, p. 45) involves passing the *elenchus* by arriving at that which gives the thing or action its character, its form, that is. This is why, for Plato, it would be futile to look at the many beautiful things to build an explanation of why they are beautiful. One would just be 'unable to see and

[57] Annas (1981) claims that distinctions between '*knowing that*, *knowing how*, and *knowing an object*' play no important role in Plato's account of knowledge. She does, however, consider the idiom '*knowing what* … a thing is' closer to Plato's concerns (p. 192). If that is true, the distinction in the text may be read, as in Annas, as mere explanatory device, but the argument made there does not depend essentially on this distinction.

embrace the nature of the beautiful itself', like the sight lovers Socrates distinguishes from philosophers at *Republic* 476b. And it is precisely because philosophers understand the true character of things that they are in the best position to rule. Pradeau (2002) summarises the point with great clarity

> Knowledge of the Forms is thus justified by and founded upon a political imperative. In other words … the figure of the 'philosopher-ruler' can be regarded as the answer to a strictly political question: it is not the case that the philosopher governs because he or she is knowledgeable; rather, it is because power demands, as the condition of its *just* exercise, knowledge of *what is*, so it must produce a philosopher (p. 55).

But Platonic *epistēmē* differs from knowledge understood as 'a merely intellectual arrangement of information' (Moline 1981, p. 10) in a deeper way. To put it crudely, coming to have the former is seen by Plato as some sort of transformative experience that allows one not only to 'give an account' of its subject matter; coming to have *epistēmē* affects one's conduct in important ways.[58] This is an aspect almost absent in Gail Fine's account, but one that Moline (1981) takes to be crucial, and that Annas (1981) puts at the heart of her account of knowledge in the *Republic*.

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[58] This has important political implications for the project of the *Republic*. As Pradeau (2002) emphasises, Plato never gives up the idea that political competence should be understood as a form of knowledge that

> both presupposes some kind of knowledge (whoever engages in politics must know how to use and direct all the tasks to be performed in the city), and also produces some kind of knowledge (by making the citizens knowledgeable) … politics is a mode of education (*paideia*), of formative culture. (p. 41, note omitted).

This captures the idea of knowledge and education as a part of the political emancipation of the citizen that sets it apart from the view of knowledge as a mere form of acquisition of information imparted by the more knowledgeable other. Thus, as Annas (1981) writes 'Forms are not just the kind of explanatory entities that anybody, even a clever sophist, could grasp and see the point of' (p. 238); '[t]hey are the beginning of an intellectual quest … breaking out of passive conformity to intellectual liberation.' (p. 240). Kahn (1996) also stresses ideas of 'spiritual liberation' (p. 66), 'conversion and enlightenment' (p. 359).

Coming to have *epistēmē* causes a change in the knower's disposition (she falls in love with wisdom, thus affecting her conduct towards learning and towards acting in the world) and in the object of knowledge (through dialectical exchange, an 'account' emerges through grasping the forms). This is closely connected with the normative aspects of Plato's *epistēmē*. Having *epistēmē* does not just mean knowing the right thing but doing the right thing. Knowledge being conceived of as a virtue, saves its holder from wrongdoing (Moline 1981, p. 10) just as much as being a true lover amounts to more than merely *thinking* nice thoughts about the object of one's love; it brings with it a *feeling of compulsion to act* in accordance with the imperatives of one's love.[59]

This is not to say that Plato's account of knowledge or *epistēmē* is by any means straightforward, as R. Taylor (2008) shows in his comparison of different ways in which Plato treats it in various dialogues. And while this is not the place to attempt a dissection of important passages where knowledge or *epistēmē* is accounted for in the Platonic corpus, two ideas are worth retaining from R. Taylor's study. The first is that, for Plato 'knowledge is knowledge of what things are' and since the forms are 'the basic things that there are' they must be the 'primary objects of inquiry.' (p. 188) The second is that it is hard to retrieve, from the Platonic corpus, a definite answer as to the possibility of empirical knowledge, i.e. knowledge of things that appear to our sensory perception (p. 188 f).

Having already hinted at the role forms play in Plato's account of *epistēmē*, and how it relates to politics, it is necessary to develop a clearer understanding how these questions connect to what we would now regard as ontology. As Kahn (1996) aptly summarises it '[t]he Forms play this central role [as the distinctive object of philosophical knowledge] in Plato's epistemology precisely because they constitute the basic entities in his ontology.' (p. 329) From what has been said thus far it is hard not to associate a sense of transcendence with Plato's account of knowledge. So much so, that as Moline (1981) tells us Gregory Vlastos 'an otherwise sympathetic reader' (p. 10) expresses some discomfort

[59] I must note that this excursion on love is more Badiouvian (Badiou 2012, p. 180) than strictly classicist. A more conventional account usually involves an examination of Plato's conception of the soul (Moline 1981, chapter 3).

with this way of conceiving knowledge, leading him to accuse Plato of mixing epistemology with religion. And perhaps this might not be completely off the mark (Kahn 1996, p. 358). Might the forms turn out to be 'spooky entities' after all? The distinction drawn in book V between knowledge and the forms, on the one hand; and belief and the sensible world, on the other, seems to confirm this view. But before we accept Drahos's characterisation, let us return to the way in which the distinction is introduced in the dialogue:

(1) Knowledge is set over what is [477a];
(2) Belief is set over what is and is not [477a].

The distinction being made between knowledge (*epistēmē*) and belief (*doxa*) seems to be presented as a distinction between different types of realities to which these powers or abilities are set over, in other words: in terms of their different objects (i.e. the forms [what is] vis-à-vis sensible particulars [what is and is not]). In this account, different cognitive abilities seem to attach to different objective realities, in a way that seems to conform to a dualist reading of Plato's theory according to which there is a world of forms radically separated from the sensible world.

In this section I have tried to offer a clearer picture of Plato's so-called theory of forms. After having rejected attempts to conceive the forms as theoretical entities, highlighted the moralising role of forms in Plato's theory, and stressed the intimate connection between ontology and epistemology in Plato's thought, I have avoided several attempts to dispel the apparent 'spookiness' of the forms. This may seem counterproductive. After all, what justified this closer engagement with Plato was some discomfort with the quick way in which Drahos brushes Plato aside when framing his question about the nature of ip objects. Might forms be 'spooky' after all?

I have been arguing that much of the appeal of Drahos's rhetorical question lies in a popular understanding of Plato as committed to a two-worlds view: a kind of dualism that posits the existence of a sensible world of belief, people, actions, and things and the non-sensible world of knowledge and forms. As Drahos acknowledges, this raises the problem of how forms can be known and how they can relate 'with the world of human action and

knowledge' (p. 152). As we have seen, it is this same criticism that, by leading to a rejection to the central lesson of the *Republic* (that philosophers should rule), has motivated some commentators to find a way to free Plato from a two-world view. The alternatives proposed in the literature are various and I cannot do them proper justice here. In any case, the following section will offer a quick overview to familiarise the reader with different ways of challenging this dualist reading of Plato, while opening the possibility of a plausible way of understanding some of the metaphysical subtleties that an ontology of copyright objects will have to grapple with.

e. One-world Platonism

Several attempts have been made in the specialised literature, especially in recent years, to dispel the image of Plato as an ontological dualist. And while this may reveal a certain modern unease with the notion of a transcendental reality, there are good reasons — more specific, and more closely aligned with the dialogues — to call this dualistic framework into question, even if a certain amount of weirdness should still be retained.[60]

Perhaps the most compelling reason to resist such dualist reading is the recognition that it creates a paradox in the heart of the political model envisaged in the *Republic*. What sense would it make to propose a political model grounded on the idea of philosophy, if the object of the philosophical *erōs* — the forms — inhabits a realm that is separate from that of things, persons and actions? How could the philosophers — trained according to a curriculum that culminates in the knowledge of the form of the Good — be apt to govern a human society? Alican and Thesleff (2013) frame it even more dramatically. Given the 'general axiological orientation of Plato's thought' such a radical separation between the realm of forms and the world of the senses would entail that 'there can be no enlightenment, moral or otherwise, so long as the Good resides in an entirely different world, along with all else that is fine and decent and noble.' (p. 13) Such

[60] As Moline (1981) advises 'The interpreter is not obliged to find (and should be a bit suspicious of finding) some reading of their [Socrates's and Plato's] views which will render them true or even congenial to us today.' (p. 11, note omitted). For my use of 'weirdness' see note 34, above.

a reading would 'leav[e] no room for an experience of value, which rests with all the good stuff in the world of Forms, not where we dwell, in the world of particulars.' (p. 14)

But these are merely reasons to suggest a rethinking of the dualist model, they give us no clue on how that can be done. In working towards a reasonable alternative, a first distinction should be made between readings that oppose epistemological dualism and readings that oppose ontological dualism. Challenging epistemological dualism means, roughly, opposing the view that knowledge is only of forms whereas opinion is only of sensibles. Allowing for knowledge of sensibles would, thus, equip the philosopher-kings with the ability to have the knowledge of the world over which they lay claim. Perhaps the best known representative of this line of though is Gail Fine. On the other side we have authors like Gonzalez, Moline, Alican and Thesleff. The kind of dualism they object to is ontological, in a minimal sense that they reject Plato's commitment to the existence of literally two worlds.

Since I have been making an effort to resist clear-cut distinctions between ontology and epistemology in Plato and considering that a refutation of ontological dualism is conducive to a rejection of epistemological dualism, I will not address epistemological dualism in detail.[61] Within the ontological camp we may include attempts to collapse the distinction between forms and sensibles. Here, we have essentially two alternatives. One, already set aside, of conceiving forms as theoretical entities devoid of objective reality; and another explicitly presented by Gonzalez (1996), but also present in the work of Moline (1981), of rejecting the existence of sensibles as such, in Plato's worldview. In a sense, we end up with diametrically opposed images of a unitary universe. The first finds no place for the objective existence of forms, the other for the objective existence of sensibles. A third alternative is presented in the work that Holgar Thesleff has been conducting (Alican 2014). This alternative essentially 'replac[es] the dualism of a world of Forms separated from a world of particulars, with the monistic model of a hierarchically structured universe

[61] Fine's rejection of epistemological dualism can, as Gonzalez (1996) demonstrates, be objected to on more specific grounds which I take to be sufficient to rule out Fine's proposal. Gerson (2003) while generally agreeing with Gonzalez raises different objections to Fine's reading.

comprising interdependent levels of reality' (Alican & Thesleff 2013, p. 11) In what follows I shall try to reconcile this view with attempts to deny existence to sensibles as such.

If we recall our earlier discussion about the metaphysical epistemology of the *Republic*, we ended up with a distinction between knowledge (*epistēmē*) and belief (*doxa*) which was tied in with a distinction between 'what is' (the forms) and 'what is and is not' (sensibles). As Kahn (1996) aptly summarises it '[s]o conceived, *doxa* can take the whole realm of sensible appearance as its object, as knowledge in the strong sense takes the Forms as object.' (p. 360) This seems to rule out the possibility of knowledge of things, persons and actions; about which only unreliable opinion would be possible. As we have seen, this leads Gail Fine (1978, 1990) to posit an alternative reading that would allow knowledge of the sensibles in order to avoid the paradoxical conclusion that, in the end and despite all their knowledge of the forms, the philosopher-kings would not be prepared to rule over an earthly Republic.

But Gonzalez (1996) deflates the objection. To say, in the context of Plato,

> that we do not 'know' … that a particular action is good or that we are seeing a tomato … does not rule out the possibility of having justified true belief that we are seeing a tomato; this is simply not what he means here by epistēmē. (p. 271, note omitted)

In other words, belief (even if true and justified) will still remain *doxa*, even if, as Gonzalez points out in the footnote accompanying the quoted passage, 'Plato sometimes uses *epistēmē* in a weaker sense that corresponds more to our "justified true belief".' (p. 271) So, in the end, what Gonzalez takes *epistēmē* (in the strong sense) to be is acquaintance with the forms. This is by no means pacific, but Gonzalez's arguments are quite compelling. Now, if we take this route, the paradox is not yet dispelled, much to the contrary. If the forms reside somewhere inaccessible to earthly beings, acquaintance (in this life, at least) will be impossible. But, as Gonzalez continues to argue,

> we need to recognize that the relation between forms and sensibles is not one between two completely distinct worlds, since sensibles do not exist independently of the forms, but are only their images or imperfect

> instantiations … the being of the sensible object is exhausted by its participation in the form; it exists and is what it is only as intrinsically related to the form. (p. 272)

This allows us to see why Socrates compares the condition of the sight lovers to living in a dream, they — much like the prisoners in the allegory of the cave (*Republic* 514a-517e) which Gonzalez mobilises as textual evidence to justify his reading— are fooled by appearances, taking them for what really is. So there can be knowledge relevant to this world, but this is not, as Fine claims, knowledge of sensibles *per se*. As Gonzalez puts it 'it is precisely because this knowledge is *not* of sensibles, but of forms, that it can reveal sensibles for what they are: nothing but deficient imitations of these forms.' (p. 273)

What Gonzalez does here is (while not unique) quite remarkable, and we should pay close attention at how his framing of the relation between forms and sensibles turns the tables on what would be perhaps a common sense — but quite unplatonic — way of conceiving the structure of reality. Most common presentations of the theory of forms emphasise the difficulty in understanding the way in which forms may be said to exist. And this may be understandable for textbook purposes. But why should a reading of Plato be primarily worried with the mode of existence of the forms? If Kahn's (1996) suggestion that 'the Forms are ontologically prior to everything else' (p. 349) is pointing in the right direction, then it seems that Plato looked at things the other way around. It is the sensible reality, the visible world, that seems question begging for him. It is this 'world', not the forms, that he time and again calls untrue and unknowable. If, however fairly or unfairly, Plato has been criticised for 'reifying universals'; shouldn't those who pay more attention to the problematic existence of forms rather than questioning the reality of the sensible world be criticised for 'reifying particulars'?

In a similar vein, John Burnet (1914) remarked that, for Plato, 'a particular sensible thing is nothing else but the common meeting-place of a number of predicates, each of which is an intelligible form' (quoted in Moline 1981, p. 116). This gives Moline (1981) the starting point to take the idea further and lay out the radical potential of Plato's thought about reality. While retaining this idea that sensibles are nothing more than places of encounter between different forms, Moline rejects the talk of predicates, since 'a predicate is a predicate of some subject' (p. 116) and therefore that subject would have to be

assigned independent existence. He prefers to see forms as powers (or *dynamis*) that fight for dominance over a given territory (p. 88 f). To see forms as powers means to efface the subject: forms have no subjects, they are not properties of things, but rather objective realities that happen to meet somewhere and appear in the form of sensible things. So, in this account, 'forms were the only realities, and there is nothing suitable of which they could be predicated.' (p. 116) As Moline sees it, Plato 'attempt[s] to deconstruct particulars into forms or portions of forms without remainder.' (p. 116)

Thus it is not as if Plato, having made a conceptual distinction between knowledge and opinion, then sought to explain it not as a difference of cognitive faculties, but rather obtrusively as cognition of different objects. There is only one object of cognition: the forms, because these are the only entities that exist. Sensibles are only ways in which the forms appear, they may be sites, or even existential states, but they have no objective existence of their own. As Burnet (1914) puts it, in the long passage quoted by Moline, 'Apart from these [forms], it [a particular sensible thing] has no independent reality; and, if we know all the forms in which anything participates, there is nothing more to know about it.' (Moline 1981, p. 116)

If, as Moline suggests, Plato conceives of sensible reality as a battle ground where different powers measure their strength, resulting in the character of the sensible world, we can conclude that it is not entirely accurate to say that, for Plato, sensible reality comes in the form of objects. Such an object-oriented approach would have to conceive the forms as properties possessed by sensible objects, rather than powers that give these appearances their character. In other words, it is not objects that possess forms as their properties, but rather forms as powers that take hold or inhabit sensible reality (see note 43, above). This could take us far — farther than desirable for my main aims — so let us take it as a hypothesis that, for Plato, sensibles do not have an immanent nature, independently of the forms.

If sensibles are not objects (and thus forms not properties thereof), then they cannot be known. Since anything that may pass as knowledge of sensibles is no more than knowledge of forms (understood as powers) that happen to meet in a certain location; knowing particulars is, in this view, nothing but identifying the occurrence of powers or *dynamis*. There is no clear boundary between the two. And here we must part ways with

the most orthodox classicists and embrace the insightful account of forms offered by Alain Badiou (2012)

> We are, as a result, at the point where the being of the object is indiscernible from what, of this being, is thinkable. This point of indiscernibility between the particularity of the object and the universality of the thought of the object is exactly what Plato names the Idea. No greater error can be committed with respect to Plato than to maintain that his thinking is dualistic. The opposition between sensible world and the intelligible world is fallacious. As far as Plato is concerned, there is only one world; the sensible one 'participates' by degrees in the intelligible one in a dialectical process. The dialectic designates precisely the possibility of a process of thought whereby the object of thought is indiscernible from the thought of the object. (p. 362 note 3, references omitted).

If Badiou's account seems to place Plato close to a certain form of idealism — according to which reality is nothing more than what one thinks about it — we need to be reminded that for Plato those 'Ideas' (the forms) have an objective reality, irreducible to what we may come to think about them.

We have seen thus how the two-worlds picture can be overcome by conceiving a unitary world where only forms truly exist. This opens the door to various degrees of reality, a problematic claim but one that can help us make sense of what Plato was trying to get at in the dialogues. Before we look at how these degrees of reality work, in finer detail, it is crucial to stress that this reading is not grounded on an opposition between the 'sensible world' one the one hand, and the 'true world of the forms' on the other (which would be just a restatement of a dualist framework). More than an elimination of the 'sensible world' what this reading achieves is a confluence or continuity between forms and sensibles within the same universe.

Having seen how Plato turns his investigation into one about the objects of knowledge, thus bridging the gap — if there had been such thing at the time — between epistemology and ontology, I hope we are in a better position to understand Plato's radical claim that the objects of sense perception cannot be known (White 1992).

Gonzalez's (1996) reading of the allegory of the cave (*Republic* 514a-517e) and especially of the moment when the philosopher returns to the place where he had once been held captive, neatly captures both the sense of continuity between forms and sensibles within the same universe, and the epistemological (and moral) journey from the seeing appearances to having knowledge of the forms. Thus, after the journey of liberation that has led him from the shadows projected on the cave's wall to the vision of the sun, understood as cause of everything that lives, he returns to the cave and is again faced with those shadows

> the philosopher in one sense does not know the shadows on the wall any better than the prisoner does; in fact, at first he will be less able to predict their movements (516e9-517a4, 517d4-e2). What allows him, unlike the prisoner, to see the shadows for what they truly are is not knowledge of the shadows themselves, but a knowledge of the originals that cast them. (Gonzalez 1996, p. 274)

Now, it is hard not to see here a sense of transcendence associated with the forms, and thus to completely avoid a separation (for lack of a better word) between the forms and their images (the sensibles). Indeed, doing so would likely miss, as Alican and Thesleff (2013) put, it the 'general axiological orientation of Plato's thought' (p. 13) or 'worldview' (p. 44). But this does not have to lead back to the strict ontological dualism of the two-worlds framework. This is precisely what lies at the heart of the ambitious revisionary project that has driven the work of Holger Thesleff (Alican 2014, p. 30) and that finds its most clear iteration to present, in an article published with Necip Fikri Alican (Alican & Thesleff 2013).

This transcendence, however, does not reside in the passage of one world to the next, but on the capacity to change from a vision of the world restricted to its sensible appearance to a vision that apprehends the world from a higher level of abstraction and culminates in the experience of values with a positive axiological charge which results in the realisation of the true structure of reality. In other words, it is not a passage from a world of appearances to the world of forms, but a gradual liberation from appearances that culminates in knowledge of the true character of reality. This sense of transcendence and gradation, albeit never explicitly presented in the dialogues, dovetails particularly well

with the imagery employed by Plato in many of the dialogues where forms play an important role. From the examples chosen by Alican and Thesleff (2013) to illustrate this point, perhaps the clearest ones are: the image of the 'ladder of love' in the *Symposium* (209e-212a) (p. 19); the divided line in Book VI of the *Republic* [509d-511e] that places the visible and the intelligible as opposite ends of the same axis (p. 19, p. 22 ff); and the fantastic image in the *Phaedrus* [248a-249d] of the philosopher's mind growing wings and ascending to the place beyond heaven where the forms can be seen (p. 44). To which Alican (2014) adds 'the analogic argument [in the *Phaedo* 78b-80b] where the soul is likened to the gods and the Forms, thus implying that the latter two are themselves comparable in some way' (p. 35, note 18), and to which we might further add the prisoner's journey in the allegory of the cave (*Republic* 514a-517e).

The beauty of Alican and Thesleff's construction resides, thus, in the ability to deny the extreme consequences of metaphysical dualism, while at the same time respecting and retaining the differentiation Plato establishes between the 'visible' and the 'intelligible', as well as his general fondness for opposites (Alican & Thesleff 2103, p. 17; Alican 2014, p. 30 f). What they achieve is a 'sliding scale of reality' (Alican & Thesleff 2013, p. 13) hierarchically disposed to fit in with Plato's numerous uses of transcendental imagery.

To be more specific, what Alican and Thesleff (2013) propose is a vision of 'a single world that is stratified into ontological layers with a sliding scale of reality where there is enough room both for Forms and for particulars as well as for their separation.' (p. 13) One that admits 'points, or regions, or just ways, of contact … as opposed to the juxtaposition of disjointed and polarised worlds where any connection would be tenuous at best.' (p 18) Their metaphor of the two levels as 'upstairs and downstairs' (p. 19) is particularly apt in capturing the accessibility of the highest level, however steep the climb might be.

In explaining how this multi-layered universe would work, Alican and Thesleff (2013) make use of Plato's divided line in book VI of the *Republic* [509d-511e]. This is a well-known explanatory device Plato employs to, arguably, various ends. It offers a picture of his division between the 'visible' and the 'intelligible' (in his typical onto-epistemological fashion); which also functions, as Annas (1981) argues, to 'grade our cognitive states according to their distance from full knowledge with understanding' (p. 250) in a

somewhat psychological and epistemological way (by mixing cognitive states with conditions of the soul). Furthermore, the line culminates in the Good, thus showing a clear axiological dimension.

This line is some sort of axis that runs from untruth to truth and encompasses several other dimensions: 'opacity/clarity', '*doxa*/*epistēmē*', 'likeness/the things themselves'. In this line we make a first incision, dividing the 'visible' from the 'intelligible'. Each of which is then divided in two. The lowest level (*eikasia*) is populated with images, shadows, and reflections; followed (but still within the 'visible') by a higher level (*pistis*) occupied by 'the originals of those images' (including animals and everything that grows, as well as artefacts). Moving on to the domain of the 'intelligible', its lower level corresponds to *dianoia*, where we find the hypotheses of the geometers and mathematicians (the odd, the even, the square itself, the diagonal itself, etc.) and in short 'those others themselves that one cannot see except by means of thought.' [510e] Higher still, within the 'intelligible', we have the noetic level where we find the unhypothetical first principles — as opposed to mere hypotheses — culminating in the Good (*to agathon*).

Each of these sections of the divided line is then conceived as a level or ontological layer within a single universe. As Alican and Thesleff (2013) explain 'The metaphor of levels, contrary to that of worlds, exposes a value differential between a higher and a lower order of entities or phenomena.' (p. 17) And while the complete model is a bit more complex than this, we can roughly assign the actual things we experience with our senses (or in a language closer to Plato the images and originals of the things themselves) to the 'visible', lower, level of reality, and the forms to the 'intelligible', higher, one. But the higher position of the forms, within Plato's universe, does not prevent them from being known, nor do they provide a kind of knowledge that is detached from our mundane encounters with things and actions.

This reading, or so Alican and Thesleff (2013) have persuaded me to believe, offers

> a reconstruction that makes better sense of Plato than the one that places the Forms in one world, the particulars, in another, and leaves no room for an experience of value, which rests with all the good stuff in the world of Forms, not where we dwell, in the world of particulars. (p. 14)

In other words, it shows that we do not need to 'posi[t] an extra world to make things work' (Alican & Thesleff 2013, p. 12).

And yet, the noetic segment of the divided line may still appear a bit spooky. As Alican (2014) explains the forms that may be assigned to this level 'are much like the fantabulous entities associated with the gods, and accorded a status bordering on divinity, as in the *Phaedo* and the *Phaedrus*.' (p. 35, note omitted). Or even if we do away with these 'metaphysical overtones' (Alican & Thesleff 2013, p. 23) we would still end up with a kind of radical moral realism that may not be very palatable.

Before concluding this section, certain key points should be made clear. The ultimate aim of this discussion is to show that the epistemological, and above all ontological (or perhaps more correctly onto-epistemological) dualism is neither inevitable, nor desirable. If this claim is true, we rid ourselves from the undesirable neverland from which Drahos derives much of the appeal of his reading of forms as spooky entities. To be sure, if that were my only goal, there would be little need to develop these ideas in much detail — much less to propose a revised version of Thesleff's model in the following section. Still, I hope that an engagement with these specialised themes in Plato studies will allow for the articulation of a more complete and coherent reading of Plato to emerge, one that may open up a new way of bringing Plato into discussions about the nature of ip objects.

f. Copyright objects as sensible particulars

We should pause for a moment and ask: even if Plato really believed in the objective existence of 'ideal qualities (or capacities) of gods and of humans at their best (i.e. philosophers)' — to borrow an apt summary by Alican and Thesleff (2013, p. 25) — what relevance might that have for a discussion about the nature of ip objects? It seems obvious that to claim property over any entity of that kind would appear utterly absurd (or at least, to put it in copyright speak, violate the idea/expression dichotomy). Conversely, to attribute the character of these ideal forms to actual ip objects, would smack of heresy, at least to a committed Platonist.

So where do we stand? Until now I have tried to sketch a reading of Plato that could be able to capture the core of his classical theory of forms. Given its moralising elements or axiological orientation, it seems odd to mobilise it in a discussion about ip objects. With this, I hope to have achieved two things.

First, to reject the ontological dualism that undergirds the Drahosian reading of Plato's theory of forms without, however, attempting to domesticate the strangeness of Plato's thought. We may still be left with a reification or even deification of moral and other kinds of virtues (Alican & Thesleff 2013, p. 20; Alican 2014; also Kahn 1996, p. 358 emphasising the otherworldly aspect of Plato's forms). This seems as odd as it is irrelevant for a discussion about the nature of ip objects.[62]

Second, to demonstrate that the classical theory of forms can hardly be used as the reaching point of a *reductio ad absurdum* designed to disown any attempt to build a realist account of ip objects (and in particular, of copyright objects). The distance between Plato's philosophical project and that which worries a theory of ip objects is just too great to allow for an instructive dialogue. A rejection of Plato's classical theory of forms leaves the prospects of a realist project unscathed, which might just provide the sort of 'philosophical underlabouring' (Bhaskar & Norrie 1998, p. 567) necessary to pave the way for a more instructive discussion of possible modes of (non-)existence of copyright objects.

But we do not have to end up in aporia, at least not just yet. If we recall the divided line, we will be reminded that each domain (the 'visible' and the 'intelligible') is itself complex (see p. 66 f, above). Furthermore, Plato did not restrict his philosophical work to normative notions — despite the fact that these form the core of his classical theory. As Alican and Thesleff (2013) suggest, and the corpus amply confirms, Plato experimented with different forms of abstraction throughout his career. So much so that, according to them, not only should we not 'compris[e] all abstractions … into the concept of Form' (p. 12) we should not even assume that 'the constructs commonly known as Plato's Forms … all belong together.' (p. 43). Acknowledging this opens the opportunity to set the

[62] This seems to confirm Michael Wreen's (2010) suggestion that 'the realist-nominalist debate about intellectual property isn't exactly the realist-nominalist debate about universals.' (p. 441)

classical theory of forms aside and find within the corpus a different way of grappling with abstraction. One which we may use in order to reconstruct Drahos's negative thesis into a more instructive one.

If we hold on, as we have done thus far, to a characterisation of the classical theory of forms as one destined to argue for some form of moral realism — with all the consequences that it might have for Plato's politics, ethics, aesthetics and psychology — we must search, without that theory — be it understood in developmental terms or merely as a tool for exposition — for other ways in which Plato has experimented with abstraction. Experiments that may illuminate aspects of Plato's thought that might be relevant for an ontology of copyright objects. In other words, if we wish to invite Plato for a constructive dialogue, we must first ask him not to come in his classical robes.

The distinction I am proposing here between the 'classical theory', on the one hand, and what we may call the extensions of that theory (or even post-classical theory) on the other, has essentially a didactic purpose and should not lead necessarily to a developmentalist reading. What is meant by this is, simply, that until now it has been useful to isolate certain aspects of the dialogues that appear to show some internal coherence or continuity and bring them together in what may be called a discrete philosophical project (Kahn 1996, pp. 59-65). What has been kept out of this picture, that which I shall address in the following paragraphs, is notoriously difficult to reconcile with that classical theory and may be best reconstructed as a separate project or experience.

Perhaps the most visible discontinuity between what we have been calling the 'classical theory' and the discussion of the forms in book X of the *Republic* (Annas 1981, pp. 227-232) and in the *Cratylus* (Kahn 1996, pp. 363-368) is what appears to be the sudden expansion of the argument to seemingly cover any generic term. Thus, for example, in book X we hear Socrates talking of a customary procedure to 'hypothesize a single form in connection with each of the many things to which we apply the same name' (*Republic* 596a)[63] and in the *Cratylus* a readiness to discuss forms for mundane artefacts. This seems

[63] As Annas (1981) writes, '[t]his passage is dear to the hearts of those who think that the "theory of Forms" is a theory of universals' (p. 228) not without remarking how 'brief and problematic' this passage is in how it 'conflicts in many puzzling ways with the treatment of Forms in the body of

to contrast with the restricted way in which Socrates talks about the forms in other places, appearing only ready to posit them for very special cases dealing with love, being, virtue, knowledge, etc. (Broadie 2007).

Such a distinction between a 'classical theory' and its 'extension' seems to overlap with Alican and Thesleff's (2013) proposal of reconstructing the various experiences Plato has conducted with abstraction under the guise of different categories of forms. Thus, what I have called here the classical theory is captured by Alican and Thesleff's (2013) notion of 'ideal forms'. This does not mean, as we have seen, that the dialogues we have been considering thus far are silent on what we may call the other categories, far from it. Nor does it mean that these are irreconcilable. Alican and Thesleff's (2013) reconstruction attempts to do just that, but in doing so the attempt deserves the proper name of a reconstruction.

The forms that we have been considering thus far, essentially the normative trio and the like, are understood by Alican and Thesleff (2013) as 'ideal forms', i.e. 'metaphysically transcendent entities … charged with positive intrinsic value' (p. 21).[64] These are distinguished from what they call 'conceptual forms' and 'relational forms' in that none of these exhibit an intrinsic positive axiological value.

Conceptual forms seem to be the only category where ip objects might be thought to fit in. If, after Alican and Thesleff (2013), we understand concepts as 'common denominations of a group of phenomena' (p. 24) there seems to be a short step from conceiving copyright objects — in their capacity to aggregate various concrete objects under the same designation and therefore include them under the remit of a single proprietary claim — as 'concepts'. However, we should emphasise that 'not all concepts are Forms' (p. 30). As Alican and Thesleff (2013) explain 'there is a Conceptual Form … for everything Plato found somehow real or important … [r]elative importance, or value, is key here: Not all concepts are interesting to Plato.' (p. 30 f)

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the *Republic*.' (p. 227)

[64] The predominance given to this category in my previous exposition is compatible with Alican and Thesleff's (2013) reading. In their words 'pressed for a choice, we might have to admit that Forms proper are the constructs we have called "Ideal Forms"'. (p. 22)

So, even though this category is far more elastic than that of ideal forms, given the absence of positive intrinsic value, it is not clear whether Plato would have conceived of ip objects as conceptual forms. Of course, this is a thought experiment and a rather anachronistic one at that. We may still thus hypothesise that if Plato seriously considered forms of artefacts, which is a big if (Broadie 2007), then copyright objects would seem to fit in quite well. If what has driven my investigation into the nature of ip objects has been what Drahos calls the 'power of abstract objects', that is, roughly their capacity to aggregate various concrete objects and thus expand the owner's control over valuable resources; we can see a similar capacity to aggregate various sensible artefacts under a single form. 'Forms' and 'works' seem thus to work as the 'one' over 'many'.

The analogy breaks, however, once we recognise that Plato is labouring at an entirely different level of abstraction. As Alican and Thesleff (2013) remind us, forms are always unitary (see also Marmodoro 2008). If this is so, only one form could possibly exist for every *kind* of artefact. So, for example, each concrete bed would have to follow the unique (conceptual) form of 'bed' (*Republic* 596b-608d; the same would apply for the 'carpenter's shuttle' in the *Cratylus* 389a-b, 390b). The conceptual form of bed (even if Plato seriously believed in it) would thus be nothing more, in copyright terms, than an 'idea' (and on a very high level of abstraction); never an 'expression'.[65]

What we call works or expressions, in copyright parlance, would thus either have to count as 'originals' (placed in *pistis*) or 'images' (placed in *eikasia*). The latter would be the case of paintings, drawings, etchings, etc.; sculptures; even photographs or films; or any sort of representation of visible things or just products of human imagination. The only works that could aspire to be 'originals' would perhaps be useful artefacts (e.g. beds, shuttles, etc.).

Running the risk of belabouring the argument, allow me to draw some preliminary conclusions. Even the most abstract category in copyright's ontology (the 'idea') is light years away from what might constitute an ideal form. This vindicates the conclusion that it

[65] One could further add that talk of authorship and originality with regards to forms would be highly problematic. Even when, rather surprisingly, Plato talks of forms as being created (*Republic* 597c-d) it seems clear the craftsman is not perceived as a human author (Annas 1981, p. 229 f).

makes little sense to invite the classical theory of forms to a discussion on the ontology of copyright objects. Copyright ideas could, at best, and only on a very high level of abstraction be framed in terms of conceptual forms. No expression — and this is a very broad claim — could ever reach the level of a conceptual form.

Now running the risk of stating the obvious, allow me to illustrate how copyright entities (let us use this to include: ideas, expressions, as well as concrete embodiments or 'the work body') would be placed in Plato's divided line. Ideas, as we have seen, could at best aspire a place in *dianoia*. Useful artefacts, perhaps a place in *pistis*, the rest would have to settle for the lowest possible level of *eikasia*.[66]

What we can conclude from this is that, rather than being conceived as ideal forms, copyright objects proper (i.e. intangible works) as well as their physical embodiments would, in Plato's ontology, most likely occupy a place in the 'visible realm'. This may seem odd, given their supposed character of 'abstract objects'. The cause of this apparent contradiction can be explained by the different levels of abstraction at which distinctions between a form and its replica, on the one hand; and a work and its embodiment, on the other are made. As Alican and Thesleff (2013) remind us

> Separating the equality from the sticks [that are equal to each other, see Phaedo 74b-c], or, say, the largeness from the man [that is larger than another man, see Phaedo 102b-c], surely counts as a milestone in the history of our ongoing efforts to understand and describe the world around us, but working with … the substances themselves [that 'to which those properties or attributes belong'], requires an altogether different operation of abstraction, marking the advent of kinds, types, and classes. (p. 26)

A first clarification is in order here. While Alican and Thesleff speak of substances, thus inviting an understanding of forms as properties that those substances possess — a view which I have objected to, following Moline (1981) and Gonzalez (1996) — we could speak generally of sensibles (understood as sites of encounter of the forms) or images or likeness of the forms. Despite this divergence, I think the point still holds. And the point is

[66] See p. 66 f, above.

this: it is not the same thing to discuss the forms themselves as opposed to sensibles, and to discuss the difference between a type and a token. To use an analogy that Gonzalez (1996, p. 273 ff) employs with a different purpose, one thing would be to discuss how the sitter relates to her portrait, another would be to discuss how the various reproductions of the portrait itself relate to one another. That Plato seems more interested in the former, rather than the latter, is revealed, as several commentators have noted, in very different contexts (e.g. Harte 2002, p. 5; Fine 1993, p. 47; Annas 1981, p. 224 ff), by the fact that Plato does not seem interested in (or even capable of) making a clear distinction between types and tokens.

So, we can say that Plato might not really have cared that we can distinguish, to return to the analogy, between the piece of paper that embodies the portrait (the work-body) from the portrait itself (the copyright work that allows its owner to prevent it from being reproduced). Both, as far as he is concerned, would be addressed to the senses, rather than the intellect; both visible rather than intelligible and much less, transcendent entities.

We end up, thus, with a reading of ip Platonism in which the objects of copyright, far from being transcendent metaphysical entities, are ultimately sensibles whose character is given by their — looser or stricter — relation with a paradigm. That paradigm might be a form, in Platonic terms, but in so being far from constituting the subject matter protectable by copyright. But the argument here is not simply that he was not interested in such mundane things but rather that for Plato not all abstract objects (as we might call them today) are forms.

So, an engagement with Plato, for the purposes of discussing copyright objects, would have to consider the possible extension of the forms towards more mundane objects. We might see the *Cratylus*, some parts of the *Phaedo* and *Republic* X, as unsuccessful attempts of doing so, which probably explains why the classical theory of forms seems to have been signalled for reformulation in the *Parmenides* (Kahn 2013, p. 181 ff; Annas 2002, pp. 11-13). As Kahn (2013) aptly summarises while introducing his commentary on the *Philebus*

> At no point [in the middle dialogues] did Plato indicate in any detail how the classical theory of Forms was to be applied to the natural world. That theory is regularly illustrated by what we may call the

> normative trio: the three Forms for the Just, the Beautiful (or Noble, *to kalon*), and the Good. The *Phaedo* also included mathematical Forms such as the Equal. But it was never made clear how this classical theory was to be extended beyond ethics and mathematics into physics. This uncertainty is dramatized in the embarrassment of Young Socrates in the *Parmenides*, who is at a loss when asked whether his theory applies to natural kinds such as Human Being, Fire, and Water (130c). There Plato himself calls attention to the fact that his theory was not originally designed with such problems in view. (p. 158)

Thus, it is in later dialogues, focusing mostly on the philosophy of nature — especially the *Sophist*, *Philebus* and *Timaeus* — that we might gain a sense of how some of the ways of thinking introduced in the 'classical theory' could apply to an account of more mundane phenomena. Still these dialogues seem tell us very little about artefacts (Kahn 2103, p. 175) and about their mode of existence when considered at different levels of abstraction (e.g. as forms and as concrete particulars).

This is one of the reasons why we should part ways with Plato; the main one, however, being the fact that my aim was never to build a fully operable contraption that could go under the name of ip Platonism; only to better understand Drahos's initial reaction against any form of realism about ip objects, thus laying out particular obstacles that any credible realist account of copyright objects needs to consider.

Conclusion

In the previous pages I have tried to offer a reading of Plato that allows us to do away with the need to posit a Platonic neverland in order to understand the *theory* of forms. In so doing, we have ended up with a monistic model of reality that is still unlikely to find much contemporary support. In other words, forms may still appear 'spooky', even if not exactly for the same reasons hinted at by Drahos. Still, this more contextualised reading of Plato illuminated one important aspect. The so-called classical theory of forms is much more than an ontological thesis, and if we want to discuss it in the context of ip, we should bear that in mind. In fact, 'the unmistakable axiological orientation' of Plato's

thought (Alican & Thesleff 2013, p. 14) evidenced in the central position occupied by what Kahn (1996) calls the 'normative trio' should be enough to convince us that to conceive ip objects as forms would be something akin to heresy for a committed Platonist.

To put it bluntly: it would be as utterly non-sensical to claim ownership of a Platonic form, as it would be to conceive existing ip objects as Platonic forms. For our most immediate concerns, this shows that the rejection of Plato leaves ip realism untouched. If, not even Plato, must commit to a separate realm of forms, and may settle for a recognition of different levels (e.g. abstract and concrete) we should not expect other realist accounts to have to do so. Importantly, if abstract objects exist (be they forms, universals, types, etc.) albeit lacking a specific spatio-temporal location, they do not need to exist *elsewhere*.

Still, as I have warned in the beginning of my reading of Plato, the theory is complex and the materials in the corpus might not lead to a unitary theory of the forms. Indeed, if we look at other points in the dialogues we may find discussions of the forms that give us a rather different outlook, as the examples by Alican and Thesleff (2013) make clear. So, the artefacts now covered by ip rights would never amount to ideal forms. They would hardly be conceptual forms either. Given the unitary nature of forms there would only exist one bed form for all the beds, making it close to the notion of 'idea' (as opposed to 'expression') in copyright, and only at a very high level of abstraction. In the end, in my reading of Plato's theory of forms, ip objects look much more like sensible particulars. This might seem odd, given their abstract nature, but we should not expect Plato to have the same conceptual tools we do, or to be worried with exactly the same problems that have occupied other thinkers after him. As some commentators have suggested, it would be surprising if Plato would have come up with a distinction between types and tokens. Not only would this have required a much more technical analysis of language than that to which Plato could have aspired, but perhaps more importantly, it does not seem that he would have found it particularly interesting.

And thus we end in aporia: the abstract objects of copyright appear as sensible particulars in Plato's theory of forms, a theory that in the end does not seem to show much concern for those entities. I hope, however, that in our journey towards this aporetic conclusion, the discussion has done some important underlabouring work. In

essence, showing that there are many different ways to experiment with abstraction and even in Plato's theory positing a separate neverland is not instructive (perhaps not even tenable). This opens the door to take realism seriously as a way to conceive the mode of existence of copyright objects in their social existence. For the immediate purposes of our discussion of Drahos's theory, this puts realism back on the table as a possible alternative to the Stoic position offered in *A philosophy*.

Chapter 2. Complicating materialism with the Stoics

Nothing incorporeal is separated from a body.
Nemesius, *De natura hominis*, p. 86 (7). L&S 45D

They say that concepts are neither somethings nor qualified, but figments of the soul [*phantasmata psyches*] …
These, they say, are what the old philosophers called Ideas.
Stobaeus, *Eclogae,* 1.136,21-22. L&S 30A

In good Stoic fashion, Peter Drahos (1996) dismisses Platonic forms as *spooky entities* (p. 17) — with a language that brings to mind the Stoic use of *phantasmata*. But Drahos does not stop at this negative thesis. Through an engagement with the thoroughly materialist philosophy of the Stoics, Drahos formulates a positive thesis that aims to 'offer a more sensible account of property rights in incorporeal things'. (p. 17) With Platonic forms out of the picture, incorporeals are called in to occupy the space left empty in the ontological commitments of intellectual property law. Though not 'spooky', Stoic incorporeals are far from being presented as unproblematic. As Drahos puts it

> That the Stoics should have had the category [of incorporeals] at all is at first sight surprising, given that theirs was a philosophy of uncompromising materialism. … Only corporeal entities were real. Incorporeal things were not existent, but rather subsistent. (p. 16 f, with reference to Hahm 1977)

As we shall see over the course of this chapter (esp. section c.), this apparently paradoxical notion of non-existing 'things', is crucial for appreciating the character of Stoic materialism. However, in the same breath, Drahos adds a further remark that curtails some of the interesting lessons one could draw from Stoic philosophy

> They [incorporeals] subsisted by virtue of human mental life. They were things superimposed by the mind onto the corporeal world. (p. 17)

The central problem with this reading, that will be analysed in more detail in section d., is that by presenting incorporeals as radical fictions, Drahos not only betrays the central role these entities play in Stoic thought but also (and more fundamentally) ascribes to the mind a much greater degree of control over the imagination than Stoicism would allow. Which is precisely one of the most interesting ways in which Stoics complicate materialism. As I will argue in this chapter (section d.), perception, for the Stoics, is a process in which the commanding-part of the soul is open and sensitive to the world rather than being a device to project order onto a chaotic world of experience. This calls for a detailed study of the differences between conceptions, incorporeals, concepts, and fictions (section e.) and for a reconstruction of Drahos's Stoic alternative that is able to capture a philosophical sensibility that is attuned to sensory impressions and to the ways in which the agency of things can be articulated in discourse. This will provide for a more subtle, but I would argue, more illuminating contrast between Platonist and Stoic modes of grappling with abstraction (section f.). To prepare the ground for this exercise, the chapter will begin with an initial characterisation of Stoic ontology in which Plato's *theory* will serve as a contrast agent enabling the specificity of Stoic ontology to become visible (section a). This will be followed by a more detailed analysis of the differences between Platonist and Stoic ontologies (section b.).

a. Brief introduction to Stoic ontology

The contrast between Platonist and Stoic ontologies is stark. The opening words of David E. Hahm's (1977) study *The origins of Stoic cosmology* could not have put the basic premise of Stoic ontology more succinctly: 'No idea is more deeply ingrained in Stoic philosophy than the conviction that everything real is corporeal.' (p. 1)[67] Indeed the Stoics,

[67] As will become clear, it would have been preferable to say that 'everything that exists is corporeal' given that, for the Stoics, incorporeals are also real. This point is made in White (2003,

for their materialism, have often reminded commentators of the giants (or the men, or sons, of the earth) in Plato's *Sophist*, a dialogue that has become a common starting point for discussions on Stoic ontology. But before embarking on a reading of that segment of the dialogue, a brief sketch of some key differences between Plato and the Stoics will help prepare the ground for the discussion as well as lay bare some of the themes (and presuppositions) that will guide it.[68]

The metaphysics I ascribed to Plato in the previous chapter seems to arrive at a synthesis between Heraclitean and Parmenidean cosmologies. The sensible world is in constant flux (as Heraclitus posited) but nothing in flux can ever be knowable (as Parmenides thought) hence we arrive at the intelligible forms as the true object of knowledge (Plato's contribution). Although this may be an oversimplification[69] I think it allows for an initial contrast between Plato's philosophy of eternal objects and the Stoic philosophy of changing events, of how bodies interact with other bodies in a material cosmos (Bréhier 1908, p. 5; Brunschwig 2003, p. 219; M. Frede 1980, p. 137). A contrast that can be captured by the idea that physics, for the Stoics, occupies roughly the same place of pride in their philosophy as what goes by the name of metaphysics does for Plato's (Vogt 2009, p. 137, pp. 143-145), or better yet: that their metaphysics is deeply grounded in the corporeal.[70]

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p. 128).

