Roman Ingarden's Ontology: Existential Dependence, Substances, Ideas, and Other Things Empiricists Do Not Like[*]

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Roman Ingarden's mammoth treatise on ontology bears the name *The Controversy over the Existence of the World* (first published in 1947, in Polish, *Spór o istnienie świata*, later in German, *Der Streit um die Existenz der Welt*; I will refer to this work in the following as 'Streit'). Why? Ingarden's teacher Edmund Husserl turned towards transcendental idealism in his *Ideas* (1913). Ingarden rejects this and develops, in his *Streit,* an ontology on the background of which he can answer the question whether and in which sense the world exists. Amongst or categories of entities Ingarden investigates there are particular, real, concrete things, ideas, states of affairs, and also fictional objects, such as Antonie Buddenbrook (from Thomas Mann's novel *Buddenbrooks*). Characteristic about fictional objects is that they are in a certain way mind-dependent. Ingarden reconstructs Husserl's idealist view as the view that all things are mind-dependent, quite like fictional objects. Ingarden produces an ontology of the various kinds of things in order to be able to answer the question whether, as Husserl assumes, the world is mind-dependent like fictional objects, or whether only some things in the world are mind-dependent, as Ingarden believes. This is the plot of the *Streit*.

Ingarden's ontology is an impressive biotope. It takes Ingarden 1840 pages to set it up. His style is not cryptic, but he writes down not only how he thinks things are and his arguments for his views, but all his thoughts about the matter, in good phenomenological tradition. The editors of this book have asked me to move on a bit more swiftly. As life is short, let us take a Europe-in-seven-days tour through Ingarden's ontology. Preparing the travel we need to clarify what *ontology* is for Ingarden, how it relates to semantics, and how it relates to metaphysics. Then we shall turn to different kinds of *existential dependence* and to the distinction between *form and matter*. Having considered these preliminaries we shall consider Ingarden's

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conception of a substance and, more briefly, his other categories. While my main aim is to guide you through Ingarden's ontology I shall also indicate where I think the actual world is not as Ingarden describes it.

Ontology, not Semantics

For Ingarden ontology has less to do with language than for most contemporary philosophers who call their work ontology or metaphysics (David Armstrong being the most notable exception). They work by analysing concepts, by 'providing truth-conditions', by developing semantics, or by discovering ontological commitments. Some of them want to discover the structure of language, others want to discover the structure of our language or of our thought, but they all work by investigating language or concepts. An example of a philosopher who calls himself a metaphysician and who wants to discover not the structure of reality but the structure of language or of thought is Peter Strawson. He calls his project 'descriptive metaphysics' (Strawson 1959, 9): the description of the structure of our thought about the world. The clearest statement of the approach to ontology that wants to discover the structure of reality by investigating language I found in Uwe Meixner's (2004, 11) introduction to ontology, where he writes explicitly that, according to the realist view, the basic structures of reality are reflected in the structures of reality so that we can read them off from language.

Ingarden wants to discover the structures of things as they are independently of how (and whether) we refer to them, describe them, or think of them (*Streit* II/1, 62). He does not want to investigate our thought, he wants to investigate things in themselves. All epistemological questions he puts aside. When he investigates concrete particulars, which he calls 'seinsautonome individuelle Gegenstände', he emphasises that he wants to find out how they are independently from anything mental, not how they are represented.

Let me clarify this by relating it to Peter Strawson's distinction between descriptive and revisionary metaphysics. Sometimes Ingardian and Armstrongian metaphysics, which tries to investigate not our conceptual scheme but things as they are, is called revisionary metaphysics. This is not

how Strawson uses the term. We have to distinguish Strawsonian meta-physics, descriptive *and* revisionary, from metaphysics as Ingarden (or, e.g., David Armstrong) pursues it. Strawson writes: 'Descriptive metaphys-ics is content to describe the actual structure of our thought about the world, revisionary metaphysics is concerned to produce a better structure.' (Strawson 1959, 9) Both Strawsonian kinds of metaphysics are concerned with *the structure of our thought*, with concepts, with conceptual schemes. Ingarden is not, he is concerned with things in themselves. Let me call In-garden's project of describing not concepts but things in themselves 'meta-physical metaphysics' (or 'metaphysical ontology'). Strawsonian descrip-tive metaphysics I call also 'conceptualist metaphysics'. (Had Strawson not already introduced the terms differently I would have called metaphysical metaphysics 'descriptive metaphysics', or just 'metaphysics'.)

Having said that, Ingarden's ontology does look like something a con-ceptualist metaphysician could have proposed. It is very Aristotelian, and it is debatable whether Aristotle's ontology is metaphysical or conceptualist. Ingarden's method in ontology is not what Meixner describes as reading off the structures of things from the structure of language, but *a priori*, in-tuitive insight into the content of ideas, which are non-temporal, non-men-tal entities. My own view is that Ingarden's ontology does not capture how the world really is and that Ingarden was deceived by the structures of our thought,[1] but nevertheless Ingarden's aim is to describe, not the structure of our thought about reality, but the structure of reality itself.

For Ingarden ontology is distinct from metaphysics. It is concerned, not with what actually exists, but with 'pure possibilities and necessities' (Streit I, 29). One part of ontology, 'formal ontology', investigates what it would be to be an idea, a substance, a property, a state of affairs, etc. It seeks to discover the structure of these things. In Ingarden's words, it seeks to analyse the *form* of an idea, the form of a substance, etc. The method of

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[1] Peter Simons has similar worries about David Armstrong's ontology: 'This is a gen-eral worry about how close the parallels are between linguistic and ontological catego-ries, irrespective of whether there are one-to-one correspondences at the instance level, which Armstrong quite rightly rejects. Personally I think Armstrong's parallels are suspiciously cosy and that there is every chance the basic ontological categories are quite skew to linguistic ones (Simons 1999). For my own ontology, a 'field ontology' with ontological categories skew to linguistic ones, see (Wachter 2000c).

ontology is *a priori* analysis of the content of ideas (Streit I, 33), where ideas are mind-independent, non-temporal entities (they are neither meanings nor concepts). So Ingarden assumes that we can by intuition or by thinking hard in a certain way discover the things ontology seeks to discover. Note that this does not entail that we can discover truths about the world without experience. In the phenomenological tradition *a priori* knowledge was sometimes assumed to be, not entirely independent from experience (as the logical empiricists interpreted 'a priori'), but based on a certain kind of experience, namely *a priori*, or phenomenological, experience (Streit I, 39; Scheler 1916, 68–71).

Metaphysics, on the other hand, seeks to find out what actually exists: whether there are substances, whether there are simple substances, whether chairs are themselves substances or whether only the elementary particles of which the chair consists are basic substances,[2] whether there is a God, etc. (Streit I, 30ff, 47ff) Further, it seeks to find out whether a certain property of a thing is part of its (individual) essence, i.e. whether a thing of this kind must have this property. For example, it is a question of metaphysics whether it belongs to your essence that you are mortal. Whilst ontology is concerned with the content of ideas, metaphysics is concerned with certain objects, like you or like my desk.

Metaphysics uses results from ontology as well as from natural sciences. Ingarden suggests that we need the natural sciences to find out whether something is itself a basic substance or whether it is a higher-order object, i.e. one constituted by a plurality of things (Streit II/1, 61f). And we need results from ontology in metaphysics in order to find out, for example, whether you could be immortal. To find out this we have to find out what kind of object you are, and then we have to look at the corresponding

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[2] Sometimes Ingarden also suggests that we need the natural sciences to find out whether something is itself a (basic) substance or whether it is a higher-order object, i.e. one constituted by a plurality of things (Streit II/1, 61f). What Ingarden is getting at, I suggest, is that metaphysics using results from the natural sciences finds out such truths.

idea whether things of that kind can be immortal. This latter task of inspecting an idea is part of ontology.[3]

Terminology

Ingarden uses the term 'Gegenstand', which corresponds to the English term 'object', usually for substances. He does not use the term 'substance'. The term 'Gegenständlichkeit' he uses for anything that exists ('irgend etwas überhaupt', *Streit I*, 79; *Streit II/1*, 102), as we use the term 'entity' in English. I call a substance, as opposed to an ontologically incomplete entity like an individual property, a *concrete* entity or sometimes just a *thing*. Ingarden's term is 'self-sufficient'.