[68] For Plato's influence, particularly his later dialogues, in Stoic cosmology see Hahm (1977, p. 137 ff; p. 209).

[69] It does, however, reflect the commonly held idea that Heraclitus and Parmenides were key influences in Plato's philosophical development (Silverman 2014).

[70] The use of 'metaphysics' in respect to the Stoics might invite a misconception stemming from a possible meaning of metaphysics as a study of something that is beyond the physical world (Brunschwig 2003, pp. 206-209). But it is only in that restricted sense that Katja Maria Vogt's (2009) claim that 'the Stoics do not have a theory that, with respect to Plato and Aristotle, we call metaphysics' (p. 137) seems adequate. As Brunschwig (2003) makes clear, we may take Stoic metaphysics as a study 'of the ontological status of the items which had any role to play within their philosophy' (p. 209). In that expanded sense, it seems legitimate to speak of Stoic meta-physics (alongside a meta-ethics and meta-logic) as a 'study over and above their standard tripartition of philosophy' (p. 206) and one that 'cuts across' these disciplinary boundaries (p. 209). More recently, Vanessa de Harven (2012) has done much to flesh out the central role of ontology

As Emile Bréhier (1908) has argued long ago, the Stoics were interested in questions that differed from those posed by Plato: they were not interested in knowing how the sensible imitates the model (or form) but rather in explaining beings as they unfold through their histories and changes. For the Stoics 'the *explanandum*, i.e. the change of the being is always analogous to the evolution of a living being.' (p. 5, my translation). Thus, the unity of being is not conceived as an effect of an external (higher) form that is mapped onto things (or which they imitate) but something like an organic development from the inside out. Bréhier's evocative summary elegantly imparts the gist of the Stoic approach: 'Like in living things it will be an internal force which determines the outward form of the being … not like a sculptor … but like a germ.' (p. 5, my translation). Hence the common characterisation of Stoic cosmology as 'cosmobiology' (Annas 1992, p. 43; Hahm 1977, Sellars 2006, p. 95; Todd 1978; Verbeke 1983, p. 22).

Crucial to understand this step are the Stoic ideas of *tension* and *pneuma*. *Pneuma* — a term originating from the medical writings of the Hellenistic period (Annas 1992, p. 46, p. 21 ff) — may be translated as 'air' or 'breath' and characterised as the force that holds a

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in Stoic philosophy and to rejuvenate the image of the Stoics as coherent systematic philosophers (p. 8). As she writes 'the Stoics led with something even more fundamental than physics, namely a principled ontology according to which their physics, ethics and logic were developed.' (p. 3) It is precisely this preoccupation with the ontological question, as Brunschwig and de Harven convincingly show, that renders their introduction of 'something' (*ti*) — a genus encompassing both bodies and incorporeals, more on this below — as a consistent and considered ontological position; giving the lie to hostile readings that saw the introduction of '*something*' as an *ad hoc* move to fend off criticism (de Harven 2012, pp. 4-6; Brunschwig 1994, p. 94 f; Sellars 2010, p. 188). To that extent, Vogt's (2009) claim that 'the Stoics do not have the kind of theory that aims to answer the question "what is being?"' (p. 143 f) or to 'what it means to say of an object that it is' (p. 145) pays too high a cost to bring forward the acceptable claim that the Stoics 'look at the earth and think that the most basic account that philosophy can offer is an account that explains the physical universe.' (p. 149). The cost being the perpetuation of prejudices that lay behind those hostile readings, by denying that the Stoics were concerned with ontology or metaphysics. A. A. Long's (1971) admonition that 'it would be pedantic and misleading not to call … [the Stoic way of 'describing the structure of our thinking about the world'] metaphysics' (p. 75, note omitted) seems entirely up to date. A similar point has been more recently made by Marmodoro (2017, p. 157, note 3).

body together while at the same time permeating it and generating all the qualities of the various beings in the cosmos (Sambursky 1973, p. 7 ff; Sellars 2006, pp. 91-95). Chrysippus — the third head of the Stoa after Zeno and Cleanthes and perhaps the most influential theorist of *pneuma* — described it as 'the binding air [that] is the cause for those [bodies] bound into such a state being imbued with a certain property which is called hardness in iron, solidity in stone, brightness in silver.' (Sambursky 1973, p. ix) Such qualities, Chrysippus goes on to explain, are '*pneumata* and air-like tensions giving definite forms to those parts of matter in which they reside.' (as quoted and translated by Sambursky 1973, p. 8)[71] It is the different degree of pneumatic tension that explains differences between various kinds (e.g. between a rock, a plant, an animal and a human being, Lewis 1995, p. 99) and states of beings (e.g. between the perceptions one receives whilst awake or dreaming, Annas 1992, p. 85). This tensional motion also gives each individual entity its particular identity (Lewis 1995, p. 100). Hence, *pneuma* has a dual function as 'binding force … [and as] an agent which generates all the physical qualities of matter.' (Sambursky 1973, p. 7). In sum, following Nikolay Lossky (1929), one may say that

> The interpenetrating action of the *pneuma* is *tonos*, i.e. tension, which spreads out from within each thing and returns to it again. This tension, in so far as it is directed outwards, determines all the qualities of things, and in so far as it is directed inwards constitutes the unity and essence of things. (p. 483, note omitted)[72]

The constitution and character of material bodies is thus explained, not through the imposition of incorporeal forms onto corporeal matter, but through a physical process where *pneuma* and matter interlock and interact. A body is, in the words of Gerard Watson (1966) 'a tensional field, made up of inward and outward action, contraction and expansion. Through this double movement the unity and existence of the object is preserved.' (p. 22) As Marmodoro (2017) highlights, 'It is a significant achievement that the

[71] These words are attributed to Chrysippus in Plutarch's *De Stoicorum repugnatiis*. The fragment appears, in L&S 47M, with a different translation in vol. I.

[72] For further details about this back-and-forth pneumatic motion, particularly in Chrysippus' work, see Hahm (1977, pp. 166-174).

Stoics could account for core and complex metaphysical issues without reifying abstract properties and universals, contrary to what their towering predecessors Plato and Aristotle had done' (p. 185).

It would thus be tempting, and perhaps also not inaccurate, to summarise this first point by saying that the Stoics present a philosophy of immanence that stands in clear opposition to Plato's transcendentalism. But I should be careful not to suggest with these words the same dualist image of Plato's theory that I have criticised earlier. The reader may already have noticed a parallel between this Stoic notion of *pneuma* and the reading, suggested by Moline (1981), of forms as *dynamis*.[73] And it is perhaps in this more subtle contrast between the forms as external agents in constant battle with one another for dominance over the sensible world and the Stoic view of pneumatic tension from within, that a sense of immanence in the Stoics gains a sharper contour. It is as if departing from the idea of *dynamis* in the same way that a filmmaker may take the idea of being trapped in a confined space as the basic theme for the plotline, Plato had filmed *The Shining* (S. Kubrick) and the Stoics *The exterminating angel* (L. Buñuel): in the first it is a clearly identifiable external force that entraps the main characters, in the second a more diffuse agent that seems to act from within.

The all-pervading presence of *pneuma* suggests not only a sense of immanence in Stoic philosophy but also another crucial aspect of Stoic thought: their commitment to a continuum physics (Brunschwig 1994, p. 97, p. 136; de Harven 2012, p. 42 ff; Marmodoro 2017, p. 161; Sambursky 1973, chapter 1.1). As we have seen, physics is the starting point for their ontology and this leaves a clear mark on their *theōria* (i.e. 'underlying vision of reality' Kahn 1996, p. 330).[74] The Stoics saw the world in strictly physicalist terms,[75] as an

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[73] See p. 45 and p. 63, above. Also, Sambursky (1973, chapter 2) for an account of *pneuma* as *dynamis* or force; and Marmodoro (2017, p. 175 f, especially note 34) for a brief hint at an opposition between the Platonic way of conceiving forms as occupants of their receptacles and a Stoic way of conceiving *pneuma* as embodied form.

[74] See note 41, above.

[75] This may sound like a rather bold claim, particularly considering that, as we shall see, the Stoics have a very special role for incorporeal entities in their ontology. As Elizabeth Grosz (2017) argues, in her recent book *The incorporeal*, the Stoics 'develop the concept of the incorporeal as the subsisting condition of material existence' (p. 28; also p. 32). While this clarifies that the

atomless continuum with no strict natural boundaries between phenomena (de Harven 2012, p. 45; Sambursky 1973, chapter 1.2; White 2003, p. 146 ff) and yet not just some jumbled primordial soup, where any bit of the cosmos would be perceptually indistinguishable from any other (Marmodoro 2017, p. 96 f).[76] That is, while the whole cosmos and all of its parts are configurations of *pneuma* mixed with matter and held up in different degrees of tension (and in that sense *pneuma* runs through the cosmos as a continuum), bodies can be individuated (i.e. distinguished from other bodies) and divided into parts (Lewis 1995). In the words of Dorothea Frede (2003) 'The boundary of every individual entity is a function of its inner *pneuma* that keeps it together and separates it from its environment.' (p. 186) As we shall see in more detail, the Stoics were strong realists that believed the world has natural, yet vague, joints (de Harven 2012, pp. 42-51).[77]

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incorporeal is a robust ontological category rather than mere theoretical entity, it is hard not to notice elsewhere in the book a tendency to epistemologise incorporeals. This tendency is apparent in her introduction where incorporeals are characterised as 'extramaterial conditions by which [matter] is framed and through which it can be thought and spoken about.' (p. 6). The problem with such reading is that it seems to ground the material in the incorporeal. As will become clear in the following pages, the reading that shall be adopted here reverses this order. Incorporeals are grounded in and depend upon bodies for their character and objectivity. Therefore, Grosz's talk of incorporeals as 'independent' of bodies (p. 34), of the 'force of the ideal' (p. 18), or of 'things [being] suffused by incorporeals, which enable them to … occupy a location … have a time … exert effects … and have a limit' (p. 32) stands in sharp contrast with the physicalism I will attempt to present as compatible with the Stoic notion of incorporeality. Despite this divergence, my reading is much indebted to Grosz's account of Stoicism as an alternative to dualism that avoids a reductionist empiricism (pp. 16-18).

[76] Although the point made there is about Anaxagoras, the close affinities with Stoicism are made remarkably clear in chapter 6.

[77] This formulation tries to find a centrist alternative located somewhere between the approach taken by White (2003) and that of D. Frede (2003) both cited in this paragraph. For White the sort of continuity conceived by the Stoics led to the ontological removal of limits or 'joints' between an object and its environment; for Frede an object does have boundaries and its corresponding limits or surfaces must be conceived as real beings. A serious study of the ontological status of limits is beyond the scope of this chapter. I shall remain agnostic in this debate, all my argument requires is that — irrespective of the ontological status of limits and surfaces — bodies have a 'true and objective unity' (Brunschwig 1994, p. 135). For a more detailed discussion, see Marmodoro (2017, chapter 6) which concludes with a description of 'object-unity'

This brief introduction sought to convey an impression of the theoretical sensibility that animates Stoic philosophy. And while the contrast with Plato will come into sharper relief over the course of this chapter, I hope that a sense of the differences between the two philosophical projects has started to germinate. The question of how these differences in temperament translate into different ontological schemes will be the topic of the following sections. Plato will give us our cue by opening up 'two great ontological options' (Brunschwig 1994, p. 120) that allowed the Stoics to formulate a diametrically opposed solution to the battle between the gods and the giants.

b. The battle between the gods and the giants

In the *Sophist* [245e-249d][78] Plato returns to his classical theory of forms, but this time as Kahn (2013) suggests 'form a critical distance, as it were from Elea.' (p. 95) To mark this critical distance, Plato casts as the leading character of the dialogue not the habitual Socrates, but a Visitor from the Parmenidean school of Elea. Much could be said about this interesting choice, but this is not my object here. Whatever the author might have intended, the Stoics appropriated the dialogue and built a radically different ontology upon it (Baltzly 2018; Brunschwig 1994, 2003; de Harven 2012, p. 9 ff; M. Frede 1994, p. 116 ff; Sandbach 1994, p. 91 ff; Sellars 2006, p. 81 ff, 2010, p. 197 ff; Vogt 2009). But first, let us set the stage.

On one side we have the friends of forms (also sometimes called the gods) that although acknowledging that bodies become, argue that true existence is reserved only to 'certain intelligible and incorporeal forms [246b]' (Brunschwig 1994, p. 120). On the other, we have the "men" of the earth (also called in some readings sons of the earth or the

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as 'the type of unity that lumps of *hylē* [i.e. matter] and *pneuma* enjoy when they are physically unified and made into discrete material objects in the universe' (p. 183).

[78] References in this segment are to *Stephanus* pages; quotes are taken from Nicholas P. White's translation in Cooper and Hutchinson (eds.) (1997).

giants) who 'clutching rocks and trees with their hands … insist that only what offers tangible contact is' [246a-b].

These 'frightening men' [*sic*] [246b] are portrayed as some sort of table thumping empiricists muffling any possibility of rational discussion under the weight of their banging fists, which is why their ontological prejudices have to be carefully reconstructed throughout the dialogue, with the young Theaetetus stepping in for a bit of role-play [246d-e]. What we get out of this reconstruction is, for Plato, the impossibility of the giants to account for the existence of the soul along with its vices and virtues while insisting on the thesis that only that which offers sensual contact and resistance can be said to exist [247b-e]. If these giants are not to deny existence to the soul, the Visitor thought, they must revise their position to allow for the existence of incorporeal realities, like the soul.

Now, if under this revised position both bodies and incorporeals can be said to exist, the door is open to consider what the underlying criterion of existence (common to both classes of entities) might be. It is here that Plato introduces the famous notion of 'the power to act and be acted upon' as a true marker of being [247e]. As we shall see it is this very idea, which we can call, following de Harven (2012, p. 9 note 33), the action/passion principle, that lies at the basis of the Stoic notion of body.

But this does not mean that the friends of the forms have won the battle, they too have to make significant concessions. Their original position would be incompatible with this marker of existence since it would place bodies (that which becomes) and the forms (that which exists) on a similar ontological footing. And this would be done not by raising bodies, so to speak, to the level of forms, but somehow dragging the forms down from their eternal (immutable) mode of being into the realm of action and passion. The Visitor from Elea achieves this by extracting from the friends of forms the concession that it is contradictory to say that the forms can be known and yet not be acted upon. The dialogue offers no resolution to this difficulty (Kahn 2013, p. 107).

The first continuity that can be identified between the dialogue and Stoic ontology is through the reconfiguration of the action/passion principle into a definition of body. As Brunschwig (1994) puts it, the Stoics 'take over Plato's formula according to which an

existent is capable of acting and being acted upon' but as we shall see 'turn it round, to work against his [Plato's] intentions in introducing it.' (p. 123) As we have seen, the introduction of this formula sought to force the giants to abandon corporeality as the marker of existence, thus opening the way to an acceptance of immaterial entities as existents. The Stoics reject that concession by expanding the notion of body to encompass anything that may act or be acted upon (the soul, its vices and virtues included: the former understood as body, the latter as 'body disposed in a certain way', de Harven 2012, p. 11).[79]

By shifting from tangibility to the action/passion principle as the marker of corporeality, the Stoics distance themselves from the original 'metaphysical brutes' (Vogt 2009) that Plato more politely named: 'men [*sic*] of the earth'. To sharpen the contrast and bring out the sophisticated physicalism of the Stoics, it is worth quoting Brunschwig (1994) at some length to illustrate how the Stoics conceived of bodies that cannot be squeezed with one's hands

> To show that the voice (*phōnē*), for instance, is a body, the Stoics show that it moves physically from the speaker to the hearer (*SVF* III in, Diog. 18) and that, in the phenomenon of the echo, its trajectory may be broken by a wall, just as the trajectory of a ball would be (*SVF* II.387). (p. 132. *SVF*: Hans von Arnim. *Stoicorum Veterum Fragmenta*, my transliteration)[80]

We end up with a strengthened criterion of corporeal existence that is far more robust than anything the naïve table thumping empiricist would be able for come up with. And part of the strength of the argument, as Brunschwig astutely observes, is that it can be used against the friends of the forms to question the very existence of incorporeals. That is: if, as the friends of the forms had originally argued, 'the power to act and be acted upon cannot belong to incorporeals, there can be no question of using it as a criterion for recognizing the possible reality of certain incorporeal items.' (p. 123)

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[79] For the Stoic 'proofs' of the corporeality of the soul see Long and Sedley (1987, p. 273 f, at 43 and pp. 313-323 at 53) and Hahm (1977, pp. 3-5 and pp. 15-21).

[80] All transliterations follow Preus (2007).

To appreciate this second part of the argument we must recognise that, as Brunschwig (1994) points out 'the Stoics understood [the terms 'to act' and 'to be acted upon'] in a strictly physical sense' (p. 132). This stands in sharp contrast with the way in which the criterion is presented in the dialogue. As we saw, the Eleatic Visitor extracts from the friends of forms the important concession that if the forms are knowable, they are acted upon (or moved). But the Stoics would never have conceded that much. As Brunschwig explains, the Stoics reject 'that cognitive relations involve a relationship of action and passion between the subject that knows and the object that is known' (p. 125). Thus, 'to be acted upon, for them', had to mean something other than being an 'item which, in a true statement, would appear in the position of the subject of an active or a passive verb.' (p. 132) In other words, not everything that can be the subject to a predicate will necessarily count as a body.[81]

At this juncture we are at risk of jumping into two mistaken conclusions, so it may be useful to lay out some signposts to help us avoid these sterile paths. The first thing to note is that, as Brunschwig (p. 123 f) takes care to point out, the inadequacy of the action/passion principle for an account of incorporeals does not, by itself, lead to their unreality. One of the most noticeable features of Stoic ontology is the recognition that some incorporeals (namely the void, place, time, and *lekta*) are in some sense real, even if their mode of reality must be established in accordance with a different criterion. Thus, rather than adopting a reductionist strategy of attempting to shoehorn everything they thought of as real into their definition of body, they expanded their ontological schema to accommodate those entities that while not being bodies, could not be simply dismissed as nothing at all. Hence, we find 'something' (*tí*) as the highest genus in their ontology hovering over existent and non-existent realities (Brunschwig 2003, p. 212 f).

The second thing to note is that, so far, I have been using a quite loose notion of incorporeal as that which is not a body. As we shall also see, the Stoics, in their theory of

[81] Brunschwig (2003) complements the analysis in his explanation of why 'place' is not conceived as a body. While one can say that place is 'being occupied' (a predicate) this does not entail it is acted upon. This is so 'because when a body is expelled from its place by another one, the former offers some resistance to the latter, whereas its place does nothing of the kind'. Thus, 'place can be occupied by another body without ceasing to be what it is.' (p. 214).

incorporeals, use a much tighter notion (incorporeals as body-less entities) that is able to distinguish between proper incorporeals (those that have a secured place at the table in an account of reality, i.e. the canonical incorporeals) and other stuff that may or may not be something in need to be accounted for from an ontological standpoint, like concepts, universals, fictions, and Platonic forms.[82]

What results from this picture is that existence does not exhaust reality. Only bodies exist, but some incorporeals subsist. And while this may appear a suspicious terminological subtlety at first, judgement must be suspended until we develop a better grasp of the architecture of Stoic ontology, starting with the highest genus: 'something'. As de Harven (2012) puts it, 'everything there is (anything that's Something) will be an individual in space-time: a non-repeatable entity that cannot be located [in] more than one place at one time … the Stoics take everything there is to be located somewhere' (p. 19). The proof of this argument lies basically in the well-known *outis* (not-someone) test (L&S 30E; Bronowski 2013, pp. 293-295; de Harven 2012, pp. 17-20; Sellars 2006, p. 85 f). To illustrate: just as no person can be in Athens and Megara at the same time, so too with place — understood as the three-dimensional extension occupied by a body (but distinct from the body itself).

But for an entity to count as 'something' it must not only be particular, but also objective. As de Harven (2012) explains, objectivity, for these purposes, means being 'a referent of genuinely significant discourse.' This must be understood not as being 'a product of thought' but rather as 'being equally available to any thinker, i.e., publicly or intersubjectively.' (p. 14, notes omitted) To illustrate — using another of the four canonical incorporeals — when the Stoics recognise that 'things to say' (*lekta*) of bodies are incorporeal somethings they are not thinking of idiosyncratic mental states residing only in the speaker or hearer's mind. As Brunschwig (2003) argues

> if a *lekton* is something that can be received by some addressee, it is also something that can be sent by some addresser; this might be a

[82] Ada Bronowski (2013) points out that 'on Stoic doctrine, not being corporeal does not make them as such, incorporeal' (p. 282), 'to say of something that it is incorporeal, on Stoic doctrine, is a very specific thing to say.' (p. 283)

> reason why it is conceived as ontologically independent from the actual thought of either of them, although being able to 'subsist along with' the thought of each of them (p. 218).

There is still a lot to unpack in accounting for how incorporeals relate to bodies, and conveying a sense of what, if anything, may be philosophically interesting about them. For now, however, it is important to stress the way in which the Stoics mount a philosophical cheque-mate on Plato. In short: if the Visitor from Elea seriously commits to the action/passion principle as the true marker of existence, then he must renege on universal or generic forms since nothing that truly acts or suffers can do so in more than one place simultaneously. Should the Visitor settle for subsistence, relying on the intelligibility of forms (or the unintelligibility of the world without them), he would be dragged into an epistemological debate and asked to show how the soul could be moved in a way that would be conducive to the recognition of forms and hence make them dependent on bodies.[83]

There is no such thing as a philosophical cheque-mate, of course. The board can always unfold in multiple directions. Literary choices aside, I hope the two initial sections have done their job in offering a broad characterisation of Stoic materialism. As we have seen, the Stoics understood corporeal existence in terms of what acts and can be acted upon. And even if the criterion seems to have been borrowed from Plato, it takes on a completely different tenor in Stoic hands. Action and passion acquire a thoroughly material sense and this is what allows the Stoics to, in one philosophical go, make bodies the basic blocks of existence while also denying the existence of Platonic forms. Not because they are incorporeal, but because they are generic. So, even if we can safely say that for the Stoics only bodies (that which acts and can be acted upon) exist, this is far from bringing a closure to their ontological speculations. It is rather the opening of what will prove to be a subtle and highly sophisticated form of materialism. As Vanessa de

[83] Forms could only be objective (i.e. truly inter-subjective) if it could be shown that two persons could hold thoughts or rational impressions about them. Since impressions depend ultimately on the senses, forms would ultimately depend on bodies and could never aspire to universality. More on this on sections d. and e., below.

Harven (2012) writes, the Stoics 'thread the needle between flat-footed materialism and other-worldly idealism' (p. 20).

To appreciate the originality of Stoic thought, we must explore some of its central aspects in greater detail. First, we will need to understand what 'subsistence' as a mode of reality entails (section c.). Then, to explore the relationship between bodies and incorporeals (which will require a detour into Stoic epistemology; section d.). Finally, we will need to re-examine the Stoic treatment of generic 'entities' to gain a better grasp of how they grappled with abstraction (section e.). Only then will we be in a position to evaluate and reconstruct the opposition between Plato and the Stoics in *A philosophy* (section f.).

c. The reality of non-existing somethings

The Stoic notion of '*subsistence*' as the proper mode of reality of incorporeals has remained a notably obscure one.[84] Vanessa de Harven's (2012) recent doctoral thesis may be seen as a great advance in Stoic scholarship for the detailed way in which the notion is analysed and for reviving a sense of the coherence of Stoic philosophy. While, as we shall see, each of the canonical incorporeals subsists in its own way, de Harven offers some important markers that are extremely helpful in gaining a first grasp of the main ideas underlying this construction. This analysis will show that, contrary to Drahos's account, incorporeals cannot be mistaken for fictions while also revealing that they can occupy an interesting, if less obvious, place in a philosophical account of intellectual property.

The proposition that existence does not exhaust reality may still strike some readers as paradoxical. Part of the difficulty lies, I suspect, in having to handle two co-existing modes of reality rather than simply one. Indeed, without a sense of coherence between these two modes of reality (existence and subsistence) the Stoics might indeed seem utterly

[84] de Harven (2012, p. 6) for a review of the various interpretations the notion of '*subsistence*' has received in the literature.

abstruse. This is precisely the aim of de Harven's thesis, and she does so by showing how subsistence, as a dependent mode of reality, can never be fully detached from bodies. This dependency on bodies also helps explain why 'incorporeal' is not a generic and open-ended category, but more like a name that groups together only those entities that, according to the Stoics, are needed to make sense of the way in which bodies behave in a material cosmos; namely, void, place, time, and 'things to say' [*lekta*].

Subsistence is a derivative mode of reality that is always dependent on bodies. As de Harven (2012) puts it throughout her text if bodies did not exist, then the void, place, time (p. 47) or *lekta* (p. 68) would not exist either. More specifically, subsistence can be understood as a form of supervenience (p. 21). Incorporeals are ultimately what remains after we abstract bodies away in accounting for a specific event; they are the spatial, temporal, or semantic extension of the bodies on which they depend. So, the void is what remains after we abstract the whole cosmos; the same applies to place and the body that occupies it; to time and the body's movement; and to *lekton* once we abstract: signifier, referent and individual mental states.

This gives us the more rigorous notion of incorporeals as *body-less* entities, i.e. 'entities that depend on body without themselves being bodies' (p. 20). de Harven's favourite example is that of 'traffic flow', and it is useful to quote it at length

> the flow of traffic depends on cars without being reducible to the cars that give rise to it. The flow of traffic is a *proper object of thought and discourse* — we can say true and false things about it, like that it is slow or fast; and it is objectively available for anyone to think about. In addition, *such an entity will pass the Not-Someone test for particularity*: the flow of traffic on the Bay Bridge cannot be the same flow of traffic as that on the Golden Gate Bridge. They might both be slow, stop-and-go, smooth, or fast; but just as my car cannot at the same time be on the Bay Bridge and the Golden Gate Bridge, so too the flow of traffic arising from cars on one bridge cannot be the same as that on another bridge. (p. 20, my emphasis)

We can thus see how something that is not a body can meet both criteria of reality (objectivity and particularity) while being neither independent from, nor reducible to the

underlying bodies. Traffic flow is the incorporeal particular that we get once, for a specific event, we abstract from — or in de Harven's words 'bracket' (p. 21) — the individual cars.[85]

Now that we have a better sense of how bodies and incorporeals fit together under the common genus of 'something', a quick overview of the four canonical incorporeals will help develop a more complete characterisation of Stoic materialism. Although the *lekton* is by far the most relevant incorporeal for my purposes — the one that, understandably, Drahos focused on — merely skipping the others may leave the wrong impression that they are more robust than *lekta,* while at the same time failing to give a sense of coherence to Stoic ontology. Picking up on the idea of subsistence according to body, we can take the theme of 'extension (*diastēma*) due to underlying body' (p. 40), as our starting point to organise a quick overview of the canonical incorporeals, through the notions of spatial, temporal, and semantic extension.

Spatial incorporeals (the void, and place) can be understood as being determined (at least in part) by the three-dimensional reach of bodies, thus borrowing the latter's three-dimensionality (Inwood 1991).[86] This, however, does not imply that they are bodies since they do not strike back (i.e. offer resistance). To recall Brunschwig's (2003) example, 'when a body is expelled from its place by another one, the former offers some resistance to the latter, whereas its place does nothing of the kind' (p. 214, note 81, above).

The idea of extension is less straightforward with regards to time, but can be understood as the interval[87] in which change occurs in the material world, 'the rate of corporeal change' or the measure of speed and slowness (de Harven 2012, p. 40, p. 36).

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[85] Alternatively, one could speak of 'abstenting' as in Christopher J. Arthur's (2001) use of Roy Bhaskar's expression: 'abstenting is certainly a real process, what has become absent through such a process leaves not simply "nothing", but a "determinate nothing" structured by the specific process that brought it about.' (p. 32)

[86] de Harven (2012) takes this further by suggesting that, by having extension, place and void are, in a sense, physical (p. 27). This position is not adopted here, given that, as Inwood (1991, p. 255 note 31 and pp. 258-264) suggests, it would create unnecessary difficulties in the understanding of the Stoic conception of the void.

[87] de Harven (2012) suggests two alternative translations of *diastēma*: 'interval' or 'dimension' (note 161, p. 33).

And, just like place, time must be particular. As David Sedley (1985) clarifies 'it is individual portions of time [e.g. "yesterday" or "now"] that count as actual incorporeals' and not '[t]ime itself as a species' (p. 91, note 5). To put it in other words, just like place individualises a generic notion of space; it is portions of time — what we might perhaps call moments, or intervals, during which individual corporeal changes occur — rather than a generic notion of 'time' that have a place in Stoic ontology. Once again, we can see how the incorporeal depends on the corporeal. This idea is aptly summarised by de Harven (2012) when she writes: 'Because there is body, there is space; because bodies move, there is time; therefore bodies, place, void, and room are all in time without making time an independent receptacle.' (p. 47)

I hope that from these cursory remarks it has become clear that the Stoics ascribed reality to incorporeals as subsistence according to body. We will now see how this principle can help us understand the Stoic notion of the *lekton* and how its mode of reality may help us distinguish it from other items such as concepts, universals, and Platonic forms. In so doing, we can follow the same scheme of subsistence according to body, albeit with some adjustments.

Several different translations have been offered to convey the sense of *lekton*. For my purposes I will be less interested in searching for the translation that most sharply hits the target and shall try to capitalise on the synergy between these various possible translations. Michael Frede (1994) opens the way by explaining that 'a *lekton*, to go just by the word, is what gets said, a thing to say, what there is to say, what can get said' (p. 111), where 'to say' is to be understood as pointing to the thing said (*legein*) (e.g. that Socrates is ill) not to the expression uttered (*propheresthai*) (e.g. 'Socrates is ill').[88] What is particularly striking in this passage, is the word's ability to encapsulate both active, passive and conditional senses, namely 'a saying', 'what is said', 'what is sayable'. For ease of expression I shall be using Frede's translation 'thing to say'.[89]

[88] The relevant sense of 'to say', the examples and the distinction between *legein* and *propheresthai* are taken from M. Frede (1994).

[89] I find this more immediate, for an English speaker, than the most common translation: 'sayable'.

But we should not get caught up in semantics for too long, as Long (1971) points out 'it is not the sense of the word *lekton* which makes Stoic theory distinctive but the status they accord to "what is said"' (note 13). As we know, this is the status of an incorporeal reality, or a non-existing something, that is an objective particular irreducible to corporeal existence. Michael Frede (1994) captures this idea well when he writes: 'The Stoic doctrine of *lekta* becomes controversial precisely because the Stoics assume that in some sense there are things out there to be said, items distinct both from expressions we use and the thoughts we express.' (p. 116 f)

Thus, to understand the status of *lekta*, in good Stoic fashion, we must begin with body. For these purposes, it seems fitting to look for the interaction between bodies and *lekta* in a slightly adapted version of a well-known passage by Sextus Empiricus[90] where he informs us on how the Stoics dissected an act of significant discourse

> three things are linked together, what is signified, that which signifies … and the object of reference … That which signifies is speech ('Dion [is running][91]'), what is signified is the specific state of affairs (*auto to pragma*) indicated by the spoken word and which we grasp as coexistent with … our thought but which the barbarians [i.e. non-speakers of Greek] do not understand although they hear the sound; the object of reference, that is, [running] Dion himself. Of these two are bodies, speech and the object of reference. But the state of affairs signified is not a body but a *lekton* (Sextus Empiricus Adv. Math. VIII 11-12 as cited in Long 1971, p. 76 f, notes and some Greek expressions omitted)

[90] M. Frede (1994) comments that this fragment is 'what modern scholars have treated as the *locus classicus* for the Stoic doctrine of *lekta*.' (p. 118).

[91] In the original, the example is simply 'Dion'. It is unfortunate that Sextus has chosen as his example an incomplete *lekton* — for the Stoics any complete *lekton* must link an object/subject to a predicate. (M. Frede 1994, p. 119; Long 1971, p. 78). To present a clearer picture, I have adulterated the quote to express a complete *lekton*, i.e. instead of 'Dion', 'Dion is running'. As Frede (1994) remarks such a change would put the passage by Sextus in line with another one by Seneca on a similar topic (p. 119 ff).

As we can see from the quote, the Stoics recognised and separated two types of body in action whenever something gets said, namely (i) the voice (or utterance) conceived as 'air that has been struck by an impulse' (Diogenes Laertius, 7.55-6 in L&S 33H);[92] and (ii) that which is referred to, i.e. the bodies in the world that stand as the object of reference and which are sometimes referred to as the 'bearer' or 'what is hit upon' (de Harven 2012, p. 55).[93]

To these we should add a third body which is only hinted at by Sextus: the coexistent 'thought' which grasps the state of affairs indicated by the spoken word.[94] This 'thought' is to be understood as the rational impression that is produced in the addressee's mind.[95] That this 'thought' is corporeal seems clear from the idea that it is an impression which affects the mind when one thinks to oneself, speaks aloud or listens to speech; indeed an agent without which none of the above would seem possible (Long 1971, p. 82).

Finally, we have the incorporeal *lekton* that, as we might expect, is not to be reduced to any of the above, but must depend on at least one of them or, alternatively, in the interaction between them. Knowing the precise mode of subsistence of the *lekton* is a difficult question, which I do not pretend to answer here.[96] Instead I find it more

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[92] The same schema would also be applicable to written expressions where 'inscription' would take the place of 'utterance' (Caston 1999, p. 207).

[93] Considering that a complete *lekton* always links a subject to a predicate (Long 1971, p. 78) we should understand 'what is hit upon' not as a thing, but an object in a certain state (de Harven 2012, p. 55 f).

[94] On the importance of distinguishing between *lekta* ('things said') and *noēmata* ('thoughts') see Long (1971, p. 80 f).

[95] I will return to this idea of rational impression (*logikē phantasia*) later. For now, it seems innocuous to talk about it roughly as a thought although I tend to agree with Long (1971) that impressions (*phantasiai*) are *the objects of thought* but 'as such are not thoughts, but the mind's awareness of things which it can express.' (note 34)

[96] M. Frede (1994) writes 'the Stoics seem standardly to have said that a *lekton* is something which subsists in correspondence to rational impression.' (p. 118, with specific references) There are at least two ways to understand this mode of subsistence. According to Long (1971, p. 80) this means that *lekta* 'subsist upon' thoughts. Frede's (1994) view is that they subsist 'alongside our thoughts' as being 'contents of thoughts or impressions, rather than the thoughts or impressions themselves.' (p. 118). My argument does not rest on a precise definition of this mode of subsistence. All that needs to be stressed is, as de Harven (2018) puts it, that '*lekta* are

productive to focus on the important lesson that, like other incorporeals, the *lekton* subsists according to body, rather than re-staging the words and world question that divides modern philosophers to this day.[97]

There should be no doubt, by now, that by calling *lekta* incorporeals, the Stoics were far from treating them as appearances with no material basis or a possible claim to a truth value, like the giants might have done. The Stoics took incorporeals seriously, making them the starting point of their logical system and a crucial element in their epistemology, as we shall see later. This crucial lesson is vividly formulated by Elizabeth Grosz (2017)

> *void*, *space*,[98] *time*, and *lekton* … cannot be considered anomalies or contradictions of the Stoic commitment to materialism, but are ways of understanding the immaterial conditions that uphold, enable, and complicate materialism. (p. 31)

Still, this does not answer the crucial question: why would the Stoics need to complicate their materialism? Why would they need a category of incorporeals within a materialist philosophy? One popular explanation is that they would be unable to *explain bodies as they change* (in time) and interact with other bodies (in space) without reference to incorporeal entities.[99] But this seems to render Stoic incorporeals as conditions for the intelligibility of the world, in a sense that would be surprisingly close to Kant. An alternative reading would be to suggest — although there is no evidence either way of how the Stoics replied directly, if they ever did, to this sort of question — that incorporeals are real *because bodies would not act as they do* if everything was just corporeal. They could not change in the absence of time; they could not interact with

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inextricable from rational impressions.' (p. 221)

[97] For a valuable critique of the limitations of the 'words and world' question, see Latour (1999a).

[98] It is slightly confusing that in this segment, Grosz opts for 'space' instead of 'place'; while in the section beginning at p. 32 the void is confronted with 'place' rather than 'space'. Even accounting for the possibility of an attempt to bring together 'place' and 'room' under a common heading, Grosz's use of the term 'space' in connection with the void seems to render that reading equally confusing. I submit that by 'space' Grosz does not mean anything different from what has been so far referred to as 'place' in my text.

[99] See note 75, above.

other bodies in the absence of place; in sum: they are conditions for the world to be as it is. This shift of focus from explanation to existence, makes incorporeals appear less as epistemological aids and more like objective features of the world, while also displacing the human in interesting ways. The problem is not the ability of humans to make sense of the world to themselves; but rather that humans would miss something in the world if they restricted their analysis only to bodies.

Can the reality of *lekta* be established on the same basis? Would bodies not act as they do without humans being present to talk about them? This would seem odd questions to pose to a Stoic. Why even imagine a world without rational agents, as if we could suspend their existence and think about rational agents, as such, detached from the world? That rational agents exist is, for the Stoics, a fact that needs to be explained. And what makes someone a rational agent, as we shall see, is the capacity to translate sensory impulses into language. So, the world would indeed turn out to be different precisely because rational impressions would be impossible without *lekta*.[100]

In this section we began to develop a more detailed appreciation of how the Stoics complicate materialism in interesting ways. Not everything (or every something) can be reduced to a body, and yet nothing subsists without bodies. In formulating this theory, we witnessed a different technique of abstraction (bracketing, abstenting, or abstracting *from*) and with it a philosophy that departs from the unrepeatability of bodies and not from the Platonic One that rules over the many. Incorporeals appear thus in sharper relief as body-less entities (i.e. that which endures analysis after the body is abstracted away) and ultimately as features of the world. The analysis also introduced the Stoic suggestion that *lekta* ('things to say' of bodies) have some form of reality. This is a complex topic but one

[100] For the reader unfamiliar with Stoic thought, an analogy with Bruno Latour's (1999b) notion of 'articulation' (p. 141 ff) may be useful. Similar to the latter, the *lekton* does not 'correspond' to a thought or an external body but subsists alongside it. As we shall see briefly, in the Stoic model, the more sensitive one is to the external world (i.e. the more capable of formulating expert impressions on the world) the greater the wealth of *lekta* that will be available to that speaker. Following Latour's terminology we could say one becomes 'more articulate' (p. 144). Niels van Dijk uses the term consistently in this sense in *Grounds of the immaterial* (esp. p. 75 and pp. 209-211).

that may prove fruitful for a problematisation of the way in which artefacts are dealt with in copyright law. For now, however, we still need to gain a better grasp of how *lekta* depend on bodies, or more precisely the bodies on which they supervene. This will require a long detour into Stoic epistemology that will address this difficulty, while also adding a new layer to our characterisation of Stoic thought by examining the philosophical importance of the Stoic account of perception.

d. Conceptions and the mechanics of perception

Lekta are incorporeals. This means they are objective and particular but irreducible either to the bodies through which they are expressed, or the thoughts held by those engaged in communication. *Lekta* are thus inextricably linked to the way in which subjects articulate, in discourse, objective features of the world (see note 100, above). An account of *lekta* will thus have to include an explanation of how the Stoics understood perception. This will require a detour into Stoic epistemology that will begin to prepare the ground for a re-examination of Drahos's positive thesis.

Picture an octopus (Aetius, 4.21.2. L&S 53H).[101] As such it is a lump of a mixture of matter and *pneuma* held up in certain degree of tension. Now imagine that each tentacle corresponds to one of the senses (sight, touch, smell, and so on) and that all of them are connected to a common 'command centre' (Sandbach 1971, p. 10) — which we can call the mind or the *hēgemonikon*. When a tentacle is struck by an object in its environment, *pneuma* travels from the extremity of the tentacles to the centre, affecting the mind in a certain way. Or to put it a bit closer to Stoic terminology 'perception of an external object, the *phantaston*, alters the pneumatic tension of the *hēgemonikon* in a particular way; this alteration is the *phantasia'* (Dyson 2009, p. 92, my transliterations). As de Harven (2018) writes: 'when an impressor strikes the senses it makes an impact that imparts

[101] For a more detailed explanation see Løkke (2015, pp. 26-31).

information about itself to the sense organs, and when that motion reaches the *hēgemonikon*, the animal is aware of the impressor.' (p. 218)

The Stoics named the result of this process an 'imprint' (*tupōsis*) (Annas 1992, p. 73) a word that neatly captures the sense of materiality that permeates the Stoic philosophy of mind. Zeno, it is thought, conceived this transfer of information between the external world and the perceiver's mind or *hēgemonikon* as analogous to the way in which a seal or a signet impresses all its idiosyncrasies on wax.[102] And while this rather simplistic picture was meticulously revised by Chrysippus, the sense of materiality was carried over to a more abstract formulation of an impression as an 'affection of the soul', i.e. as the soul affected in a certain way (Annas 1992, p. 73 f; Løkke 2015, pp. 15-17; Sambursky p. 26 f; Watson p. 34 f).

By relaxing the emphasis on the impressor, Chrysippus' conceptual move created space for the reflexive dimension of the impression to come into the foreground. As Aetius explained, the word *phantasia* (impression) came from *phos* (light) 'for just as light reveals … itself and the other things in its compass … also impression reveals itself and what has made it' (quoted in de Harven 2018, p. 217; L&S 39B). And this allows us to better understand that an impression differs from 'raw sensory data before it reaches the mind' (de Harven 2018, p. 217) in important ways; impressions are not data transfers but, as de Harven puts it 'states of direct, reflexive awareness of the world.' (p. 216).

To tackle its reflexive dimension first, what the analogy with light grasps is that the impression makes the subject aware of both the impressor and of the fact that it is being moved by it. Thus, while '[t]he impressor is the agent … the *pathos* [the affection occurring in the soul] is a joint product … of agent and patient: impressor and soul

[102] Although the analogy would be more immediate if we talked about the 'form' rather than the 'idiosyncrasies' of the stamping tool (i.e. the impressor) — and it seems clear that *tupōsis* is somewhat related to the idea of the 'general form or character of something' (Dyson 2009, p. 85, see also p. 91) — talk of forms might suggest, from association with Plato or Aristotle, something more abstract than what the Stoics probably had in mind (Dyson 2009, p. 83, see also p. 93). In this sense see Reed (2002) making clear that the *hēgemonikon* is 'stamped and impressed exactly in accordance with what is' (p. 150), likewise Dyson (2009) stresses that 'the *phantasia* … allows the *hēgemonikon* to perceive the external object itself, not a mental image of it' (p. 92). The expression 'idiosyncrasies' is borrowed from de Harven (2018, p. 218).

together.' (p. 220) There is a reflexive dimension that goes beyond the mere translation of data from one medium (i.e. the external object) to another (i.e. the *hēgemonikon*).

The reason to call impressions states of direct awareness of the world, comes from the idea that it is the very motion, that occurs when an object strikes back upon being hit by the senses, that 'travels up the arms of the octopus to the *hēgemonikon*, where it becomes a *phantasia*', or impression (p. 227). But what is carried through in that journey is not raw data, but information — if we understand it here closely to its etymological roots; as Bruno Latour (2005) takes great joy in constantly reminding his readers 'To provide a piece of in*form*ation is the action of putting something into a form' (p. 234 my emphasis; see also Latour 2010, p. 225).

This thought that arises in the mind, as Diogenes Laertius (7.49. L&S 33D) explained 'has the power of talking' or, in de Harven's (2018) translation, 'of speaking out' (p. 221). As Long and Sedley (1987) write 'the rationality of a thought … consists in its relationship … to a sayable … This explains the insistence on the connexion between thought and language' (p. 200). To put it in other words, rational thoughts — those of rational agents — are always already linguistic and, as de Harven (2018) adds, 'thick with content for internal discourse' (p. 230) that gives them an important role to play in ethics and knowledge formation, as we shall see.

The formation of impressions thus depends on what the person's soul is able to grasp. The connection to language is made clear by A. A. Long (1991) when he writes

> how things appear to a rational animal will necessarily depend upon the kind of language user that it is … Or, to put it in Stoic terms, for every rational representation [i.e. impression/*phantasia*] there is a *lekton*, a 'sayable', which will articulate the representation in propositional form: S is P. (p. 273, note omitted)[103]

[103] In the truncated part of this segment, Long associates the kind of language-user one is to 'the kind of concepts that it has'. It is not clear whether Long, in this context, is using the word 'concept' in a technical sense and none of the references he cites are decisive on this matter. In his major work with David Sedley the distinction between 'conception' (*ennoia*) and 'concept' (*ennoēma*) is laid out — the first being a disposition of the soul; the second its intentional object — (Long & Sedley 1987, p. 182 f and p. 241). Given that, in that work, the authors say that 'our

This suggests, as Ada Bronowski (2013) explains, that the soul must be both passive and active in order to be able to both receive and organise what the senses have to offer (pp. 280-282, see note 108, below). While it is true that the *hēgemonikon* is in control of the impressions it receives — and to which it must give or withhold its assent — it is not sovereign over the content of the impressions it entertains (Long 1991; Long & Sedley 1987, pp. 239-241; Sellars 2006, pp. 65-74).