An *abstract* entity, a trope for example, is one that is ontologically incomplete, dependent, non-self-sufficient. So I do not use 'concrete' and 'abstract' in the Quinean sense for being temporal and being non-temporal. (Armstrong (1978a, 78) calls the Quinean use of the terms 'perverse' because it ignores the tradition.) To call something temporal or non-temporal I use, like Ingarden, the traditional terms *'real'* and *'ideal'*.

Ingarden calls universals (to be precise, transcendent universals, as Armstrong (1989b, 76) calls them) 'ideal qualities' ('ideale Qualitäten' or 'reine Wesenheiten'). Particulars Ingarden calls 'individuelle Gegenständlichkeiten'. I use the adjectives 'particular' and 'individual' and the nouns 'particulars' and 'individuals'. Note that, with this terminology ('individual' in the title of Strawson's book *Individuals* is used differently), an individual can be concrete (e.g. you) or abstract (e.g. your mass trope).

Properties, according to Ingarden, are individuals; like Husserl, he calls them 'moments' ('Momente'). We can also use the modern term 'trope', or 'abstract particular', or 'property instance'. Ingarden uses the term 'moments' to refer not only to a thing's properties but to all its ontological constituents, or even to anything that can be distinguished at a thing. The individual property bearer, the 'subject' of the properties, is an ontological constituent of the thing. (Ingarden uses neither the term 'substance' nor the

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[3] For how metaphysics uses results from ontology, see Streit I, 50–53. For a discussion of the relationship between ontology, epistemology, and metaphysics, see (Ingarden 1925), referred to by (Küng 1975, 159).

term 'substratum'.) The term 'ontological constituents' (as used by Armstrong 1997, 2, 28; and Smith 1997) is not used by Ingarden, but I use it. This is justified by the fact that Ingarden, following Husserl (as explained below), takes the properties (and other ontological constituents) of a thing to be parts of the thing; not 'concrete parts' but 'abstract parts'.

Ingarden's term 'Wesen' is translated as *essence*. An essence is something individual, it is the essence of a thing. You have one and I have one. They are both essences of a man, but they are numerically distinct.

Survey over all there is

According to Ingarden, in the realm of what there is there are three types of things (Streit I, 39; Streit II,1, 60): individual entities ('individuelle Gegenständlichkeiten'), ideas, and ideal qualities ('ideale Qualitäten' or 'reine Wesenheiten').

Individual entities are things like a certain chair, a certain rabbit, a certain planet, a certain electron, but also the properties of such things (tropes, as we call them today), for example the mass of the Moon. Amongst individual entities, Ingarden distinguishes, as I shall explain in more detail below, independent individual objects (which many philosophers call 'substances'), like a certain planet, from dependent individual objects, like a certain planet's mass (a particular property, a trope) or a certain man's being a man (a particular kind). Amongst independent, individual objects, Ingarden distinguishes basic objects from higher-order objects, which are constituted by a plurality of things (often called 'parts' of the thing), e.g. my car, which is constituted by many smaller things.

Ideas are a kind of ideal, i.e. non-temporal, entities. An example may be the idea of a man. An idea has a content ('Gehalt'). In the content of the idea of a man it is determined, for example, that a man has a body, and also that a man has some weight. Each man falls under the idea of a man. Ideas determine what is possible in the realm of individual things, e.g. that I could have a different weight than the one I have.

By 'ideal qualities' Ingarden means what today is called transcendent universals. They are ideal, i.e. non-temporal entities, whose exemplifications are individual properties (property instances, tropes, Ingarden, like

Husserl, calls them 'moments'), such as my mass, which is numerically distinct from your mass, even if we both have a mass of 81 kilograms. So Ingarden believes that there are tropes as well as universals.