That the Stoics were far from seeing the *hēgemonikon* as only a passive registrar of sense-data, is attested by their recognition that different persons can be affected in different ways by the very same stimulus. The Stoic characterisation of the soul at birth, seems like a good starting point to gain a sense of the subtlety of the Stoic position. While it is common to point out that the Stoics viewed the soul, at birth, as a tabula rasa, the following fragment from Aetius, gives us a fuller picture

> When a man [*sic*] is born, the Stoics say, he has the commanding-part of his soul like a sheet of paper ready for writing upon. On this he inscribes each one of his conceptions [*ennoiai*]. (4.11 1. L&S 39E)

It is through the acquisition of conceptions (*ennoiai*) that the soul evolves allowing it to grasp the world in different ways (de Harven 2018, p. 225 f).

The clearest example of this comes from the Stoic discussions of expert (*technikai*) impressions (L&S 39A). By having more refined conceptions, the expert will see a silver birch where the uninitiated only sees a tree (Annas 1992, pp. 81-83). As de Harven (2018) writes the 'disposition of a person's soul determines the content of the rational impression' (p. 226) and thus frames the subject's ways of seeing. The epistemic advantage of the expert seems thus to reside, not in the capacity to impose order to the flux of sensory perceptions through analytical frameworks, but in a higher degree of sensitivity (or capacity to be impressed by the world). Quoting de Harven once again, 'expertise is not a

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conception of man [*sic*] is, at bottom, our understanding of the nature of *men* [*sic*]' (p. 182) and that 'conceptions are the very stuff of rationality' (p. 194), I am inclined to think that it is in this sense that Long is using, rather loosely, the term 'concepts' in the truncated part of the segment to mean what in more technical language should be rendered as 'conceptions', more on this below.

new ingredient or part of soul, but soul itself disposed in a certain way — *pneuma* that is maximally sensitive to the world's maximal intelligibility and detail' (p. 226 f).

What becomes clear from this exposition is that the Stoics thought of conceptions (*ennoiai*) not primarily in terms of extension and intension (or modes of sorting out bodies) but rather as embodied dispositions of the soul resulting from a dynamic process where impressions are juxtaposed and congealed into *dispositifs* that shape the perceiver's capacity to be impressed by the external world.[104]

So, rather than a device to frame sensory perceptions, conceptions appear as a layer that prepares the *tabula rasa* to be impressed. To introduce an analogy with photography, the comparison would be not with the lens but with the photographic film, coated for varying degrees of sensitivity. This allows the soul to receive ever more refined *lekta*. In this process, language mediates between the 'irreducible particularity' of *phantasiai* as 'mental affections of this and only this person' (Long 1991, p. 275) and the inter-subjective contents available for public discourse. Each speaker is still presenting only one way of seeing, dependent upon previous experiences and training that shape the capacity of the subject to be impressed by the world in different degrees of sensitivity. The Stoics would thus explain differences in perception not in terms of what each subject projects onto nature, but rather in terms of how sensitive their minds are to capture real qualities of the objects in front of them.

At this point, it is important to emphasise that this reading stands in sharp contrast to the way in which Drahos understood *lekta.* As the reader will recall, for Drahos (1996), incorporeals are 'things superimposed by the mind onto the corporeal world' (p. 17). Accordingly, any *lekton* 'subsists as a construct of the mind.' (p. 18) Although Drahos does not develop this point in any detail, his analysis shows a clear influence by Gerard Watson (1966)[105] who claims that lacking corporeal existence, incorporeals can be identified and

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[104] On the formation of conceptions, and especially, the role of memory, Bronowski (2013, pp. 280-282).

[105] In the same footnote (Drahos 1996, note 22, p. 35) Drahos also acknowledges the influence of Rist (1969). However, on closer inspection, it becomes clear that Rist does not endorse Watson's strong conclusion that *lekta* are meanings imposed on things by the mind (pp. 147-151). In the chapter referred by Drahos (chapter 9) Rist does talk of Platonic forms, universals and concepts as mind-dependent images (*phantasmata*) (p. 165). Read in context, it becomes clear that this

separated from bodies only in thought (p. 12; also de Harven 2012, p. 22). Leading to the conclusion that they 'exist in the mind' (Watson 1966, p. 38) and merely 'reflect our tendency to classify reality to help us in our efforts to know and express it.' (p. 41) They are things 'imposed by us' (p. 38), 'our contribution' (p. 39).

Even if Watson's reading raises important questions regarding the ontological status of limits in Stoic philosophy — a topic that cannot be covered here[106] — it results in a form of subjectivism that is difficult to square with the overall tenor of Stoic philosophy (Brunschwig 1994, p. 119 note 66; de Harven 2012, pp. 60-63; Long 1971, pp. 94-96). In a nutshell, while Watson is correct in suggesting that an overly empiricist reading of the Stoics would miss the active role they ascribed to the *hēgemonikon*, this should not lead to a denial of its capacity to be acted upon. To appreciate how the Stoics negotiate this double nature of the *hēgemonikon*, we must briefly turn to the doctrine of assent.

So, on the reading proposed here, the agent has no direct control over how things appear to her. But the Stoics would insist that rational animals have the capacity to reflect upon and judge the impressions thus received. This is beautifully captured in a well-known passage by Epictetus

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chapter is not mainly concerned with the ontological status of *lekta*, but rather with discussing how common qualities relate to universals, concepts and Platonic forms. In any case, Rist clearly states that incorporeals are immaterial things, rather than non-existents (p. 153) and that 'time' is not treated by the Stoics as 'purely a mental construct, as they held the Platonic Ideas to be. It is in some sense real.' (p. 274, see also p. 279 stressing the Stoic commitment to a distinction between what 'exists' and what is 'real'). Rist also casts doubt on the two textual basis that offer support to Watson's reading: Basileides (p. 153) and Proclus (p. 279). I take these to be sufficient reasons to claim that Watson, and not Rist, is the main influence for Drahos's reading of the status of incorporeals.

[106] The argument is roughly that if the cosmos is an assemblage of tensional fields composing a dynamic and atomless continuum and not just an arrangement of separate and discrete bodies surrounded by void (Watson 1966, chapter 1, see also p. 39 and p. 55), then the words we use to designate objects cannot correspond to reality (p. 37). For a critique of this position see de Harven (2012, pp. 46-48 and pp. 62-64). For an introduction to the problem of the ontological status of limits see de Harven (2012, pp. 74-79), Ju (2009), and note 77, above.

> Wait for me a bit, *phantasia*; let me see who you are and what you are about, let me test you. (*Discourses* 2.18.24-6 quoted in de Harven 2018, p 224 and Long 1991, p. 279)

The impression one is called upon to judge is, as we have seen, already articulated in language. A thought has 'the power of talking' (Diogenes Laertius 7.49. L&S 33D), it is triggered by an impression and subsists alongside a *lekton*.[107] The shape of the *lekton* upon which one is called to give or withhold assent to an impression depends not only on one's expertise, but also on one's capacity to test the level of commitment demanded by the individual *lekton*. To use a famous example (Brennan 1996), presented with something that looks like a pomegranate — but will later turn out to be a wax replica — the wiser viewer may assent to the *lekton* 'this appears to be a pomegranate' whereas the more gullible would readily accept 'this is a pomegranate'.

As Long (1991) points out, 'Epictetus constantly emphasises the fact that the way things affect us depends upon how we describe them' (p. 284). But it is important to stress here, as Long does, that '[a]ssent does not generate the thought-content itself.' That is, 'the role of assent in this account of life and action is restricted to acceptance or rejection of the representation.' (p. 274) The Stoics are, thus, far from conceiving rational agents as automatons that passively register the signals their sensory receptors capture. The idea is aptly summarised by Long

> we are not constituted as creatures who can act satisfactorily if we simply allow representations to determine our conduct — eating simply because attractive food appears, running away simply because danger is evident. To function well, to live as our nature requires, we need to reflect on and evaluate the appearances that the world and our internal states generate in us. (p. 276).

The subject has indeed an active contribution in shaping her ways of seeing, but not in projecting forms onto corporeal matter. Instead, what is 'up to us' is the faculty of judging those impressions and keeping only those to which one gives one's assent. That their

[107] See p. 101, above.

theory is dynamic, as Watson accurately suggests, only demands that the faculties of perception, assent, and impulse develop and get perfected through training and reflection, not that individual imagination must constitute the very impressions one receives. To quote Long once again

> A representation [i.e. *phantasia*], once it has occurred, cannot be revoked or erased from my life. … Any representation is part of my experience, but I can make it *mine*, — my outlook, or belief, or commitment — or *not mine*, by giving and withholding assent. (p. 274, italics in the original)

Thus, while this incorporation of previous *phantasiai* may train the individual's capacity to be impressed, there is no direct individual control over the faculty of perception. The most one can do, is to self-examine the mechanisms that generate impressions. This is clearly evidenced in Marcus Aurelius' advice to ask oneself 'What precisely it is that is generating your representation, and to disclose it by analysing its cause, material, reference, and necessary duration.' (*Meditations* XIII.18 as quoted in Long 1991, p. 281). But this faculty of self-reflection falls short of direct control over one's impressions, something which could only be done at the expense of severing the ties between the perceiver and the world in a way that would hollow out the faculty of assent, which is the bounded realm of decision that will lie at the core of Stoic ethics.

We can thus begin to map the three notions we have been working with so far. Impressions (*phantasiai*) are affections of the soul that register the world in varying degrees of detail. They are both a cause and an effect of conceptions (*ennoiai*) — they are the seeds which will germinate into conceptions that in turn fertilise the very soil on which they stand. *Lekta*, for their incorporeality, can play no active or passive role in this process. They are things to say about something (publicly and intersubjectively) and yet inextricably linked to the process, given thought's capacity for speaking out. As de Harven (2018, pp. 222-230) convincingly argues they are not 'objects of thought for a separate mind' (p. 228). The content of the thoughts we are able to entertain are conditioned by the way our soul is organised (expertly or inexpertly) and trained (to test our *phantasiai*

and withhold assent until they prove to be true). This depends on *ennoiai* (conceptions), they are alterations or states of pneumatic tension of the soul and thus — like *phantasiai* but unlike *lekta* — remain thoroughly corporeal.

Conceptions seem to have a slightly odd feature: being corporeal they must remain particular (alterations of *this* soul) while also being tasked with explaining how various ways of seeing the world can converge.[108] What this means is that the individuality of one's conceptions does not entail a radical particularity of one's ways of seeing. To make sense of this seemingly universalising role of conceptions, we must examine how the Stoics dealt with generalisations which will lead us to the important distinction between conceptions and concepts. For now, I think we can conclude that in the wake of Watson, Drahos presents an overly subjectivist account of *lekta* that culminates in their assimilation to figments.[109] An account that, as I have argued, seems incompatible with the double (simultaneously active and passive) character of the *hēgemonikon*.

e. Figments: fictions and concepts

What we have seen in the previous sections should be enough to complicate Drahos's (1996) assertion that incorporeals are 'things superimposed by the mind onto the corporeal world' (p. 17). Some incorporeals subsist as intangible dimensions of bodies and

[108] This apparent duality of *ennoiai* is closely linked to what Ada Bronowski (2013) calls 'the soul's simultaneous activity and passivity' (p. 282). As she explains 'The capacity to think thus relies crucially on the capacity of the soul to stock conceptions and preconceptions and thus be disposed in the appropriate way, i.e. ready to activate the appropriate conception at the appropriate occasion.' (p. 282, note omitted) This entails, as she writes, the soul's capacity of 'generalizing over individual impressions, remembered and collected together' (p. 282).

[109] To do justice to Watson, his reading is much more careful than Drahos's. For instance, Watson (1966) makes clear that, even in his reading of Stoicism, our ways of seeing and making sense of the world are not 'purely subjective' for they result from natural tendencies common to all humans (p. 38, see also pp. 24-28). They are not unreliable either (p. 51) since they are guided by *Logos* (see also p. 17 f). Finally, they do not result from pure acts of will, but rather, at least in some cases, frames that arise naturally by some universal tendency to arrive at similar patterns, which is 'a manifestation of *oikeiosis* in the field of knowledge' (p. 24, my transliteration).

the Stoics saw these as particular and objective features of the world. While this is one of the most important differences between the Stoics and the 'giants' that appear in the *Sophist*, in no way does it bring them closer to the 'friends of forms'. Drahos sees this clearly when he writes

> One of its analytical features [of Stoic philosophy] is that it would have allowed the Stoics to give an account of universals without, as Plato did, committing themselves to the existence of abstract Ideas or Forms. Within Stoic metaphysical theory, only particulars existed. Universals were a convenient fiction. (p. 17).

Here, we have a more acceptable version of Stoicism where universals, ideas or forms (but not incorporeals) are deemed to be mere figments. To understand the significance of this claim in the development of a Stoic way of grappling with abstraction we need a brief detour into Stoic logic — focused on the Stoic notion of 'concept' and highlighting the differences between Stoic concepts and Platonic forms — before attempting to tie it all back to Stoic cosmology.

That the Stoics had no room in their materialist philosophy for entities with 'ontological priority over the material world of flux grasped by the senses' (Sellars 2010, p. 185) should come as no surprise.[110] But the way in which Stoics managed to give an account of our use of generic expressions without feeling the need to hypostatise universals — as Drahos suggests in the quote above[111] — is far from obvious. The technical aspect of this solution was formulated by Chrysippus who, through a remarkable advance in propositional logic, was able to eliminate the need to posit generic objects and their images in discourse, as Dyson (2009, pp. 99-109) convincingly shows.

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[110] As Sellars (2010) points out, in the note accompanying the cited text, 'Whether Plato himself ever held this position is of course another mater.' For my purposes, however, all that matters is that both Drahos and the Stoics seem to have taken the theory of forms in these terms.

[111] This is confirmed by the reference to the work of David Sedley (in Drahos 1996, note 23, p. 35); particularly where Sedley (1985) writes: 'The logical and metaphysical outlawing of concepts is … a warning to us not to follow Plato's path of hypostatising them.' (p. 89). I will also draw extensively upon Sedley's masterful paper.

The strategy went something like this: take any universalising proposition (e.g. 'Human is mortal'). Now, to get rid of the universal ('Human') dislocate it from the subject position to the predicate position (i.e. from 'Human is mortal' to 'If something is human, than this something is mortal'). The result is a conditional proposition that 'stands over an indefinite range of corporeal objects' (p. 102) thereby removing the temptation to 'mistake [the appellative 'human'] for the name of an object' (p. 101).[112]

While this may appear, at first, as a linguistic hack to get around a deep metaphysical problem, it is important to appreciate how different ways of speaking can be conducive to different ways of making sense of the world. The Stoics do not deny the utility of generalisations, but unlike Plato they do not start with the 'One'; they literally start from a particular 'something'.[113] Understanding 'Human' as concept (*ennoēma*) rather than (some)thing displaces it ontologically. 'Human' names nothing in the world since there is no particular body — existing in Athens or Megara, but never simultaneously in both — that can have all and only the properties assigned to this pseudo-entity. As Dyson observes 'The *ennoēma represents* the qualities of corporeal objects that are classified under it' (p. 92, my emphasis and transliteration). This crucial idea of 'representation' is more fully developed when Dyson writes

> Perception of similar objects, which the soul naturally groups together, produces a kind of harmonic alteration in the soul which allows it to produce a generic mental image,[114] which is a composite or abstraction from a number of memory-images. This harmonic alteration is the *ennoia*; the generic mental image is the *ennoēma*. (p. 92)

As we saw in the previous section (p. 102 f, above), *ennoiai* [conceptions] are dispositions of the soul that prepare it to be impressed by the world in varying degrees of detail. And just like the *lekton* allows its sender to articulate in discourse the *content of*

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[112] On the choice of avoiding the more common 'Man is mortal', see Moulton (1980, p. 133-136).

[113] For a discussion of the One-and-the-many in Plato, see chapter 1.

[114] It is not clear how literally Dyson understands the idea of a 'mental image', but we should be careful not to exclude non-retinal features of objects.

her impressions, concepts help articulate publicly *how one's soul organises the impressions it receives from nature*. Long and Sedley (1987) help illustrate this mode of thinking

> If it is asked in virtue of what this breath is describable as the quality 'man' the answer (H)[115] will be that it corresponds to the universal concept 'man'. That concept is not something present in Socrates; it is our mental construct, a convenient fiction (p. 174).

At this point it would be tempting to return to Drahos's account of ip objects and substitute the references to *lekton* for references to *ennoēma*. After all, it is the latter that the sources refer to as 'a figment of the intellect, a *phantasma dianoias*.' (Dyson 2009, p. 93, my transliteration). But this might leave the wrong impression. Victor Caston (1999, p. 172, note 58) explains that the term *phantasma* did not always carry a pejorative sense, even thought it was often used to refer to hallucinations.[116] We need thus, to gain a better grasp of the role 'concepts' played in Stoic philosophy.[117]

As David Sedley (1985) famously put it, despite being 'metaphysically outlawed' concepts still retained 'epistemological value.' (p. 89) This is what separates them from mere figments or fictions. Concepts are figments — they result from a process of association, rather than from direct experience (Dyson 2009, p. 89) — but not necessarily

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[115] The reference here is to a fragment by Simplicius that, for the sake of completeness should be quoted in full

> The Stoics say that what is common to the quality which pertains to bodies is to be that which differentiates substance, not separable per se, but delimited by a concept [*ennoēma*] and a peculiarity, and not specified by its duration or strength but by the intrinsic 'suchness' in accordance with which a qualified thing is generated. (*On Aristotle's Categories* 222,30-3. L&S 28H, with reference to the original printed in vol. II, my transliteration)

[116] The Stoics seem to have found nothing particularly interesting in dreams or hallucinations that could not be reduced to a corporeal phenomenon of relaxation of the faculties of the *pneuma* (Annas 1992, p. 85).

[117] I will have to leave aside the vexed question of the ontological status of 'concepts' in Stoic philosophy. A question to which almost every conceivable configuration has been put forward by some of the most brilliant contemporary commentators on Stoic ontology. For a good summary of the debate see Sellars (2010, p. 188 ff).

speculative aberrations. Due to their genericity concepts fail to be *something*, but they still can attain some form of objectivity — which might be the reason for calling the 'quasi-somethings'. In support of this reading, Bailey (2014, p. 304) points to a passage where Aetius compares concepts to money

> all the phantasms which strike irrational animals are only phantasms, and those which occur in us and in the gods are phantasms in general and specifically concepts [*ennoēmata*]. Just as denarii and staters, on their own, are denarii and staters, but when they are given to pay for a ship passage, then they are called 'ship money' in addition to being denarii [and staters]. (4.11.5 I&G 21)[118]

What makes the analogy so compelling is not only that both coins and figments are artefacts, but that both have a value in circulation. Their value and currency — and consequently their ability to circulate — does not depend on the mind of their holders alone, it can only be realised in commercial or intellectual exchange. As Bailey (2014) writes: 'once I am trying to use these [money-]tokens when their value has been so fixed, to buy passage aboard a ship, their value is no longer something dependent on either my imagination or anyone else's.' (p. 305) Likewise 'if universals are to be useful at all, they must carve at the joints; but then they will not be fictional *simpliciter*.' (p. 305) However useful the analytic philosopher's trope of 'carving the world at the joints' might be; it seems clear that a concept's extension captures a way of seeing the world that allows generalisations to become inter-personal in a way that not every figment of the imagination can.[119]

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[118] I have opted to keep Gerson and Inwood's translation for seeing no compelling reason to adopt Bailey's choice of translating *ennoēmata* as 'conceptions' in his modified version.

[119] Where products of the imagination (*phantastikon* as opposed to perception: *phantasia*) gain some form of imagistic consistency it may be possible for them to acquire inter-personal currency, as de Harven (2012, p. 84 ff) claims. Although evidence is scant, it is possible that some Stoics might have recognised a special place for these fictional entities (e.g. centaurs, giants, etc.) in their ontological schema. In any case, unlike *lekta*, they would seem to subsist upon conventional practices, rather than the capacity of certain bodies to make an impression in the *hēgemonikon*. They might acquire a certain objectivity and even particularity but in a rather more indirect or artificial way.

For the Stoics, concepts capture our ways of thinking and expressing generalisations about bodies. As such they are 'a convenient, if not indispensable, encapsulation of the objective structure of things' (Sedley 1985, p. 89) precisely because they are linked to the ways in which our souls are disposed to grasp the world (or be impressed by it). Even when concepts match 'the objective structure of things' by being built upon expert conceptions (see pp. 101-107, above) that allow us to register things in full resolution, concepts do not cease to be figments. Just like money-tokens do not cease to be artefacts when they act as money. But both concepts and money-tokens attain a certain objectivity by clearly having extensions that do not depend on the whim of any individual speaker.

We can thus start to see how an epistemology built upon sensory impressions and particular dispositions of the soul (see previous section) does not result in radical relativism. What is crucial to understand here is that, for the Stoics, particular bodies are grouped together in the mind through affinities that occur naturally *among things* and that, rather than constructed, should be discovered gradually as the soul is altered in accordance with nature (Dyson 2009, p. 103).

We can thus conclude that not even concepts can be considered impositions of the mind onto the corporeal world. When properly construed, they should reflect pre-existing affinities in nature. This helps explain why the singularity of one's impressions [*phantasiai*] and conceptions [*ennoiai*] does not entail a radical particularity of one's ways of seeing. The way my soul is disposed to be impressed by the world may be, indeed should be, entirely coincident with yours, that is if we both aspire to 'perceive the order and regularity *among things*' (Løkke 2015, p. 35, my emphasis).

To be sure, this is a strongly realist epistemology that asserts that there are things in the world that are actually animals, silver birches and so on.[120] This should be enough to tempt any diligent Foucauldian to reach for her copy of Borges' *Other inquisitions* in search of the *Celestial emporium of benevolent knowledge*. But however strange this theory may sound, it is hardly surprising coming from a philosophical system that places

[120] It is worth stressing at this point something that was hinted at in the previous discussion about expertise. As Løkke (2015) writes 'someone is experienced in something as soon as he [*sic*] is able to recognize that thing as what it is' (p. 36).

living in harmony with nature as its guiding ethical principle, and that constantly needed to guard its position against Sceptic advances (Reed 2002; Løkke 2015, p. 20).

By rejecting the assimilation of incorporeal *lekta* to figments, we were able to find in the Stoic account of 'concepts' a way of grappling with abstraction and generality that departs significantly from Plato's philosophy. And yet, the doctrine is not resolved by holding a radically particularistic account of language and perception. As a basis for a rethinking of copyright theory, Stoicism has thus offered a way of grappling with abstraction that does not need to hypostatise universal entities. We could thus conclude that a realist account does not need to conceive of copyright objects as things but can instead commit to the idea that there are objective things to say about artefacts. This is a problematic claim, but one that can lie at the basis of a different way of making sense of copyright's ontological commitments. A fuller picture of such an alternative account will be rehearsed in the concluding section of this chapter. The objective is not to put forward Stoicism as a more plausible foundation for the philosophical metaphysics of copyright law, but to show how different ways of grappling with abstraction can illuminate different aspects of legal technique. As we will see, this will require a strategic use of a realist ontology.

f. Reconstructing a Stoic alternative

We are now in a position to see that Peter Drahos (1996) puts forward two incompatible views about the nature of ip objects. Nothing can be both an incorporeal *lekton* and a mental figment. It would be possible to reconstruct his thesis by calling ip objects concepts (rather than incorporeals) and explore how Stoic methods of reasoning might help offer a more sensible account of intellectual property rights. And to some extent, this is something Drahos did already. As we will see, his account of copyright infringement is heavily indebted to Stoic logic. But logic, as we saw, is never fully detached from other dimensions of Stoic philosophy, thus a more ambitious formulation of the Stoic alternative should seek to offer a holistic picture. One that, as we shall see, will open perspectives not envisioned by Drahos.

When discussing the role of abstract objects in judgements of infringement (pp. 153-156), Peter Drahos begins not with the intangible work but with tangible artefacts. For Drahos, infringement cases turn essentially on '*legal* judgements of identity' (p. 153) where the judge is called upon to make 'a decision about whether disparate physical objects are the same or similar, or resemble each other' (p. 154).[121] What his discussion reveals, above all, is the refusal to hypostatise the 'one' that aggregates many disparate physical objects. And although the text does not make a specific link to the Stoics, the echoes with Chrysippus are, I believe, quite clear. Like Chrysippus, Drahos focuses on qualities and attributes shared by various bodies, rather than positing an abstract form serving as a model or standard for its physical counterparts. The abstract object is thus, as Drahos insists, no more than 'that core structure that is integral to the identity of the concrete object. This core structure forms the basis upon which an observer makes an identity judgement between two particular physical objects' (p. 154).

The suggestion is that instead of postulating an intellectual object characterised by a set of attributes, we should think in conditional terms, starting from the tangible artefacts in dispute and finding common qualities (e.g. If something is [to count as a copy of] *Great Expectations*, then it is …).[122] Like the universal 'human', our 'copyright work' is nothing but a figment (*phantasma*) precisely because there is no body in the world that would have all and only the properties a copyright work must have to be able to perform its aggregating function (e.g. being an expression with no unique physical inscription or embodiment; having and not having my name on it). What Drahos learns from the Stoics is this way of understanding generic claims as attempts to group disparate bodies without

[121] This sliding scale runs the risk of including, at the bottom end, situations that would likely fall outside of what is normally considered to constitute infringement and fails to acknowledge the necessary establishment of an 'opportunity to copy'. Drahos seems to acknowledge this on p. 154 (especially in the accompanying notes 38-40). In any case, for the purposes of the argument we can leave these doctrinal technicalities aside.

[122] Not to betray the character of Drahos's reading I will have to disclaim that this logical structure tells us very little about how this list is fabricated, which seems to be the main worry animating Drahos's account.

positing the existence of a higher-order object (call it universal, abstract object, incorporeal, etc.) independent from the claim.

We could stop here and claim that this post-modern version of the battle between the gods and the giants has revealed two great onto-legal options for dealing with artefacts. We either take the intangible work as the basis of identity between various bodies; or take the work as the result of a judgment that compares material differences between corporeal artefacts. But this would be to stop too early. It would be to stop before questioning the basis upon which such judgements are made and miss the opportunity to explore an important tension within Drahos's Stoic-oriented positive thesis.

Let us start by formulating the tension. If we ask Drahos what lies at the basis of the 'core structures' upon which judgements of infringement depend, we obtain the following answer: 'This core structure, we have suggested, is itself a matter of judicial composition. Constitutive judgements about core structures are judgements of convention.' (p. 155) This is the answer of a sceptic. For a Stoic, when it came to concept formation (our analogue of the copyright 'work'),[123] the matter turned on identifying 'common qualities' that exist in nature and are responsible for the generalising function of our conceptions. (Dyson 2009, Løkke 2015, Reed 2002, Sedley 1985, discussed above)

The point is not to accuse Drahos of lack of philosophical purity, it is rather to suggest that, once we start questioning our ways of grappling with abstraction, we cannot stop at ip objects. We cannot suggest, as Drahos does, that 'the book or the invention' is the 'concrete physical counterpart' to 'its abstract, intangible twin' (p. 153). There is something we can productively explore here, since while the Stoics seemed comfortable with generalising concepts, they remained highly attuned to minute material differences between objects. As Cicero reports,

[123] Given that many concepts may be involved in characterising an ip object (say an individual copyright work) it might be better to describe it as a genus (Diogenes Laertius 7.60-1. L&S 30C; see also Caston 1999, pp. 159-162). Since the difference between concept and genus is not ontologically relevant, I will improperly continue to speak of a copyright work as a concept, not to overburden the text with specialised terminology.

> everything is in a class of its own and … nothing is the same as something else. That is certainly a Stoic thesis … no hair or grain of sand is in all respects of the same character as another hair or grain. (*Academica* 2.83-5. L&S 40(8))

The thesis Cicero refers to is the well-known doctrine of the 'identity of indiscernibles'. As Long and Sedley (1987) explain 'For if they exist as discrete objects, they must each exist as "peculiarly qualified individuals" with distinguishable properties that impressions, in theory at least, can discriminate' (p. 252). Thus, a Stoic would never settle for the idea that an invention — rather than a particular and unique machine that could not be in Athens and Megara at the same time — is a body. The book, the invention or the computer programme — to use Drahos's examples — are already abstractions in the sense of what remains after we bracket the various bodies in which they are inscribed.

Thus, rather than focusing exclusively on legal judgements of identity, a reflexive approach to the nature of abstract objects within the context of intellectual property will have to expand its examination to a broader field of abstractions used to describe the stuff intellectual property deals with. Whatever else may be said about different levels of abstraction at which identity judgements may be made (Drahos 1996, p. 154) it is important to be aware of the point at which one changes from an appreciation of concrete matter to an appreciation of generic entities. One should learn, from the rigour of Stoic metaphysical analysis, to appreciate different modes of being that result from the distinction between bodies and non-bodies, as well as somethings and not-somethings. Particularly relevant, in this context is the treatment of the path from corporeal qualities of bodies to general concepts. One that can serve as a model for a materialist treatment of judgements of identity in copyright law and may bring light to the operation through which jurisprudential analysis moves from an appreciation of the material media of fixation to a discussion of the core structure of the repeatable copyright work.

Qualities enter Stoic analysis through one of the four genera or categories with which the Stoics analysed 'the metaphysical aspects under which a body can be viewed' (Long & Sedley 1987, p. 165 at 27). This is a highly technical area of Stoic thought, but for our purposes all we need to know is that the Stoics found it useful to examine bodies with, so to speak, different lenses: as unqualified matter (or substrate), as holders of qualities, as

that which can be disposed in different ways (disposed and relatively disposed). (Long & Sedley 1987, pp. 166-179 at 28-29) In examining 'the qualified' (i.e. the second genera), the Stoics distinguished between being commonly qualified and being peculiarly qualified. What this means is that each individual is a unique combination of common and peculiar qualities. Common qualities are those that make a stone a stone, whereas peculiar qualities make this stone unrepeatable. Both are corporeal. As Sandbach (1994) puts it, they are 'breaths passing through its substance' (p. 93), they are a certain tensional configuration of *pneuma*. Being corporeal, they are both unique — even the common qualities, because they admit of variation (Long & Sedley 1987, p. 289 at 47) — and have the capacity to impress the mind and thus give rise to a *phantasia* that captures that thing as it is, albeit in different degrees of resolution depending on the expertise of the viewer (de Harven 2012, pp. 64-66 discussed earlier). Thus, what we predicate truly of a body picks out a corporeal quality or disposition of the body that is thus qualified or disposed. As Ada Bronowski (2019) explains with great clarity, there is a clear difference between these common qualities that one holds by being what one is, and the concepts one formulates based on one's previous experiences. Only the latter can be said to be mental constructs. As she puts it

> it is from the individual encounters with things (through the impressions each, individually, makes on us), together with the memory-traces they leave in us … that we produce generic conceptions and thereby form generic concepts. It is thus in virtue of there being one thing which is a mortal rational animal, and another and another, and so on, that we form and consolidate the mental concept of human being. There are thus many things which display similar qualities (being mortal, being rational, being biped, etc.) but no thing in reality is a generic man (hence the Stoics appositely call this a not-something). (p. 414, note omitted)

As a model to make sense of copyright practice, we can — with Drahos — question generic formulations of the nature of a particular copyright work (or even more so a definition of any of its descriptions: literary, dramatic, musical, etc.), but not the objective presence of common qualities that can be expressed through language. For the Stoics, these qualities are objectively present in nature and not things superimposed by the mind.

As we have seen, Stoic epistemology seems to work the other way round: it is not our minds that impose sense and order onto nature, but nature that projects itself onto our minds; minds coated with *ennoiai* (conceptions) that — developed out of our impressions — allow us to be sensitive to nature in all its detail.

Maybe we should have stopped sooner. With its commitment to a natural order of things — without which their account of abstraction would be significantly distorted — Stoicism begins to look less and less like a viable alternative to Platonism and more like an enchanted view of nature that would rival the spookiness of Platonic forms.[124] What then, if we look at the Stoics not for an alternative account of ip; but rather for an alternative *reductio ad absurdum*? That is, what if we explore the possibilities of constructing a more sensible philosophical account of ip (at least more sensible than the commitment to two-worlds) not to solve problems, but to raise questions?

This would offer us a radically different, yet not unprecedented, image of copyright practice. An image of lawyers attempting to grasp, in the materiality of tangible objects, grounds for claiming identity or independence, rather than friends of forms discussing expressions in abstraction from their embodiments. As Jose Bellido (2014) observes, one of the crucial operations in any copyright infringement case is 'the imperceptible passage, the transition that characterizes copyright infringement disputes: from the difference in the materials to the material differences in what is assumed to be the copyright "work."' (p. 71; for a similar view see Pottage & Sherman 2014, and van Dijk 2017). 'Assumed' marks, of course, a critical distance that is not available to the practitioner. And that suspension of critical distance is the fiction that lies at the heart of copyright, and hence the hook of our reconstructed *reductio*. We do not need a separate world for copyright objects to reside, we do not even need to have an independent object; all that copyright needs to be committed to is the idea that there is a limited number of things to say objectively of artefacts and upon which judgements of legal identity can be made.

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[124] As Sedley (1985) explains, for the Stoics 'The world is already shaped by an immanent deity by means of the "seminal principles" which underlie the generation of all natural entities, and our central conceptions are no more than an empirical recognition of that ordering.' (p. 89) For a more detailed explanation see Long and Sedley (1987 at 40).

What is crucially different in this figuration of copyright practice — based on impressions, rather than projections — is that we no longer have judges in full control of what goes by the essence of the intellectual work. We have judges who are responsive to the material composition of artefacts. What can, however, be registered is never the object as such but a representation that can be discursively handled in litigation.[125] An idea that dovetails with the way in which language and thought are never fully separated in Stoicism. In short: the words we use to describe the ip object and the conceptions that go along with them shape our ways of seeing. If we take certain liberties with the Stoic notions we have been discussing, we can formulate two questions

(i) What occupies the role of conceptions [*ennoiai*], what makes a judge disposed to appreciate certain material qualities in favour of others?

(ii) How can impressions [*phantasiai*] be trusted? Or what gives objectivity to certain things that can be said about particular artefacts?

These are questions that one cannot expect to answer through a speculative theoretical exercise — but that we could hardly have been able to formulate without it. We need, thus, to turn our attention to different materials — those of copyright history — to look for the processes through which a certain disposition to see artefacts as embodiments of intellectual works (rather than singular material artefacts) emerges and congeals into a logic of securing property claims pitched at a high level of abstraction.

Conclusion

As we have seen, Peter Drahos presents Stoic incorporealism as an alternative framework to a Platonist approach that, according to his reading, severs the corporeal from the incorporeal thus masking the power of abstract objects within the context of property relations. As originally framed, the ontological question set up by Drahos left us with two alternatives: we either believe ip objects exist in some Platonic neverland or recognise

[125] For the argument that materiality, in law, always operates on a symbolic order, Pottage and Sherman (2014).

them for the fictions they really are. Throughout the previous chapters we explored various possibilities of re-reading this modern version of the battle between the gods and the giants. And, as in Plato's dialogue, both of these original sides had to make significant concessions.

The Platonism we started off with was forced to abandon a commitment to a separate world of forms. Even if abstract objects exist — in the sense of being irreducible to concrete ones — they do not have to exist elsewhere. Nor do they have to be the extraordinary metaphysical entities that form the central concern of Plato's middle dialogues. There are many ways to deal with abstraction, and the level at which one abstracts has important consequences for one's analysis. As for Stoicism, it is clear that their world of continuous and dynamic tensional fields is markedly different from Plato's, but this is not the end of the story. For all their materialism, we discovered in the Stoics not a bunch of metaphysical brutes, but sophisticated thinkers able to distinguish between corporeality and tangibility (the action/passion principle) and to include incorporeal entities, that depend on bodies but are not reducible to them, in their ontology. Among those entities we found *lekta*, things to say. Semantic entities that mediate between what a person is able to register from the world and what it can say about it; but not to be confused with generic or theoretical entities like concepts (*ennoēmata*). The introduction of this distinction — predicated, essentially, in the difference between particular and generic entities — has allowed for a reconstruction of Drahos's positive thesis. The convenient fictions Drahos took from the Stoics were not incorporeals (in the technical sense) but figments (*phantasmata*). But even some of these can attain a certain form of objectivity and thus be retained for the purposes of discourse, rather than simply dismissed. In the end we have two realist philosophies that deal with generality and abstraction in sophisticated ways, but they build their philosophies from radically different starting points. When it comes to questions of sameness and differences, Plato starts from the one, the Stoics start from the many.

The alternatives are clear, yet more subtle than what they seemed to be. But more importantly, throughout this dialogue a new set of tools of analysis has emerged to address the function and character of ip objects.

While discussing Plato the question of sameness in difference or the-one-and-the-many emerged as particularly useful for an analysis of the aggregating function of ip objects. When attempting to approach this question from a Stoic perspective, an alternative appeared: it is possible to grasp similarities without reifying generic objects. Adding to this, the Stoics allow us to think about ways of aggregating different phenomena through common qualifiers without assuming that the template comes first. Concepts, although figments of thought do not result from acts of radical speculative creativity. This, however, is only achieved through a commitment to objective similarities, predicated on a doctrine of existing and intelligible common qualities.

So, just like we had to abandon Plato as a *reductio ad absurdum*, we had to reject Stoicism as a viable alternative of a philosophical account of copyright. Still, the Stoics proved much better equipped to play the role previously assigned to Plato. If all copyright law needs to commit to is the idea that there are a limited number of things to say objectively about particular artefacts — claims that lie at the basis of judgements of infringement — then it is the supposed objectivity of such claims that needs to be examined. An examination that entails abandoning Stoic epistemology and turning to the historical construction of the objectivity of such claims.

Part 2.

Turning to the vernacular

Chapter 3. Intangibility as the horizon of intellectual property

For hours in advance I have to make arrangements …
in one season calculate the fashions of the next …
My money is in the hands of strangers.
Franz Kafka (2009) p. 9

The tale of the gods and the giants, explored in the first part of this study, has revealed two visions of reality. And thus, what began as an ontological enquiry into the mode of existence (or non-existence) of the stuff of copyright gradually morphed into a wider and more complicated narrative about ways of seeing and sensing the world, including (but not restricted to) ways of grappling with abstraction.

This turn, and the productive complications that ensued, hinged upon the gradual melting of the apparently solid boundaries between aesthetics,[126] epistemology, ontology and cosmology made possible by revisiting two complex philosophical systems — a term that is easier to apply to the Stoics than to Plato — that can only retrospectively, if somewhat anachronistically, be reconstructed according to modern disciplinary boundaries. It would thus be tempting, at this point, to suggest a return to a more holistic way of understanding what matters to humans; one that is unencumbered by the legacies of modernity and the functional differentiations that at once ground and are grounded upon them. Whether such a return might be feasible at all is a question that I shall not attempt to address; what I feel to be more productive, instead, is to experiment with a relaxation or blurring of such disciplinary boundaries. To put it in other words, to rehearse

[126] See note 42, above.

an indisciplined (Goodrich, 2009) — rather than a- or anti-disciplinary — take on the form (or mode of appearance) artefacts take within copyright law.

The largely aporetic experiment conducted in the first part of this study has, however, revealed that a lot is missed when discussions about tangibility and intangibility focus too narrowly on determining the ontological status of various entities at the expense of examining the techniques with which intangibles are carved out of sensory experiences.

Forced to abandon the prospect of finding in philosophical metaphysics a ready-made account to explain copyright objects (or explain them away), this study will turn to an alternative way of making sense of intangibility in the work of Lionel Bently, Alain Pottage, and Brad Sherman. The making of intellectual property and its objects — in the collective and individual work of this trio — appears as a historical process that is irreducible to radical judicial creativity. In a sense, this approach, resembles the well-known critique of attempts to explain legal concepts by appealing exclusively to juridical or academic creativity, formulated by Pashukanis (2002)

> To think that the juridical concepts which express the sense of the legal form have been quite arbitrarily dreamt up is to fall into the error which Marx pointed to in the work of the Enlightenment scholars of the eighteenth century … they tried to render these forms less incomprehensible by declaring them to be in fact human inventions rather than something which appeared out of the blue. (p. 60 note omitted)

In what follows I will explore the materialist dimensions of the way in which these authors deal with abstraction as a technique employed historically, in particular settings and for specific legal operations, to claim ownership of objects specified as generic particulars. By exploring the historical processes through which this mode of arguing emerged, this trio explores what I shall call the vernacular metaphysics of intellectual property.

The second part of this study is divided into three chapters: the first focuses on Sherman and Bently's thesis of the closure of intellectual property — i.e. the techniques through which the metaphysical aspects of proprietary claims pitched at a high level of generality were contained by legal technique — and with it the gradual acceptance of the

idea that intangibility is not an obstacle to being an object of property. The second, turns from the general idea of intangibility as the horizon of intellectual property to the ways in which that idea was materialised in legal practice by examining the conceptual insights of Pottage and Sherman's history of the emergence of the modern invention in US patent law. The final chapter will offer an original account of copyright objects that combines insights gathered from the works examined in the two preceding chapters with the concept of real abstraction and by linking the emergence of intangibility as a legal fact to the division of labour characteristic of capitalist modes of production. In line with Pashukanis' methodological insight, the thesis refuses to see intangibility as either a purposive human invention or something that appears out of the blue. Copyright will thus emerge as mode of dealing with artefacts that gained plausibility within an economic system oriented towards serial production.

a. Dodging metaphysics

This discussion started with Peter Drahos's provocative question as to whether the existence of spooky entities is one of intellectual property law's ontological commitments. And although, as far as I am aware, none of the three authors that lie at the centre of the second part of this study has ever attempted to engage directly with Drahos's approach, they present a clear alternative whose relation to Drahos's question is more direct than one would expect.

A couple of affinities are striking. The first lies in the rhetorical employment of terms associated with the supernatural. Where Drahos speaks of 'spooky entities', Sherman and Bently (1999) speak of a 'phantom' (p. 26, 59). Pottage and Sherman are a bit more elusive, in describing the invention in patent law as having to be 'elicited' from corporeal artefacts used in registration and litigation.[127] The second affinity is the reluctance to

[127] [T]there is no dimension of reality in which inventions, signs or designs might subsist independently of the artefacts, texts or drawings from which they are elicited' Pottage and Sherman (2104, p. 28). The choice of words is precise and evocative. Elicit has its origin in the Latin verb *elicere* 'drawn out by trickery or magic' ('elicit', 2010).

engage directly with ontology. While for Pottage, this can be traced back to his earlier work on Luhmann (Pottage 1998); in Sherman and Bently it appears mostly as a historiographic claim linked to the idea of closure.

The affinities, however, stop here. Drahos employs supernatural vocabulary to marshal common sense to his camp. In so doing he takes an ontological position which, at the end, is a positive one: realism about physical objects but not about abstract ones. Bently, Sherman, and Pottage, on their part, retain the somewhat spectral or phantasmagorical character of ip objects but decidedly resist the extra step of attempting to exorcise it from ip discourse. The ontological question is kept theoretically open even if avoided for strategic and methodological reasons. This theoretical sensibility is most clearly articulated in the following segment

> Although we are drawing attention to the positive role that the law plays in creating intangible property, we should not be taken as suggesting that intangible property is purely a figment of the legal imagination. Rather, what we are hoping to highlight is that the law finds itself in a situation where it both uncovers and produces intangible property: the relative weight of each depending on the circumstance and the subject matter in question. While it may be impossible for the law to reduce the subject matter of intellectual property to a material form or to exhaustively define intangible property, it is not as some suggest — or hope — an optional exercise. Rather, in a process as impossible as it is necessary, the law is forced to pursue something that it can never completely imagine, which is always beyond representation. (Sherman & Bently 1999, p. 58 notes omitted)

This acceptance of the artificiality of intangible property, with the acknowledgement of the productive, even necessary, role of fictions and figments in ip law can be read as an interesting alternative to Peter Drahos's ontological scepticism. Had this been a carefully staged philosophical debate, commentators might describe the move as one of 'biting the bullet'. In so doing, Sherman and Bently open the possibility of conferring some agency to the legal form. In more immediate terms it reveals a shift from the comforting view that ip law went astray at some point and that a return to simplicity (e.g. textual identification, Drahos 1996, p. 153 f) is available or even desirable. In more theoretical terms it avoids

reducing away the complexity and pervasiveness of the construct in favour of an external explanation.

Thus, if Sherman and Bently are right in suggesting that the intangible is that which 'the law is forced to pursue', there is too much to lose in attempting to reduce it away. If, on the other hand, it is something which the law 'can never completely imagine' that which is 'always beyond representation' we must be careful not to make it more solid than it appears. The explicit acknowledgement of the irreducible character of intangibility in intellectual property law makes for a less confident but arguably more productive starting point than Drahos's occasional claims to radical judicial creativity.