Existential dependence

Volume I of the *Streit* bears the title 'Existential Ontology', Volume II 'Formal Ontology', and another volume, which Ingarden never came to write, would have been called 'Material Ontology' (instead Ingarden wrote a volume about 'The Causal Structure of the World'). Before we turn to Ingarden's account of individual objects and of ideas, let me explain his concepts of existential dependence, which he discusses in *Streit I,* and then his concepts of form and matter.

For Ingarden, ontological dependence is linked to *being* in the following way. He distinguishes various kinds of being ('Seinsweisen') which an entity can have. Examples are being real ('Realsein'), being ideal ('Idealsein'), and being possible ('Möglichsein') (Streit I, 66). (He does not say whether this list is complete.) Unlike, for example, Thomas Aquinas, he does not assume that the being of an entity is an ontological constituent of the entity (Streit I, 71–74). It is not like the rose's being red, which Ingarden does assume to be an ontological constituent (or you may even call it a part) of the rose. The existence of a thing is not an addition to the rest of the thing. If the Moon dropped out of existence, there would be nothing left. That the Moon exists is made true not by an ontological constituent of the Moon which we could call its being but by the Moon, which consists of its mass, its density, its property bearer, etc.

Ingarden assumes that one may be able to make distinctions about a kind of being. Being real is a kind of being. Considering what it is to be real, to be a real entity, one may be able to make further distinctions about *being real.* That which is distinguished then Ingarden calls *existential moments* ('existentiale Momente'). The different kinds of existential dependence are existential moments of *being real.* Ingarden discusses four kinds of existential dependence, four pairs of existential moments of *being real.* We need to familiarise ourselves with them in order to be able to understand Ingarden's ontology. They are four reasons why it may be true that

some thing x cannot exist unless some thing y exists.[4] That is, it is impossible that x but not y exists.

Note that 'It is impossible that x but not y exists' does not imply that the sentence 'x exists and y does not exist' is, or entails, a self-contradiction. The idea that something is impossible if, and only if, it is self-contradictory is an idea of the logical empiricists and is opposed to what phenomenologists like Ingarden assume about modality. When Ingarden says that it is impossible that x but not y exists he presupposes that 'x exists and y does not exist' is consistent. I call this kind of modality 'synthetic modality' (see Wachter 2000b).

1. Existential autonomy / heteronomy

First, Ingarden tries to capture the way in which the figures in a novel are dependent on the author of the novel. (Streit I, §12) He calls this heteronomy of being ('Seinsheteronomie'). His generalised definition is:

An entity is existentially heteronomous if, and only if, it has the fundament of its being in itself, i.e. if its attributes ('Bestimmungen') are immanent to it.

What does Ingarden mean by 'x has the fundament of its being in y'? He does *not* mean that x is *caused* by y. A shoe has the fundament of its being in itself, not in the shoemaker. The forest fire has the fundament of its being in itself, not in the cigarette that caused it. The Moon that was caused by God and is sustained by him has the fundament of its being in itself, not in God.

An example of a heteronomous entity is Amy Dorrit, also called 'Little Dorrit', daughter of William Dorrit, from Charles Dickens's novel 'Little Dorrit'. Little Dorrit has soft hazel eyes. She really does. Well, perhaps not really 'really'. Ingarden's account of it is as follows. Little Dorrit exists. But unlike you, Little Dorrit is a heteronomous entity. 'Little Dorrit has soft hazel eyes' is true. But there is a difference between your and Little Dorrit's having soft hazel eyes. According to Ingarden, the difference is that to Little Dorrit this attribute is not immanent, because 'Little Dorrit

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[4] For the names of the existential moments I use Peter Simons' translation (in Smith 1982, 263, in the preface to Ginsberg 1931. An English translation of the relevant parts of *Streit I* is (Ingarden 1964b).

has soft hazel eyes' is true not because there are somewhere eyes that reflect such and such light. A heteronomous entity is one whose attributes are not immanent to it but are for some other reason its attributes.