One of the thrills of reading on ip is that one never knows whether or at which point in the narrative metaphysics will crop up — usually in the form of Justice Story's famous words: 'Patents and copyrights approach, nearer than any other class of cases belonging to forensic discussions, to what may be called the metaphysics of the law'.[128] As literary device, suspense was missed by Paul Goldstein (1994) in his influential *Copyright's highway: From Gutenberg to the celestial jukebox*. Metaphysics does not crop up, unannounced, but is right there in the title of the first chapter. In it, after an overview of legal, technological, and cultural changes — and after dutifully citing Story (pp. 6, 13 and 27) — Goldstein writes

> But the puzzle of copyright's metaphysics remains unchanged: where should copyright draw the line between the competing works of creative minds? (p. 27)

It is difficult to compare it to Drahos's formulation. At first glance it seems utterly superficial: in that 'works of creative minds' are simply allowed to pass onto the metaphysical puzzle without prior inspection. On second thought it suggests a more sophisticated stance by situating the question historically; that is, by indicating that the limits of enquiry are exhausted in establishing who owns what. In so doing Goldstein offers

[128] *Folsom v. Marsh* (1841). Also cited in Biron (2010, p. 382); George (2012, p. 84); Koepsell (2000, p. 43); Merges (2011, p. 16); van Dijk (2017, p. 5). For some context, see Pottage and Sherman (2010, p. 70).

an almost perfect copyright example of what Pottage and Sherman (2010) called the 'leap of faith' of patent law practitioners. That is, while

> Philosophers recognize that the existence of such things ['abstract objects'] cannot be taken for granted. Patent lawyers, on the other hand, routinely deal with the invention as though the reality of embodied forms was entirely self-evident. (p. 6)

As they explain, the 'philosophical' question — such as the one asked by Drahos — is something practitioners do not need to engage with, it is 'externalised because patent lawyers already made the leap of faith that is involved in treating the invention as an intangible form.' (chapter 1, note 20)

But what is striking in the example is not so much that the metaphysical question goes unasked but that a doctrinal question appears dressed up in the robes of metaphysics. The question is neither externalised, nor merely rhetorically posed in the assumption that the answer is taken for granted. Hyo Yoon Kang's reading of Pottage and Sherman's argument seems much sharper. More than a simple 'leap of faith' Kang (2012) suggests a 'contemporary, consciously or unconsciously cultivated, evasion.' (p. 464) What I am trying to suggest is that, asked here and now, the metaphysical question is not there to be answered but to be either evaded or employed to irritate.[129]

Although Sherman and Bently (1999) refuse to take the nominalist route of dismissing 'intangible property' as mere figure of speech for what in fact is a judicial invention (p. 59); they are also careful in avoiding a naïve realist position of taking the subject matter of ip as naturally 'detached, neutral and closed' (p. 200). Moreover, they explicitly avoid engaging directly or even indirectly that type of metaphysical debate. The position stems, distinctively albeit subtly, from one of the central theses of *The making of*: the proposition that modern intellectual property law emerges from a historical settlement that came to

[129] This is not to be dismissive of analytical attempts to address the question with a straight philosophical face (Biron 2010; Bottani 2010; George 2012; Hick 2009, 2011, 2017; Koepsell 2000, 2010; Peukert 2021; Reicher 2016; Wilson 2010; Wreen 2010). While they offer interesting tools to handle such a slippery object, the focus on the ontological status of the object misses the point. Ip objects do not need to be really real above and beyond being legally real.

neutralise historical objections to earlier forms of intangible property that in one way or another attempted to discredit the very idea of property in intangibles.

It would take a book of the exact same length as *The making of* to do justice to the subtlety of analysis and richness of detail with which the stitches of this closure are knitted together. But I hope a more structural analysis of the argument may help illuminate one central point in Sherman and Bently's argument. The closure was not a product of judicial or legislative dispensation, there was no foundational clause, killer argument or silver bullet that put the opponents to rest. Rather, a change of taste in legal argumentation together with the emergence of representative registration with regards to certain subject matters, conspired to displace the apparently metaphysical questions that had energised commentators in the earlier part of the eighteenth century in favour of a practical and mundane task of form filling. To put it in other words, once an intangible could be 'taken for granted, on the production of the certificate of registration, to be the property of the person in whose name it is' (Sherman & Bently 1999, p. 198, note 18 citing a report on the 1862 *Select Committee on Trade Marks*) common sense changed horses. The burden was now on the critic to demonstrate that the paper was mere illusion, with the obvious risk of sounding abstruse.

The consequence being that if the law moved on from those metaphysical debates of the eighteenth century while leaving them unresolved, attempting to pose a metaphysical question afresh — can there be such things as intangibles? — might not be particularly productive. Analytically it would miss the mechanisms that brought about the closure. Strategically it would suppose ip would crumble under the weight of its own contradictions, without realising the ways in which the law developed mechanisms to contain them.[130]

[130] This is essentially the critique Sherman and Bently (1999) formulate against John Perry Barlow's views that were quite influential at their time of writing (p. 1 f). See also Bowrey (1996).

b. Ways of dealing with artefacts

The idea of a historical closure is a very bold proposition and with crucial importance to legal theory. It is also a complex and sophisticated thesis that takes some time to explain and has no obvious entry point. But it lies at the heart of the central claim of Sherman and Bently's (1999) study

> while gradual, haphazard and in some ways still incomplete, by the 1850s or thereabouts modern intellectual property law had emerged as a separate and distinct area of law replete with its own logic and grammar. (p. 3)

But before we analyse the concept — and the historical process — of closure, as employed by Sherman and Bently, it is important to first understand what, for these authors, intellectual property law is.[131] Judging by the two leading themes made explicit at the outset of the book, intellectual property law has to be understood both as a mode of organising legal materials and as a way of 'thinking about and dealing' with certain artefacts. (p. 3) While both senses of the expression are as deeply tied together as the historical processes of their formation, my focus will rest on the second aspect.

We can begin to grasp the distinctly modern logic that emerges by the 1850s with three central markers. Modern intellectual property law is a generalised, speculative, and object-oriented mode of thinking and dealing with artefacts. The terminology is my own, but the content maps on directly to Sherman and Bently's discussion.

Intellectual property law, if we drop the 'modern' adjective to avoid projecting it back onto a foreign historical territory, is a generalised mode of dealing with artefacts. Sherman and Bently identify this feature of the logic of intellectual property when they write

> modern intellectual property law tends to be *more abstract* and forward looking. In particular, while the shape of premodern law was largely determined passively in response to the environment in which

[131] That this object can never be taken for granted has been demonstrated by Kathy Bowrey (1996).

> the law operated, in drafting modern legislation the law was not only concerned with the objects it was regulating, it was also interested in the shape that the law itself took when performing these tasks. (p. 3 f, my emphasis)

To gain a better sense of the different mentalities at play in the diverse historical modes in which the law has dealt with artefacts, we need an example. Take, for instance, the 1798 *Act for Encouraging the Art of Making New Models and Casts of Busts, and other things therein mentioned* (Models and Casts Act, 1798). Ronan Deazley (2008e) points out both its historical significance — 'The first occasion on which British copyright law provided protection for a medium other than print' — but also its pre-modern character.[132] From the convoluted wording of the statute,[133] one learns that it grants an exclusive right to control the reproduction, by copying or casting, of: (i) any originally carved or modelled statue of human or animal figures; (ii) any cast taken from nature of any part of the body of humans or animals; or (iii) any high or bas-relief (or other sculptural work) where the representation of any human or animal figure is introduced.

If the restriction to the subject matter depicted (or imprinted) in such sculptural works clearly exemplifies the narrow and subject-specific character of pre-modern law; the way in which the object is spoken of captures even more strikingly how careful pre-

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[132] The Act's history of production also exemplifies the 'reactive, quasi-private law' character of premodern law (Sherman & Bently 1999, p. 17 note 26) as it was triggered by a petition of artist, sculptor and 'leading modeller of animals' George Garrard (Cooper 2016, p. 163; also Deazley 2008e). For other examples Sherman and Bently (1999, p. 17 f.).

[133] '[E]very person who shall make or cause to be made any new model, or copy or cast made from such new model of any bust, or any part of the human figure, or any statue of the human figure or the head of any animal or any part of any animal, or the statue of any animal; or shall make or cause to be made any new model, copy or cast from such new model, in alto or basso relievo, or any work in which the representation of any human figure or figures, or the representation of any animal or animals shall be introduced, or shall make or cause to be made any new cast from nature of any part or parts of the human figure, or of any part or parts of any animal, shall have the sole right and property in every such new model, copy or cast, and also in every such new model, copy or cast in alto or basso relievo, or any work as aforesaid, and also in every such new cast from nature as aforesaid, for and during the term of fourteen years from the time of first publication of the same'. *Models and Casts Act* (1798) p. 609 f.

modern law was in specifying the techniques used to execute these artefacts. Read with modern eyes, the sluggish prose of the act is a testament to how a generic concept of 'work' facilitates the abstraction from the tangible modes of fabricating artefacts (Sherman 2011). Note, particularly, the care with which it is spelled out that the right attaches to (is subsistent upon and may be evidenced by) any of the following: the model (in the sense of the modelled material, not some immaterial design), a cast (i.e. an imprint) for that model, or a copy of the model by any other technique. This carries over to the description of — what we would now call primary — infringing acts: to 'make … any copy or cast of any such new model, copy or cast … or [of] any such new cast from nature'. That is, despite the references to the 'genius, industry, pains and expense' of those involved in the art of making models and casts in the opening lines of the statute, creating the work and making a copy appear on an almost equal footing. Even if the very legal act of distinguishing between new (or original) models[134] (as well as authorised copies or casts thereof) and unauthorised copies or casts of that new model (or copy or cast) already grants the former a second nature.

The point worth stressing is that the logic of pre-modern law albeit already abstract did not mature into a generalised mode of thinking about and dealing with artefacts until much later. That is, one cannot properly speak of copyright until there is both a perception that various legal materials belong together in the same family and this perception starts playing a role not only in the shape the law acquires but in the reach of its ambit.

Sherman and Bently capture an exuberant specimen that puts the originality of the modern mode of thinking in sharp relief. Writing in 1891, Lord Monkswell, armed with a distinctly modern perspective on intellectual property as a discrete and generalised mode of dealing with artefacts, not only decries the lack of systematic order of the law of his time when he says that

[134] For the sake of simplicity I use models as the sole example. A more rigorous, but cumbersome, formulation would be: new (or original) models of statues, high or bas-reliefs (as well as authorised copies or casts thereof), or casts.

> the Law of Copyright seems to have been the sport of some malignant demon as it were, and we find that at present the Law of Copyright is contained in 18 Acts of Parliament, and in some ill-defined common law principles. (Lord Monkswell, 11 May 1891, 353 *Hansard col.* 438 as quoted in Sherman & Bently 1999, p. 207, note 4).

Not only that, he goes on to project this 'glorious muddle' across almost two centuries to the 1710 Statute of Anne. Sherman and Bently offer us priceless quotes such as the following where the Statute of Anne is proleptically transfigured as a piece of a larger puzzle just waiting to be discovered

> I have said that the muddle began with the Statute of Anne. One would have thought it was not very easy to begin with a muddle, because that was the first Statute passed, but the muddle began in this way … the Statute of Anne was apparently passed by a Legislature who had evidently not the slightest idea that there was any Law of Copyright in existence at all. (as quoted in Sherman & Bently 1999, p. 207).

As this exemplifies,[135] once the threshold is crossed, and the idea that any artefact capable of serial production may be treated as a form of intellectual property is fixed, all objects start appearing equal before the law.[136]

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[135] Another telling example offered by Sherman and Bently is a remark by James Lahore treating the subject-specific character of pre-modern intellectual property law (*pace* the slight anachronism) as a historical accident and thereby assuming the generalised logic of dealing with artefacts as abstract entities is an essential feature of the law, an always already there.

> There would appear to be no reason for the development or retention of a separate branch of the law dealing with design outside the Copyright Acts other than historical accident and the fact that at the time of passing of the first designs legislation the law of copyright had not developed beyond giving protection to a very narrow range of intellectual works, not at all to be equated at that time with the work of the industrious artisan. (Lahore 1971, as quoted in Sherman & Bently 1999, p. 211 note 18).

[136] This is not to deny the exclusionary effect of copyright categories and doctrines (Anderson 2009, chapter 6; Barron 2002, 2006; Bently 2009; Pavis 2016). The point worth stressing is that those very critiques depend on taking the claimed universality and neutrality of the law at its word and 'trapping it in its own ideology', to use a very fortunate expression by Edelman (1979, p. 110).

Sherman and Bently help us see that the way in which the law is perceived and later organised, reveals the generalisation of intellectual property as a mode of thinking about and dealing with a potentially unlimited set of artefacts. Moreover, their reference to modern law as 'forward looking' reveals a different dimension of the phenomenon. Legal categories start being devised at a higher level of generality with the explicit intention of remaining open to novel developments.[137] This attempt of folding future developments into present regulation is a typically modern mode of speculation. One that merges 'two distinct semantic-conceptual registers: cognitive and economic.' (uncertain commons 2013, p. 9).[138]

There is a third marker of intellectual property as a mode of thinking and managing artefacts I need to briefly address in order to facilitate the development of the argument. It results from a historical shift in the way the law approached its protected subject matter, turning away from a concern with 'mental or creative labour embodied in the protected subject matter' — that peaked during the eighteenth century debates — to 'concentrate

[137] As Sherman and Bently (1999) write: 'modern law … is characterised by abstract general categories which have the potential to apply to new subject matter' (p. 17).

[138] Intellectual property seemingly coalesces the following two senses, to the point of indistinguishability.

> Speculation has two distinct semantic-conceptual registers: cognitive and economic. To speculate may mean to contemplate, to ponder, and hence to form conjectures, to make estimations and projections, to look into the future so as to hypothesize. And it may also mean to buy and sell so as to profit from the future rise and fall of market value … to engage in business transactions of a risky nature that may yield unusually high returns in the future. The bridge that spans across the two registers of modern speculation and that binds them indissolubly to one another consists in a certain conception of the future: both intellectual or financial investments project into and stake claims on the future. Whether the lasso thrown across time is thought or money, speculation always constitutes an attempt to draw the future fully into the present … both registers index an attempt to fix and capture a potential future in and as the actual present. Such, then, is speculation: a modern technology for the absolute actualization of potentiality without remainder, a modern apparatus for erasing the future by realizing it as eternal present. (uncertain commons, 2013, p. 9).

more on the object in its own right.' (Sherman & Bently 1999, p. 4)[139] The choice of words is not the happiest, though. The suggestion of immediacy ('the object in its own right') is misplaced since, as we shall see in the course of this chapter, the object of labour deserves attention not for its singularity but precisely for being exemplary. As Miguel Tamen (2001) reminds us, in an entirely different context: 'In the structure of the exemplum, the actual values count for less than the absolute certainty concerning the possibility of deriving them from given individual things' (p. 67). So, it is not the material artefact in its singularity that becomes the subject of the law's gaze, but rather that artefact configured as that which is capable of being copied or imitated and whose value lies in the certainty that every object — seen a certain way — can be reproduced, at least potentially. We do not have a simple transition from subjective to objective assessment, but rather the object, reconfigured as exemplary, comes to act as the point of reference of legal discourse, at the expense of detailed discussions about the value of the labour it embodies.

The first two sections of this chapter prepared the ground for introducing the concept of 'closure' that is central to Sherman and Bently's analysis. As we have seen in this section, the emergence of 'modern' intellectual property is the emergence of a generalised, speculative, and object-oriented way of dealing with artefacts. With it comes a greater indifference to the peculiar qualities of different media and of the labour and techniques employed in their fabrication. If this is our modern predicament, analysing its historical construction will require an analysis of the conditions that made it possible. As we will see in the following section, by cultivating ways of evading the metaphysical pitfalls of literary property (already in the eighteenth century), legal doctrine created conditions for this development by committing the law to the separation between tangible and intangible dimensions of an artefact.

[139] '[M]ental labour and creativity was replaced by a new-found concern with a detached, neutral and closed intangible property'. (Sherman & Bently 1999, p. 200).

c. The closure of intangible property

Closure is a term that, in Sherman and Bently's (1999) hands, becomes a versatile device to account for the developments that *made* modern intellectual property law. Mapped onto the two proclaimed themes of the book (pp. 2-6), closure refers either to the subject matter ('the intangible property')[140] or to legal categories, depending on the context of use. The first sense is predominant in chapters nine and ten and linked to the effects of representative registration on the stabilisation of the subject matter of various ip regimes and the respective shift away from a concern with mental labour to a concern with the product reified in the process of representation.[141] The second dominates chapter six and is associated with the crystallisation of the legal taxonomy with which we are now familiar. And with it, the closure of the possible futures that the regulation of 'intellectual labour' might have taken and with which the law had been experimenting; thus showing there is nothing natural or immediate about the aesthetics of our current legal taxonomies.

There is, however, I submit, a third sense that is intimately connected to the first and often difficult to distinguish from it.[142] In this third sense, what comes to a closure is a certain style of arguing about the idea of property in intangibles. The term is used in this sense in two important passages, the first connected to the way in which legal doctrine moved on from the literary property debate (p. 40); the second referring to the growing acceptance of patents in the 1870s after the troubled preceding decade (p. 132). Closure here is not to do with the apparent confinement of the subject matter — in the sense of a clearer demarcation of its borders achieved by improvements in modes of registration. It is rather the tradition of 'self-styled metaphysical discussions about the nature of intangible

[140] Sherman and Bently (1999) often use 'intangible property' in this sense: 'the subject matter of intellectual property law, what we have tended to refer to as intangible property' (p. 5).

[141] This is the idea that the subject matter 'started being presented as a unitary, closed object' causing 'the related displacement of mental labour'. (Sherman & Bently 1999, p. 194).

[142] In the occurrences on pages 4, 6, 40 and 176, it is unclear whether the reference is to the subject matter of individual intellectual property right or to ideas about the subject matter.

property' (p. 4) that comes to a close, and with the stabilisation of a particular way of thinking about artefacts.[143]

The intimate connection, and even ambiguity, between the first and third senses in which 'closure' is employed can be explained by the way in which 'thinking about and dealing with intangible property' are often weaved together in the text (e.g. pp. 3, 4, 38). This ambiguity reveals the two sides of this idea of closure of intangible property: both an increasing predictability of the techniques through which intangibles are elicited from tangible records; and a growing confidence in the law's ability to deal with the idea of ownership of intangibles. This second sense comes out clearly in the following passage where Sherman and Bently discuss 'the change of attitude which lead to the normative closure of patent law'. They write

> For the most part, the development of trust in patents and its institutions was a gradual process which came with time, with the force of repetition and the familiarity that this generates. More specifically, in the same way in which the literary property debate helped to secure (and close) the normative status of copyright law, the debates as to the validity of patents helped to engender public faith in the *idea* of a patent system. (p. 132, note omitted)

As they later clarify, 'the integrity and predictability of the routine hidden operations of the Patent Registry' played a crucial role in this change of attitude (p. 132). This illustrates well the complicity between the mundane workings of intellectual property practice and legal imagination; confirming that theoretical debates can come to a closure by ways other than argument. While this theme, and particularly the role of material media, received greater development in Pottage and Sherman's (2010) *Figures of invention*, we can sense a materialist sensibility emerging here that offers a generative way of dealing with the ontological question. But I am getting ahead of myself, it is better to refrain from

[143] Surprisingly, when Brad Sherman (2011) returns to the topic, he laments the disappearance of the 'self-styled metaphysical style of thinking' (p. 121) rehearsed during the literary property debates, without acknowledging the closure identified in his work with Lionel Bently a decade earlier (Sherman & Bently 1999).

methodological considerations until I can offer the reader a sense of the historical narrative of the closure of intangible property.

Given the multifaceted character of Sherman and Bently's use of closure, it is difficult to find a place to start. Let us perhaps begin with a symptom. Take Sherman and Bently's (1999) discussion of Thomas Scrutton's *Laws of Copyright*, published in 1883

> Speaking of the period up until the middle of the nineteenth century, he said that any attempt to
>
> "reduce to principle the laws dealing with Copyright, or the similar laws of Patents and Trade-marks … would naturally commence with an investigation of the nature of property". Such an inquiry would "at once lead the student into what had been called the 'realm of legal metaphysics".
>
> Although this mode of inquiry had once been virtually obligatory, questioning the nature of intangible property in terms of the mental labour it embodied was now said to be
>
> "as fruitful in controversy and as fruitless in proportionate result as that other realm where ignorant armies clash by night: over the debatable fields in Phaenomena and Noumena, destiny and Free Will".
>
> While the nature of the intangible, and the mental labour it embodied, had long played a central role in intellectual property law, like so many others at the time Scrutton felt excused from these forms of inquiry: he was hinting there that what had once been of central importance to intellectual property law (viz., the nature of intangible property) was now regarded as vague, tiresome and irrelevant. (p. 175, notes omitted).

That this marks a clear anti-intellectual stance in doctrinal commentary is quite clear. But the point here is not to take the irrelevance of 'metaphysics' on trust from Scrutton. The point, the historical matter of fact, is that something 'disappeared from the law's horizon.' (p. 176) Sherman and Bently's contribution is central not only in revealing this

shift in doctrinal taste, attention, and sensibility, but also in examining the material processes that contributed to this transfiguration of the law's horizon. A transfiguration that constitutes the point of emergence of modern intellectual property law.

As Sherman and Bently explain, the fruitless controversy Scrutton had in mind was exactly the type of 'self-styled metaphysical discussions about the nature of intangible property' that characterised pre-modern law (p. 5) and that had reached their prime at the height of the literary property debate, where their historical narrative begins (p. 2). This story has been told and retold many times (Deazley 2004, Feather 1994, Johns 2010, Rose 1993) but a brief sketch is needed to appreciate the material dimensions of what Sherman and Bently call the closure of intangible property.

As is well known, in the wake of changes in the regulation of the British book trade that saw the lapse of the *Licensing Acts* and the passage of time limited printing rights (*Statute of Anne* 1710), a fraught and protracted judicial battle opposed established London booksellers to a new generation of ambitious Scottish printers. At the heart of this multi-pronged dispute[144] was an apparently simple question: whether after the expiry of the legal term of protection established in the Statute of Anne, the Stationers could still rely on a perpetual common law right stemming essentially from the old customs of the Stationer's Company. (Johns 2010, p. 111 ff)

Even though, as Sherman and Bently summarise, the debate 'turned on the status and nature of [perpetual] common law literary property' (p. 9) its real significance lies in that '[t]hrough the process of contesting the meaning of the Statute of Anne, the concept of copyright itself would come to be defined.' (Deazley 2008b)

If, from a contemporary vantage point, the fact that the Stationers' attempt to claim protection beyond its statutory term was once taken seriously seems perplexing — and there is no shortage of material presenting it, fairly or unfairly, in those terms (e.g. Goldstein 1994, p. 34; Horten 2011) — a brief glimpse at the opponents' strategy reveals our distance from their mode of thinking. The taste for essentialist and resounding

[144] That spilled over into the public sphere. 'This was the dispute which was conducted in the tracts, pamphlets and newspapers of the day as well as in the English and Scottish courts, concerning the status of common law literary property.' (Sherman & Bently 1999, p. 11).

arguments that questioned the very idea of property in the subject matter of a book[145] reveals that, as Deazley suggests in the above quote, it was not just the idea of a perpetual common law literary property that was being questioned but the very meaning of the Statute of Anne.[146]

And while those eminently quotable zingers against the notion of property in intangibles may illuminate many contemporary seminar room discussions, they probably sounded, at the time, utterly conservative, even atavistic.[147] But it would be a mistake to stay at this generic level of discussion. As Sherman and Bently point out, the debate also anticipated specific and mundane problems in the management of claims that might emerge from a recognition of an unregistered and perpetual right over an unsettled

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[145] Of which there is a rich collection in Sherman and Bently (1999). E.g. In *Donaldson v Becket* (1774) alone: an 'exceedingly ill founded and absurd' idea, Barron Perrott (p. 41 note 127); a property 'so abstruse and chimerical in its nature' for 'all intents and purposes to be indefinable' Attorney-General Thurlow (counsel for Donaldson, pp. 25 and 41 note 127). Lord Gardenston in *Hinton v Donaldson* (1773): 'property in nonsense' (p. 19 note 31); Yates J dissent in *Millar v Taylor* (1769): extending property 'beyond the manuscript, to the very ideas themselves' as a 'very difficult, or rather quite wild' proposition (p. 19) and describing the objects of property as 'the phantoms which the Author would grasp and confine to himself' (p. 24). The anonymous 1762 pamphlet *An Enquiry into the Nature and Origin of Literary Property* describing the task of examining common law literary property as a 'chimerical' exercise in which the author was

> 'forced to exercise a poetical faculty in giving limbs and features to this airy phantom, … supposed it to be endowed with qualities not such as really exist in it (for it is imaginary) but with those which are generally attributed to it.' (p. 26)

or Lord Karnes in *Midwinter v Hamilton* (1743-1748): comparing property 'without a corpus' to conceiving parent without a child (p. 20 note 36).

[146] As Sherman and Bently (1999) explain 'Although the Statute of Anne had specifically referred to the existence of such a property (albeit limited in time), nevertheless, many contemporaries did not believe that the statute was concerned with property "in the strict sense of the word"'. (p. 20, note 31)

[147] The proponents taking the apparently more progressive stance of arguing that 'while the notions of property which were utilised in the arguments against literary property may once have been relevant, they were no longer appropriate for the enlightened times in which they now lived.' (Sherman & Bently 1999, p. 22 f and 26. See also Anderson 2009, pp. 55-58; and Rose 1994, p. 129, making reference to the parallels between the immateriality of literary property and of paper money, another eighteenth century invention).

subject matter (pp. 19-42). Perhaps the most common concern was that of determining the scope or 'boundaries' of the property; expressed so eloquently by Lord Camden in *Donaldson v Becket* (1774) 'Where does this fanciful property begin, or end, or continue?' (as quoted in Sherman & Bently 1999, p. 25).

More specifically, opponents sensed the interest would be difficult to contain. As Sherman and Bently highlight, proponents of literary property often sought shelter from this objection by resorting to the printed surface of the text as a stabilising mechanism. Although not the essence of the subject, for that was conceived by all as incorporeal, the printed word congealed the sentiment of the author, as the marks of the page would serve as the markers of the property. While the thing of value was the author's sentiment, the right was presented as being restricted to the multiplication of copies of a book (Blackstone in *Tonson v. Collins* 1762). Taken at face value, the argument would imply that infringement could only occur in verbatim. Opponents, like Joseph Yates, were quick to anticipate a slippery slope as soon as 'colourable differences' (*Millar v Taylor* (1769) 2394) would come to be treated as inessential — as proponent William Enfield had suggested they should (Sherman & Bently 1999, p. 32 note 98; pp. 27-39). But not all were so relaxed as Enfield. Hargrave (1774) another champion of the common law right, seemed aware that once the thin membrane of textual identity was pierced in favour of a more fluid notion of resemblance, enforcement of the right would appear impractical and the subject matter itself implausible as a subject of property (p. 6). Hence suggesting a much narrower scope (p. 15-22).[148] History would, rather paradoxically, prove Yates's arguments as accurate as Hargrave's prudence unnecessary (Sherman & Bently 1999, pp. 31-35).

A second concern expressed clearly by Yates, in *Tonson v Collins* (1762), focused on the difficulties in managing an unregistered common law right whose subject matter displayed 'no indicia, or mark of appropriation' (335). He did so by stressing that the defects inherent to the incorporeal nature of the subject matter were corrected, in the

[148] Hargrave (1774) also argued that the lack of protection would stimulate a run to the bottom in terms of the quality of the books produced. Not the content, but the print type and paper (pp. 30-31) thus, presenting verbatim reproduction as the paradigmatic case of infringement.

Statute of Anne through the requirement of registration. Although Yates's argumentation evidenced greater concern with the nature of the subject matter — especially the impossibility of 'separate and exclusive enjoyment' — it hints, at points, to very practical matters: such as the impossibility of abandonment of the property as well as the difficulty in identifying the author.[149] Given these, and other arguments against the practicality of managing claims grounded on literary property, Yates and others, speculated about the opening of a 'door … for *perpetual litigations*.' (*Millar v Taylor* (1769) 2394).

In their final analysis of the literary property debate, culminating in *Donaldson v Becket* (1774), Sherman and Bently (1999) emphasise how these consequentialist arguments — either of the doctrinal sort exposed here, or more policy-oriented ones focused on ideas of public interest — came to take a much more prominent role in the final decision. Questions about the ontological status of sentiments, compositions or whatever stuff might have occupied the position of the subject matter of literary property, receded into the background. As they write

> What we witness, in effect, is the beginning of an epistemic shift within intellectual property law whereby reason, experience and wisdom were displaced by the consequential positivities that have come to characterise modern law. While it was not until the later part of the nineteenth century that these consequential arguments took on the pervasive role they now play, the debate provides a useful point of contrast between the *a priori* and the consequential modes of argument. (p. 39)

Categorical rejections of the very idea of literary property that attempted to conscript common sense by presenting literary property as fanciful, chimerical, or unintelligible proved quite limited. To borrow some famous words by Alfred N. Whitehead (2015) these arguments were inviting judges to convict the legislature of 'almost the only crime which has never been imputed to any English parliament', that is 'devotion to metaphysical

[149] Yates's reference to lack of *indicia* or *marks* of appropriation being not that different to what Sprigman (2004) calls 'signalling' (p. 501); a question of contemporary relevance especially relating to the difficulties in the use of so-called 'orphan' works (Directive 2012/28/EU; Netanel 2008, p. 205 f).

subtleties' (p. 78).[150] Although opponents helped expose what Jane E. Anderson (2009) calls the 'metaphysical dimensions of intellectual property subject matter' (p. 12); to save the Statute of Anne from the same attack would have dragged them further into metaphysics. As history would later prove, the metaphysical question was not to be answered, but rather avoided by managing its consequences.

And here we come to a central aspect of the thesis on the closure of intangible property. As we have seen, Sherman and Bently — despite the occasional ambiguity — carefully avert any explicit formulation of such historical closure as the closure of a debate. There are very good reasons for this, especially if one takes into account the moment at which Sherman and Bently (1999) were writing. A moment marked by a significant resurgence of attention to this historical moment in English legal history and a consolidation of the narrative position of the literary property debate as the point of origin of copyright law (p. 40 ff). The image they wanted to avoid was that of an explicit dispute that was closed by argument. As they write

> we wish to argue that far from resolving the problems the law experienced in its dealings with the intangible, the literary property debate is merely an example of the law working through a set of problems that arose and continue to arise in its dealings with intellectual property. (p. 42)

There would be room to perhaps find here a sense of 'closure' closer to its common use in psychology, but I would like to focus on something else. The debate did not, nor could it, settle a metaphysical question, but it helped anticipate a set of problems and

[150] As Ronan Deazley (2004) concludes from his study of the origins of the Statute of Anne

> Although a clear rationale for the Act is readily identifiable, there is nothing to suggest that the drafters, and parliament in general, had any real understanding of the various ideas with which they were dealing. Their failure to define any of the concepts central to the statute illustrates that, while they may have fully appreciated the rationale of their actions, this did not necessarily mean that anyone fully understood what was meant by a statutory property in books (p. 164).

possible responses that allowed the law to develop mechanisms to deal with such a sticky subject matter.[151]

It would be a mistake to find here the birth of modern intellectual property or even modern copyright. This was still the age of literary property. Returning to the three characters of modern intellectual property law presented earlier, I need to stress that the practice of ascribing a double nature to artefacts (the division between tangible and intangible) was still pretty much reduced to stuff printed on paper.[152] The few 'extensions'[153] there were during the final decades of the eighteenth century and first half of the nineteenth were still, as Sherman and Bently inform us, drawn by analogy: not by subsumption under a generalised notion of intellectual property or even, more modestly, copyright (p. 18). As Elena Cooper (2016) demonstrates 'from the vantage point of the

[151] Although I use expressions like unsettled, slippery or fluid in other parts of the text to convey a vaguer sense of how difficult legal materials intangibles turn out to be, in particular when it comes to delimit claims. I use sticky in a more precise sense to indicate how easy it is to get stuck in metaphysical questions if one's attention rests for too long on examining the nature of the subject matter — as this twenty-year judicial saga showed, or indeed how the first part of this thesis illustrated. To prevent it from sticking, this material has to be keep moving as part of reasoning about a specific claim. It was in this sense that I argued that the superficiality of Goldstein's metaphysical question reveals a more sophisticated understanding of ip than Drahos's, irrespective of one's political affiliations. As we shall see in more detail later, it is by routinely 'working through' problems that are known in advance that the law becomes more dexterous in handling intangibles.

[152] Books (Statute of Anne 1710) including maps and since *Bach v Longman* (1777) printed musical sheets, irrespective of the subject matter (literary, academic, scientific or practical, see generally I. Alexander 2010); and engravings (Engravers' Acts 1735, 1766, 1777). It should not be assumed this logic also marked contemporary patent law (better yet: the practice of granting patents) as Biagioli (2006) and Pottage and Sherman (2010) show. These claims are also supported by the more detailed and English-centred historical work of MacLeod (1988).

[153] The scare quotes are justified to alert the reader that the expression is a shortcut. To say that copyright (*rectius*: literary property) was extended to other subject matter, involves the anachronistic assumption that it was a generalised logic before its time. As an example, the first UK legal treatise on copyright law (Maugham 1828) covered a wide range of subject maters described as 'copyright' but still under the general title *Treatise on the laws of literary property*. A clear sense of family resemblance between the various acts covered in the volume had not yet matured into an overarching conceptual framework for the law of copyright. (Deazley 2008f, Sherman & Bently 1999, pp. 95-100).

late nineteenth century, the passage of an Act premised on uniformity of treatment to all copyright subject matter, was far from a foregone conclusion.' (p. 173)[154]

As we have seen, it took a long time before artefacts came to be imagined through the prism of copyright's categorical distinction between tangible and intangible, irrespective of their different media and modes of production. Still, the closure of literary property in the second half of the eighteenth century, remains a period of exceptional importance in the formation of modern intellectual property law. In one sense, it may not be entirely inaccurate to speak of an extension of the logic of literary property (that emerged in this period) to diverse fields beyond the making of books to virtually any object that could be imagined as susceptible to serial production. In this sense, and at a macro-level, the whole history of intellectual property could be told as a gradual folding of different types of artefacts under a logic of textuality (Pottage & Sherman 2010, p. 144), a gradual expansion of the opportunities to find sameness in different material artefacts.

So, in conclusion, it would be a mistake to see in the literary property debates the emergence of a modern idea of copyright precisely because that logic of textuality was still confined to the typographical arts: book making and analogically extended to print-making. And even then, as we shall see in the following sections, the respective intangibles were constructed in very different ways. Those localised and subject-specific forms of copy-right were yet to develop into a generalised and speculative/forward-looking mode of dealing with artefacts. Still, it is important to highlight two crucial ideas, that gained common currency during the debates and that would come to play a decisive role in the expansion of this logic to other sectors. Namely, future profits as the measure of literary property and labour as the source of its value. As I will argue, it is in the appeal to these mundane concerns we can witness a vernacular metaphysics in the making.

[154] Such a legal taxonomy would only materialise with the passage of the 1911 Copyright Act.

d. Design as a practical abstraction

While the literary property debate usually occupies a central role in accounts of the formation of a modern logic of intellectual property in Britain, the roughly contemporary emergence of claims to the protection of engravings has not escaped the attention of copyright historians and commentators. The 1735 pamphlet titled *The Case of Designers, Engravers, Etchers, &c.* — part of the lobbying campaign initiated by a small group of artists and engravers including William Hogarth, John Pine and George Vertue and that would culminate in the 1735 Engravers Act (Hunter 1987) — is often credited with being the first explicit articulation of the immateriality of ip objects (Deazley 2008a; Hick 2011, p. 187 note 9; Rose 2005, p. 63), owing to the insistence on the distinction between 'paper' and that which gives it value. Namely in these two passages

> Whatever Right an Artist has to the Sale of his own Print arises from this: He has by his own Industry and Skill given his Print whatever Value it has above another common Piece of Paper; …
>
> He [the copier] does not intend to steal the very Paper (which if he did, tho' it is not of near so great a Value, he knows he should suffer for it) but he steals from him [i.e. the 'industrious and skilful Artist'] every Thing that made the Paper valuable, and reaps an Advantage which he has no more Right to, than He, who counterfeits a Note of Hand, has to the Money he receives by it. (Case of engravers, p. 4)

Here we have the ontological crossing from paper to the thing that makes it valuable; value conceived as monetary profit; and even an analogy with other speculative yet mundane activities such as signing a promissory note. What interests me, however, is not the claim to originality, nor the simple idea of an intangible value that is abstracted from the paper. What interests me is the specific way in which that crossing is made.

So, what is this thing that gets abstracted from the paper? What is this metaphysical 'thing of value'? Ronan Deazley (2008a) commenting on this document and the Act it

engendered, suggests it is 'the image'. Mark Rose (2005, p. 64), closer to the wording of the pamphlet, identifies it with the 'Design'.[155]

Despite this terminological difference, Rose reads the reference to 'design' in similar terms to Deazley when he hears in it 'platonizing overtones'. Here, Rose takes 'design' to echo the Italian Renaissance idea of *disegno* as the 'intellectual or even spiritual as opposed to the merely manual component of art' (p. 64) a distinction upon which self-fashioned artists sought to rise above the condition of mere craftsmen. This is not the place to question the reception of the conflicting legacies of the Renaissance in its representation of artistic work (Panofsky 1968; Siegert 2015), nor to question the claim that a Neo-Platonist reading of *disegno* might still/already resonate with a 1730s audience.[156] To rephrase: the point is not to say that 'design' did not mean that, but rather to point out that it probably meant so much more that reducing it to an intellectual form would inevitably obscure some of the most interesting aspects of the argument put forward in *The Case of the Engravers*.

Following Bernhard Siegert (2015) 'design' — in the sense developed during the Italian Renaissance — has to be understood as 'the double nature of *disegno* as [i]

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[155] The word 'image' appears nowhere in either the pamphlet or the Act. The word invariably used is 'design'. Indeed, the pamphlet identifies: 'One Artist's having in its power to copy the Designs of another is, therefore, the true source of all grievances' and specifically asks 'to make it punishable by Act of Parliament for any one to copy the Design of Another.' (Case of engravers, pp. 4 and 5, respectively).

[156] The difficulty in deciding upon the adverb comes from the recognition that although hierarchies between liberal and mechanic arts had already been rehearsed during the Italian Renaissance, they became much more rigid by the second half of the eighteenth century. In the English context, the creation of the Royal Academy in 1768, under the direction of Joshua Reynolds is a useful marker to situate the crystallisation of the division. As James Ayres (2014) writes

> In Early Modern Europe many of the artists who wrote about their vocation [including Vasari] were not above describing the rudiments of their craft. In contrast a painter like Reynolds was so anxious to emphasise the intellectual dignity and social status of easel painting and painters that he elided the details of the "mechanic" parts of his art (p. 5).

On this theme also Puetz (1999, p. 233 ff), and Fyfe (1985, p. 201 ff).

lineamento and [ii] mental projection (*speculazione di menta, invenzione*)' (p. 123)[157] What will become apparent once we carefully analyse how the word 'design' is deployed in the pamphlet, with the minimal aid of some contextual material, is that the metaphysical operation necessary to conceive property in a design was much cheaper than the expensive task of having to summon up the spectre of Plato in support for a petition of small businessmen.

Although the suggestion that 'design' might still carry in the 1730s the classical sense that had been forged in the discourses on art of the Italian Renaissance is entirely plausible — especially the idea that design is the source of the arts of painting and sculpture — the pamphlet establishes an even clearer link between the art of designing and a notion of surplus value. This, as we will see presently, is done at two levels that double as the two main senses in which the word is used in the pamphlet.[158] First, 'designing' is an art upon which the fine arts but and all the 'Inferior Arts' involved in luxury manufacture depend.[159]

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[157] The history of the English reception of the Italian notion of *disegno* during the period immediately prior to the one under study is a complex one, as Michael Baxandall (2003) vividly shows. And even though he stresses that the effort to disambiguate and define the extraordinarily mobile, polysemic and generative notion of *disegno* is very much an 'anglophone agony' (p. 84) he comes to the conclusion that despite the efforts during the English Renaissance to separate drawing (as graphical representation) and design (as scheme or plan) were far from successful. Hence my reluctance to accept Rose's suggestion that even in its plainer English use, 'design' might have a clear an unambiguous reading fully detached from graphic execution.

[158] Curiously, in its first occurrence the term is used in a very different sense: as plan, project or scheme. Written as a letter to a member of parliament, the pamphlet urges the addressee to take the opportunity of promoting a 'Design for the Encouragement of Arts'. Whether or not intended as a play with 'Encouragement of the Arts of Designing', it evidences the pervasiveness of the word 'design' in the public discourse of eighteenth century Britain (Craske 1999).The word 'Design' is again used in this sense on p. 3 describing the intentions of printshop owners.

[159] E.g. 'the Arts themselves, of Designing, Engraving, Etching, etc. and the whole Train of inferior Arts (which depend upon Designing) where Taste and Fancy are all requir'd' (Case of engravers, p. 1); 'Designing is the Foundation of Painting, Sculpture, Architecture, etc. and in proportion as Designing is encouraged, and improved, these must of consequence improve with it: And all the Train of inferior Arts which depend upon Designing; all the Ornaments of Buildings, Gardens, nay of Furniture, Dress and Equipage, where the Justness of the Outline, and the Fancy of the Pattern,

And secondly, 'design' as the tangible product of the artist's labour.[160]

This reading is very much in line with how historians, more interested in the history of commerce than in the history of theoretical speculations over the nature of art, have treated the notion of 'design' in eighteenth century Britain. A period in which 'design' became a matter of industrial policy and something of a national obsession owing to a perceived imbalance in the luxury trade. In the first decades of the eighteenth century, and without shedding its association to pattern-making,[161] 'design' came also to stand for that quality that French goods were thought to have but English ones lacked (Berg 2005, chapter 3; Craske 1999, pp. 190-205; Puetz 1999).

Both senses of the word are relevant to the pamphlet and this productive ambiguity seems to form an integral part of the economy of an argument that went something like this: good draughtsmanship generates good design which generates competitive advantage in the luxury market. But while the fragile link between good draughtsmanship and good design was topical at the time (Puetz 1999, p. 232 ff) and likely to be persuasive, the case was not so clear in showing how restricting reproduction of designs in print would serve the cause of good draughtsmanship. Particularly, why protecting the printed image instead of a graphical composition abstracted from its medium, would offer the proper encouragement of the arts of designing. This justifies that, without losing track of the rhetorical synergy between both senses of design, we spend a couple of paragraphs examining the latter sense in a bit more detail.

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given the Neatness and Elegance to the Work, will daily receive their share of Improvement.' (p. 7)

[160] E.g. 'When any of these Artists have finish'd a Design, which has taken them up Time, and Pains, and Thought in the Execution, and procured at a considerable Expence Engravings, or any other Sort of Prints from their Designs' (Case of engravers, p. 1). While 'execute' is the verb most commonly associated with 'Design' in the pamphlet, at other points 'Designs' are: 'taken' from Portraits, Paintings, Buildings, or Gardens — not in the sense of 'stolen' — but in the sense of 'made after' (p. 4).

[161] Not in the modern sense of a repeatable graphic arrangement but the more material sense of a model to be used in the execution of decorations (e.g. textiles, tapestries and wallpapers) or three-dimensional artefacts like items of furniture or ceramics. (Puetz 1999, pp. 221-223). This has roughly the same sense as its Anglo-French root word "patron" as 'a maquette or a model for a work of art' that only later came to signify the client. (Ayers 2014, p. 5)

There are at least two ways in which 'design' may be understood within the logic of the argument. The idea could be that hindering copies would stimulate the introduction of novel designs, since it is clear that novelty, variety and inventiveness of designs were seen, at the time, as key to compete with French manufactures in the luxuries market (e.g. Berg 2005, p. 91 ff ; Puetz 1999, p. 218). But the argument could also be that clamping down on the practice of copying designs would liberate the workforce from such menial jobs and encourage the development of the craft or skill of good draughtsmanship necessary to applied industries or arts beyond printmaking. That is, the capacity to 'translate' a picture invented or copied into a printed sheet (Fyfe 1985). Luckily, we do not have to decide which sense is the correct one: in a sense, both are.[162] But what is interesting is that 'design' means slightly different things in each argument. In the first sense design is closer to *invenzione*, in the second to *lineamento* or actual drawing (Siegert 2015, p. 121 citing Wolfgang Kemp; also Osborne 2003).

The first sense is compatible with Deazley's and Rose's reading; but not the second which is brought out clearly in the more detailed passages of the pamphlet that describe how a design is copied

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[162] As an example of the first argument

> Not only the indigent and laborious, but the sprightly and inventive Genius will be permitted to enter the Profession. Instances are plenty, of young Men of Taste and Genius, who have not been suffered to indulge their Love of Designing, and been almost beaten from their Pencil, by those who know very well … how little is to be gained by the Business. (p. 6)

As an example of the second

> One Artist's having it in his power to copy the Designs of another is, therefore, the true source of all the grievances, which at the same time that they have oppressed the most skilful and industrious artists, have sunk the Arts themselves into the low condition which they are at present in. If it be considered what it is that given an Artist the right to the profits of his own designs, prints, etc. (p. 4)

Note especially the contrast between 'the sprightly and inventive' and the 'skilful and industrious'; and the way in which 'designs' appear side by side with prints in the second passage, but not the first. The reason I do not emphasise the reference to 'Genius' in the first passage is that it seems more a reference to temperament than an anticipation of a Romantic notion of *the* Genius (Williams 1960, p. *xiv*)

> in taking a direct Copy of a Design, there is absolutely no Skill in Designing requir'd. It is to be done mechanically, by one who knows nothing of the Business. He who can only follow with Tool a Line already drawn, can by colouring the back of a print, and placing it properly on a Plate, that is duly prepared to receive that Colour, trace out and delineate the Out-lines, and every remarkable Feature, nay each individual line of the Print. … with no skill at all, with little or no pains, in one day's time at most, he defrauds an industrious and skilful artist of the fruits of some months of labour and invention? (Case of engravers, p. 4)

What is being described here is essentially taking the finished print as a pattern for tracing over with a burin. This process is explained in the 'processes and materials' section of Hind's (1963) classic history of engraving as 'transferring the design'.[163] A very similar technique is also described by a French engraver active in the mid eighteenth century, for transferring the manuscript in the engraving of maps. In this method a 'transparent paper, well oiled' is placed 'on the design, holding it tight so it doesn't vary at all.' (quoted in Pedley 2005, p. 49). Hardly something one would expect doing to an intangible. Leading to the conclusion that design could clearly mean the pattern to be cut into the prepared plate.