Why does Ingarden not give more rigorous or formal definitions? I have tried to clarify the meaning of 'x has the fundament of its being in y' not by giving an elaborate definition but by pointing to an example and by indicating what aspect of it the phrase aims to capture. The phrase applies to all cases that resemble the examples in the relevant respect. This is how Ingarden does it. His aim is not to construe or explicate or analyse concepts but to grasp how things are in themselves. The key terms in Ingarden's definitions and investigations do not have definitions from which you can read off whether it applies to a certain case; he does not give a set of necessary or sufficient conditions. Ingarden tries to describe what he investigates and to introduce terms that capture aspects of what he investigates.

Little Dorrit belongs to the kind of heteronomous entities Ingarden is most concerned with: 'purely intentional objects' (Streit II/1, 82–86, Kap. 9). A purely intentional object is one that has its fundament of being in intentional mental events ('intentionale Bewußtseinserlebnisse'). Most philosophers today would call such objects fictional objects. Ingarden emphasises that they exist but that they differ in their ontological structure from autonomous objects. Little Dorrit is a purely intentional object because it has its fundament of being in mental events of Charles Dickens, the author of the novel.

Let me draw your attention to two features of purely intentional objects (Streit II/1, §47). First, intentional objects have two sides ('Doppelseitigkeit'). On the one side they have a *content* ('Gehalt'). The content of a purely intentional object is the sum of its attributes. For example, it is part of the content of Little Dorrit that she has soft hazel eyes. In the content there is all that which the object's fundament of being bestows upon the object. On the other side a purely intentional object has properties in itself. Ingarden calls this the object's intentional structure. For example, it belongs to Little Dorrit's intentional structure that it was created by Charles Dickens.

Second, purely intentional objects have places of indeterminacy ('Unbestimmtheitsstellen'). For autonomous objects like you for every property there is a fact of the matter whether you have it. For example, I do not

know whether George W. Bush has a liver spot on his left shoulder. But he knows, or somebody can find out; it is something to be discovered. Not so for purely intentional objects. There is no fact of the matter whether Little Dorrit has a liver spot on her left shoulder because the book does not say anything about it. This is what Ingarden calls a purely intentional object having a place of indeterminacy.

What Ingarden calls a purely intentional object here is different from what is sometimes called an intentional object: object that is the object of an intentional mental event, for example of your desiring its possession or your imagining it. Ingarden's teacher Edmund Husserl uses 'intentional object' in this sense, especially in his Fifth Logical Investigation. He says that there are intentional mental events ('acts') that have an object, which is the called its intentional object, as well as intentional acts whose object does not exist, for example my imagining the god Jupiter. For Husserl, to say that a mental act has such and such an object does not entail that there is, i.e. exists, such an object but only that the act is of a certain kind: it has a certain directedness so that if there exists a corresponding object that object is meant in the act. In the case where the object does not exist but only the act with its being directed in a certain way[5] (for example, towards the god Jupiter), Husserl says that the act's object is a 'merely intentional object' ('bloß intentionaler Gegenstand' (Husserl 1913c, 425)).

Now, this concept of a merely intentional object is the same as Ingarden's concept of a purely intentional object, instead of which he often says only 'intentional object'. The aim of Ingarden's book *The Controversy about the Existence of the World* is to answer the question whether the world is a purely intentional object. Husserl, after his turn to transcendental idealism in his book *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy* (1913a), held that the spatio-temporal world has 'merely intentional being' (Husserl 1913a, 93), i.e., in Ingarden's terminology, that it is a purely intentional object.[6]

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[5] 'Die Intention, das einen so beschaffenen Gegenstand "Meinen" existiert, aber *nicht* der Gegenstand.' (Husserl, *V. Logische Untersuchung,* 425)

[6] For more on this see (Wachter 2000a, 71–74).

2. Existential originality / derivation

The second pair of existential moments that Ingarden discusses is about whether the entity could be created (Streit I, § 13). It is similar to the scholastic distinction between 'esse a se' and 'esse ab alio'.