But design seems to have been conceived in slightly more abstract terms too. This is made clear when the pamphlet argues for protection against, not only *facsimile* reproductions but also scaled copies. This is an important technique of abstraction from the surface of the print to the geometrical shape of the design. But again, the practice is defined with close attention to the technique of reproduction

> They have likewise Mechanical Ways, by the Assistance of Rulers, etc. to take Copies of Prints, both larger and smaller Sizes than the Original;

[163] 'The artist-etcher will often work without the aid of any design laid on the surface of the ground. [i.e. the prepared plate coated with some varnish or 'ground'] But if design is needed it can easily be transferred by covering the back of the thin paper, which contains the drawing, with red or other chalk, and pressing the design through on to the blackened ground. There are, of course, various other means, a pencil drawing on thing paper laid against the grounded plate and passed through the press being an expeditious method.' (Hind 1963, p. 6)

> by which Means they can in a very short Time furnish out different Editions of a Print in all the sizes they think likely to please. (Case of engravers, p. 4)

Now compare the types of reproduction described above with another reproductive technique mentioned earlier in the pamphlet

> Is there any Original and valuable Painting which any artist has designed? A Second, and a Third, and as many as will, have an equal Right to make Designs of the same Picture. (Case of engravers, p. 4)

There is a sharp difference between copying the design by tracing over or scaling the print and making a design after another one.[164] Or to put it differently, the design of the painting is not the same as the design of the print: even if they are of the same 'Picture'. Design as it was conceived here was just not something that could travel between different media.

And it is not difficult to see why: whereas tracing over a *lineamento* leaves no scope for interpretation, drawing painted figures with lines that are designed to be cut is, as Gordon Fyfe (1985) puts it: an act of translation.[165] This is also what explains that in the general division between 'the profession' and 'those who know nothing of the business' there is no hesitation in bringing together 'those who Invent, and those who take their Designs from Portraits, Paintings, Buildings, Gardens, etc.' (Case of engravers, p. 3)

The originality of designing (even when not inventing) is also clearly articulated in the instructions on how to spot a direct copy

> when a Print is copied directly from another, it follows from the Method of making such copy, that the Manner must unavoidably be the same, the Shape of every Part must be exactly the same, and the Parts

[164] Deazley (2008a) reads this a 'concession' and sees in it the origins of the idea/expression dichotomy. This reveals as bias in favour of disembodied images, rather than designs carved with graver or burin. It seems clear from the wording of the pamphlet that the skill in question is that of an engraver, not an inventor of pictures.

[165] Conceptually the question is not very different from what motivated Richard Wollheim's (2001) critique of formalism in aesthetics.

> will all be kept at the same distances in the copy as the Original; and consequently there will be so many Marks of its being a direct Copy, distinguishable by the most common Eye, that it will be impossible not to be discover'd when compared in Court with the Original. (Case of engravers, p. 5)

What is quite remarkable in this passage is that while resorting to pretty much the same imagery as writers did in their discussions of plagiarism, especially dehumanising the copyist into a machine (Groom 2010, p. 287) the concerns are very different. Although at other points in the pamphlet design acquires a connotation less associated with craft skill, in this part of the discussion what is at stake is really the execution of the pattern that will be cut into the plate, not the pictorial composition.

Ronan Deazley (2008a) in his commentary overlooks the technical detail in which direct copying and scaling are described. This leads him to place a disproportionate emphasis on originality of composition. He writes, 'It was self-evident to the engravers that one person's design would be just as unique and original as his handwriting' even when taking up the same subject. To be fair, there is reference to the uniqueness of handwriting but only after the passages cited above and clearly intended as a point about evidence. The reference comes as a reassurance that this new right would not increase levels of litigation or lead to complex factual analysis

> no one can be supposed to be blind to his own Interest as to prosecute another, unless he can evidently prove, that the other's Design has all these Marks of a Copy; which (if not more so) are certainly as apparent to every common Eye … as the Proofs are of a counterfeited Hand when compared with the Original Hand-Writing; for these likewise depend upon the Manner, Distances and Shape the Strokes which compose the Letters. (Case of engravers, p. 5)

Read as a remark on evidence, 'manner, distance and shape' are to be understood in very literal terms and as references to the graphic line and not, as Deazley suggests 'the form or the style in which each [work] was rendered'. The very same argument, and the very same sensibility to the material, is apparent in Evelyn (1769) when he writes 'tis almost impossible to imitate every hatch, and to make the strokes of exact and equal dimensions,

where every the least defect, or flaw in the copper itself, is sufficient to detect and betray the imposture.' (p. 114)

I hope I did not push things so far as to eclipse the other sense of design, the one closer to *invenzione* or even image. While the passages just quoted seem clearly written in the voice of a master engraver, the truth is that the final version of the Act was less generous to engravers, refusing protection to those who did not 'invent' as well as design their own prints.[166] This restriction, that was not envisaged in the petition, was the result of amendments in the House of Commons (Hargraves 2005, p. 49 f) and had the effect of excluding the majority of the profession. There may be some truth in the suggestion that the text may have encapsulated a tension between the aspirations of George Vertue — a traditional engraver who would later criticise the narrow scope of the Act — and of a more versatile picture maker like William Hogarth (Hunter 1987, pp. 137-139). The 1766 amendment would extend protection to the translators of pictures into prints, as Vertue had intended. In the wording of the 1766, any person who shall

> Engrave, etch or work in Mezzotinto or Chiaro Oscuro … any print taken from any picture, drawing, model or sculpture, either ancient or modern, shall have … the benefit and protection … in like manner, as if such print have been graved or drawn from the original design of such graver, etcher, or draftsman. (*Engravers' Act* 1766, p. 412)[167]

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[166] The wording of the Act is not entirely clear, but Deazley's (2004, p. 92 f) reading seems correct. Part V of the Act grants the engraver John Pine of London reproduction rights over a planned series of engravings after a set of tapestries hanging in the House of Lords. The exceptional character of this privilege transpires from the statutory formula granting Pine a benefit 'in the same manner as if the said John Pine had been the *inventor and* designer of the said prints.' Emphasis added, since nothing in the act seems to suggest that Pine would not have been considered the designer of the prints.

[167] Deazley (2008a) characterises the engravers excluded by the 1735 Act, and now covered by the amendment, as 'mere copyists' (note 18). This is a clear departure from the way in which the pamphlet characterised the skill of taking (as opposed to inventing) a design. This narrow sense of 'originality' also explains why Deazley overlooks the technical detail in which 'mechanical' (i.e. unskilled) copying is described in the pamphlet.

What emerges from this reading is that 'design', although not necessarily restricted to the act of drawing the pattern that would be cut into metal, had not shed its material connotations or better yet its medium-specificity. 'Design' in this context should not be understood as an abstract arrangement of visual elements that would keep its essence even as it travelled between different media. David Hunter (1987) in his now classic treatment of the topic opted for the much soberer and more accurate formulation of the object of protection: 'the particular expression of a design *by engraving*' (p. 133, my emphasis). Elena Cooper (2016) also makes clear that, even if the 1735 Act gave painters the right to control prints taken form their own works 'copyright subsisted in the print and not the painting' (p. 164); which also explains why Delabere R. Blaine (1835) would propose amending the law so that: 'copyright should be granted in pictures as such, and without reference to their being engraved.' (p. 55)[168]

The conclusion to draw from this is that we do not need to go as far as Mark Rose (2005) in assuming the pamphlet accompanying the campaign that ended up in the passage of the 1735 Engravers' Act was running the protocol of modern intellectual property law

> The intellectual machinery through which copyright was extended to engravings thus involved an act of abstraction and idealization. The material processes through which an engraving is produced were elided and the engraver became a designer, one who created something through mental rather than physical activity. In presenting the act of engraving in this way, the pamphlet anticipated the idealizing process through which some 150 years later copyright was extended to another image-making technology, photography. (p. 65)

While it is true that 'design' is an abstraction — in its irreducibility to a specific physical object — not all abstractions need to go the full way of this imagined Platonism. As we

[168] 'Picture' also seemed a particularly ambiguous word. In Blaine's sense it seems closer to our sense of 'image', but contemporary uses seemed to restrict it to paintings (and not their abstracted visual content) as in the following dictum by art critic F. G. Stephens (1859), acknowledging the popularity of prints in Victorian Britain 'Where pictures cannot go, the engravings penetrate.' (as cited in Bayer & Page 2015, p. 120)

have seen 'design' was often used in a very material sense, with only the practice of tracing over or scaling a pattern considered akin to a 'mechanical act'. Indeed, what these passages seem to suggest is that there was a very specific modulation of the semantic field of 'design' when applied to print-making, which is confirmed by other sources. Consider this apparently bland description appearing in the *Oxford Dictionary of the Renaissance* (prints, 2005)

> In typographical and artistic usage, a print is a picture *or design printed from a block or a plate*. The impression on the paper can be made from a *design on a* raised *surface* (e.g. woodcut) or a recessed surface (e.g. drypoint, engraving, and etching) or a flat surface (e.g. lithographs) … Methods that create recesses in the surface that are then inked are called intaglio and they differ in the means by which the *designs are incised* in the metal plates. (my emphasis)

The description goes on, covering various methods (e.g. 'in etching the design is bitten into plate with acid') and the sense is clear. Whatever else design might also mean, it means, in this very specialised sense, the topography of the plate or block: the design is the accident in the landscape of a tangible plate. But design also means — and this is the first use — the image (or design) that results from pressing plate and paper together. Design refers both to the cause of the image and its effect (the image itself). Hind (1963), albeit offering a more precise terminology, also captures this idea of design as that which results from the mutual accommodation of plate and paper. This is clear from the way in which he distinguishes between techniques of intaglio and techniques of relief. In the former 'the line … engraved possesses a positive value and stands for the design itself' whereas in the latter 'the lines … are engraved merely as negatives to leave the design in relief' (p. 1). The design is here the trace left by the accidents carved into or off the plate or block.[169]

But if 'design' has these clear topographical and typographical senses when used within the context of printing images, a separate question may be: who 'designs' the design? And to answer this question we have to place 'design' within a line that goes from 'invention'

[169] This is not, however, the only sense in which Hind employs 'design'.

to 'cutting'. The following discussion in Jackson and Chatto (2009) about the attribution of the woodcuts in a fifteenth century book printed in Verona, offers a good illustration of the distinction

> Maffei has conjectured … that the cuts in question were executed by his [artist Matteo Pasti's] hand. If such were the fact, it only could be regretted that an artist so eminent [as painter, sculptor and goldsmith] should have mis-spent his time in a manner so unworthy of his reputation; for allowing that a considerable degree of talent is displayed in many of the designs [attributed to Matteo Pasti], *there is nothing in the engraving, as they are mere outlines, but what might be cut by a novice*. (p. 228, my emphasis)

Now, if we conceive engraving as a mechanical reproductive activity, we may be puzzled by the comment. Note that the engraving is judged poorly not because the *lineamento* is poorly executed, but because there is nothing else besides the correct rendition of the outlines (that any 'novice' was expected to execute properly). Also, if we take the design to mean pattern — which makes sense considering the intimate way in which the 'design' and the 'cut' are related in the passage — and if the design is praised in spite of the poor execution of the print, we may conclude that an eminent artist would be expected to add something to the outlines (as we know already, another possible sense of design). In fact, the quality of the *lineamento* as such was probably easier to assess given the austerity of the cut. To put it shortly: the quality that was missing in these woodcuts was precisely what a master engraver would be capable of adding to the design: the skill in translating picture into print.

John Evelyn (1769), in his short treatise on engraving: *Sculptura*, identifies this missing element as colour. Colour, understood in classical terms, not as pigmentation 'but a certain admirable effect, emerging from the … union of light and shadows' (p. 112 f) that complements the *disegno* or outline. As he continues to explain, the 'colour' is something that is up to the engraver to evoke even when copying, rather than inventing the picture

> And this it is which has rendered so difficult to copy after designs and paintings, and to give the true heightenings, where there are no hatchings to express them; unless he, that copies, design perfectly

> himself, and possess more than the ordinary talent and judgment of gravers, or can himself manage the pencil. (p. 113)

This is part of a longer argument about the need to teach engravers better drawing skills, including perspective and the art of casting shadows, but it marks out clearly what is missed when one looks at engraving as a simple technique of reproducing images. Evelyn writes

> The principal end of a GRAVER that would copy a design or piece composed of one or more object, is, to render it correct both in relation to the draught, contours, and other particularities as to the lights and shades … so as may best express the relief; in which GRAVERS have hitherto, for the most part, rather imitated one another, than improved or refined upon nature; some with more, some with fewer strokes; having never yet found out a certain and uniform guide to follow in this work, so as to carry their strokes with assurance, as knowing where they are to determine, without manifestly offending the due rules of perspective. (p. 107)

We should not be distracted by the perceived lack of creativity Evelyn identified in the 'gravers' of his time, what is important here is that he identifies a *spielraum* for original, that is, underdetermined contribution by the engraver. Even in copying a design ('the draught, contours and other particularities as to the lights and shades') the graver has the role of picturing the relief in a binary medium that only allows a positive and a negative, and from which tone, solidity, weight and shade have to emerge.[170]

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[170] For a sense of the complexity of this operation, consider this passage

> it shall be necessary to admonish, that shadows over dark, too deep and sudden, are not commendable in these works … and therefore hatchings expressed by single strokes, are ever the most graceful and natural, though of greater difficulty to execute, especially being any ways oblique; because they will require to be made broader and fuller in the middle, tan either at their entrance or exit, and address much more easy with the burin and the pen than with the point (Evelyn 1769, p. 111).

Several other examples can be found in Fyfe (1985, p. 406 ff).

As Gordon Fyfe (1985) points out engravers, especially reproductive engravers, had always occupied an ambiguous position which is nicely encapsulated in the practices of attribution typical of the medium. Even if the name of the master engraver often appeared alongside that of the painter and not simply vanished under its authority, the mention of the painter in the product of the engraver's hands[171] 'acknowledged … that pictorial authority resided elsewhere' (p. 402) Quite aptly, he suggests translation as a way to capture the craft in '[the] making a printed image … [which] is not the simple transcription of the visual qualities of the object onto a printed surface' (p. 406). Given the status of translations as the quintessential 'derivative works' in copyright law, it is an apt expression to articulate the engravers' originality and the separation between a print and the picture after which it was made.

The institution of the Royal Academy (1768) together with the subsumption of the labour process of printmaking under a more industrial model during the nineteenth century would do much to engrain the perception of engravers as mere copyists and the consequent lack of appreciation to the art involved in this operation of translation (Bayer & Page 2015, p. 122 ff; Beegan 1995; Fyfe 1985, p. 410 ff). But it would be a mistake to project ideas that would only solidify later in the century, and a division of labour that would only develop in the following century, into the imagination of the petitioners.

However disappointing it may be to the copyright historian, and however difficult it may appear to the theorist, the 1735 pamphlet does not easily give in to a schematic division between the manual act of cutting and the intellectual act of designing; nor can the object of protection be dematerialised to the point of a visual form independent of its material carrier and mode of production. And yet, there is no question we are dealing with intangible property, and that this is clearly understood by the actors. What this suggests is that there are perhaps as many techniques to abstract an object as there are to reproduce an image. Detail matters.

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[171] I deliberately use the expression in the plural to signal the collective nature of print making executed in workshops. As Guichard (2010) points out for the case of painting, it was common for several hands to be involved in the execution of a painting signed by the Master's hand. This was equally applicable to artisan workshops involved in printing (Beegan 1995).

To sum up, to conceive of property in a design requires two important leaps. The first, a crossing between paper, plate, and the intangible entity whose flickering existence resides awkwardly between these two materials. The second, a hierarchical division between the craft of executing a medium-specific pattern and that of cutting it into metal from a ready-made template (one that cannot be neatly captured within a manual/mental distinction).

Analytically they sound like quite momentous steps, but nothing that would surprise a person who had once glimpsed into the workshop while counting her coins to pay for the commodity. This is a conceptual operation that requires much less from the imagination, than the idea of subscribing one of Hogarth's prints or of producing to a speculative market.[172]

In all cases we are talking about the projection of a material artefact that is presently absent. An object figured in abstraction from its materiality. The important question is thus how ideas about these things are crafted. The example of the 1735 *Engravers Act* shows that in that localised universe of print, such ideas were forged in very material terms. This slippage into metaphysical territory did not require much from the imagination. Any basic idea of seriality invites a notion of identity in difference that cannot be reduced to matter (Baudrillard 2005, pp. 150-160). The shape this 'identity' will take cannot, however be determined in advance, it has to be crafted. What this shows is that the abstraction required by a logic of intangible property is entirely compatible with different modes of imagining the absent value. As this example illustrates, the logic of intangible property requires the thing of value to be immaterial (i.e. conceptually distinguishable from the material support), but that it can be so constructed from a material model.

That the value of a design exceeded the marks left on the paper seems to have been an easy assumption to make given the properties of the medium. This did not, however,

[172] It would be interesting to experiment with Bernard Siegert's (2015) thesis that 'design promotes speculative action; to design is itself a speculative act, to operate at one's own risk: It indicates the emergence of subjectivity from operations of borrowing, investing, planning, inventing, betting, reinsuring, and risk-spreading' (p. 136) and see whether it might help explain the way in which Hogarth related to his mass-produced narrative pieces (Bayer & Page 2015, p. 64 f).

require a commitment to design as an idealised form. The term 'design', given its rich semantic possibilities, served as a stable object to be put forward as the candidate for legal protection. However, given its dependence on techniques of engraving, the argument could not easily scale up and expand as a generalised logic for conceiving property in images or pictures (in a more abstract sense) and hence the contrast with modern ways of construing 'artistic' copyright.

In the following section, I will examine a very different way of construing the intangible in the context of literary property. While there are some continuities with the types of arguments drawn upon in the engravers' petition (namely: profit and labour, rather than philosophical metaphysics), the task for the advocates of literary property required different rhetorical and conceptual techniques.

e. Blackstone's radical rationalism

Even if devotion to metaphysical subtleties cannot explain the emergence of intangible property, eighteenth century debates rendered the metaphysical dimensions of literary property visible. As Ronan Deazley (2004) concludes from his study of the origins of the Statute of Anne

> Although a clear rationale for the Act is readily identifiable, there is nothing to suggest that the drafters, and parliament in general, had any real understanding of the various ideas with which they were dealing. Their failure to define any of the concepts central to the statute illustrates that, while they may have fully appreciated the rationale of their actions, this did not necessarily mean that anyone fully understood what was meant by a statutory property in books (p. 164).

Things appeared very differently in the attempts to articulate a convincing case for the legal protection of prints, modelled after the Statute of Anne. The object of protection was given a very specific name 'design' and clearly separated from the paper on which it was pressed. But we should not get too carried away with these conceptual developments. Design was a very mobile and equivocal term, and the scope of protection

was formulated according to a very material model. Furthermore, it was not speculative philosophy that rendered the argument appealing. Rather, it was the language of profit that carried most of the conceptual weight of the argument. Such an appeal to future profits benefited, of course, from a new understanding of property that also played a part in the development of the case of common law literary property: property seen as thing of value rather than object of possession. But the case of the engravers was easier considering they were petitioning parliament to enact a new law to entitle engravers (or their patron artists) to profit from the labour of their own (or their hired) hands. Advocates of common law literary property, on their part, had to show not the desirability of protection, but its actuality. That is, irrespective of what the statute said, literary property had to be always already there.

The different task ahead of these advocates explains some of the differences between the form of argument developed at the height of the literary property debate, and the one rehearsed in the 1735 pamphlet examined in the previous section. There were also similarities, essentially: money as the agent for distilling the intangible thing of value from the tangible paper; a Lockean appeal to entitlement to one's labour; and an attempt to distinguish between skilled and unskilled labour (in some form or other). All of these evidencing a distinctive mode of speculative thinking.

In this section, however, I want to focus on another dimension of the appeal to labour and profits in the construction of intangible property by examining a different way in which the value of 'authorial' contribution was discussed. The discussion will follow the arguments in *Tonson v Collins* (1762) to illustrate how Blackstone imagined a division of labour that differed considerably from the one depicted in the 1735 pamphlet and in so doing liberated the object of protection from the material limitations evidenced in the pamphlet examined in the previous section (namely the idea of modelling infringement not on the copy of an immaterial expression but its tangible inscription).

If, as we have seen, the engravers could claim moral entitlement to the profits of their labour — presenting copiers and their commissioners as the lowest of robbers — in their plea for legal entitlement, this separation between moral and legal entitlement was not available to the advocates of common law literary property. Entitlement had to be one

and the same; which opened the door for accusations of circularity. This was precisely what Joseph Yates did in *Tonson v Collins* (1762) while concluding his first argument against common law literary property. Yates puts his finger on the apparent circularity of Blackstone's appeal to the protection of the author's labour by pointing out that 'It is begging the question, to say, that the law will protect what is acquired by the labour of the author.' (p. 334) And the point is simply that while a manuscript can be physically controlled by the author, its content cannot. Therefore, in the absence of a statutory mechanism to confine the subject matter, there would be literally nothing for the author to hold on to. That is, the common law was being asked not only to recognise the legitimacy of the alleged owner's control over the subject matter, but in a sense to invent it.

But there is a second dimension to Yates's argument. Blackstone's neo-Lockean argument seemed not only circular, but ambivalent too. If labour were to be rewarded, what say could the Author have as to 'The books sold [which] are not, nor ever were, the property of the plaintiffs.' After all, 'The paper and ink belonged to the Defendants.' (p. 334) But he goes further

> The Plaintiffs can claim no Right to the Profits made by the defendant, because they accrued in the way of his trade. Their property, if any, is only in the incorporeal Ideas, and not in the Profits, to which another Man [*sic*] applies them … The business of a printer is a lawful trade, and where there is no property, but what merely subsists in idea, no man [*sic*] can be guilty of a private wrong, by merely following his trade. (p. 334)

Blackstone's response is two-fold. He first tries to dismiss the question on a technicality that basically reaffirms the circularity of the argument;[173] but his real defence is more complex. As he explains, replying directly to Yates's argument

[173] 'As for the profits which the defendant has made in the way of his trade, we claim them not; this is not a bill for an account, but for an action for disturbing us, in making that profit in the way of our trade, which we say we have a right to do. *Sic utere Jure tuo, ut alienum non laedas*' (p. 341) In other words: make use of what is yours, but without harming others. Evidently, the harm depends on a question of entitlement that is yet to find its feet.

> The profit must arise from … [the author's] sentiment, from the subject matter contained in the Book. It arises not in the way of trade, by the bare manufacture of printing; For the paper when printed on, abstracted from the learning contained in it, is rendered less valuable than before. (p. 342 f)

This exchange reveals, once again, the ease with which a dispute about profits can slip into a dramatic battle between the gods and the giants. Yates clutching the stained paper to his chest, as Blackstone turns his gaze to the true value of which the paper is but an appearance. And yet, there is nothing 'spooky' about this value. Blackstone shows an almost disconcerting capacity to combine the abstract with the mundane. This will become clearer once we examine how he prepared the ground for this metaphysical reversion that gave plausibility to a property that 'could be stolen through a pane of glass and carried off by the eye' (Sherman & Bently 1999, p. 20).[174]

As Deazley (2008c) explains, one of Blackstone's most significant innovations when he took up the case from Wedderburn — who had counselled the plaintiffs during the first reading (*Tonson v Collins* 1761) — was to abandon the simplistic claim that the property of the authors lay only in the profits to be reaped from future sales. Thurlow — counsel for the defendants before Yates — had seemingly gained the upper hand by insisting that 'profits of publication must presuppose property in the thing itself'. As is well known, the author's sentiments would be called to perform that role.[175]

But this is not to suggest that Blackstone simply abandoned the notion of monetary profits. He still insists that the value of a subject matter of property 'consists in its capacity of being exchanged for other valuable things.' (*Tonson v Collins* (1762) 322) The price can thus be asked to resolve the doctrinal question of measurement — of how the harm

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[174] This expression seems to have its origin in the campaign for the amendment of the Calico Printer's Act during the 1840's (Kriegel 2004, p. 244). Although the imagery was employed to impress an idea of immateriality, this rhetorical figure had a very concrete origin in the practice of imitative printers sending draughtsmen to London to spot new designs exhibited in shopwindows. As we shall see in the final chapter.

[175] For Blackstone value originated from the 'operations of the intellect'; that is, the mental labour expended by the Author. More explicitly: 'Sentiment therefore is the Thing of Value, from which the Profit must arise.' (*Tonson v Collins* (1762) 323 f.)

to the ownership of an object devoid of any physical markers could be quantified — even if now it appears not as the essence but only the expression of value.

To avoid the circularity that had trapped Wedderburn, value had to pre-exist exchange; i.e. things are exchanged at a price because they are valuable, and not the other way around.[176] Theoretically there would be no great difficulty in coherently arguing from such a position. Locke's labour theory provided at once a value not dependent on exchange[177] as well as an opening to separate mental from bodily labour (Mossoff 2012). The real challenge must have been to negotiate the conceptual and the monetary in such a way as to present the notion of ownership of ideas as mundane, without sounding too superficial.

To have labour replace price as the essence of value — itself the essence of property, for Blackstone (Anderson 2009, p. 57) — seemed easy enough, but to avoid circularity property had to attach to the fruits of that labour. And in characterising those fruits, Blackstone would need to avoid getting stuck in the ontological question Yates had laid out in his insistence that that which is incapable of 'separate enjoyment' (*Tonson v Collins* (1762) 333) cannot be owned without powers of exclusion granted by statute. Are we back to square one? Are we destined to make Blackstone posit some spooky entity to make the argument work? To dramatise, we may even imagine Blackstone musing like young Socrates in *Parmenides*

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[176] It must be pointed out that, when discussing the measure of value, Blackstone writes

> it matter not, whether that Value be intrinsic, or merely capricious. A Man [*sic*] hath a property in an Ape or a Popinjay, and trespass lies for taking them away … So, every literary composition hath a Value; which is measured by the Sale it obtains. (p. 322)

The masterful ambiguity allows Blackstone to pass measure off as essence for the purpose of depicting literary property in the most prosaic terms.

[177] This is the essence of any labour theory of value. That is, the idea that value is generated by labour and not through exchange. Exchange merely realises the value already contained in the labour embodied in a given commodity. Although Marx has given the clearest and most complete formulation of the theory, the core idea of labour-producing-value precedes Marx, Smith, Ricardo, perhaps even Locke who is Blackstone's direct source. For a critical comparison between different labour theories of value Elson (2015).

> Not that the thought … hasn't troubled me from time to time. Then, when I get bogged down in that, I hurry away, afraid that I may fall into some pit of nonsense and come to harm. (*Parmenides* 130d)

So, what was Blackstone's escape? The genius of Blackstone lay in articulating a notion of the subject matter of literary property that alternates between something as plain as that which can carry a price and as esoteric as a purely mental composition. One would not work without the other: without the esoteric component the argument would be circular; without the monetary aspect, purely metaphysical.

By replacing price with sentiment as the thing of value, Blackstone risks losing his grip on materiality. How can mental operations be exchanged, thus realising the essence of the property interest: profits? The answer comes with communication. It is at the moment of publication, when words are 'addressed either to the ear or the eye, by discourse of writing' (p. 323) that the Author is able to reap the profits. Of course, to make this right to profit survive first publication in print (i.e. the first edition) Blackstone needs to render invisible the differences between communicating one's 'composition' in *viva voce*, have it recited by another, or even printed. And in so doing make the labour of the performer, and by extension that of the printer, disappear.

The strategy is made particularly clear on two occasions. The first, already cited, is the response to Yates's assertion that the profits of the defendants derived from their own trade, paper, and ink. As we have seen Blackstone explicitly abstracts, or conceptually severs, the *paper* from the sentiment. It is not just the ink, of course, that Blackstone is missing but also the labour of compositors, pressmen, bookbinders and so on.

The second, is the following remark about the continuities between writing and printing

> They are both different modes of the same thing; the substantial part is the describing a sentiment in characters. It is *a matter of indifference*, whether a man [*sic*] prints 100 copies, or employs 100 amanuenses to write them. (p. 342, my emphasis)

The literary expression is the substance, the labour of reproducing the characters negligible. Blackstone has literally no regard to the labour of the amanuenses or that of the

printer; they are subsumed under an abstract logic of expression and communication. The stained paper is abstracted away and with it, the labour that produced it. The expression is dematerialised, and so must the labour of 'describing a sentiment in characters'. As we will see, for Blackstone it is not *copying* that renders the work of the amanuenses and the printer negligible; it is the very fact that it is a physical act. Literary creation will have to be formulated as radically detached even from the act of making the first manuscript.

The attentive reader may suspect, at this point, that by some manipulation of the attention, a straw man has usurped the role of Blackstone. If mental labour was a common-sense notion at the time (Sherman & Bently 1999, chapter 1), why would Blackstone need to go to such lengths in conjuring up a purely mental notion of literary composition where no atom of matter was allowed to enter? I have no answer to that question but can offer instead a hypothesis that presents Blackstone's choices as indicia of the conceptual difficulties posed by the notion of intangible property.

The textual evidence of Blackstone's radical rationalism is compelling. Consider the following passages

> I must maintain, that 'a literary composition, as it lies in the author's mind, before it is substantiated by reducing it to writing,' has the essential requisites to make it the subject of property.
>
> While it thus lies dormant in the Mind, it is absolutely in the power of the proprietor. He alone is intitled to the profits of communicating, or making it public. The first step to which, is clothing our conception in words, the only means to communicate abstracted Ideas. (p. 322 f)

For Blackstone, then, reduction to writing — or 'describing in characters, those words in which an author has cloathed his ideas' (p. 323) — is accidental to the 'literary composition'. Even the arrangement of the words that will clothe the author's ideas is conceived solely as 'conceptions and operations of the intellect' that can lie 'dormant in the Mind'. It all sounds a bit too much, but the body must be repelled at any cost. As he clarifies towards his final reply to Yates's response

> Style and sentiment are the *essentials* of a literary composition. These alone constitute its identity. The paper and print are merely *accidents*,

> which serve as vehicles to convey that style and sentiments to a distance (p. 343, my emphasis)

The bodiless nature of the literary composition is further confirmed when Blackstone, following Warburton, explains that while a duplicate of a patented engine bears but a resemblance to the original — since it must, necessarily involve 'different materials' and 'workmanship' — 'Every duplicate … of a work … is *the same identical work* which was produced by the author's invention and labour' (p. 343, my emphasis) no workmanship or matter involved.[178]

But it is not only from mechanical inventors that authors must be distinguished. More subtly, Blackstone distinguishes abstracted ideas that can only be communicated by words from 'ideas drawn for external objects, [that] may be communicated by external signs'; since 'Words only, demonstrate the genuine operations of the intellect.' (p. 323) What is being excluded here becomes clearer when, several paragraphs later, Blackstone exposes his philosophy of language. After having presented writing as 'describing in characters, those words in which an Author has clothed his Ideas', he explains that 'Characters are but the sign of words, and words are the vehicle of sentiments.' (p. 323) Characters because they touch the paper, are like the external signs that communicate ideas drawn from external objects. Both are graphical signs and only in literature is the work complete before the pen touches the paper. Painting, for instance, where creation and execution (head and hand) are intimately connected would seem to violate the purity of Blackstone's mental labour.

The opposition between painting and writing is made explicit at a later point, where the intangible nature of the subject matter of literary property is reinforced. This follows the bizarre remark that 'The Roman Law of Accession … was founded on very absurd principles.' (p. 324) To Blackstone it was unreasonable that if a poem were written on another's paper, the law should allow the owner of that paper to keep it; whereas 'in the same breath' mandate that a picture painted upon another's tablet should belong to the

[178] Blackstone is, of course, no pure metaphysician. Anticipating the risk that the 'distinction … in nature of the things compared together' may not be convincing to all; he adds another 'distinction arising from public convenience' (p. 344) and owing little to ontology.

painter. The significance of this remark would have been easily missed were it not for Marta Madero's wonderful study of this topic in *Tabula picta*. As Madero (2011) shows, the differential treatment[179] was based on internally consistent principles, the apparently shocking results reveal only a very different way of thinking and dealing with artefacts.

The conclusion from this rather long exegesis is simple: in Blackstone, I submit, the subject matter of literary property is radically immaterial: a pure rational sentiment that comes to life before it is put down on paper. The length and pace of this segment was necessary to alert the reader that it would be a mistake to frame Blackstone's argument under the familiar notion of 'embodiment' as used in contemporary intellectual property scholarship. Blackstone is not merely suggesting that the 'thing of value' is the literary composition (i.e. the product of mental labour) fixated or embodied on a tangible record. It is fully formed in the mind before consummation in material form.

But it would be a mistake to rest for too long on the esoteric side of the notion of the subject of property. We must remember that what drives the wedge between Yates and Blackstone is the question of entitlement to the booty from book sales. And their strategies are quite similar: to make the full price (and the full profit) attach to one party, the other's labour had to be rendered invisible: Yates presenting the author's contribution as 'incorporeal' and thus incapable of separate enjoyment; Blackstone making the printer's labour 'indifferent'. (see p. 342, cited earlier)

Blackstone achieved this vanishing act at the expense of an extreme rationalist poetics: where no atom of matter could be allowed to contaminate the literary composition. Whatever else theology or psychoanalysis might tell us about this almost fanatical repulsion of the body, the pains (and risks) Blackstone took in devising the argument suggest that the division between mental and bodily labour could either not be taken for granted, or at least, that it was being mobilised to rehearse an unprecedented manoeuvre.[180]

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[179] Although I believe Blackstone is drawing extra rhetorical firepower from the fact that the painter received better treatment than the poet.

[180] The fact that years later in *Millar v Taylor* (1769) Yates quotes Blackstone as saying that 'the labours of the mind and productions of the brain are *as justly intitled* to the benefit and

One must first appreciate the difficulties. To present the skilled labour of printers or amanuenses as bodily labour would clearly have been nonsensical — especially when bodily labour had been presented, at the start of the argument, in animalistic terms: 'the exertion of animal Faculties, and common both to us and the brute creation, in their nests, caves, etc'.[181]

A second difficulty in forging an origin for a natural property right comes from the need not to get stuck in the question of possession. Blackstone must extrapolate 'the exclusive right of multiplying the copies of [an Author's] … literary productions' (p. 321) from a secure foundation and the identification of some moment of absolute control seems inevitable. But the extrapolation will only work if the thing remains, in essence, constant: even as it is 'clothed in words' and 'reduced to writing'. And this has nothing to do with the scope of the right. There would be no need, in this case, to go beyond the surface of the text: i.e. literal copying. His only job is to render literary property plausible.

Two alternatives seem, at first, less cumbersome than Blackstone's choices. The first would be to present mental labour as superior to bodily labour and thus identify a degree of value corresponding to the degree of intellectuality of the concrete labour put into the making of a book. The second, to use the unpublished manuscript as the paradigm of the Author's exclusive control over his sentiments, rather than having to commit to the notion of a literary work that is completed before its inscription on paper.

Perhaps both alternatives might have been equally persuasive in a court, but Blackstone was meticulous. And it is not difficult to see why a careful discussant would avoid any of these simpler alternatives. If the literary composition were to be presented as unfinished until material fixation, there would never be a clean cut between mental and bodily labour: and thus, the skilled work of printers would have to be taken into account. Also, comparisons with mechanical inventions, engravings — engravers had never

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emoluments that may arise from them, *as* the labours of the body are' but not more, seems to confirm the hypothesis (as cited in Sherman & Bently 1999, p.15 note 18, my emphasis).

[181] The argument, at that point, is never far away from the well-known racist remarks against Native Americans that punctuate Chapter 5 of Locke's *Second Treatise of Government*, from which Blackstone explicitly draws inspiration and authority. On this see Caffentzis (2009), M. Davies (2007, pp. 85-96), and Quiggin (2019).

attempted to assert common law rights — and even other crafts could be used against the literary property. The solution seems to have been to repress the labour of everyone involved in making books or, analogically, any other material artefact; so that the labour of the author could appear in a category of its own. To that end, even the labour of writing words down had to be made invisible so that the full value of a book could be made to depend on the author's mind alone.

This vignette served to illustrate, work through, and give density to the idea that eighteenth century debates were deeply metaphysical even if in a vernacular key. But also to suggest that mental labour was not just something that could have been deployed easily in argument. The contrast between the engravers' and Blackstone's accounts of the surplus value that accrued to the inked paper reveals there were different ways in which the labour process could be imagined and reconstructed within the context of intangible property. Whereas the former set out a division between skilled and unskilled labour that seemed to roughly follow a workshop organisation; Blackstone opted not only for a radical separation between head and hand, but also a clear hierarchy between the two.

Blackstone is indeed exemplary in bringing out with great clarity two things: first, the need for a metaphysical leap in order to subsume separate material artefacts under the same 'composition'. This was harder to see in the engraver's argument given the multiple meanings that 'design' could take. But the difference is not just at the level of clarity, the intangible thing of value was constructed in very different ways. Whereas the engravers modelled the 'design' closely on the technical means of taking a finished print as a pattern for a *facsimile* or scaled version of a drawing; Blackstone crafted a radically rationalist figure of literary work. Whereas, in the engravers' argument, 'design' had a double nature; for Blackstone, the body of the artefact was purely accidental as an incorporeal essence is ascribed to the work. That clear hierarchy reconceptualised the labour process. Making a book was no longer seen as a single enterprise, but two separate ones, mental and mechanical: paving the way to the more modern dichotomy between work and embodiment.

Secondly, the rigour of Blackstone's analysis — especially when contrasted with the engravers' case — brings out the crucial point that the level and mode of abstraction

employed in construing the intangible is not necessarily connected to the question of scope. Even literal copying presupposes the crossing into metaphysical territory. Indeed, it is quite striking that Blackstone, needing only to argue against literal/verbatim copying, cast his intangible from a model of pure rationality; whereas the engravers, pleading for the protection of a design that could be effectively rendered in any size, modelled theirs in very material terms. In any case, both models posited an object that, by definition, was not reducible to any physical object: a bodiless legal entity neither here nor there definitely, but always in potentially multiple form.[182]

It is also important to clarify that the aim of this tale is not to unmask the foundations of contemporary copyright law. Lawyers and advocates since Blackstone have not been as thorough in dissecting mind and body. If Blackstone appears overzealous that is perhaps a sign of two things. First, that at that time the superiority of mental labour — as a basis of property, at least — was not yet on the side of common sense. Second, that copyright can survive even a less rigid separation between the tangible and the intangible.

f. Reversibility and directionality

By the end of the literary property debate — and considering the introduction of legislation relating to engravers — we witness, as Sherman and Bently (1999) write, 'a growing and widespread acceptance that mental labour could give rise to a distinct species of private property' (p. 41, note omitted). And yet, as Sherman and Bently also hold, 'precise details about the nature of mental labour remained contentious' (p. 15) at least until a clear separation between mechanical and authorial copyright gained acceptance, as

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[182] Blackstone goes to the point of suggesting that all incorporeal rights (e.g. options, advowsons, rights of way or o turn cattle into a common) are

> mere potential rights dormant and unnoticed, till opportunity calls them into act; and then they produce a visible Fruit, by presenting a Clerk, by travelling on the Way, by turning Cattle into the Common, and, in the present case, by publishing the Book. (p. 340 f)

The difference, of course, being that a commons has a specific spatio-temporal location, whereas the authors' sentiment or composition or the modern copyright work do not.

Elena Cooper (2018) has shown in her rigorous and comprehensive study of artistic copyright in the mid nineteenth and early twentieth centuries.

In sum, while the idea of a particular form of labour capable of infusing surplus value into tangible artefacts was fixed in the horizon, bringing with it an ontological fragmentation of the commodity into tangible and intangible components, different ways of imagining labour and different techniques to execute the cut persisted. To use the two examples examined in some detail in the previous sections, Blackstone's radical rationalism was not the only way to articulate a notion of literary property; the case of the engravers could be formulated without a fully dematerialised conception of design.

While the strategies discussed to formulate claims over ways of making and circulating repeatable artefacts predate what Sherman and Bently identify as 'the closure of intangible property' — associated with the object-oriented approach that marks the period after the modernisation of systems of registration — they had a similar effect. Even if Sherman and Bently are correct in suggesting that, during the eighteenth and earlier part of the nineteenth centuries, the regulation of mental labour still had many possible futures and not just the single logically predetermined aesthetic of modern intellectual property law, it seems undeniable that the literary property debate fixed 'mental labour' as the horizon of literary property. A horizon and not a recipe for making the cut: a movable target admitting multiple configurations.

As the eighteenth century progresses, mental labour becomes a catalyst for articulating cases for the protection of a variety of clearly defined activities. To clarify, I am only suggesting that proponents of similar forms of protection could rely on the idea of mental labour as a ready-made grammar through which the agenda could be advanced and implemented. To claim more than that; that is, to suggest the horizon itself could trigger the development would be to afford ideas an impossible level of agency and in that way constrain the possibilities of modelling a form of division between manual and intellectual labour according to the specificities of the trade.

But if one must be careful in avoiding an overly deterministic depiction of Sherman and Bently's thesis, it would be equally problematic to portray the emergence of modern intellectual property in the mid nineteenth century as radical break with the experiences

and experiments of the previous decades. The fixation of intangibility as the horizon of intangible property (in its various forms) did not mark, as Sherman and Bently (1999) write, a 'sudden and irreversible change that neatly marked the move from one period to the other' (p. 3). This 'transition' was only completed and secured later in the nineteenth century with the emergence of modern systems of registration and the stabilisation of techniques to elicit the intangible (that will be explored in more detail in the following chapter). But the acceptance and growing densification of the notion of intellectual labour as the source of value of intangibles, already in the eighteenth century, helped stabilise 'ways of thinking about and dealing with intangible property' (p. 3) and envelop a wider range of forms of serial production into the logic of intangible property.

Although by the first decades of the nineteenth century the accommodation of the law to the idea of property in intangibles was reversible, there was a clear directionality. Arguments for the expansion of intangible property became cheaper due to the ease with which a general idea of a hierarchical separation between intellectual and manual labour could be articulated. Sherman and Bently summarise

> While by the end of the literary property debate the law felt comfortable, in a way it had never done before, in granting property status to intangibles, nonetheless problems of the type identified by the opponents of literary property continue to confront the law. (p. 5)

It is important to grasp both sides of the argument at once. If it is true that, by testing and trying arguments and counterarguments, the law gained confidence in the notion of intangible property. As can be seen in the ways in which the apparent 'common sense' notions that informed the speeches of the likes of Joseph Yates and Lord Camden became less and less plausible, precisely because they now appeared too grand; indeed too metaphysical. At the same time, the problems identified by those very same voices remained, lurking in the shadows and still threatened to make the law crumble under its tensions and contradictions.

As we have seen, the literary property debate raised questions not only about the nature of its subject matter, but about the very nature of property. Whereas the opponents saw in possession the hallmark of property; the proponents focused instead on

the more abstract notion of value (one that could crucially encompass both the use value derived from exclusive enjoyment and the exchange value realised in a market transaction). Thus, one of the central techniques used by the proponents to make the idea of intangible property plausible was, to quote Sherman and Bently (1999), 'focusing on the future financial benefits — the profits — that were likely to accrue to the owner or to the appropriator if the property was taken.' (p. 26)

If the fixation of intangibility as the horizon of a nascent idea of intangible property was an important step in the formation of modern intellectual property, it was not yet secured. The change was still reversible in a way that it no longer is. It was reversible precisely because in the literary property debate the very notion of intangible property was at stake. It was precisely the naturalisation of the notion of owning intangibles that was still in need to be carried out. Naturalisation and not simply plausibility. The second crucial moment in this narrative will thus be the slow development of mechanisms through which this naturalisation takes place, up to the point where the metaphysical question could be evaded altogether. This second closure that comes with the notional 'leap of faith' mentioned earlier (section a. of this chapter).

The important point, for now, is that mental labour but especially lost profits placed the idea of intangible property as a common-sensical proposition by offering a mundane reference point to the interest. That reference point, to be sure, was placed in the future, but a future that could be projected in the present. The notion that there was anything there to be owned as property, something that could be projected and quantified, could become fixed in the horizon; whereas knowing exactly where the boundaries of each property lay became lateral questions to be solved 'case by case'. While this helped fixed intangibility as the horizon of intangible property, it did not offer a closure. For intangible property to appear closed, the law would still need to develop techniques to contain the doctrinal problems involved in confining the subject matter. It is here that registration will play a crucial role, but the conditions of its intelligibility depended upon this split between work and embodiment.

Even though this economic projection increased uncertainty, it did not require much from the imagination in an age of professionalisation of authorship. As Nick Groom (2010) explains, 'textual expectations' of a growing reading public created a market for a certain

type of literary originality that became intimately tied with the author's potential earnings. Or in Isabella Alexander's (2010) summary of the argument 'originality was not so much about creativity as about identifying the person entitled to payment' (p. 304). Under the unifying language of profit, as Alexander continues to explain, eighteenth century literary property seemed to deal equally well with 'works of high authorship, such as poems, novels or songs, and those of a more factual or derivative nature, such as almanacs and maps.' (p. 304)

What we see here at play are the two registers of modern speculation (see note 138, above). A merely conjectural object of property — entirely dormant and unspecified until a claim is validated — to be measured by a calculation of hypothetical profits accruing to its owner in a possible future; or alternatively, a contractual projection wagered by mutual estimation. By this change of perspective — from thing that can be occupied to thing of potential value (Anderson 2009, p. 57 ff) — the object of property is rendered intangible in a curious way. Like that of Kafka's small businessman — in the epigraph — it is made to reside in the hands of strangers (the publisher, the consumer, the pirate).[183] But it is important to stress that within this logic, the subject matter of literary property appears neither more nor less metaphysical than any other commodity: only differently configured.

Conclusion

This chapter has accounted for the long and complex historical closure of intellectual property through a somewhat artificial, but I would submit plausible and generative, distinction between intangibility as the horizon of intangible property and the intangible as the object of proprietary claims. An explanation of the latter, I would submit, will remain incomplete without an articulation of the former. But stopping at the former without

[183] What Kafka is alluding to is nothing other than, quite appropriately, the metamorphosis of commodities (Marx 1990, pp. 198-209). There is an equivalence between the seller's stock of commodities and the money 'in someone else's pocket' (p. 201, p. 206). Money that is already his because equalised (to commodities) under the sign of value. I will return to this topic in the final chapter.

accounting for the development of techniques to render the intangible tractable as an item of property would amount to an idealistic understanding of abstraction. To secure the proposition of property in abstract objects, a mere conceptual division between mental and manual labour would be insufficient. The abstract object of intellectual property had to be crafted. Returning to the idea that the horizon by itself does not determine the landscape (even though it confines it and makes it intelligible) we can better appreciate why conceptions matter even if they need to be supplemented and densified by material techniques of figuration and argumentation.

Within the overarching narrative of this thesis, this chapter ends — historically — at a moment of fixation of intangibility as the horizon if intellectual property. This roughly coincides with the eighteenth century debates over the law and its expansion. The moment when, to paraphrase Sherman and Bently again, the law became comfortable with the idea of property in intangibles (even as it struggled to articulate them); to put it in my own words: the moment when common sense changed horses and it became cheaper to accept that proposition than to challenge its metaphysics. This was, however, a very unstable settlement for, although the idea of property in intangibles was no longer at stake in the same way that it was during the first half of the eighteenth century, concrete problems over the confinement of its subject matter still threatened to open the abyss of metaphysical speculation over the nature of intangible property. The following chapter will thus trace the ways in which the proposition was secured by the development of techniques of immunisation of intangible property. Doing so will require a brief detour into patent history — given the more apparent nature of the techniques used and especially the sophisticated scholarship that has emerged on that topic — that will hopefully open new perspectives to investigate the more subtle techniques employed in the development of modern copyright.

Chapter 4. Making tractable intangibles

> We can say anything we please, and yet we cannot. As soon as we have spoken and rallied words, other alliances become easier or more difficult.
>
> Bruno Latour (1993) Irreduction 2.3.5

Mario Biagioli (2006) famously argued (in the context of patent law) that 'the idea of the [intangible] invention did not emerge through a process of abstraction but through one of inscription — not by thinking it up but by writing it down.' (p. 1145) These were the inscriptions that, according to Biagioli, 'eventually put the "intellectual" into "intellectual property"' (p. 1143, note omitted). Like Biagioli, Pottage and Sherman (2010) refuse the facile reduction of intangibility to a simple idea thought up by the legal profession. In an article published shortly after *Figures of invention*, Alain Pottage (2011) asks: 'What if machines were an essential condition for the formation of concepts and paradigms of invention? (p. 622) Crucially, Pottage is not referring to the *idea of a machine*, but to actual machines, in the form of the working scale models that accompanied the submission of applications and especially the courtroom debates of the US patent system during the greater part of the nineteenth century.

Although there are close affinities between these accounts, there is a certain discontinuity in their respective analyses. While Biagioli focuses on a reduction to paper — and thus a representation of the invention — Pottage and Sherman examine a period when (and a technique in which) the 'intellectual' dimension of tangible artefacts was not as thoroughly formalised as when it appeared in the modern form of a patent specification. One might suggest that inventions became intellectual through the way in which models were handled, before patent doctrine devised methods for specifying in text what the essence of the invention might be. Thus, in the period before patent claims

became 'prefabricated abstraction[s]' (Pottage & Sherman 2010, p. 136), there was already a way of transmuting tangible machines into tractable intangibles. This seems to suggest the need to account for the processes through which patent lawyers learned to 'write down' and articulate the conceptual separation between the fungible body of the machine and its intangible essence.[184]

Drawing on Sherman and Bently's account of intellectual property as a way of dealing with artefacts (see chapter 3, section b.), this chapter will analyse the techniques employed in the formative years of the US patent regime to form an image of the subject matter of modern patent rights. Although this will lead us on a detour into the historical formation of modern patent law, the aim is to understand the ways in which intangibility was materialised and given life through the mundane operations of intellectual property law. In this chapter I will identify in Pottage and Sherman's concept of 'figures of invention', two different but complementary techniques for rendering intangibles into tractable objects of proprietary claims. Modes of figuring out (or eliciting the intangible from the tangible media that gave body to the practice of patent specification) and modes of figuring in (or preparing materials that could sustain the operation of elicitation). This is the content of sections c. and d., respectively. To prepare the ground for that part of the discussion, a brief introduction to the methodological sensibility that runs through Pottage and Sherman's work will be offered (section a.) followed by an equally brief introduction to the historical materials upon which they ground their analysis (section b.). The chapter will conclude in section e., by drawing lessons from these modes of fabricating intangibility to make sense of the construction of copyright law, a system with the notable feature of lacking the resources of representative registration that characterise modern patent law. In so doing, the chapter will help distribute the excessive load inscriptions (i.e. what is written down and thus formalised) have been made to carry in some theories of intellectual property.

[184] For this sense of 'articulation' see note 100, above.

a. Grasping the materiality of abstraction

Scale models played a crucial role in the operation of the US patent system during its formative years (Dood 1983a, 1983b; Fullilove 2020; Pottage & Sherman 2010). But, as Pottage (2011) points out, although models were central as a means of communicating between clients, attorneys, examiners, lawyers, jurors, and judges; written sources give very little away about how they were actually used. The hypothesis advanced by Pottage is, as we will see in more detail in the course of this chapter, that models worked as some sort of ready-made abstraction that operated before it was rationalised in legal discourse. As he writes

> the role played by patent models in the process of litigation could not be apprehended by patent lawyers because the demonstration of models was the condition for there being anything for them to see and talk about in the first place. One might say of models what Mario Biagioli says of the written patent specification; they were a kind of pre-conceptual condition for the formation and manipulation of legal concepts … although demonstrations with models made the invention visible and tractable in patent doctrine, just how they did so remained invisible to lawyers. (p. 627)

But one should be careful not to take the reference to a pre-conceptual stage and hence to a precedence of patent models over clearly formulated concepts of invention, as a suggestion that scale models were dealt with as plain concrete objects. In other words, one should avoid confusing pre-conceptual with pre-abstract. A scale model sitting at the attorney, the patent clerk or the judge's desk was there as an envoy or representative, as both more and less than itself (in extensional and qualitative senses, respectively).[185] This suggests a dual nature such that the judge or jury could never be entirely sure whether

[185] As Alfred Gell explains '[a]n ambassador is a spatio-temporally detached fragment of his nation' (Gell 1998, p. 98).

the lawyer was *pointing to* the model or *pointing out* the invention. And in a sense, of course, the only way to avoid ridicule would be to do both at once.[186]

A better way of understanding the reference to scale models as pre-conceptual tools of legal argumentation, is to connect it to the central premise of *Figures of invention*.

> Our premise is that the invention in its modern sense emerged in the course of the eighteenth century, when lawyers and administrators began systematically to make the distinction between ideas and embodiments, or between the invention and the material artefact in which it was expressed. (Pottage & Sherman 2010, p. 3)

The modern conception of invention emerged not through debates over its nature, but by the way various 'figures of invention'[187] were enlisted in the process of 'eliciting ideas from embodiments' (p. 1). It is essential here to understand that the stress on the systematicity of the operation points, not to the inception of a wholly new mode of dealing with artefacts, but to the awareness of the need to find a response to a specific problem. As they write '[w]hile the notion that an artefact could embody an idea or express a design was not new to the eighteenth century, it was only in that period that the notion became a practicable theory' (p. 1) A repeatable method that subsisted in the domain of practice

[186] 'While the intangible and tangible dimensions of the invention are distinct, at the same time they are also intrinsically linked.' (Pottage & Sherman 2010, p. 12)

[187] The closest thing to a definition of the evocative notion of 'figures of invention' appears in the reference to 'specific material media in which inventions could be represented; namely, scale models, formalized texts, technical drawings, and archives' from which it 'became possible [for patent lawyers and administrators] to visualize and communicate the idea independently of its embodiment'. (Pottage & Sherman 2010, p. 3) This is consistent with the reference to the patent model as 'an interesting figure of invention.' (p. 17) This is not, however, the only sense the authors attribute to the expression; more ambitiously the authors describe 'figures of invention' as the whole 'material and semantic assemblages of patent jurisprudence … that make the invention visible and tractable' (p. 11). I find, however, the combination of media and interpretation less analytically helpful as it makes it harder to bring out the element of material construction of the media that serve as the basis for those semantic operations.

before it came to be articulated in analytical terms.[188] As Pottage and Sherman write '[t]he task of giving form to the invention' was a 'mundane and practical matter' that unfolded 'not through normative argument but was, quite simply, a consequence of making and using patent texts' (p. 52); but especially, as they highlight in chapter five, of manipulating scale models.

To make sense of the arc of this narrative, we need to start laying out some historical markers. But given that the task is to find the emergence of some sort of craft knowledge and not of an explicit theory, the historian will have to begin by examining the traces left by the surfacing of certain tensions in the operation of the law. Hence the reference to the fact that 'throughout the nineteenth century patent lawyers tried to fix the criteria by which one could identify and delimit the idea expressed in a material artefact or a technological process.' (p. 2) This suggests that the method that had begun to emerge in the final part of the eighteenth century somehow became too loose, and in need of being held steady. This is, in short, the story of how '[t]he paper specification and patent drawings were at once brought to life in, and eclipsed by, demonstrations of patent models' (p. 16) only to render the latter obsolete by the final decades of the nineteenth century.

The choice of looking for the origins of the modern conception of invention in the everyday practices of lawyers and administrators is not justified by the lack of more explicit and apparently grander historical markers, but by a clear understanding of what is at stake in forging tractable intangibles. One could read the US Patent Act of 1790 as marking a clear departure from the old regime of privileges especially in envisaging patents as rights to things that are fully formed before they are reduced to practice (Biagioli 2006)

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[188] This depends on a reading of Pottage and Sherman's (2010) positive ontological claim that 'the difference between idea and embodiment is an effect of interpretation, and interpretations are artefacts of representational and communicative practices.' (p. 9) Leading to the conclusion that,

> To explain how the invention is produced and held steady, we do not need a philosophical theory about the existence of abstract object or generic properties, so much as a material theory of how the invention is distinguished from its embodiment and how that specific distinction is recorded, communicated, and sustained. (p. 14)

and thus separated not only from their contingent embodiments but also from the persons with the competences to work the same invention (Pottage & Sherman 2010, p. 45 f).[189] However, as Oren Bracha (2016) aptly points out: 'there was little to explain and operationalize this idea' (p. 189). Even the 1793 amendment, with a more suitable terminology to identify that to which the patent monopoly attached (i.e. the 'principle' of a machine), would be insufficient since the process of extracting that principle from the means through which inventions were supposed to be represented needed something more than a name. It required a craft and a technique, which is not just a matter of dispositions of human agents but also of the materials with which the art is performed. Indeed, one of the great methodological breakthroughs in Pottage and Sherman's study is the resistance to fitting everything into a wider rubric of 'interpretation',[190] and especially to abstaining from reducing the development of such techniques to a battle of arguments discussed in abstraction from the media that constituted the material of that constructive work. The two central claims here that, combined, give us a sense of the agency the authors ascribe to these media, are: first, that without such media (or figures) 'doctrinal argument would have no objects, nothing to talk about.' (Pottage & Sherman 2010, p. 13); second, that the very discussions that marked the formative period of the US patent regime were conditioned by what different material media could be made to show. In other words, figures of invention were there at the start of forensic discussions and they never fully withdrew, even as lawyers took on the leading role in purporting to translate what those artefacts communicated.[191]

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[189] The very idea that the invention should (or even could) be 'disclosed' through an artefact, speaks of a shift from conceiving knowledge as an embodied disposition to knowledge as a thing.

[190] Although interpretation forms a core part of their analysis (Pottage & Sherman 2010, p. 13 f), they also stress that

> the central actors in our conceptual history are not lawyers, judges, inventors or legislators; instead they are the media in which intangible form of the invention is made visible and tractable: scale models, texts, botanical types, and deposits of living material. (p. 17).

[191] '[I]n the formative period of the United States patent regime machines were not just the focal object of patent law, they were also the basic means that patent lawyers used to represent, elaborate, and argue their claim to an invention.' (Pottage & Sherman 2010, p. 16)

Beginning with the scale models that assumed the role of the paradigmatic figure of invention in the first years of the US patent regime,[192] the authors stress that

> models were tools of legal argument: they demonstrated the material features or operations of two competing embodiments — the 'senior' invention and the alleged infringement — in such a way as to reveal the 'principle' of each, and depending on the intent of the demonstration these principles would be either distinguished or identified. (p. 16)

Talk of revelation can, however, obscure one of the central claims of the book: figures of invention do not merely 'represent' a pre-existing invention; rather, the invention is brought into being in the act of manipulating and examining the figure. As the authors put it 'the invention is an artefact rather than an existent form.' (p. 17) Now, this refusal of making meaning inherent to the thing is not the same as presenting the thing as a blank canvas upon which lawyers would project their 'interpretations'. This would have been a deep misunderstanding of Pottage and Sherman's thesis by failing to bring out the sophisticated way in which the authors resist reifying the invention while at the same time refusing a facile reduction to radical fiction. Even if, at times, the authors stress the agency of the human actor (judge or patent lawyer) when saying, for example, that 'legal criteria that identify invention … are plastic resources from which the interpreter produces the thing that it is supposed only to describe or represent' (p. 17) this is only possible because there were material media to act upon — e.g. demonstrating the mode of operation of a machine simulated in the scale model — and, perhaps more importantly, they could not control the impression such media elicited on others. As Pottage and Sherman put it, in one of the most Latourian passages of the book

[192] The reasons for this American originality are not entirely clear but two important factors may help understand the adoption. The first is the French precedent of scale models for examination that marked the pre-revolutionary patent regime (Baudry 2019). The second, is a combination of the lack of a specialised patent bureaucracy and judiciary at least until 1836 and the slow adoption of descriptive geometry and basic engineering training in the US during the nineteenth century (Stevens 1995). In this landscape, '[m]odels were the means that made machines comprehensible to jurors and judges.' (Pottage & Sherman 2010, p. 16) As late as 1878, the Commissioner of Patents would claim no more than one in five judges was able to read engineering drawings (p. 100).

> Things often surprise their would-be masters; things can be invested with human designs, but they often take on these designs in ways that recursively change the sense of what the project or design actually was. So things 'irritate' or 'inflect' the action of their human interlocutors. Action is a property neither of human nor of things, but of the engagement between them. (p. 10, note omitted)[193]

This is what justifies the attention they devote to material media to 'make visible a set of representational practices that are essential to the functioning of patent jurisprudence, but which are neither noticed nor explained by patent doctrine.' (p. 17) Leading to the vital conclusion that rather than mere artifices of legitimation, with which judges feign objectivity and hide the radically subjective task of forging an intangible object of property, '[e]ach figure reveals the invention to doctrine in a particular way and, in return, the questions asked by doctrine shape the cognitive practices that shape each particular figure.' (p. 17) In a figurative sense, one could say that different media are differently disposed to conduce or resist different claims that can be made on behalf of the object.[194]

The apparent tension and its eventual resolution should, by now, be clear. How does the argument thread the line between voluntarism (in the mode of radical fictions at the disposal of patent lawyers) and technological determinism (in the form of media over-determining the message)? Answer: by not being stingy with the attribution of agency, by making productive use of the 'shape and being shaped by' idiom, by understanding recursivity, by, in short, seeing agency not as an attribute of a single actor but the effect of an encounter between two bodies. The interesting question to pose, after Pottage and

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[193] Pottage and Sherman (2010) quickly distance themselves from a more radical reading by stressing the difference between say microbes that move around without being pushed by the scientist and semantic elements that do not (p. 11 and note 29). While this is an important gap to keep in mind — lest a passion for vivid language move the speaker too close to overly animistic and impersonal accounts of legal construction — this should not lead construing meanings as things plastered onto objects and expected to stick to them regardless of their materiality.

[194] This is in line with Pottage and Sherman's (2010) borrowing of the Latourian concept of chain of reference, especially with the image of the chain of reference as an 'electrical current' (p. 10). van Dijk (2017) uses a similar analogy with plumbing (p. 61, see also p. 42).

Sherman, is not to ask whether the subject matter of patent law is discovered or made; but rather, how the interactions and mutual accommodations between various actors unfold. What did each of the actors bring to the party and what have they left the party with? Within the confines of this study, the question I want to ask is this: did abstraction emerge in this encounter or was it something the actors brought with them?

But let us now move to historical territory and attempt to identify a moment in which tensions in the operation of the law have surfaced, thus forcing practitioners to reflect on that operation and spell out some hidden assumptions that may offer a glimpse of the unacknowledged routines, the 'practicable theory', with which the cut between tangible and intangible had begun to be systematically made in the formative years of the US patent regime. Mid nineteenth century controversies over the value of patent models offer such a window from which those operations can be understood.

b. Scale models: from eloquent to verbose artefacts

Scale models were seen, since the early years of the US patent regime, as 'the most complete, authentic, and incorruptible token of invention' (Pottage & Sherman 2010, p. 107). Even as late as 1877, Mortimer Leggett — Commissioner of Patents between 1871 and 1874 — would convey this view to the US Congress by stressing that judges for whom drawings would 'stand up and be a machine' were the exception rather than the rule.[195] But the core of the argument is not exhausted by this idea of an epistemic deficit on the part of judges. As Pottage and Sherman write '[t]he premise of Leggett's account was that models were less open to interpretation than texts or drawings.' (p. 100)

[195] On a vivid moment in his appearance before the Congressional Committee on Patents (1877), captured by Pottage and Sherman (2010), General Leggett recalls his earlier days as patent attorney and a confession by a trial judge who, after a full day in court, confided on Leggett that he could not make heads or tails of the argument because he was unable to picture the invention only by looking at the drawings. The next day, with the assistance of a patent model, the judge only needed about half an hour to grasp the subject matter (p. 100). A 1823 Report of the Committee of Expenditures, cited by Dood (1983a, p. 205) advances the same point.

That, by the final quarter of the nineteenth century, this assumption could no longer be taken for granted is illustrated by a question one of the Congress members addressed to the former Commissioner: 'Would not forty experts come and give testimony differently in regard to the same model?' (as quoted in Pottage & Sherman 2010, chapter 6, note 74). Leggett's assurances about the trustworthiness of patent models are less interesting for how they respond to the objection, than for how they spell out assumptions about their role and character. Underlying the claim, is the old idea that models were 'immediate evidence of the invention' (p. 107) in the precise sense of its apprehension not being mediated by an activity of interpretation or distorted by an act of representation. In this view, scale models were transparent things over which 'a thin veneer of immediate reality' was spread and whose materiality had to be carefully skimmed over to avoid 'involuntarily sinking into the history [of production] of that object' so that its supposed immediacy could be preserved. (Nabokov 2012, p. 3) In less evocative terms, the model had to be taken as the immediate vehicle of the inventor's idea, rather than an object constructed for the purposes of forensic argumentation.

If Leggett's defence of patent models is an important source for understanding the traditional view about the role of patent models, it is the fact that models had to be defended that gives away the need to analyse wider changes in the US patent regime. Because it is not only the 'credibility' of models that needs to be examined — shaken as it was during the reissues crisis (1852-1870), as we will see shortly — but their utility too.

The function of patent models in the period between 1793 and 1836 is not easy to determine. Although they were mandatory in the first Patent Act of 1790, that regime was short-lived. Kendall J Dood (1983a, 1983b), in his authoritative study of patent models, suggests this first regime envisaged two clear functions for patent models: disclosure and demonstration. Starting with the second, one should recall that the 1790 regime required substantive pre-grant examination. This examination was mainly concerned with the 'usefulness and importance' of the invention, and models were thought to be the best medium to demonstrate the value of the invention to a board of eminent, yet not

necessarily technically competent, state officials.[196] Models seem, thus, from the very start to appear as the most accessible and democratic medium to communicate an inventive idea.[197] This is confirmed when we look at the other function, especially how it was spelled out in the text of the 1790 Act

> specification shall be so particular, and such models so exact, as not only to distinguish the invention or discovery from other things before known and used, but also to enable a workman or other person skilled in the art or manufacture … to make, construct or use the same [s. 2]

The text is so vivid that one must read it twice to decide whether the skilled person is expected to learn 'to make, construct or use the' model or the invention. An ambiguity that would hardly embarrass if we consider Pottage and Sherman's suggestion that patent models might have worked as some sort of conscription devices (Henderson 1991), that is, the idea that without scale models patent lawyers would have nothing to talk about. Still, there is another dimension that needs to be considered to appreciate the continuing relevance of models after their submission ceased to be mandatory: time. As Dood (1983a) explains, with the abolition of pre-grant examination and of the model requirement, none of the previous functions could explain the continuing popularity of scale models. Disclosure rules changed so that the burden could now be fulfilled by two-dimensional means, and there would be no apparent reason why an inventor would wish to disclose more than what was required by law. But even as pre-grant examination was abolished, demonstration might still have been necessary. As Dood explains, the 1793 Act did not abolish patentability criteria, but it 'left to the courts the whole initial test of patentability of inventions but only after patents had already been issued on them.' (p. 200) Something that would only occur in the event of litigation. Hence, we still need to

[196] The Secretary of State, the Secretary of War and the Attorney General. See also Bracha (2016, p. 193 ff).

[197] The point seems entirely plausible, given what we know about the very slow development of engineering literacy and technical drawing in the United States during the nineteenth century (Stevens 1995).

ask what would justify submitting one pre-emptively and indeed speculatively (as litigation might never materialise). The answer to that question is credibility. As Dood writes

> when a model was introduced in court proceedings to help interpret a written description, the question might still have arisen whether the model and the description represented the same thing, or whether the model itself was based on an interpretation of the description designed to further the patentee's cause rather than the cause of justice. Thus, the most effective model would not have been one made especially for the court, but one submitted with, and as part of, the patentee's application. Then, even though there still might be disagreement between the original patent model and the patent document itself, as there often was, the official Patent Office model would at least help establish what the applicant had *intended* to describe in the original patent documents. (p. 205, italics in the original)

The temporal dimension is crucial to understand that despite the trope of 'speaking for themselves' (Dood 1983a, p. 205; Pottage & Sherman 2010, p. 107), patent models were always conceived as part of an ensemble. On a more Latourian note, we could say that texts articulated observable features of the object (Latour 1999b, esp. pp. 133-144). But this also suggests that the 'invention' was not reducible to the written specification, and this is made clear in the practice of reissuing patents based on the idea that defects in the description of the 'invention' could be corrected by asking the Patent Office to reissue the patent with a corrected text. Drawings, but especially scale models, were taken as reliable traces of original aspects of the 'invention' that had, nevertheless, not made it to the description.

As Dood (1991) informs us, 'the aim was to preserve the constitutional right of inventors to profit from their inventions despite mistakes in their patents.' (p. 1001) That is: inventive substance over bureaucratic formality, a principle fit for a system with few checks on the suitability of applications and grounded on a natural-rights ideology. To put it simply, if the model showed something that by mistake had not been put into writing, the text could be revised to align it with the true nature of the invention embodied in the

model. A reissued patent was, thus, essentially a new patent that preserved the priority date of the 'defective' application.

Once the modern reader overcomes the shock with this practice that allowed the patentee to meddle with the text of the patent after its priority date — and history shows the shock is justified as the practice lead to unsurprising abuses[198] — we can proceed with a discussion of the assumptions that lay at the base of such a naïve regime. One assumption seems particularly striking: the idea that accurate knowledge of the invention could be retrieved even after the patent had been issued, irrespective of its description in textual form. In other words, this is the assumption that models or drawings were atemporal records, that is, they were not expected to reveal more information after knowledge of a potentially infringing act than they did at the priority date.[199] This innocent worldview suggests a lack of awareness of the fact that technical objects — themselves already abstractions — behave differently when placed in a legal context. That is, while the model, as a technical object, could be assumed to work exactly in the same way over time, what could be said about it would obviously be coloured by contact with other similar technologies thus facilitating the job of subsuming them within the ambit of the original disclosure. With the consequence of placing on the defendant the heavy burden of showing that the model did not, in fact, reveal what it could now be made to show.[200]

What reissues did effectively, was to let models loose from any ties they had with the text of the description. As a consequence, they became less articulate and more verbose. There were ways to manipulate a model even without altering its body, by directing the

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[198] An 1859 article published in the influential *Scientific American* cited by Dood (1991) informed it had 'become quite common for the holders of valuable patents when infringed, to obtain a re-issue, before a suit is brough, with claims so worded as squarely to meet the infringer.' Alongside stimulating speculative dealings with patents not unlike those of modern patent trolls (pp. 1004-1008).

[199] This seems to be confirmed by the remark in *Singer v Braunsdorf* (1870) that 'although every other part of the original application of 1850 had indeed been altered in the amendment process, the model had remained unchanged.' As quoted in Dood (1983b, p. 257 f).

[200] The similarities with contemporary copyright law will be explored in the final section of this chapter.

way it could be seen. The reliability of the model was compromised as it came to be seen simply as a material artefact with no special claim to giving privileged access to the intangible. More poetically perhaps one could say that the patent model ceased to be a transparent thing (see p. 187, above) once the marks of its manipulation became too visible, as tends to happen with glass or crystal. This marks a loss of innocence in patent doctrine as no figure of invention could now be seriously taken to 'speak for itself': the gap between the technical object and the legal object — between the object and claims to it — became all to evident. Thus, to understand the role of patent models in the formation of the modern notion of invention, we must concentrate on how they worked as figures of invention, in the double sense of how they played a role in adjudication (modes of figuring out) and how this role was prepared at the stage of patent procurement (modes of figuring in).

c. Modes of figuring out

If, with the crisis of reissues, patent models came to be seen as problematic; it would be wrong to suggest that they had not been problematised earlier. The statutory notion of the 'principle of a machine' only became an operative notion through the questioning of what models revealed in each individual case. By simulating the operation of the machine in isolation from its material inputs and outputs, the scale model was a medium conducive to demonstrate — to the trained eye — a thing that conformed to the postulate of an inventive essence logged in a fungible body. The mode of operation of a machine — a repeatable event — attained, thus, a thing-like quality (Pottage & Sherman 2010, p. 84) that could be mobilised in discursive contexts. This is not to suggest that the mode of operation or rule of action could be 'simply read off from their form' (Pottage 2011, p. 623) only that the complex strategies that allowed lawyers to render the principle of a machine visible to the law were both conditioned and made possible by the expressive qualities of the medium. As Pottage writes 'the central doctrinal notion of the "principle" of a machine was unreachable — or inconceivable — except through the agency of the

model' or, differently put: '[w]hat could be said was conditioned by what was seen, and vice versa.' (p. 632)

The notion of the 'principle' of a machine entered statutory language in the 1793 US Patent Act that identified the mechanical inventor as the person who 'discovered an improvement in the principle of any machine', further adding that 'simply changing the form or the proportions of any machine … shall not be deemed a discovery.' (sec. 2, see also s. 3) The principle of the machine should, thus, not be reduced to its design or external appearance; the essence of the invention would have to be identified by focusing on its mode of operation. Joseph Story, who can be credited with making this conceptual move explicit, especially in his decisions in the second decade of the nineteenth century, fell short of articulating a positive definition of what this mode of operation might consist and especially of laying out a routine for isolating this intangible essence from the observation of scale models at work. (Pottage & Sherman 2010, pp. 68-70) This was a task for mid and late nineteenth century treatise writers who elaborated on judicial practice to articulate what is roughly a move from conceiving inventions as things (or thing-types) to conceiving inventions as means of eliciting repeatable effects.[201]

But what is important to note is that scale models did not have to wait until a more explicit articulation of the invention as an instrumentality or a means in itself, to elicit an impression that could be handled discursively in a court of law (Pottage 2011, pp. 628-633). Rather, as Pottage and Sherman (2010) explain, 'principles [of machines] were not seen as conceptual abstractions, so much as matters that had to be represented, contested and distinguished. In practice, a principle always came into focus in contradistinction to another principle.' (p. 80) The conceptual abstractions elaborated by treatise writers in the second half of the nineteenth century were thus based on

[201] As Pottage (2011) puts it: 'Although 19th-century patent doctrine turned on the distinction between invention and embodiment, it did not follow that an invention was a static form or template that was directly expressed in a material substance.' (p. 630) Drawing on George Ticknor Curtis's 1848 patent treatise, Pottage explains that the invention was conceived as 'an effect elicited from nature' a notion that William Robinson, by the end of the century, developed into the idea of a 'means in itself'. (pp. 629-633; see also Pottage & Sherman 2010, pp. 70-81 for a more detailed account).

techniques of bracketing the effects of the mechanisms presented in court and thereby isolating their 'mode of operation' or their 'rules of action'. Here we can see with great clarity the mutual interaction between the spectator and the spectacle: patent models demonstrated what lawyers were attuned to see: mechanisms in a state of 'suspended animation' (p. 78). Under the spell of this mode of abstraction, the body of the artefact became an incidental carrier of an intangible essence.[202]

What seems striking in this story is not that a tangible object could project something beyond its concrete singularity. The various uses made of scale models during the formative years of the US patent regime, from means of instructing manufacture or communicating between inventors, patent agents, and investors to tourist attractions in the halls of the US Patent Office (Dood 1983a; Fullilove 2020; Pottage 2011, p. 623 f; Pottage & Sherman 2010, p. 87-91) demonstrate their ability to elicit reactions from various agents and in different settings. As Alain Pottage (2011) writes, 'models could give an invention a number of alternate existences, depending on audience and context.' (p. 624) The crisis of reissues and the need to develop an explicit doctrine of the principle of a machine testify, instead, of a need to develop techniques to secure an acceptable and reliable way for these artefacts to speak.

Could we say, thus, that there was a time when models 'spoke for themselves'? Such a claim would certainly elicit a raised eyebrow, but we should try to be more careful in measuring our response and avoid the easy alternative of muting the scale model and making the lawyer or judge ventriloquise the 'essence' of the invention: an essence that would subsist only in the lawyer's or judge's imagination. Luckily, this is not the answer one obtains from a careful reading of *Figures of invention*. This is evidenced, most clearly, in the central place courtroom demonstrations of scale models occupy in the development of the argument of the book. In a vivid passage, the authors explain

> a model could be set on a table, pointed at from any aspect, picked up, rotated, or upended so as to display a point of interest to a particular

[202] An idea we can trace back at least to Lord Chief Justice Eyre in *Boulton & Watt v Bull* (1795) 'Some machinery it is true must be employed, but the machinery is not of the essence of the invention but incidental to it' (as cited in Pottage & Sherman 2011, p. 66).

> audience within the courtroom, and, if need be, brought to the bench or the jury so as to facilitate close inspection. In other words, the three-dimensional form of the model was drawn into the choreography of a demonstration, the object of which was to point out those features of the embodiment in which the invention was manifested, and to highlight those features which either distinguished or identified two competing embodiments. The model became the medium in which the embodiment was anatomized and interpreted. (Pottage & Sherman 2010, p. 17)

As Pottage and Sherman explain, in *Burr v Duryee* (1863), the counsels for the complainant proposed a thought experiment to the Supreme Court justices asking them to '[suppose] the mode of operation to be taken away from the machine' and see what would be left apart from 'the wood and metal composing' the machine (Pottage & Sherman 2010, p. 80). What is interesting, in this example, is the ability to present the 'mode of operation' of a machine as something that can be conceptually detached, abstracted — or bracketed — from the body of the machine. But even more interesting is the fact that, as Pottage and Sherman point out, justices were expected to understand and indeed perform that mental feat by themselves (p. 80). How was this abstraction possible? On Pottage's (2011) account

> this vital 'essence' [that animated the material elements of the machine] could be abstracted by means of a specific kind of phenomenological reduction; not just by 'imagining' machines, but by actually seeing them put to work. The abstraction from inert "wood and metal" to the vital trace of the invention was made by demonstrating the operation of a machine; or, more precisely, a mechanical model. (p. 631)

Put differently: the invention was not imposed on dead matter (as the fictionalist would have it), the invention was that which the scale model simulated and displayed to those who were prepared to take it as a model.[203] As Pottage concludes

[203] 'The process of "seeing" or "observing" that were essential to the apprehension of a mode of operation were not operations of the imagination; until professional lawyers had learned to make a textual description or drawing "stand up and be a machine", the invention presupposed the

> The invention was elicited from the machine in the form of a sensory impression — a perception of the working machine that wove into itself a thread of verbal testimony and doctrinal argument. So the central doctrinal notion of the 'principle' of a machine was unreachable — or inconceivable — except through the agency of the model. (p. 632)

The choice of passive voice, in the passage, runs the risk of obscuring the significance of the thesis. But it should be absolutely clear that the ascription of agency to the artefacts presented in court is not a mere rhetorical flourish.[204] To rephrase: scale models elicit a response from human legal actors; a response that depends on watching a model at work. These artefacts acted upon the imagination of legal practitioners. As we will see, this is not an argument for withdrawing agency from human actors — and their own capacity to make the artefacts speak in more persuasive ways — but of distributing the weight of the task of figuring out the invention more evenly between the various actors.

Patent lawyers are thus displaced from the role of lead actors, using scale models as props, to the role of spectators, in the sense used by Piyel Haldar (2013).[205] As he writes 'the act of being a spectator must be understood as requiring more than empirical

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immediate observation of models. And "seeing" was the horizon against which patent doctrine was written.' (Pottage 2011, p. 632)

[204] For Pottage (2011), the 'agency' of the model is not to be taken as a mere figure of speech. As he explains

> Patent models were essential to the apprehension of the invention as a means abstracted from its effects. Models were not just instruments by means of which lawyers 'applied' to the facts a definition that had been arrived at through a process of doctrinal reasoning. They were the medium in which lawyers had worked out this notion of invention in the first place. Both diachronically and synchronically, the machinery of models was essential to the making of the doctrinal notion of invention. (p. 632)

And while at points, for rhetorical purposes, Pottage makes models almost speak for themselves, he stresses that this supposed 'essence' that shows trough the demonstration is a 'rhetorical effect'. This is a point about what is elicited (or figured out) from the model (or other figure of invention), and one that does not concern me here. My object is determining how certain artefacts can be made to speak, not exactly what it is that they say.

[205] Van Dijk (2017) makes a similar analogy with theatre on p. 138 ff.

observation.' (p. 138) Thus what characterises the spectator's way of seeing is this disposition to take words, things, actions, as indices, examples, traces of something else that is hidden. In the case of a patent trial, in the historical period studied by Pottage and Sherman, this would import being attuned to the ways in which the artefacts demonstrated something other than their physical individuality.[206] Only then could they be taken as models.

Artefacts must, in a way, project something, elicit a response from their spectators that will then be articulated (with a higher or lower degree of plausibility) as a representation or an embassy on behalf of that object.[207] This much results directly from the pioneering work of Pottage and Sherman. But there is a second aspect that follows from this finding, although I do not find it explicitly articulated in their account. That is, if the materiality of the medium is to be recognised, the artefact will have to come to court fully prepared to exceed itself, precisely because it was summoned to act as the embodiment that encloses that which the law needs to verify in order to determine to which series the infringing artefact belongs: one initiated by the inventor named in the patent or some other series over which the patentee claims no ownership. In other words, we will need to peer into the backstage to see how these actors have been trained.

Pottage and Sherman's exploration of the ways in which 'inventions' were elicited from material media open new perspectives for a non-reductionist account of the formation of objects in law. If attention should be given to practices of construction and interpretation, equal attention should be given to the ways in which material media were prepared to play a role in the adjudication of claims over intangible features of given artefacts. This requires an exploration of the techniques through which these media (or figures) were articulated in ways that might be conducive to sustain the claims made on behalf of the intangible. Hence, we shall turn to the speculative exercises through which inventions were figured in the materials put forward as part of a patent application.

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[206] For an account of attunement as a mode of accessing artefacts see Felski (2020, chapter 2).

[207] See note 185, above.

d. Modes of figuring in

In the previous section I have suggested, in line with Pottage and Sherman, that we cannot allow the media used to 'represent' the invention to be outshined by what typically goes by the name of 'interpretation' or 'construction'. Media matters as it can be more or less conducive to certain claims. This is not to suggest that what will result from an exercise in adjudication is the 'essence' of an invention that was there — inscribed in the medium — all along. It is enough to argue that the 'nature' of the invention is created with the assistance of the media with which inventions are presented before the law. This active role seems hard to deny after the reissues crisis, a period when, as we saw earlier in this chapter, scale models came to be questioned and techniques devised to secure the knowledge that could be drawn out from them. But it would apply equally well to an earlier historical period in which scale models were expected to convey, without much distortion, a simple technical idea arrived at in the inventor's workshop and later relayed in a courtroom demonstration. This time, as it were, behind the backs of human actors.

There is, however, something interesting in that historical shift. If awareness to the mediating role of scale models — and other figures of invention — prompted a careful examination of the techniques with which inventions were figured out; one is to expect a similar development at the other side of the equation. That is, the development of refined techniques for figuring inventions in the artefacts recognised by patent practice as capable of carrying an inventive idea. To put it in other words, after scale models came to be problematised by patent doctrine — and a discourse came to be formed on what models were expected to illustrate — it seems unlikely that models themselves would not have been created with awareness to the inevitable gap between technical object and legal object.

While it would be difficult to demonstrate that the execution of models began to reflect a greater concern with the need to present the 'invention' (and not just a technical

object) in advantageous terms,[208] Pottage and Sherman offer important clues on how models came to form part of claiming strategies that developed during the nineteenth century. They do so by suggesting a link between the demise of central claiming (i.e. a technique of specifying or sign-posting a typical embodiment of the invention, and relying on judicial construction to encompass other equivalent variants) and the gradual obsolescence of patent models.

Considering the technique of central claiming, Pottage and Sherman (2010) write

> Speculatively, we might suggest that central claiming was allied to the use of scale models as material holograms of patent texts and drawings … The claim could function as an index pointing to the machine — or rather the "principle" that it embodied — because the real action lay in the close comparative examination of material representations of the 'central' embodiment and the accused artefact. (p. 136)

The idea of claims working on an indexical register, and therefore a reliance on material outside the strict confines of the claim, confirms that claims had not yet become 'a self-sufficient representation of the invention' (Pottage & Sherman 2010, p. 134). A view that is well illustrated in the way George Ticknor Curtis reduced patent infringement to a question about 'whether the two *things* … are the same or different' (Curtis 1867, as cited in Lutz 1938a, p. 147, emphasis by Lutz) thus suggesting that the role of the patentee was to present a typical embodiment and demonstrate its equivalence to the accused device. Curtis was not unaware of the difficulties involved in this exercise by pointing out that determining the degree of resemblance necessary to constitute identity raised 'difficult and metaphysical questions' but showed confidence that these could be reasonably settled 'in each particular case' (Lutz 1938a, p. 147) essentially by juries when properly instructed by judges.

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[208] The emergence of specialised model-making firms after 1812 (Ray & Ray 1974, pp. 14-22) could be taken as an index. However, the hypothesis cannot be confirmed without an archival study of the communications between inventors, attorneys and model makers as well as a stylistic analysis of a representative samples of scale models from various periods.

What this suggests is that, even though models had the capacity to engage the imagination of their spectators in the task of figuring out the mode of operation or the rule of action that animated the otherwise inert matter of their bodies, models still appeared essentially as illustrations of actual machines. Models were a medium well adapted to central claiming, conceived essentially as a descriptive technique that relies heavily on judicial construction to determine the scope of right.[209] But the 'description' in question could be achieved by means other than tacitly pointing to a machine (in the form of a scale model). This semiotic register (indexicality) was also explicitly performed when the claims referred directly to the written description. As Lutz (1938b) informs, by the final quarter of the nineteenth century, it was still common for claims to rely heavily on the description especially by the use of the expression 'substantially as described' in the body of the claim (p. 470, p. 478).[210]

However, the medium of the text provided other performative possibilities that were to be productively exploited by applicants and their agents, especially when faced with judges keen to pass onto the applicant the labour of anticipating which uses could be covered in the original application. A good example of this new sensibility comes in the form of Justice Bradley's opinion in *Keystone Bridge Co. v Phoenix Iron Co.* (1877), where the judge refuses to expand the scope of the claims 'by inference and conjecture, derived from a laborious examination of previous inventions, and a comparison with that claimed' (as cited in Lutz 1938b, p. 471). Further adding that the role of supporting applicants in properly crafting their claims fell on the Patent Office where applications should be 'examined, scrutinized, limited, and made to conform to what he [the inventor] is entitled to' (as cited in Lutz 1938b, p. 473). And although this could not be said to be the dominant view at the time, both applicants and the Patent Office had good reasons to

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[209] The very idea that claims should be used as a measure of infringement is a rather late development in American patent jurisprudence (Lutz 1938a).

[210] Justice Bradley in the Supreme Court case of *The Corn Planter Patent* (1874) acknowledged the utility of the expression 'for restraining the too great generality; or enlarging the literal narrowness of the claim.' (as cited in Lutz 1938b, p. 471) The sample claim offered in the 1875 Patent Laws and Regulations also included the expression: 'I claim as my invention, / The combination in a saw-toothing machine, substantially as described, of a tapering barrel and chain, with a roller for feeding the blade.' (as cited in Lutz 1938b, p. 487)

stick to this stricter view to anticipate the possibility of having the claim assessed by a more demanding judge (Lutz 1938b, p. 471 and 488).

Thus, rather than expecting judges to extract from the description an essence that could reach through a greater number of embodiments of the invention; applicants were now expected to bring forward 'a kind of prefabricated abstraction' in the form of the textual claim to be densified in the course of adjudication (Pottage & Sherman 2010, p. 136). Reading these shifts in line with Pottage and Sherman's main thesis on the agency and sociality of media, opens new perspectives for understanding the formation of conceptions of invention beyond the agency of judges tasked with the role of extracting the intangible object of patent protection. We have here two, inter-related sides: the first how figures are made to elicit an invention — thus shaping and reproducing a conception of invention (what I have called figure-out); and how figures are made (what I will call figure-in).[211]

The figuration of inventions — although nearly absent in Pottage and Sherman's (2010) account of patent models (pp. 88-93) — plays a central role in their analysis of the emergence of modern patent claims and the development of techniques of peripheral claiming — i.e. specifying the invention in broad terms and relying on interpretation for subsuming embodiments and applications of the invention under the template(s) conveyed by the claims (pp. 135-148). There, we have a much more reflexive account of how practices of figuring-in and figuring-out feed off each other in mutually transforming and reinforcing ways. What Pottage and Sherman show in the second half of chapter seven is, essentially, the development of techniques of translating mechanical parts — of the sort that could be found in a scale model — into semantic units and of manipulating those units and transforming them into variables that could be recombined in various ways (pp. 137-142). The effect was a textual claim that could be recombined and actualised

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[211] I am drawing here on an insightful remark in Hyo Yoon Kang's (2012) review of *Figures of invention*

> Far from being instruments in the passive sense of the word, these media do not merely represent and external reality of invention which is translated, but they literally 'figure out' and configure the legal fiction of invention by their visualisation and demonstrations. (p. 464)

when confronted with an allegedly infringing article or use (p. 142 ff). As Pottage and Sherman summarise: 'The original "meaning" or "scope" of the claim element is the meaning it will turn out to have when constructed in the light of the structure of the accused device.' (p. 143)

As should be clear by now, the change of medium (from model to text as the paradigmatic figure of invention) is not merely a question of offering a written description instead of pointing to a thing. The materiality of the text allowed for different modulations as if the model could be broken apart and recombined to elicit new 'meanings'. This is captured by Pottage and Sherman in the evocative formulation of modern claims as textual machines. Rather than describing a clearly defined object (i.e. the central embodiment) the claim became 'the nexus around which the other parts of the patent text (and the other forms of representation that are mobilized in litigation) are articulated' (p. 144 f).

The result is a new conception of the invention, away from the age of the scale model — where the invention was imagined as a prototype in the classical sense of an 'instructional means' (Pottage 2015, p. 235) whose degree of specificity would be inversely proportional to the degree of abstraction. Specifying an invention would no longer simply be a task of describing a machine in such a way that 'simply changing [its] form or proportions' (US Patent Act 1793, s. 2) would not alter its essence;[212] but a question of focusing on the relationship between elements specified at the highest possible level of abstraction (e.g. reducing the materiality of a screw to the rarefied notion of a 'fastening means' Pottage & Sherman 2010, pp. 137-139) so that it could be made to generate a collection of always partial views. As Pottage and Sherman write 'The claim is not supposed to describe the physical device or even offer a complete (albeit abstracted) picture of the whole device.' (p. 145, note omitted). The meaning of the claim is, thus, always in the making since if 'the claims colour the disclosure … by the same token, one could return to the disclosure in order to redraw the type represented in the claim.' (p.

[212] A wonderful illustration of this strategy is offered in a 1799 patent to Benjamin Dearborn specifying that 'the drawings accompanying this description are not laid down by any scale of measurement because the forms, sizes, and proportions of the whole and its parts may be indefinitely varied' (as cited in Lutz 1938a, p. 135).

148) One might say that the modern claim moves beyond typological figuration (i.e. building a genus or type) to operate in a parametric logic so that the abstraction operates not simply by the suppression of scale but by reducing the invention to 'a set of elements and relations' (p. 150).

As a medium, text allowed specification at higher levels of generality and — especially when combined with the proliferation of separate claims to the same 'invention (Lutz 1938b) — an increase in the number of models (or information) that could be packed into ever smaller textual formulations. What peripheral claiming also entails is a clearer separation between the technical object at the centre of the inventive activity — that could, as we have seen, be specified at various levels of abstraction — and the legal object of patent protection. In an almost Copernican shift: the invention ceases to be conceived as magnetic body pulling potential variants into its orbit; and becomes a multitude of peripheric signalling devices that can be triggered in different ways. What this requires of the applicant is a more explicitly speculative exercise: of looking into the future for potential configurations of the same 'invention' and trying to fold them into the wording of the claims. It was this focus on the temporal dimension, that allowed us to see that the source of abuse in reissues had not to deal exclusively with the incompleteness of scale models as reliable sources to withdraw clearly delimited claims, but particularly by being able to formulate claims that would preserve an earlier priority date. The risk inherent in the activity of speculating the proper limit of the claims was neutralised — in the practice of reissues — by being able to change the past.[213] Similarly, the speculative burden that came with more restrictive judicial approaches to claim construction, could be met by turning claims into open-ended templates.

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[213] Justice Bradley, that very same that illustrated a stricter approach to claim construction in *The Corn Planter Patent* (1874), would advise in *Keystone Bridge Co. v. Phoenix Iron Co.* (1877) that

> If the patentees have not claimed the whole of their invention, and the omission has been the result of inadvertence, they should have sought to correct the error by a surrender of their patent and an application for a reissue. They cannot expect the courts to wade through the history of the art, and spell out what they might have claimed, but have not claimed. (as cited in Lutz 1938b, p. 472 f)

Perhaps the best example of a growing awareness of the need to figure-in the invention in advantageous ways and of the novel possibilities of manipulation of textual media, was the growing popularity of combination claims in the early twentieth century (Pottage & Sherman 2010, p. 148 ff). When applicants claimed inventions as combinations, they sought to exploit the possibilities of specifying an invention without reducing it to a central embodiment. As Pottage and Sherman (2010) explain: 'the object was to claim a collection of known components as an invention on the basis that each component was transformed by its relations to the others' (p. 151). By focusing on the combination rather than the functionality of each element taken in isolation, this technique allowed the interpretation to select and modulate any element so that, 'the incremental adjustment of a part … is able to impact on the whole assembly' — to borrow from Luciana Parisi's (2013, p. 265) definition of parametricism. Picking up the topic of a move away from central claiming, one could even appropriate further from Parisi (2012) and suggest 'Here there is no core, no end point and no individual response: only the continuous fluctuation of a total form enveloping all parts.' (p. 168).

The evolution of the legal conception of invention — and the mark it has left on patent practice — is beyond the scope of this study and the brief reference was justified merely as a way to illustrate that modes of figuring-in are as speculative and abstract as modes of figuring-out. In a sense, when words and drawings ceased to be pictures of an ideal embodiment to become systems of imaging or rendering views of potentially infringing artefacts it became clear that abstraction is an effect that can be intentionally produced in choices taken in the making of texts and drawings. But intentionality should not be considered necessary to abstraction. The focus on techniques of achieving higher levels of abstraction as an effect of the way in which an invention is specified, is justified because it puts into sharp relief that abstraction is not simply an effect of 'interpretation' (or de-coding) but also of 'presentation' (or encoding). And hence of suggesting that any 'presentation' of a figure already turns the artefact (text, drawing or model) into a practical abstraction. Even in the most modest and innocent of models — e.g. when the actual commercial object is given as a model of the invention (say a peg, a lock or a sewing

machine, Pottage & Sherman 2010, p. 104, Ray & Ray 1974) — is already an abstraction, in the sense that its individuality must be ignored if its essence is to shine through.

e. Abstraction without representation: the case of copyright

Having looked, in this chapter, at how representative registration and the media that materialised the practice helped forge a new conception of invention. And having looked at, in the preceding chapter, how registration played a role in the closure of intangible property. We are now in a position to tackle the apparent mystery of how copyright law managed to form an object despite the lack of representative registration. The topic is absent in *Figures of invention*, for obvious reasons, but is addressed in Sherman and Bently's (1999) *The making of.* While acknowledging that, as a result of the lack of mechanisms of representative registration, 'copyright law remains pre-modern' (p. 192) the authors still point out that until the abolition of formalities with the 1911 Copyright Act, 'registration existed as a prerequisite for full protection for most forms of copyright.' (p. 180, note omitted). Indeed, as we saw in chapter three of this study, some of the concerns raised during the literary property debate had to do exactly with the uncertainty that would result from a recognition of a *natural* (and thus unregistered) perpetual literary property right (see chapter 3, section e., above). Consequently, the question that emerges at this point is that of assessing the role and character of registration during this earlier period.

In assessing the historical role of copyright registration, some valuable lessons can be drawn from the period between 1793 and 1836, when patent models were submitted despite the lack of a clear legal requirement to do so. As ancillary devices to the patent application, models were deposited with the State Department to be retrieved in the event of litigation or, as later came to be the case, to apply for a reissued patent. Thus, rather than a representation that attempted to specify and narrow down the subject matter of the application, the model acted as a place-holder for the arguments that could

later be articulated in court. This suggests some interesting parallels with the practice of copyright registration, as explained by Sherman and Bently (1999). As they write

> Although representative registration played an important role in shaping intangible property which was protected by patents, designs, and trade mark law, the same cannot be said about copyright. The reason for this is that while, when dealing with patents, designs and trade marks the law was presented with a representation of the protected object, in the case of copyright the law was confronted with *the object itself* rather than a representation of that object. (p. 191 f, my emphasis)

This account of copyright registration seems to suggest an idea we are already familiar with. This is the idea of a transparent thing that collapses the distance between the artefact and the legal object (see p. 187, above). What is being imagined in the passage is a historical period in which that which was deposited coincided with the legal object of protection.[214] But it should be clear that depositing a book at Stationer's Hall (p. 192) was not the same as depositing a golden watch in a bank safe.[215] While in both cases, the item is deposited to be retrieved in pristine condition at a later point, the book is preserved as an exemplar. Returning to this key notion, as articulated by Tamen (2011, cited earlier, p. 135), the book deposited at Stationer's Hall is already prepared to exceed itself. To be more than a singular concrete object and present itself as the vehicle to ascertain the identity of the literary work. We may, of course, argue that this vehicle (or medium) will have a specific degree of conductivity to different claims that can be made on its behalf. But suggesting that the text figured in the deposited book is more conducive to claims closer to the surface of the paper than a written specification rendered at a higher level of abstraction (as indeed the story of the change from central to peripheral claiming in patent

[214] A misguided idea to which Brad Sherman returned to after the publication of *Figures of invention* by suggesting that the copyright work can coincide with the tangible (2011, p. 108 ff) One that is also not far from Alexander Peukert's (2021) recent proposal of a figure of 'Master Artefact' (p. 16 ff, above) or George's (2012) notion of the 'Documented form' (p. 93).

[215] Likewise, as Wreen (2010) remarks: 'The purpose of bringing an item, a physical object, before the patent office, isn't to show the government the very thing being patented.' (p. 439)

law seems to confirm) is not the same as holding that the crossing between concrete and abstract can only be made through representation.

The present analysis points in two directions. The first, already hinted at in the previous sections, is the unlikelihood of finding in law the necessary basis for all the operations of abstraction required by the logic of intellectual property. Even without representation, materials deposited as part of the registration procedure, seemed to be ready to exceed their physical boundaries and project an identity that could not possibly be exhausted by the 'parameters' of a physical object (Sherman 2011, p. 108). Raising the question: what were the historical conditions that made this exercise in abstraction possible and workable? The second, that has been gradually unfolding since the very start of this study but can only mature in its closing pages, is the question of how we can think the copyright object without reducing it to a purely tangible or a purely intangible nature while at the same time avoiding a confusion between the two terms.

So, what makes copyright in some ways pre-modern (when compared to other forms of intellectual property) has nothing to do with a supposed immediacy in the way it relates to the tangible object. It is pre-modern in the sense that, like patent models, the objects put forward as the privileged exemplars of the work only operate at the point of dispute. The lack of representative registration is, in fact, the postponement of the speculative exercise about the parameters of the object that, in other forms of intellectual property, must be formulated at an earlier point in time (the moment of application for registration). But even then, at the point of dispute, the object does not stand on its own: claims have to be made on its behalf, it has to be made to show a character that transcends its material confines while corresponding to the 'objectivity' of the artefact.

Talk of claims in copyright law may seem a strange notion — as claims are exclusively associated, in legal discourse, with patents — but any assertion of a legal position in copyright law (of authorship, ownership, or entitlement to remedies) depends on how the features of the work are specified and articulated. The difference between patent and copyright claims is primarily a temporal one that brings with it differences in terms of techniques and technologies of specification dictated by bureaucratic constrains. But the central idea is that the privileged exemplar never speaks for itself, it is always seen through what is said on its behalf.

The originality introduced by the elimination of formalities — especially deposit — was the abandonment of the figure of a privileged artefact introduced prior to litigation. It is as if copyright quickly transitioned from a pre-modern to a post-modern era in which not even the basis of the claim could be fixed *a priori*.[216] The perfect example of this shift comes from Jose Bellido's (2014) luminous study of a landmark case in British copyright law, *Designers Guild v Russell Williams*.

The case opposed two textile manufacturers over the origin, originality and alleged copy of a flowery stripy fabric design. Much of the dispute at first instance concerned the issue of derivation, that is, of whether the plaintiff's piece originated independently or derived from previous access to the plaintiff's work (*Designers Guild v Russell Williams* [1998] 815). Were we to trust the idea of a privileged exemplar, we would expect the plaintiffs to have submitted, with their petition, the 'original' artefact from which the rolls of colourful fabric that made their way to the shops were executed (808). This should have been the painting produced by one of Designers Guild's employees during the design stage of the development of their commercial products, and upon which the claim was based. But that was not the case.[217] This should be enough to show that rather than a privileged artefact, in the case of objects that are serially produced, any token can serve as a demonstration of the type. But the articulation of Designers Guild's case was more

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[216] Although several other techniques to contain the subject matter were introduced, more on this soon.

[217] 'The plaintiff owned the copyright in a painting from which it derived its *Ixia* design' (803). 'In this action the relevant copyright work is the artwork or painting produced by Miss Burke in 1994.' (812) The production process is described on p. 808 of the report. Since the defendants could not have had accessed to the workshop painting, this was treated as a case of 'indirect copying' and the finished fabric taken as a starting point for analysis since material differences between painting and fabric were considered 'immaterial' by the judge (812). This results from a principle, neatly captured by the editors of the latest edition of *Copinger and Skone James on Copyright*, according to which 'the work, once fixed, continues to have a separate, disembodied, existence from the material form in which it is fixed.' (Caddick, Harbottle & Suthersanen 2021, at 3-166). This is a banal point about indirect copying (Bently, Sherman et al. 2018, p. 194). See also *Lerose Ltd v Hawick Jersey International Ltd* [1973] 23 f, with the judge pointing out that the issue is not one of access to the plaintiff's original drawing, but to 'the design features in the point drawings' accessed through a sample of a knitted fabric.

elaborate. As Bellido (2014) beautifully shows in his article, the plaintiffs did not simply point to the competing fabrics hoping they would reveal what was said on their behalf. Thanks to the crucial intervention of Victor Herbert, the expert witness called by the plaintiffs, various sophisticated techniques of visualisation were employed 'to "materialize" the incorporeal' (p. 66) under dispute. This involved selecting, identifying, dating, ordering, captioning, cropping, and positioning the materials that would make their way into the case file (pp. 75-82). More than assembling evidential materials, Herbert created a montage, in the medium of the case file, to sustain the narrative that accompanied the plaintiff's claims: from originality, to derivation, to the similarities and differences that would 'reveal' substantial copying (p. 81). What this example illustrates is that in modern copyright law it is not just the intangible that is fabricated during the trial, the very tangible materials that are supposed to evidence or reveal the intangible only gain materiality in the process of articulating a claim.

The lack of control over the materials that can be harnessed together in articulating a claim is, however, compensated by other techniques for stabilising the subject matter. Perhaps the most relevant one, for my purposes, is the control over what can be said of the materials presented to exemplify the intangible character of the work. Here, categories of protectable subject matter (ss. 3-8 CDPA 1988) play a central role.

The continuing relevance of statutory categories under UK law is subject to debate. While rulings from the CJEU seem to have closed the possibility of rejecting claims based solely on the incapacity to shoehorn the subject matter under one of the available descriptions (Bently et al. 2018, pp. 59-62; Griffiths 2013, pp. 781-783 and pp. 787-789) — rulings whose relevance is itself unstable in a post-Brexit scenario (Y. Lee 2018b, p. 136; Caddick et al. 2021, at 3-14) — categories continue to operate in a more subtle way. Subsuming a work under a given category, restricts what can be said of it (or in its behalf).

This can be seen in multiple cases, but Justice Laddie's decision in *Electronic Techniques (Anglia) Ltd v Critchley Components* [1997] captures this operation with

extreme clarity.[218] Faced with the question of whether a circuit diagram should be treated as an artistic work, literary work, or both, Laddie J emphasised that '[i]dentifying correctly the particular copyright category into which an author's work fits … can be of importance both to the duration and scope of the rights.' (412) Hence, the judge reasoned, if the diagrams would count as artistic works, then only that which was "appreciated simply with the eye" (413)[219] would count (i.e. the lines abstracted from any meaning which they could carry as symbols). Conversely, should they be treated as literary works, graphical elements and their position on the page should be bracketed and the symbols taken as exhaustive of the work. In other words, categories determine what 'matters' in a work.[220]

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[218] Even though the decision has been criticised on its merits, especially for the insistence that copyright categories are mutually exclusive when considering a 'single piece of work by an author' (p. 413). *Sandman v Panasonic UK Ltd* [1998] 657; Bandey (2007, p. 464).

[219] This is a quote from Jacob J in *Anacon Corp Ltd v Environmental Research Technology Ltd* [1994] where a list of components drawn up by the defendants after examining the plaintiff's electrical circuit was held not to infringe the artistic copyright in the diagram because 'the alleged infringement simply does not look like the artistic work' (662). Even though containing the same information, there were differences on how these elements were positioned on the page of the diagram or the material of the circuit. The words 'visually significant' were quoted, by Jacob J, from *Interlego AG v Tyco Industries Ltd* [1988] 373 a case also singling out retinal features as what matters in an artistic work.

[220] E.g. *Navitaire Inc v EasyJet Airline Co Ltd (No. 3)* [2004] considering that 'to emulate the action of a piece of software by the writing of other software that has no internal similarity to the first but is deliberately designed to "look" the same and achieve the same results' [at 5] was not an infringement of literary copyright (affirmed in *Nova Productions Ltd v Mazooma Games Ltd* [2007] at 45 ff, and *SAS Institute Inc v World Programming Ltd* [2013] at 84 f.). *Francis Day & Hunter Ltd v Bron* [1963] considering similarities between musical works as 'a matter for the ear' (594). *Kogan v Martin* [2019] suggesting that the development of 'plot and character' may carry greater weight in dramatic than in literary works [at 69]. *Abraham Moon & Sons Ltd v Thornber* [2012] at 92-95, reviews a long line of cases holding essentially that following written instructions to produce the article specified therein does not amount to an infringement of the literary copyright — shortly 'you do not infringe copyright in a recipe by making a cake' *J&S Davis (Holdings) Limited v Wright Health Group Limited* [1988] 414 — to reach the apparently counterintuitive conclusion that decoding the finished product by producing independent instructions for its manufacture is an (indirect) infringement of the literary copyright in the plaintiff's instructions. Still, only the production of a text — not the finished article — was considered to infringe the literary copyright (*Abraham Moon* [2012] at 99). The second, apparently counterintuitive, conclusion reached by Judge Birss QC in the case was that of considering a two-

It seems Justine Pila (2010) captured well the fundamentals of this technique through which the law has learned to contain the scope of proprietary claims that can be made over such a fluid subject matter when she wrote that 'in order to perceive a work *qua* work one must perceive it in relation to a category of work' (p. 230) while also emphasising the 'variability of their properties relative to that category.' (p. 244)[221] More to the point, Jonathan Griffiths (2013) conceives categories as judicial 'tools … to resist unduly broad claims to copyright protection.' (p. 768)[222]

This illuminates an important operation of copyright law that would be easy to miss were we to take the idea of immediacy seriously. Copyright does not deal with privileged exemplars directly, but only through the mediation of what is said on their behalf. A memorable opening line by Whitford J in *Kleeneze Ltd v DRG (UK)* Ltd [1984] — a case dealing with draught stoppers for letter boxes (of all things) — captures this shifting nature of perceptions with great elegance

> When this case was opened I was handed a specimen of the plaintiffs' draught excluder and a specimen of the defendants draught excluder and to me too at first glance they appeared to be virtually identical. On a second look it was immediately apparent that they were not. (400).

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page document containing words and numbers specifying the combination of threads to be weaved into a fabric, an artistic work [at 102-107]. This did not, however, contradict the emphasis typically put on visual significance. The document in question was presented as the 'record' of an image that an expert could elicit from the words and numbers of the document and infringement assessed on that basis [at 109].

[221] Whether this captures a universal 'psychology of art appreciation' (Pila 2010, p. 244) is a separate matter. For a critical perspective Barron (2002).

[222] In an extensively researched essay, Yin Harn Lee (2018a) has recently put forward a similar view that formalist techniques, similar to the one employed in *Electronic Techniques (Anglia) v Critchley*, were an integral part of the development of copyright law in the eighteenth and nineteenth centuries as a way to separate 'between those aspects of the work that could properly be regarded as the property of the copyright owner and those that could not.' (p. 42 f) A view, the author suggests has a continuing influence in contemporary UK and EU copyright law (2018b). Tanya Aplin (2009) has explained in detail that 'it is wrong to think that "open list" systems avoid classification entirely.' (p. 73)

Although the judge does not enter into details on what caused this change, it seems clear that what he was looking for mattered as much as what he was looking at. This ties in with a second mechanism through which objectivity is forged in copyright law, not by bureaucratically regulating the materials with which the 'intangible' is brought before the law, but by controlling what can be said of them. Here, I will quickly return to *Designers Guild,* this time to the way in which the case was handled in the House of Lords.

Asked to look at the two designs to ascertain whether the defendants had taken a substantial part of the plaintiff's work, Lord Hoffman considered this exercise irrelevant, indeed a distraction (*Designers Guild v Russell Williams* [2001] 2421). What justifies this indifference? The answer is given in the final point of Lord Hoffman's speech on the appellate function (2423 f). Quoting Buxton L.J. in *Norowzian v. Arks Ltd. (No. 2)* [2000] (370), Hoffman agrees that 'a party should not come to the Court of Appeal simply in hope that the impression formed by the judges in this court, or at least by two of them, will be different from that of the trial judge.' (2424) What is at stake here is no longer deciding whether substantial copying has occurred but policing the attitudes of appellate judges. The message is clear: once an impression elicited from the material has been translated into a set of linguistic formulations (dare we call them *lekta*?) it should be held steady.[223] At this moment, the impression of trial judge has congealed into a legal object whose objectivity lies precisely in its closure.

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[223] In *Designers Guild v Russell Williams* [2011] (Lord Hoffman)

> Mr Fysh [counsel for Designers Guild] … said that the question of substantiality was one of impression. That, in a sense, is true. When judges say that a question is one of impression, they generally mean that it involves taking into account a number of factors of varying degrees of importance and deciding whether they are sufficient to bring the whole within some legal description. It is often difficult to give precise reasons for arriving at a conclusion one way or another (apart from an enumeration of the relevant factors) and there are borderline cases over which reasonable minds may differ. (2420)
>
> The question of substantiality is one of mixed law and fact … It is … one of impression in that it requires the overall evaluation of the significance of what may be a number of copied features in the plaintiff's design. (2423)

Concluding, not that the trial judge impression was correct, but rather that it should 'not have been reserved.' (2424)

Once again, this other mechanism to contain the subject matter does not act upon the body of the artefact (or media of presentation), but upon managing the linguistic propositions it elicited. A similar conclusion results from an examination of the recent *Levola Hengelo BV v Smilde Foods BV* [2018] case at the CJEU, the one about the copyrightability of a taste. In the absence of a closed list of subject matter (Griffiths 2013, p. 782), the CJEU would be barred from excluding it categorically. But excluded it was, nevertheless. While the reasoning of the court is somewhat obscure (e.g. suggesting that copyright law must 'ensure that there is no element of subjectivity … in the process of identifying the subject matter' *Levola* [2018] para. 41), in one possible reading the court may be pointing in another direction. Excluding subjectivity in an area of law whose object is ultimately determined by impression, as Lord Hoffman eloquently articulated in *Designers Guild v Russell Williams* [2001],[224] is not something to be taken seriously, still there is a crucial difference between laying claims over a source and an effect. The court tried to point out the differences between the form of expression of literary, pictorial, cinematographic and musical works, on the one hand, and the 'taste of a food product on the other' (*Levola* [2018] para. 42) by employing a trope of objectivity/subjectivity, but the results are unsatisfactory. The issue here is not that a packet of cream cheese cannot be put to examination (as a privileged exemplar of the 'work', if the reader will bear the shortcut) in a similar way that a recording can be played in a courtroom. It is also not the case that the cheese is unrepeatable, in fact one would expect each packet of an industrially produced food product to be far more consistent than multiple renditions of the same musical piece. Both subject matters could elicit different impressions, even though not necessarily due to differences in the source of those impressions. The point is rather that the claimants were pointing not to a source subject matter and formulating claims on it; the claimants tried to shortcut the operation by appealing directly to the impression elicited from the consumer (i.e. the effect, the taste).[225] As if trying to own a

[224] To which we could add several other well-known passages from the case law. E.g. *Bauman v Fussell* [1953-1978] 489 describing the issue of substantial taking as one that turns 'on the view one takes of the two pictures'.

[225] In the more recent *Cofemel v G-Star Raw* [2019], the court was once again faced with a claim targeting an effect rather than a subject-matter. In this case the aesthetic effect produced by a

feeling rather than the means to elicit it. But more importantly, the court seems to be unwilling to accept as reliable, things said about a taste (para. 42 f) considering them more subjective than things to say about the impressions caused by more orthodox types of subject matter. Once again, it is by controlling what can be said of an object that copyright constrains the claims that can be made to it.[226]

All this suggests that although representative registration has played an essential role in formulating the techniques in which the legal object is abstracted from the figures put forward as their representatives, they do not seem necessary for the conceptually earlier step of making a cut between tangible and intangible. With intangibility fixed in the horizon even a simple artefact can serve as the basis of that abstraction, depending, however, on what can be admissibly said about it. This takes some weight off the shoulders of inscriptions and opens the floor to consider other techniques of abstraction.

Conclusion

This chapter has followed Pottage and Sherman's account of the emergence of the modern conception of 'invention' as a process of abstraction. Material media used in patent bureaucracy and adjudication did not offer fully formed images or representations of abstract objects; they were, instead, tools with which 'knowledge' was abstracted from its actual or potential embodiments. Although their conclusions cannot be linearly extended to cover the making of abstractions in copyright law — particularly due to the

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design, rather than a claim made to the design itself, holding that 'that subjective [aesthetic] *effect* does not, in itself, permit a subject matter to be characterised as existing and identifiable with sufficient precision and objectivity' (para 53 my emphasis).

[226] Y. Lee (2018b) reaches a similar conclusion when discussing the exclusion of behavioural aspects of a computer programs as relevant features of the subject matter in the appreciation of infringement claims, by identifying the absence of 'a vocabulary for articulating the precise nature and scope' of those features (p. 137) as a crucial factor to explain the text-centric approach to computer programs in copyright law.

lack of representative registration — they offer important lessons on how to deal with abstractions seriously without, however, hypostatising them.

My reading of Pottage and Sherman's study has emphasised one particular dimension of this process by highlighting techniques for figuring-in and thus bring to the law 'prefabricated abstractions', to use their perfect expression (Pottage & Sherman 2010, p. 136). The point was not to suggest that inventors or their agents already had a fully developed conception of 'invention' in preparing those materials. As we have seen, in the formative years of the US patent regime, the task of figuring the invention operated on the basis of techniques of description. However, what was described or simulated as a technical object was already an abstraction: a thing irreducible to any concrete embodiment. Similarly, in copyright the appeal to a privileged tangible artefact as coextensive with the work has proved implausible. This suggests that intangibility was not really the problem, patent law did not need to invent an entirely new way of seeing things and copyright works did not need to be written down to become intangible property. In searching for the origins of this speculative mode of dealing with artefacts — especially in copyright — we must look for the modes in which literary and artistic works were figured-in as abstractable objects. This will be the task of the final chapter of this study by examining whether changes in the production and circulation of commodities had already created a culture of abstraction that allowed legal actors to conceive of things that were irreducible to any of their concrete manifestations.

The lesson to draw from our discussion of the formation of the modern conception of the invention, is that abstractions that were not thought up but rather practiced in the mundane workings of the patent regime, facilitated the formation of legal doctrines. This is a process of translating those abstractions into the legal realm, wherein they acquire a more definitive shape. One should then expect such vernacular abstractions to become formal and analytical abstractions with which the phenomenal world of production came to be seen (and rights allocated accordingly). The formation of legal concepts required working with vernacular abstractions already present in some sectors rather than committing to loftier abstractions. Teasing out historically, and theoretically, how this process played out will be the subject of the following chapter.

Chapter 5. How to be both

> a certain kind of materialism—comic materialism—that identifies something useful by showing us how material stuff joins abstract ideas not by changing places, but by pressing the abstract directly into the concrete, through comic ontology, that is, without changing place.
>
> Peter Galison (2016) p. 44

Double meanings often induce laughter. 'Double meanings [that] superimpose the literal and the metaphorical', Peter Galison (2016) notes, double as prompts for philosophical speculation. They capture us in an endless 'back and forth', a 'cross' between things that ought to be kept apart; they displace our expectations by 'an *insistence* on staying in the same place', by simulating a '*simultaneity* of the metaphorical and literal, of ideal and material' (p. 43). Laughter, in such cases, comes not as a recomforting discharge associated with an unmasking — say of the Emperor's all too human stupidity (George 2012, p. 6, see note 3, above) — but rather as a ticklish unease that offsets comfortable dichotomies with a forced change of perspective. It is an ecstatic laughter (in the all too literal sense of laughing in spite of one's certainties): it is 'an attack against the self's balance' (Cavarero 2016, p. 6).

The constraints of the genre have already spoiled any aspiration of comedic effect, so I will have to report it as a finding and restrict myself to its secondary function. As I was reading Lara Kriegel's (2004) excellent 'Culture of the copy: Calico, capitalism, and design copyright in early Victorian Britain', in the section where she recounts the contemporary

cloth printers' frustration with the designs' or 'patterns' insecurity as property',[227] I came unexpectedly across these familiar words

> It was the very *"immateriality"* of a pattern on display that allowed it to be "stolen through a window, without cutting out a pane of glass," or "carried off by the eye, without being traced or found upon the person." (p. 244, note omitted)

All the passages marked with inverted commas come from a letter written in 1840 by calico printer and champion of the law reforms to increase 'copyright' protection in the calico trade, James Thomson. The letter was addressed to Sir Robert Peel, who would shortly become the Prime Minister, and during whose administration the new law reforms would be passed.[228]

Now, these words — in a slightly different configuration — also appear in Sherman and Bently's (1999) study

> While the idea of a property which could be stolen through a pane of glass and carried off by the eye without being found on a person offended the empiricist sensibilities of the law, the non-physical nature of mental labour created a number of more specific problems. (p. 20)

But they appear in the context of the discussion of the literary property debates (1747-1773) and without reference to Thomson — whose letter is, nevertheless, thoroughly examined in chapter four. Grafted onto the structure of the metaphysical complications of literary property, these words appear metaphorically as an elegant articulation of the ontological elusiveness of intangible property. Their use in the context of literary property further entrenches the purely metaphorical sense of those words. Literary property

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[227] In simple terms, this a version of the well-known Law & Economics truism: that expressive works are costly to make, but cheap to reproduce. Alternatively, and more in line with the historical universe Kriegel's narrative unfolds we could say the main difficulty lies in making them valuable and sought-after commodities. For the contemporary version of the argument and accompanying critique, see Barron's (2010).

[228] See Sherman and Bently (1999, chapter 4) for a background of these legal reforms.

cannot be literally stolen through a pane of glass. It is not quite the same with designs or patterns.

As Kriegel (2004) explains, it was common practice, in mid nineteenth century England, for provincial calico printers to send draftsmen to the most fashionable parts of London to 'look through the windows' and copy designs (p. 244). The relative simplicity of patterns (as opposed to literary works or even figurative engravings), together with its ephemeral value linked as it was to cycles of fashion, meant that these prospectors could effectively carry *them* off on a vague impression. Perhaps 'them' is the wrong word; they could carry *that* which potential consumers might have been expected to value in the design. But both sides agreed that what one displayed and the other looked for was not just a material piece of cloth, but a valuable intangible. A hook to, and a projection of, the passer-by's desire.

If unmasking were my aim, Thomson's words would appear here diminished by their mundane reference to commercial pilfering. As if the image would somehow be demoted from a witty remark by a metaphysically sophisticated soul to the trivial complaint of a shopkeeper. The effect would, however, come at the cost of keeping the boundary between high metaphysics and low material concerns undisturbed. I choose a different route. What I will propose is that in the vernacular context in which Thomson's words were expressed, the pattern or design was no less *an* abstraction than if it had the expected Platonic overtones — were we to take received ideas of copyright's ontology on trust. That which was placed behind the shop window's pane of glass was already an abstraction. An abstraction other than by thought or representation.

This is an abstraction that is not 'thought up' (Biagioli 2006, p. 1145 quoted in the previous chapter) but one that emerges in the sphere of production and circulation of commodities. In this final chapter I will argue that greater attention to these real abstractions help distribute the excessive weight that inscriptions (i.e. what is written down and thus formalised) have been made to carry in some theories of intellectual property and conclude that the intellectual in intellectual property is not an abstraction that was either thought up or written down: it was picked out and rematerialised.

a. Abstractions other than by thought

The idea of an abstraction other than by thought has firm roots in Marx, but we owe Alfred Sohn-Rethel its development and expansion beyond the strict confines of political economy. The idea of a real abstraction is complex, multi-layered and Sohn-Rethel's account is not always entirely convincing. Still, as a way of grappling with abstraction it offers interesting possibilities to an account of intellectual property law.

Consider this experiment. Suppose you are passing by Thomson's shop at the precise moment at which his clerk is placing a sample of a new fabric on public display. Sohn-Rethel (1978) comes closer and tells you: Here,

> in the market-place or in the shop windows, things stand still. They are under the spell of one activity only; to change owners. They stand there waiting to be sold. While they are there for exchange they are there not for use. A commodity marked out at a definite price, for instance, is looked upon as being frozen to absolute immutability throughout the time during which its price remains unaltered. And the spell does not only bind the doings of man [*sic*]. Even nature itself is supposed to abstain from any ravages in the body of this commodity and to hold her breadth, as it were, for the sake of this social business of men [*sic*]. Evidently, even the aspect of non-human nature is affected by this banishment of use from the sphere of exchange. (p. 25)

Although the word 'abstraction' is not used in this passage, Sohn-Rethel introduces here all the components of what he sees as the commodity abstraction. First, a physical separation between things for exchange and things for use. Second, the postulate of equivalence that is presupposed in the notion of exchange; represented, in the excerpt, by the price. Third, the postulate of immutability. What we witness in the theatre of the shop window is a process of sublimation: the object in the shop window is there and not there at the same time: an object lacking a *unique* spatial temporal location — in the most orthodox definition of abstract object (Wetzel 2009) or, more ambitiously, as a

distributed object (Gell 1998, chapter 9).[229] The characterisation is not decisive for my purposes. All I need to hang on to is the looser idea that, placed in the theatre of the shop window, a concrete object is doing more than announcing *it* is for sale. Instead, it makes a double invitation: it mediates between the stock inside the shop and its possible future as a use value for the buyer.

This commodity abstraction is not only a conceptual operation of political economists when looking at the commodity twice: first as use-value, then as exchange-value. The abstraction Sohn-Rethel is describing is much more mundane. Even the proverbial 'moron in a hurry' of the law of passing off (*Morning Star Cooperative Society Ltd v Express Newspapers Ltd* [1979] 117) would understand quite well that thirst, hunger and desire must be held back until the spell is finally broken at the till. Abstraction from use, the sealing off of bits of matter in storage containers small or large, the 'stringently observed' 'separation of exchange from use' (Sohn-Rethel 1978, p. 24 and p. 92 ff) is a necessary condition — the material basis, if we want — for imagining objects immune to the flux of events, in other words: abstracted from space and time, which is only a different way of saying abstract objects or values.

But the shop window introduces a layer of semiotic complexity that can obscure the simplicity and immediacy of the kind of abstraction Sohn-Rethel examines. We should start elsewhere, in the warehouse, beyond the public gaze. Things there are sealed off and various technologies are used to contain them and make sure they remain just as they are (so that they are not displaced by thieves, ravished by the elements, or consumed by termites). Crucially while they are there waiting to be exchanged, they cannot be used.[230] To the erection of a barrier that divides things marked for exchange from things marked for use, we may give the name of literal abstraction. But we must follow Sohn-Rethel in 'penetrating further into the exchange abstraction' to

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[229] Gell (1998) defines them as 'aggregates of artworks … combining multiplicity and spatio-temporal dispersion with immanent coherence.' (p. 222); also 'an object having many spatially separated parts with different micro-histories' (p. 221).

[230] 'Wherever commodity exchange takes place, it does so in effective "abstraction" from use.' (Sohn-Rethel 1978, p. 25)

> notice that there are indeed two abstractions interlocked with each other. The first springs from the separation of exchange from use … The second operates within the very relationship itself, and results from the interplay of the exchanging parties as solipsistic owners. It attaches directly to the act of exchange itself. (p. 46)

We started the analysis with a material attempt to stabilise or immunise matter, but its goal already gives away a second form of abstraction: the 'real abstraction'. The attempt to stabilise matter is guided by the need to conform to the determinations of exchange; that is: to ensure that the thing retains enough constancy to maintain its use value and thus keep both sides of the bargain in equilibrium. The act of exchange — that crucially depends on an idea of equivalence, unlike acts of gifting — 'consummates'[231] the abstraction that underlies exchange. This is what Sohn-Rethel (1978) calls 'the postulate of equality of the two lots of commodities to be exchanged' (p. 46) it is this postulate that allows commodity owners to exchange their claims to exclusive use.[232]

Commodity production, that is, speculative production intended for exchange (Marx 1990, p. 136), is based on a postulate of the equivalence of commodities (as exchange values), despite their material differences (as use-values). The commodity abstraction is thus, at its simplest, 'the mode of expression, the "form of appearance"' of the equation in which a definite quantity of a given commodity is exchanged for a definite quantity of a different one. (p. 127) But for commodities to appear as equivalents in acts of exchange, they have to be reduced to an abstraction: value. What is abstracted away is nothing other than what makes them use values in the first place. As Sohn-Rethel (1978) writes

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[231] In the apt expression of Michael Heinrich (2012, p. 50) when writing on the theme of real abstraction in Marx, but in connection to 'abstract labour' and not in direct reference to Sohn-Rethel.

[232] As Sohn-Rethel (1978) clarifies later on

> The business of exchange enforces abstraction from [events in time and space] … for the objects of exchange are assumed to remain immutable for the duration of the transaction … While commodities travel a distance for delivery to their new owners, the equation between the two lots prevails at every one spot and every one moment the same as at every other one. (p. 48)

'exchange-value is itself abstract value in contrast to the use-value of commodities. The exchange-value is subject only to quantitative differentiation' (p. 19).

Now, the crucial point is that this postulate of equality does not need to be thought up, it is a function of the act of exchange: 'They are equated by virtue of being exchanged, they are not exchanged by virtue of any equality they possess' (p. 46). That is, for commodities to confront each other as equivalents they must appear as pure quantities. No one would, of course, trade like for like (in terms of use values: one pound of apples for one pound of the same apples at the same time) since each would end up exactly as they began. But they do trade like for like in a different (quantitative) sense: this is the equation in which each is left no better off than the other when things are or assumed to be traded at their value.[233] This exchange happens at a different level: value is abstract and can only be accounted for after consummation of the exchange. Value is abstract in the precise sense of being body-less: value is what remains after one abstracts from (or brackets) the commodities that have parted ways.

I hope the previous paragraphs have prepared the ground to appreciate what may be methodologically interesting in the concept of real abstraction. As we have seen, the reduction of commodities to mere quantities, for the purpose of exchange, is according to Sohn-Rethel an abstraction. But to take in the full blow of Sohn-Rethel's attack on traditional epistemology, we must examine his words carefully

> The essence of commodity abstraction, however, is that it is not thought-induced; it does not originate in men's [*sic*] minds but in their actions. And yet this does not give 'abstraction' a merely metaphorical meaning. It is abstraction in its precise, literal sense. (p. 20)

[233] Whether or not this may be a fiction, as in the case of labour power. One may say that things were not exchanged because they were of equal value, but that they have equal value because they were exchanged. The circularity of this predicament is what leads Marx to search for value outside of exchange and locate value generation (a concept separate from realisation) within the sphere of production. These complications are, however, unnecessary for the argument I am trying to develop. The only factor I wish to draw from the example is this: in commodity exchange things are held to be fungible (i.e. susceptible to changing places without losing value, precisely because their nature is reduced to the bare minimum of being carriers of exchange value).

It is unfortunate that Sohn-Rethel did not take the time to expand on this distinction between the 'literal' and the 'metaphorical' senses. However, Sohn-Rethel is probably hinting at the etymological root of the word, in the Greek *aphaíresis* 'built on the verb *aphairein*, to take away, for example to draw blood' (Preus 2007, p. 31) or 'pulling out, extracting' (Bhandar & Toscano 2015, p. 8).[234]

It is also worth pointing out that although Sohn-Rethel seems to envisage a clear demarcation between literal abstraction (as in the removal of things for exchange from the company of things for use) and metaphorical abstraction (as in the conceptual erasure of matter from the appreciation of an object); in other parts of the analysis Sohn-Rethel admits an intermediary stage that goes beyond mere physical displacement but not as far as a pure mental operation. What characterises the real abstraction is, precisely, that it retains the literal sense of severance, even as it affects perception. It is precisely this (comedic) simultaneity of thought and action that upsets the comfortable materialist and idealist positions against which his critique of epistemology is directed.

This way of grappling with abstraction has three interesting features: (i) abstraction is a process (like the cutting that precedes the *abstraction* of the patient's blood); (ii) that at least in one sense of the term there is a material process (again like the cutting of the patient's flesh) concomitant with the abstractive process; and (iii) that abstraction (at various levels and in its various forms) arises historically, which entails that abstractions are not only historically situated but also time-bound.

To emphasise the second point, a contrast with Tony Lawson's (1998) use of the term seems helpful. Lawson also conceives abstraction as 'method or process' but essentially as a process of looking or examining. In his own words 'focusing upon certain aspects of something to the (momentary) neglect of others.' (p. 170) To sharpen the contrast, we may say that for Lawson the process of abstraction begins with an attitude of cognitive suspension, whereas for Sohn-Rethel it begins with a cut.

Another aspect worth emphasising is that abstraction, in this mode, is neither an explicit thought process nor a sneaky operation happening behind an ideological mantle.

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[234] Osborne (2004) traces its root to 'the' Latin *abstrahere*, to abstract means "to draw away or remove (something from something else)'", p. 22.

As we have seen, the postulate of equivalence has no need for an explicit 'theory' of free and bound variables. No 'thinking up' is needed to exchange apples for pears. Abstract value — although a precondition or implicit commitment of exchange — can remain dormant as a category of thought. What this implies is that an explicit account of value is not necessary for exchange and it may appear, therefore, sterile. The 'real abstraction' is thus not *the idea of* value, it is the postulate of equality in (trans)action. Value, as a concept, only formulates in explicit terms the real abstraction that precedes it. That is: 'value does not create the equality, it only applies to it *post festum*.' (Sohn-Rethel 1978, p. 49)

But to say that an explicit account of value is not necessary for exchange is not to assume it is irrelevant to it. Concepts are generative mechanisms. What they make possible, however, is not the exchange of particulars at definite quantities; but the calculation of value. In a crucial passage, Sohn-Rethel writes

> The interrelational equation posited by an act of exchange leaves all dimensional measurements behind [e.g. tons or gallons or acres] and establishes a sphere of non-dimensional quantity. This is the pure or abstract quality of cardinal numbers, with nothing to define it but the relation of greater than (>) or smaller than (<) or equal to (=) some other quantity as such. In other words, the postulate of the exchange equation *abstracts* quantity in a manner which constitutes the foundation of free mathematical reasoning. (p. 47, my emphasis)

There is a great big gap between this real abstraction (the formal elements of exchange postulated by the treatment of things as pure quantities) and the thought or conceptual abstractions evidenced in mathematical thinking. In his own words

> the question occurs as to why commodity exchange gives rise to abstract thinking only at the relatively late date of classical antiquity and not from the very first exchange, probably tens of thousands of years earlier. (p. 58)

Now, what Sohn-Rethel wants to avoid is a purely epistemological account that would render the emergence of conceptual thinking as an operation of looking at

phenomena with the mind's eye (be that the discovery of the scientist, the speculation of the philosopher, or the plotting of the central committee of the bourgeoisie). This fits the target of his overall project which is precisely the very idea of a separation between the hand and the head. In that, Sohn-Rethel seeks to offer an alternative to both rationalism and vulgar Marxism. And he does so by attempting to explain abstraction and conceptual thinking as closely as possible to the hand.

An important part of Sohn-Rethel's argument is grounded upon a provocative (but unfortunately underdeveloped) historical claim about the practice of coinage and the role of minted metal tokens in commercial exchange in the seventh century BC Ionian states. A practice that, according to him, served as the trigger for — or at least the real abstraction at the basis of — the type of abstract thinking exercised in Greek philosophy and geometry.

This taste for *the* original abstraction — in line with Marx's (1990) own historiographic sensibility when it came to 'primitive accumulation' (chapter 27) — may mislead us into an idealistic position whereas once discovered, ideas could merely stand on their own. Silvia Federici (2014, introduction) describing how primitive accumulations are constantly being actualised or Bruno Latour (1987, chapter 5) in insisting on the precarity of scientific 'advances' remind us that even abstractions need to be socially reproduced. Requiring, thus equal attention to be given to historical origins of certain phenomena as to their social reproduction and mobilisation.

However plausible the historical claim about the original abstraction may be, Sohn-Rethel's hypothesis will remain interesting only as long as it proves a useful tool to appreciate real abstractions in their actuality. To put it in other words, I am more interested in examining how Sohn-Rethel may help us make sense of current, mundane, practices of abstraction; rather than how he traces its historical origins. What is important is to place abstraction in time, not necessarily to discover the time in which the first abstraction took place.

Still, it is important to have a sense of the arc of Sohn-Rethel's narrative, if only as a parallel or a scheme for understanding how real abstractions operate. Returning to the theme of value, what Sohn-Rethel wants to claim is that value was not an abstraction dangling in mid-air just waiting to be picked up by a rational mind. There couldn't have

been an *eureka* moment when someone just though: wait a second, we have been exchanging value, not things, all along! The scenario is not plausible precisely because the mode of thinking in such abstract terms had to be invented first, in historical time. A first acquaintance with or grasp of an embodiment of value, Sohn-Rethel seems to suggest, is necessary to allow the formation of a reflexive attitude on its character. It is the invention of coinage (not money) that provides Sohn-Rethel with the necessary starting point to show that conceptual abstractions are fabricated out of mundane experiences that render or simulate the very postulate of immutability which constitutes the real abstraction of commodity exchange.

By tracing changes in the materials used as money, Sohn-Rethel (1978) is able to plot the course of the transition between different modes of abstraction

> The material of money must … be adaptable according to every possible quantity of value. It must therefore be divisible *ad lib.* Money must be divisible in order to leave the commodities undivided … The abstract materiality of value … figures as an integral whole in every single incident of exchange, and in order to be able to serve all incidents in this capacity it must, on the contrary, allow for any degree of divisibility (p. 53).

The adoption of precious metals by their 'physical durability, divisibility and mobility easily complies with the postulate' of immutability (p. 58). But they do not yet secure what Bruno Latour (1990) might call 'an immutable mobile'.[235] They were still too inconsistent and too close to the hand to capture a conceptual imagination. As Sohn-Rethel (1978) explains, as long as the bare weight of these metals that stood in for value

> at each transaction they had to be weighed and cut or melted and tested for their metallic purity; in short, they had to be treated in accordance with their physical nature. (p. 59)

[235] Despite the usually disparaging terms with which Latour refers to Alfred Sohn-Rethel's work (Latour 1990, Latour 2018), there are interesting affinities in the ways in which both authors understand abstraction and the media through which it is executed.

It is only with the circulation of minted coins — what is ultimately a practice of inscription — that the senses are presented with an immutable, yet sensible, artefact.[236] In Sohn-Rethel's words

> A coin has it stamped upon its body that it is to serve as a means of exchange and not as an object of use. Its weight and metallic purity are guaranteed by the issuing authority so that, if by the wear and tear of circulation it has lost in weight, full replacement is provided. Its physical matter has visibly become a mere carrier of its social function. A coin, therefore, is a thing which conforms to the postulates of the exchange abstraction and is supposed, among other things, to consist of an immutable substance, a substance over which time has no power, and which stands in antithetic contrast to any matter found in nature. (p. 59)

The spectre of vulgar Marxism is so pervasive that we cannot be too careful here. There is no hint of determinism in this passage, Sohn-Rethel comes to us here unencumbered by the heavy weight of basis and supra-structure. Coins are neither ideology nor fetish; they are a technology. Coinage does not determine conceptual thinking, but as a technology it is generative.

> But to reflect upon the ideas involved, to become conscious of them, to formulate them, to take stock of them and to work out their interrelations, to probe into their uses and their implications, to recognise their antithetic contrast to the world of the senses and yet their intrinsic reference to it, etc. — this does not follow automatically from the use of coined money, it constitutes a clearly definable conditioned potentiality inherent in a monetary economy. (p. 59 f)

To summarise, then, Sohn-Rethel proposes the idea that the mode of inscription through which coinage came into existence not only reflected the real abstraction of commodity exchange but also rendered it palpable. In his words: 'the abstractness assumes a separate embodiment' in money (p. 27) but 'the gold or silver or other matter

[236] Latour (1990, p. 58) talks about coins towards the end of the article, while forgetting to acknowledge that this is discussed at length by Sohn-Rethel.

which lends to money its palpable and visible body is merely a metaphor of the value abstraction it embodies, not this abstraction itself.' (p. 33 f). That is, the fungibility of coined metal tokens — operated through the possibility of full replacement despite wear and tear — elicited a separation between the body of the coin (the deteriorating metal) and its value (that which was inscribed in the metal and secured by authority). It became not only possible but plausible to speak of things that do not suffer from the ravages of time, that is: abstract objects. In Sohn-Rethel's account, the shift can be seen with the emergence of Greek geometry as detached from the art of measurement by rope — by which '[t]he combination of lines were tied to no particular location' (p. 102). This, he reasons, had its material basis in the real abstraction inherent to the exchange of commodities which entails abstract space, abstract time, and abstract counting. An abstraction that was rendered palpable with the practice of coinage. Something which, for Sohn-Rethel 'could result only through the generalisation intrinsic in the monetary commensuration of commodity values promoted by coinage.' (p. 102)

I should conclude this section by reminding the reader that I am interested in the structure of Sohn-Rethel's argument rather than in the validity of his historical claims.[237] That is to say, I am not entirely convinced Sohn-Rethel showed us the origin of the division between manual and intellectual labour; but in his attempt he offered a materialist way to grapple with abstraction in non-abstracted terms. The underlying premise I take from Sohn-Rethel's thesis is that ideas are fabricated with the very same tools we fabricate coins and all the rest. And if this is plausible for serious abstractions such as numbers and geometrical figures, there is no reason to suspect ip objects should be any different.

[237] The history of conversion from real to conceptual abstraction, as told by Sohn-Rethel (1978), and the search for the birth of a definite moment when the head was severed from the hand (that is, the distinction between manual and intellectual labour in Ancient Greece, chapter 15) is just too grandiose and too rigid to be entirely convincing. Perhaps a reconstructed and more granular account of the historical developments traced by Sohn-Rethel could enhance its plausibility, but that is beyond my talent or ambition.

b. From ideology to real abstraction

The reader may already have guessed some parallels between Sohn-Rethel's concept of real abstraction and Pottage and Sherman's account of the ways in which the modern invention emerged in the formative years of the U.S. patent regime. Like the 'invention', 'value' was not thought up, but materialised and worked out in a process of real abstraction. Like coins, patent models and later texts, made an intangible dimension of things (or of the practices that articulate their mode of being) tractable and capable of wider circulation. But it would be a mistake to stop at the theoretical affinities between these two very different forms of materialism. As I will claim in this chapter, Sohn-Rethel offers tools to understand the backstory to the development of a way of dealing with artefacts that facilitated the operations of abstraction necessary to make intellectual property thinkable. We saw a lot of things in the previous chapter, but none of them seemed a suitable candidate for an original abstraction. Several changes occurred at the level of techniques to elicit legal objects from tangible modes of representation (i.e. different conceptions of the patented invention), but all occurring against the same horizon of intangibility, without which figures of invention would be unthinkable (as the object could not be expected to take the role of a model). Pottage and Sherman (2010) address the topic in chapters two and three of *Figures of invention*, but they remain too close to understanding the abstraction at the heart of intellectual property law as an ideological construct, rather than a postulate resulting from new modes of making and selling commodities.

In chapter two, Pottage and Sherman (2010) claim that 'manufactures formed the horizon against which the modern doctrinal conception of the invention emerged'. More specifically,

> [m]anufacturing isolated and idealized form (the original or the design) as the generative principle that was unfolded and implemented by the machinery of reproduction … [T]he monotonous precision attributed to machinery repeatedly imprinted an identical form into matter,

> producing what one might call a specific intersection of form and matter. (p. 42)

This is a remarkable passage. Notice how 'form' (that which ip seeks to protect) is abstracted through the operation of machines tasked with reproducing or 'stamping out potentially limitless copies of an original' (p. 20). The design or form appears, thus, as a real abstraction before it is picked out and transformed in the modern doctrinal conception of the invention. Notice too how this 'form' is thoroughly (yet comically) material: there is no place for Platonism here, the 'form' is stamped or pressed directly into matter at the same time that it is projected as a generative principle detachable from the body that leaves a mark on malleable matter.

Now, it should be clear that Pottage and Sherman are not claiming that lawyers simply discovered and made visible an intangible dimension lurking in the body of manufactured or industrial goods. The ways in which the doctrine of the principle of the machine was forged, show this was not a simple, descriptive, task. The principle of a machine was not there before doctrine found ways of articulating it with the materials of patent disclosure and specification; but — as we have seen in chapter four — the result of an interaction between various human and non-human agents. And yet, as we have also seen, it should be clear that any reading that would reduce the 'invention' to a radical fiction residing in the minds of judges would miss the main contribution of *Figures of invention*.

Returning to the contents of chapter two: after noting striking parallels between the way in which Charles Babbage described the organisation of industrial production in 1832, and the role attributed to 'ideas' in modern patent discourse, Pottage and Sherman (2010) turn to Marx for an understanding of how the changing positionality of the worker (from craft production to manufacturing and later to industrial large-scale production) expressed changes in the relationship between labour and capital in ways that could illuminate the isolation of design, form, or knowledge as a potential object for proprietary claims. In short, the argument is that with the division of labour typical of manufacture and later with the re-organisation of the labour process from the perspective of the machine in industrial production, we witness a gradual deskilling of workers (from craftsperson, to specialised worker and finally to manual labourer), but crucially

> What is lost by the specialized workers is concentrated in the capital which confronts them. It is a result of the division of labour in manufacture that the worker is brought face to face with the intellectual potentialities … of the material process of production as the property of another and as a power which rules over him [*sic*.]. (Marx 1990, p, 482)

Pottage and Sherman (2010) see in this passage a reference to the emergence of industrial property.[238] David Harvey's (2010) reading is, however, more convincing. Rather than the emergence of a legal form, what Marx is describing is a transformation through which '[i]ntellectual labor becomes a specialized function, separating mental from manual labor, with the former brought increasingly under the control of capital.' (p. 186) And that control was exercised not juridically by enforcing intellectual property rights — which obviously involved, at least at the time, disputes between competing capitalists, not their workers — but by controlling the means of production (not only machines, but the very organisational structure of the workshop or the factory). Read in line with the notion of real abstraction in Sohn-Rethel, what we see here is knowledge being abstracted from the workers at the level of production. It is by cancelling out the creative faculties of workers — and hence the potential for difference — through new forms of division of labour that the capitalist achieves, in part, the effect of identical serial objects made to a common design. The body of that artefact will, thus, reveal its very mode of production in appearing identical to the other objects in the same series. And while, as Pottage and Sherman point out this is captured in the writings of nineteenth century political economists like Babbage or Marx, these accounts merely spell out in conceptual and analytical terms an operation

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[238] A couple of paragraphs before introducing the same quote from Capital, Pottage and Sherman (2010) write 'According to Marx, this process of disembodiment [of knowledge] was an essential condition for the emergence of the modern form of industrial property' (p. 29). More explicitly, in the paragraph immediately after the quote they write

> Marx concluded that this [large-scale industry] was the point at which technical knowledge became intellectual property: it was the point at which "invention becomes a business and the application of science to direct production becomes a prospect which determines and solicits it." (p. 29, quoting the *Grundrisse*).

of abstraction that had started much earlier in the period Marx refers to as that of manufacture.

Now, before I propose a different route to that taken in *Figures of invention* — that is, looking at the doings of industrialist Josiah Wedgewood (1730-1795) rather than the writings of political economist Charles Babbage (1791-1871) — there is a need to discuss a crucial methodological point about periodisation. One of the reasons that led Pottage and Sherman to abandon the Marxian analysis and take the argument in a different direction had to do precisely with an important difference in terms of historiographical sensibility. They write

> Recent historical scholarship complicates the story of a linear shift from making to manufacturing and large-scale industry: instead of seeing "craft production" and "industrial manufacturing" as successive phases we should see them as labels for some of the diverse modes of fabrication that co-existed in early modern production networks. (Pottage & Sherman 2010, p. 30)

As Pottage and Sherman go on to detail, machines never worked as perfectly as Babbage assumed they would in stamping out identical clones (pp. 30-36). Marx too seems to have over-estimated the power of machines in deskilling workers to the point of transforming them into mere appendages (Lubar 1995, pp. S72-74; Mueller 2021, chapter 2). Furthermore, the very idea of a linear progression between modes of production according to some teleological notion of progress obscures the very material dynamics of the deployment of capital and labour (Harvey 2010, pp. 225-228). Pottage and Sherman (2010) seem, thus, faced with a paradox: even if history did not really play out according to Babbage's or Marx's script, their accounts of manufacturing and industrial production still resonate with the ways in which the invention was singled out and taken by patent law as the essence of technical innovation. A paradox that is resolved by an escape to the plane of ideology

> Whatever the situation may actually have been, patent law adopted the ideological distinction between manufacturing and making as an essential criterion of patentability. Patentees had to show that what they claimed

> as their invention represented an exercise of inventive ingenuity rather than mere mechanical skill. (p. 30)

But this move comes at a high cost. Rendered as an ideological construct, the logic of copying and the deskilling of workers will play out exclusively at the level of representations, with very little attention to actual changes in the mode of production and the organisation of labour in the eighteenth and nineteenth centuries. Speculatively, I would suggest that the path taken betrays a tendency, typical in intellectual property scholarship, to imagine intellectual property objects (intangibles) as pure abstractions. As if nothing short of complete identity between embodiments or a clear-cut detachment between intellectual and manual functions could ever do as the basis upon which legal categories could internalise actual changes occurring in the division and organisation of labour. Consider the following passages

> Patent jurisprudence routinely dealt with disputes as to which of those involved in realizing an invention had made the decisive "inventive" input; but even if the *world from which these disputes emerged was not actually structured by the difference between creative and instrumental labour* — how could it have been? — legal argument proceeded as if there was such a difference to be found. (p. 31, my emphasis)

> The figure of the copy was an effect of something more than technical precision or workshop organization. *Industrial manufactures were never technically or materially identical*; they owed their status as replicas to the emergence of a consumer aesthetic … that rendered them as such. (p. 36, my emphasis)

It seems that to avoid the risk of naturalising the legal assumption of an ontological division between intellectual and manual labour and its way of seeing material artefacts as incidental embodiments of an intangible essence, Pottage and Sherman fail to appreciate the ways in which — as we shall see shortly — workshops were re-organised to isolate certain functions within a functional re-structuring of the workforce as well as the pains with which the effect of identity was produced, not only by duping costumers, but in actually devising ways to standardise outputs. Alternatively, if we understand intangibles in

the vernacular, as material and rhetorical contraptions that need to produce not clean but workable abstractions, we can better account for the way in which changes at the level of production and circulation of commodities had a bearing on the emergence of a way of dealing with artefacts that would later materialise in doctrinal conceptions of intellectual property law. This is not to deny an ideological component to those notions that are the object of Pottage and Sherman's critique, only to insist that, in a materialist account, ideologies too have to be made with the very same tools with which one makes coins, teacups and steam engines.[239]

In what follows I will offer a re-reading of chapter two of *Figures of invention* replacing the figure of Charles Babbage by that of Josiah Wedgewood. The differences are significant. First, we move to an earlier century, the century in which, as we saw in the chapter three, forms of intangible property began to grow from an analogy with literary property and where 'design' appeared as a ready-made abstraction that could be deployed in legal settings. Second, we move away from the writings of a political economist to the workings of a manufacturer; and hence from a conceptual articulation of the significance of industrial production, to strategies and technologies developed to produce (even if incompletely) the very effects of identity between artefacts, and a division of labour with the isolation of design as an activity separate from execution. There is, however, a felicitous continuity with Pottage and Sherman's work as Wedgewood devoted his attention to two of the central aspects highlighted in the chapter: serial production and consumer aesthetics (in the form of the catalogue).

c. Fabricating sameness

In accounting for the real abstractions that fixed intangibility as the horizon of intellectual property, Pottage and Sherman take care to historicise — and thus denaturalise — that

[239] '[D]etermined social relations are as much produced by men [*sic*] as are cloth, linen, flax, etc. … In acquiring new productive forces men [*sic*] change their mode of production, and in changing their mode of production, their manner of gaining a living, they change all their social relations.' (Marx 2008, p. 119)

fundamental distinction that lies at the heart of a certain way of appreciating objects that characterises what one might call the logic of intellectual property: the separation between ideas and embodiments. Drawing on Mario Biagioli's previous work, Pottage and Sherman (2010) carefully point out the different logic that permeated the mediaeval and early modern system of privileges, so easy to confuse with modern regimes of intellectual property. As they write

> Privileges did not reward or protect ideas as such. Precisely because knowledge could not be isolated from other factors involved in the production of an artefact or device one could only secure the means of reproducing an artefact by recruiting and retaining the persons in whom the specific know-how was embodied. By awarding a monopoly to a particular person the privilege was able to capture the set of competences, techniques, tools, and materials — in short, the entire 'workshop' — required for the production of a useful artefact or device. (p. 24)

I will take this quote as my starting point because it identifies — with extreme clarity — that the 'workshop' had to be fragmented internally so that distinct factors of production could be isolated and presented as distinct 'objects'.[240] If, as Pottage and Sherman also write,

> Babbage's theory of copying expressed the basic phenomenological premise of modern patent law: in the process of stamping out potentially limitless copies of an original, machines and manufacturing workshops marked out 'ideas' as the prime movers in the making of consumer artefacts. (p. 20)

We should then look at the history of how the making of 'ideas' (better: designs) became a distinct occupation within the workshop. Here, Adrian Forty's (1986) material history of

[240] 'Perhaps a particular operation, although yesterday it still formed one out of the many operations conducted by one producer in creating a given commodity, may today tear itself out of this framework, establish itself as an independent branch of labour, and send its part of the product to market as an independent commodity. The circumstances may or may not be ripe for such a process of separation.' (Marx 1990, p. 201)

the emergence of design will allow us to better understand the material process with which conception and execution of an artefact came to be conceived as separate activities as well as the material techniques and technologies that ensured the reproduction of that division. Before we proceed, it is important to clarify that Forty adopts a thoroughly material concept of 'design'. As he points out 'design' refers not only to the way things look — the retinal and sensorial appearance of things — but also to 'the preparation of instructions for the production of manufactured goods' (p. 7) The reference to manufacture is crucial because it allows us to understand that abstraction cannot be seen purely in terms of intangible forms, but as that which remains once we abstract the idiosyncrasies (and 'defects') of all the embodiments that belong to the series. An operation that requires both a new aesthetics of indifference to the singularity of manufactured artefacts and a new mode of fabricating artefacts that reduces actual differences in the bodies of serial objects.

For Adrian Forty, 'the emergence of the specialist designer' (p. 29) signals the appearance of a new way of making commodities.[241] This was the moment where design emerged, one could say as a real abstraction within the workshop, as a result of new modes of organising, dividing and disciplining labour. Forty provides a rich and detailed account of this development, focusing particularly on the example of Wedgwood's pottery manufacture from the late 1760s onwards (pp. 34-41).

One of the reasons why Wedgwood is interesting for Forty, as well as for this study, is that 'he attached more value to the work of designers than other manufacturers had done' (p. 29), a strategy fitting the profile of Babbage's 'principle of copying' that lies at the heart of Pottage and Sherman's (2010) study, albeit anticipating it by more than half a

[241] While Forty's (1986) claim that 'design has become necessary as a separate activity in production once a single craftsman ceases to be responsible for every stage of manufacture from conception to sale' (p. 29) could be subject to criticism for over-simplifying the complex division of labour in the mediaeval and early modern period, one must understand that the modern functional differentiation and specialisation differs considerably from the pedagogical division of labour that characterised the system of apprenticeships (See Marx 1990, p. 1027).

century.[242] Wedgewood's obsessive search for a consistent product was not, however, dictated primarily either by a desire to increase his overall output, or to reduce waste in production. As Forty explains, Wedgewood was not competing in price but seeking competitive advantage through a different mode of selling by advance order, with the aid of illustrated catalogues and especially samples displayed in showrooms or by travelling salesmen.[243] This, as Forty explains, required the finished product to be 'indistinguishable from the samples [the buyer] … has seen.' (p. 30) And, in a reminder that cuts against the grain of many pre-conceived ideas of the nature of repetition Forty not only highlights that 'maintaining absolute consistency was a major problem in pottery manufacture' (p. 30); but also details the lengths to which Wedgwood had to go to manufacture sameness. This included experimenting with materials for their sensitivity to kiln temperatures, testing the predictability of glazes, adopting transfer printing of decorative patterns, and devising a workshop discipline ("preparing to make such *Machines* of *Men* as cannot *Err*", p. 33) through specialisation, deskilling, division of labour, and supervision. The making of prototypes (by a new specialised professional: the 'modeller') as exact instructions 'to restrain the men [i.e. crafts person tasked with making the finished product] from introducing variation' (p. 34) played a crucial role for the real abstraction of design from execution and helped isolate its function. This is a function inextricably linked to the relation between labour and capital. The emergence of design reveals how capital had become 'a real condition of production' (Marx 1990, p. 448), a process Marx calls 'real subsumption' (Forty 1986, p. 44 f)

But it is important to note that all the major developments in Wedgewood's mode of production, that allowed a greater uniformity and reliability in production, largely preceded any dramatic increase in mechanisation (p. 43). A similar story can be told about calico

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[242] 'Almost unlimited pains are, in some instances, bestowed upon the original, from which a series of copies is produced; and the larger the number of these copies, the more care and pains can the manufacturer afford to lavish upon the original. It must this happen, that the instrument or tool actually producing the work, shall cost five or even ten thousand times the price of each individual specimen of its power.' (Babbage 1832, as cited in Pottage & Sherman 2010, p. 19)

[243] As Forty (1986) explains 'With these methods of selling, Wedgwood did not have to tie up capital in unsold stock or risk making large quantities of designs for which there might be no demand.' (p. 30) A technique to absorb the risk of speculative production of novelty items.

printing, where the division of labour between drawing the design, engraving the block, and pressing it onto cotton emerged before the passage of the Calico Printers' Act (1787), itself preceding the introduction of the first roller printing machines that would dramatically increase the output less than a decade later (Forty 1986, p. 45; Deazley 2008d).

This is not to say that mechanisation did not play a part in the development of 'design' law. As Forty explains, the greater volume of output made possible by mechanised production increased the speculative and actual value of designs.[244] It thus comes as no surprise that the major reform to the system inaugurated by the Calico Printers Act 1787 emerges at a historical period (Copyright of Designs Act, 1839) of great expansion of the use of machine printing (Forty 1986, p. 48 f; also Bently 2018). The more fixed capital was tied up with machines and designs, the greater the need to protect that very capital from depreciating through the forces of competition (Forty 1986 pp. 48-61; Kriegel 2004, pp. 244-247).[245] Still, as Forty explains

> the new attention that was being paid to design [during the debates over copyright in the 1830s] did not mean that designing was a new

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[244] The distinction must be made since, as Forty (1986) explains, most designs never reached the production stage. But once they did and if they proved successful, the law of diminishing marginal costs would amount to a relative reduction of the design cost and thus a greater margin of profit: hence the increased actual value of the design (pp. 47-49). But the recognition of that truism by contemporaries (e.g. Babbage, see Kriegel 2004, p. 242) increased the speculative value of each design, before the production stage, that is each one acquiring the potential of becoming a successful design. As Forty summarises 'The great advantage of machinery was its potential to manufacture a single design endlessly' — as opposed to hand made objects where creating sameness was often costlier than introducing variety — 'the successful design became a very much more valuable possession, for it was what released the machine's capacity to make a profit.' (p. 58)

[245] Forty (1986) quotes from the evidence delivered by J.C. Roberts at the 1835 *Select Committee on Arts and Manufacture*

> the great command of capital possessed by the English manufacturer, the immense capabilities of his machinery, he is enabled to turn out a greater quantity of goods in given time than the manufacturer of any other country whatever. (p. 60)

This, as Roberts argues, favoured repetition rather than variety, thus increasing the value tied to a particular design.

> activity or even that its essential nature had lately changed in any way because of the introduction of machines. (p. 49)

The examination of these parallel developments in the eighteenth century pottery and calico industries, reveals how changes in the division of labour — often dictated by commercial strategies — led to an actual functional re-organisation of the labour process and with it an increased valuation of 'design' as the conceptual or projective aspect of production, as opposed to the labour tied to execution. Changes that had more to do with the organizational form of the labour process than the technical nature of the means of production. The separation was not definitive and should in no way be understood as reducing the importance of execution. Quite the contrary, as we have seen in the example of Wedgwood, the reproduction of a uniform design was only possible due to a reinvention of the way of making tangible artefacts.[246] Thus, one might say, in line with Pottage and Sherman (2010), that the separation between intellectual and manual labour is ideological — rather than merely technical — but only if one does not lose sight of changes at the level of production and circulation of commodities both triggered and reproduced by the ability to deal with human labour in those terms.

Once labour becomes abstract in palpable ways, legal abstractions start to hold good and serve as the basis for extensions to other departments. In other words, the notion of ideas detachable from their embodiments could appeal to a vernacular understanding of what producers and consumers valued in commodities produced serially.

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[246] As Forty (1986) writes

> In almost every industry, one of the first conditions a design had to fulfil was that it should give consistent results in its execution … Almost all designs have therefore had characteristics that were arrived at in order to use the available means of production — machines or workmen's hands — in such a way that chance and variation would be eliminated. (p. 37)

d. Intellectual property and the division of labour

Notions of intangibility articulated in legal discourse, gave form to and helped reproduce (and later expand) divisions within the labour process that had already begun to materialise during the eighteenth century. But we must return to the point where we departed from Pottage and Sherman, that is, we must return to their reluctance to entrench — through critique — the very notions upon which intellectual property is built, i.e. the supposed difference between creative and instrumental labour. The return is needed to avoid naturalising the idea that intellectual property simply recognised a division that had already happened on the ground. To do so we must disentangle analytically two inter-related dimensions of this phenomenon. First, the actual division between operations within the process of manufacture; second, the way they were characterised according to a hierarchical order that privileged the task of designing under the idea of 'intellectual' labour and the task of reproducing the design under the idea of manual or instrumental labour. In so doing we will also meet at this crossroad Sherman and Bently's account of the role of mental labour in the formation of modern intellectual property.

As Sherman and Bently (1999) convincingly show, the commitment to mental labour was an unquestioned assumption already during the literary property debate.[247] And yet, as they also illustrate, it was far from being a stable or precise notion (p. 15). It is also clear that the cut between mental and manual labour did not, by itself, unify a stable category of

[247] This is made clear at various points in the book: 'one of the notable features of pre-modern law was that it was concerned with the mental or creative labour that was embodied in the protected subject matter.' (Sherman & Bently 1999, p. 4); 'it was widely agreed that mental labour — that which flows from the intellectual labours of the mind and the exertion of genius and thought — was fundamentally different from manual labour — the mere exertion of bodily strength and corporeal application' (p. 15, note 18). 'During the eighteenth and early part of the nineteenth centuries there was widespread agreement that manual labour could and should be separated from mental labour.' (p. 95); 'there was general agreement as to the existence of a general category of law which granted property rights in mental labour and which was united by a shared image of creativity' (p. 96); 'As we have seen at various stages in this work, one of the defining features of intellectual property law in the eighteenth and the first half of the nineteenth century was its concern with mental labour and creativity.' (p. 173)

rights in mental labour (p. 96 ff). Thus, while the idea that mental labour was entitled to separate protection (p. 97, p. 173) was beginning to take root, the law was still, until the mid nineteenth century, to develop routinised techniques to extract the essence of the property from its accidental embodiments, with sufficient generality.

Sherman and Bently's crucial insight about the central but underdetermined character of ideas of mental labour, reveals two important features of modern intellectual property. The first is that the logic of intellectual property required much more than simply postulating a separation between the head and hand to fabricate a reliable and tractable intangible that could be detached from its tangible embodiment or representation. This was the business of registration as it emerged in the second half of the nineteenth century (see Sherman & Bently 1999, chapter 5). The second, more important to this part of the analysis, is that even as a grounding assumption lacking specificity, the idea of mental labour came to play a definitive role in the formation of modern intellectual property law (chapter 7).

But where did this idea come from? And how did it achieve such a naturalised status? Mental labour, in *The making of intellectual property*, appears, if not as an ahistorical datum,[248] at least something that lies outside of the work's historical purview. This is entirely justifiable in a historical work with a very specific timeframe of analysis and with the clear aim of understanding the endogenous techniques by which modern intellectual property was formed, rather than reducing law's creativity to socio-economic determinants. And yet, a closer examination of the assumption can still reveal something valuable for our understanding of the logic of intellectual property. More precisely, as I will argue presently, examining the notion of mental labour reveals the deep connection between intellectual property and the division of labour.

As George Caffentzis (2013) has argued, a distinctive feature of modern bourgeois thought — as it developed during the seventeenth and early eighteenth centuries — was the reconfiguration of intellectual activity from one of contemplation to one of production

[248] Which would be unfair to say, given that the authors clearly signal its constructed character, especially in p. 15 (Sherman & Bently 1999).

> thought *does* become laborious … *ideas* … were not 'givens', they had to be worked on, struggled with, refined, or computed to be worth something … Locke, Hobbes, Bacon, and Descartes … hardly agreed on anything, but they did on this: knowing thought is not, should not, and cannot be a natural, spontaneous activity. (p. 166)

As mental and manual activity become comparable as units of labour, a new way of conceptualising the division of labour became possible. Mind and body are not cast to different ontological territories but are made to cohabit within the same sphere, though not on horizontal terms. Silvia Federici (2014, p. 133 ff) has made an inestimable contribution to this debate by showing how this new anthropological paradigm reconceptualised the body not so much as separate from Reason, but its subject. This new form of subjugation of bodily labour to rational control, not merely as idea but as actual division of labour, forms the background upon which ideas of mental labour — so crucial to the abstraction at the heart of the logic of intellectual property — emerge and from which techniques to render the intangible product of mental labour tractable as an item of property.

It is now time to tie together what was momentarily disentangled for the purposes of analysis. The materials harnessed together in early patent applications (textual descriptions, drawings, and models) to specify the invention in a way that would 'enable a workman … to make, construct' it (Patent Act 1790) were unsurprisingly of the very kind that were used to instruct workers to reproduce designs in a consistent manner. Modern patent law did not inaugurate, with its techniques of representative registration, the practice of severing the body of the artefact (and the labour of its execution) from the intangible essence that gave it its character. Patent law borrowed techniques of specification that had already been adopted in some sectors.

But it would be wrong to suggest that making a model or a technical drawing for execution was exactly the same as drawing an intangible for the purposes of patent specification. Techniques were adapted to the needs of the (commercial or legal) trade. Indeed, a remarkable feature of patent drawings — as historians of engineering and of legal bureaucracy have noted, albeit usually *en passant* (J. Alexander 1999, Emptoz 2013, also Dood 1986, p. 3) — is the absence of scale. This apparently trivial finding has,

however, crucial ontological significance within the context of understanding the making of intangible property. As Sohn-Rethel (1978, chapters 15 and 17) has argued, scale is what connects the purely abstract lines of geometrical drawing to the concrete needs of those who employ it. Consequently, its suppression liberates the drawing from such constraints. A drawing without scale allows a specification at a much higher level of generality as embodiments of different sizes can be made to be subsumed under the specified design.

Another mistake that should be avoided is the assumption that because patent specification borrowed the techniques of projection in other fields, it merely took a neutral medium to depict what was already translated from the engineer's plan to the lawyer's mind: namely the abstraction of an intangible essence from the body of the artefact. To incur such a mistake would be to waste the most significant contribution of Pottage and Sherman's thesis in *Figures of invention*. Techniques of representation did not merely render fully formed abstractions in a visual medium, they played an active role in the very construction of the intangible, as we saw in chapter four.

The reconfiguration of intellectual activity as labour facilitated the articulation of the notion of mental labour that acted as an underlying premise of the literary property debates and, in time, provided tools for an expansion of the reach of intangible property. And while this notion — already committed as it was to a severance between the labour of designing and controlling and that of execution — was still open-ended and incomplete, it served as the horizon against which the cut between intangible essence (in the form of design, work or invention) and fungible body was executed in individual cases. And it was against this background that techniques and doctrines to isolate the intangible, developed in the making of modern intellectual property law. In so doing, intellectual property did not create a whole new (pictorial, material and discursive) language for rendering visible that which united (and gave character) to serial objects. Intellectual property borrowed existing techniques to later explore their discursive potentialities. Intellectual property emerged within an already established culture of abstraction marked by ideological representations and practical means of organising labour. The opposition Biagioli started with when attempting to explain what put the 'intellectual' in 'intellectual property', that is, the

opposition between abstraction and inscription has to be abandoned in favour of an understanding of processes of real abstraction.

e. How to be both

As we saw in the first part of this study, intangibility tells us very little about the configuration of the individual object over which intellectual property rights are claimed. Nevertheless, intangibility is the limit and condition of intelligibility of everything else that might be said to characterise that object — fitting any textbook definition of a necessary but insufficient condition, fitting my own use of 'horizon' in this study: conditioning without overdetermining. The fate of an individual claim — that, being a transitive act, needs an object — is contingent on a decision and its materials (media, dispositions, doctrine, technique, etc.); intangibility as the horizon of intellectual property has a very different fate. Its survival — or closure — depends on its reproduction in the judgement of any individual claim (be it in court or elsewhere). But reproduction here not as a mere ideological phantom, rather as an operative way of seeing. Judges were not hallucinating when they saw the principle of a machine revealed in a court demonstration; it was there. Not as in 'there all along'; but there among many other things to say about the demonstration. Better yet, things to say through the material artefact, since the intangible 'it' could only be reached through manipulating the former.

We have come a long way from the initial plausibility of the appeal to Plato as a way of revealing the ontological commitments of intellectual property law. As we saw in our discussion of *Figures of invention*, the invention cannot be entirely detached from a body nor entirely confined to it precisely because to assume either would be to force us to choose between two natures that ip objects are quite capable of performing. The comedy, and hence the action, lies precisely in the duplicity of ip objects. The intangible nature of the invention is not located 'elsewhere' — as Drahos assumed the lawyer would have to concede if pressed sufficiently hard — the abstract is pressed directly into the concrete in the drawing, prototype, scale model and operating machine in patent law, or the very artefact (or assemblage of materials) that is put forward as an embodiment of the

work in copyright law. It would be a very poor materialist ontology one that would fail to notice how things can move us (chapter 2, section d., above).

The question this raises is, thus, how could that artefact be both? How could models be understood to convey an immaterial essence? How could a tangible artefact be token an intangible 'work'? Following Pottage's (2011) idea that 'What could be said was conditioned by what was seen, and vice versa' (p. 632) the hypothesis I began to unfold in the previous sections is that, with the advent of serial production, the ground was already prepared for an object to be put on display as an embodied abstraction. Intangibility came to be configured as the horizon of patent law; as a real abstraction that was only later articulated and inflected (picked out) by its assimilation into legal doctrine.

Returning to the emblematic figure of scale models; if such folksy artefacts could be taken as models, that is if they could project something other than themselves, then intangibility was neither the obstacle nor the issue. More specifically if, for the good part of a century, scale models were preferred to engineering drawings due to a lack of visual/technical literacy by the part of juries and judges, the problem was one of aesthetics, not ontology. Imagining an abstracted machine was not as difficult as finding a way to hold that imagination in check. If a mode of operation abstracted from a tangible artefact were such an esoteric proposition, we would expect models to be as quiet as drawings or indeed as any other material medium, even wordy rhetoric. The very history of the demise of patent models shows exactly the opposite. As we have seen, models ceased to be trusted when they went from eloquent to verbose artefacts: when they began to conjure up too many different intangible machines.

And this confirms the one of the main intuitions that run through the works of Bently, Biagioli, Pottage, and Sherman: that the history of intellectual property is the history of how the legal imagination was contained, rather than sparked. In a perfect aphorism, Pottage and Sherman (2010) describe their project as 'a material theory of how the invention is distinguished from its embodiment and how that specific distinction is recorded, communicated and sustained.' (p. 15) To draw some parallels with the tradition of Science and Technology studies, it seems that scale models (indeed any other figure of invention) act similarly to Robert Boyle's air-pump in Shapin and Schaffer's (2011) much celebrated foundational text: *The Leviathan and the air pump*. One could paraphrase that

text to suggest that figures of invention are devices for making *legal* knowledge of a certain kind (p. xi). Further still, and keeping with the textual borrowings, one could suggest that for Pottage and Sherman the history of intellectual property is the history of how 'legitimate knowledge was to be secured, assessed, and communicated.' (Shapin 1996, p. 5).

Thus, models — and all other figures, media or modes of representing intangibles — are relevant as a trace of how this knowledge was secured at a particular point in the formative years of US patent law. Models — for a time — played a central role of a trusted point of reference for a dispute with an always uncertain outcome. If, as Pottage (2011) remarks '[t]hings are an effect of stability in contingency' (p. 636), then models played a role in fabricating the thingness of inventions. And one of the greatest advantages of framing these inscriptions as media is that of making visible their materiality. A loaded and somewhat elusive term (Kang & Kendall 2019), but one that, in this context I use in a very specific sense. As that which can act or be acted upon, that facilitates or resists, that — with the idea of a medium in mind — conducts. Different media bring the invention into existence in different ways by blocking, obscuring — or abstracting — certain elements with greater ease than other media. As Pottage (2011) elegantly summarises this was 'the role of models in articulating concepts and visibilities' (p. 636). The point is not to essentialise, only to remark that certain images are cheaper or costlier depending on the contexts and the materials.

These conclusions cannot, however, be extended linearly to copyright. The lack of representative registration, and with it the irrelevance of whatever means there were of projecting a stable design, forces us to look elsewhere for an account of how spectators were prepared to see tangible artefacts as something other than themselves, extended as it were beyond their concrete particularity. Here we must return to a central point in our discussion on the literary property debates. Perhaps the most consequential conceptual move in Blackstone's argumentation was the shift of focus from things to value in his conception of property. The paper upon which characters were inscribed was an incidental and negligible part of the literary work, it was the value words carried that gave pertinence to the claims of literary property. The conceptual operation of appealing to

value invites a different way of relating to objects. This point is captured particularly well by Miguel Tamen (2001) when he writes

> The attribution to that thing of the ability to denote its absent value, would indeed, as Marx famously remarked, turn that thing into "*a sensory suprasensory thing*". (p. 74, note omitted)

The context is very different from our own — the value Tamen has in mind is the exemplary value of cultural objects as items of art history or cultural property — but the operation is the same (hence the link to Marx).[249] Tamen even hints at the possibility of taking Marx's apparently whimsical remark about the 'metaphysical subtleties and theological niceties' of commodities seriously. In the note accompanying the above quoted passage, Tamen (2001) suggests that the status of the commodity as a sensory suprasensory thing 'is not very different from the theological status … of double-natured objects' (p. 167) discussed in his previous chapter, namely Christ, Icons and the Eucharist.

Now, if at this point the reader is waiting for the final admission that Drahos was right all along and that ip objects are — and have always been — spooky entities, I will have to disappoint. The point I am trying to make, and will conclude shortly, is that in turning the centre of gravity of property discourse away from sensuous possessions and towards

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[249] The passage Tamen has in mind appears in the section on 'The fetish of the commodity and its Secret' in volume 1. Chapter 1 of Capital.

> A commodity appears at first sight an extremely obvious, trivial thing. But its analysis brings out that it is a very strange thing, abounding in metaphysical subtleties and theological niceties. So far as it is a use-value, there is nothing mysterious about it … The form of wood, for instance, is altered if a table is to be made out of it. Nevertheless the table continues to be wood, an ordinary, sensuous thing. But as soon as it emerges as a commodity, it changes into a *thing which transcends sensuousness*. It not only stands with its feet on the ground, but, in relation to all other commodities, it stands on its head, and evolves out of its wooden brain grotesque ideas, far more wonderful than if it were to begin dancing of its own free will. (Marx 1990, p. 163 f, note omitted, my emphasis).

As we can see, Tamen diverges from Ben Fowkes' translation. Heinrich (2012) opts for a similar translation 'sensuous extrasensory thing' (p. 72). As he explains this is not only closer to the German original but captures better the suggestion that the table even when made to stand 'on its head', does not cease to have 'its feet on the ground'.

'things of value' the advocates of common law literary property took a decisive step in providing a language for intellectual property. But what is remarkable is not 'dematerialisation' as such, but the ease with which dematerialisation could be rendered with a simple and apparently trivial appeal to profits. For the logic of profiteering is already steeped in the perfectly metaphysical art of projecting the future and summoning it in the present. It is in the ability of any commodity to denote its absent value that we find the perfect parallel to the doctrine of the icon as making Christ visible through its absence from the artefact.[250] As Marie-José Mondzain (2005) writes

> Difficult though this may be to accept, it must be admitted that the icon attempts to present the grace of an absence within a system of graphic inscription. Christ is not in the icon; the icon is toward Christ, who never stops withdrawing. And in his withdrawal, he confounds the gaze by making himself both eye and gaze. (p. 88)

There is much to learn from this venerable tradition of dealing with embodied intangibles. Byzantine iconophiles had to thread a very thin theological line to avoid falling into the heresies lurking at both sides. On one side Monophysitism, the temptation of reducing Christ's true nature to the divine; on the other Nestorianism the heresy of separating Christ's two natures (Barasch 1995, p. 267). The same agility is needed to deal with the metaphysical issues thrown up by intellectual property so as to keep the metaphysical and the mundane simultaneously in view. Without it we would risk taking the appeal to profit as either a metaphysical flight into immateriality or a trivial appeal to common sense, rather than seeing it as a manifestation of a vernacular metaphysics in the making.

To be clear, literary property was metaphysical in the minimal sense that the book as artefact had to be conceptually dissected, decomposed or fragmented into discrete legal objects (e.g. the tangible medium, and the intangible content). This is what Bernard Edelman (1979) called the over-appropriation of the real. Ownership of one could not be

[250] This is a very complex topic that I cannot discuss in detail here. But one crucial, if basic, aspect of the Icon is that it does not claim to contain Christ in any way. Being neither an idol nor a talisman (Mondzain 2005, chapter 6).

reduced to or confused with ownership of the other. But even if the objects could not be materially separated, their values could be compared, estimated, quantified and divided; given a common denominator.

So, is there a way to, without great violence, reconstruct the subject matter of copyright within a clearer ontological framework? In doing so we face a problem not so different from the one early Christian theologians had to grapple with in accounting for the nature of Christ's image.[251] The point, again, is not to raise, so to speak, ip objects to the divine, but rather to show that even the most trivial artefacts may encapsulate mysteries with which we have come to live peacefully. The link between 'design' (in the sense of something less than a disembodied image and something more than lines engraved into copper) and Christ's image is not far from the early Christian tradition either. As Devin Singh (2018, pp. 119-124) has recently shown, typography and coinage were classical resources amongst patristic and scholastic theologians in attempts to articulate the mystery of Christ's double nature.[252]

This is an apt reminder that once one suspends semiotic prejudices, materiality can indeed surprise. A tangible seal on tangible wax produces a tangible mark, and yet there is something transferred from one material to the other that cannot be exactly pinned down or reduced to meaning. In accounting for the nature of that which is irreducible to either paper or wax, whose flickering existence resides awkwardly between these two materials, we should focus less on its ontological status (material or immaterial; abstract or concrete) and more on its potentialities. Intangibility is trivial, yet generative as a mode of dealing with artefacts. From which we can conclude that the historical matter worth pursuing in intellectual property is the form intangibility takes in legal discourse. But one that depends, conceptually, on developing an ability to deal with double-natured objects and their vernacular metaphysics.

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[251] The expression is slightly tautological if, following Mondzain, we opt for a notion of an 'imaginal Christ' — or in a slightly different wording a 'sensational Christ' (Tamen 2001) — to mark the impossibility of separating Christ from His image. Not to get bogged down in theological niceties I opted for the less sophisticated, but probably more easily intelligible formula.

[252] As they were to the Stoic theory of mind (see chapter 2, section d., above) and as they were again, in an expanded sense, in Western sixteenth century epistemology (MacGregor 1999).

Conclusion: thinking intellectual property after the closure

This thesis has argued that to reason about the metaphysics of intellectual property is a futile task that must, nevertheless, be taken seriously. Drawing from the work of Brad Sherman and Lionel Bently the thesis argued that the opportunity to debate the nature of intangible property has been historically closed and that to reopen it one must come to terms with the processes and techniques that operated such closure, so brilliantly captured by Alain Pottage and Brad Sherman. Once we abandon the comfortable *reductio ad absurdum* that posits ip objects as timeless forms radically detached from matter, the path is open to find other ways of coming to terms with the processes through which intangibility was legally constituted as the horizon against which vernacular practices of drawing lines, filling forms, and choreographing evidence allowed lawyers to speak on behalf of material objects and present the grace of an immaterial essence.

The first part of this thesis took on the central question raised by Peter Drahos (1996) in *A philosophy of intellectual property*: 'By recognizing intellectual property rights, is the law forced also to recognize "spooky" entities?' (p. 17) By showing that Plato's theory of forms could be comfortably squeezed into one world and by appreciating the different philosophical experiments in abstraction that were carried out in various dialogues, the initial punch of that rhetorical question lost its impact. The field was opened to appreciate the real differences between the opposing metaphysics of Plato and of the Stoics. In Plato we found a reduction of the many to the one, a philosophy of indifference where material reality was exhausted by its participation in the forms. In the Stoics, we found an appreciation of the irreducible particularity of bodies. This sensibility to matter did not, however, prevent the Stoics from dealing with generalisations in a sophisticated way.

Generic predication can be achieved without hypostatising generic entities. But in negotiating particularity and generality, the Stoics revealed an enchanted vision of reality — where rational impressions merely capture natural affinities between things. Affinities that are received through impressions that have the power to speak: *lekta*.

The conceptual work carried out in the two initial chapters, accomplished one of the explanatory tasks of a copyright ontology. The minimal ontological commitment of copyright is the proposition that there are limited things to say (*lekta*) objectively of artefacts, there is no need to commit to two worlds or to posit a generic entity hovering above matter. It also provided tools for the experimental task of bringing out different ways of conceiving abstraction and intangibility. In so doing it opened new questions. The material philosophy of the Stoics shifted the attention from objects to dispositions and thus to the examination of the ways in which things move us and to how ways of seeing are dependent upon a capacity to be impressed by the world. Raising the double question of how judges and lawyers came to be disposed to sense the intangible through the materials and actions of legal argument and of how the law forged ways to hold those impressions in place.

Certain things were left unaccomplished, however. Speculative metaphysics showed itself incapable of fixing the character of the copyright object or providing a clear explanation of its role, as copyright practice could not be easily assimilated to either Platonist — in the dualist or reconstructed versions — or Stoic ontology. Suggesting that the construction of copyright objects had to be studied historically rather than theoretically. These fresh questions and unfinished tasks had to be carried out through a historical analysis of the construction of modern intellectual property, and hence the turn to history in the second part of the thesis.

Chapter three dealt with the emergence of a speculative, object-oriented, and generalised mode of dealing with artefacts, whereas chapter four dealt with the techniques through which intangibles were figured in and elicited from the media employed in legal argument. In them we saw how the construction of the intangible was carried out without explicit reference to philosophical metaphysics but rather through vernacular techniques of abstraction. And while this seemed to give credibility to the proposition that 'the idea of the [intangible] invention did not emerge through a process of abstraction but through

one of inscription — not by thinking it up but by writing it down' (Biagioli 2006, p. 1145), the question remained as to what prepared judges and lawyers to see an intangible essence revealed through those inscriptions (in patent law) or artefacts (in copyright). Chapter five attempted to undo the opposition between abstraction and inscription by experimenting with Sohn-Rethel's notion of real abstraction. Serial production through manufacture and the accompanying division of labour — between design and execution — appeared as that which helped fix intangibility as the horizon of nascent forms of intellectual property in eighteenth century Britain.

An answer to the remaining question of the role of copyright objects can now begin to be formulated. More than a reference point to the formulation of legal rights, the intangible copyright object builds upon and reproduces a division between intellectual and manual labour along a clear hierarchical line. It is the privileging of what may come to be considered intellectual labour that allows copyright owners to control unprivileged forms of labour at a distance.

There is still much to be explored in the historical formation of the division between intellectual and manual labour and its impact on the development of intellectual property law. Material analysis of modes of production and circulation of commodities may uncover much more about the construction of modern intellectual property. The relevance of this distinction for understanding the political economy of intellectual property, especially in the course of its international expansion from the late nineteenth to the early twenty first centuries, may help provide a clearer understanding of the role intellectual property has played in the history of capitalism. Finally, the continuing relevance of the division between intellectual and manual labour and of intellectual property itself, in the age of vectorial capitalism (Wark 2019) is an open question. These are questions that exceed the ambit of this study, but that I hope a renewed attention to the labour process in the context of intellectual property law may help explore. Thinking copyright after the closure is to locate it within a larger culture of abstraction.

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