An existentially original ['seinsursprünglich'] entity is one that because of its essence cannot be created by another entity. An existentially derived ['seinsabgeleitet'] entity is one that can be created by another entity.

Ingarden takes this to entail that an existentially original entity is one that because of its essence cannot not exist. Its own essence or nature forces it to exist. An existentially original entity cannot be destroyed by another entity, it is imperishable. It exists eternally, i.e. at all times. It exists necessarily.

Ingarden does not take a view in his ontology whether there are existentially original entities. To determine this is a task of metaphysics. God would be a existentially original entity. Atheist materialism may hold that there is matter that is existentially original (Streit I, 112).

3. Existential self-sufficiency / non-self-sufficiency

Ingarden assumes that the properties of a thing are individual, like the thing of which they are properties. Even if we both are 81 kg in weight, your mass of 81 kg is numerically distinct from my mass of 81 kg. However, the properties of a thing are existentially dependent upon each other. Your mass could not exist without your density, etc. This kind of dependence Ingarden captures with his concept of existential non-self-sufficiency (Streit I, §14).

An existentially non-self-sufficient entity is one that can exist only together with certain other entities in the unity of a whole. An existentially sufficient entity is one that is not existentially non-self-sufficient.[7]

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[7] Ingarden's wording is: 'An entitiy is existentially self-sufficient if it requires for its existence the existence of no other entity with which it would have to exist in the unity of one whole; in other words, if its existence is not a necessary co-existence with another entity in the unity of a whole.' (Streit I, 75, my transl.)

Ingarden writes, instead of 'unity of a whole thing', 'unity of a whole' ('Einheit eines Ganzen'). What does he mean by the unity of a whole? Also the spring and the balance in a watch exist in the unity of a whole, and one can even say that there is the whole consisting of the table and the book on the table, but they could exist without any unity of a whole. One could say that the foundation-stone of a house could not exist without there ever being a house of which it was the foundation-stone, but that is also not what Ingarden means because a foundation-stone can be removed from a house in a way which Ingarden wants to exclude for existentially non-self-sufficient entities. The point is not that if the entity were removed from the things on which it depends, then it would not be that very entity any more, or then it could not be referred to with the same name. The point is that there is no removing from the whole at all possible and that no entity of that kind could exist except as a part of a. The kind of unity he means is clearly that in which, for example, the mass, the density, and the temperature of the Moon exist; that is, the unity that the properties (and other ontological constituents) of a thing have. We need to understand the definition so that it refers to a certain kind of a unity of a whole for which we have examples, and then states that an entity is non-self-sufficient if it cannot exist but within such a whole.

Ingarden's notion of a non-self-sufficient entity corresponds to Husserl's notion of an 'abstract part' (*III. Logical Investigation*, § 17). Whilst Aristotle (*Categories,* II) insisted that the properties of a thing are not parts of it, Husserl, in his *Third Logical Investigation,* distinguishes between 'concrete parts', which can be removed from the whole, and 'abstract parts', which can only exist when they are in the unity of the whole. The properties (or 'moments', as Husserl and Ingarden also call them) of a thing are abstract parts of the thing. The reason why Ingarden, like Husserl, takes properties to be individuals is that an individual thing cannot have universals as constituents. Everything that can be distinguished at an object (e.g. the object's mass from the object's temperature) has to have the same mode of being. (Streit I, 74f; Streit II/1, 236)

Ingarden draws further distinctions, about relative to what and about in virtue of what (matter or form) something is non-self-sufficient. Relevant for us here are the following distinctions:

x is unambiguously existentially non-self-sufficient relative to y if, and only if, x can exist only together with y within the unity of a whole.

x is ambiguously existentially non-self-sufficient relative to y if, and only if, x can exist only together with y or some other entity within the unity of a whole. (For example, the mass of the Moon is ambiguously existentially non-self-sufficient relative to the Moon's temperature, because the Moon could have a different temperature whilst having the same mass.)

x is reflexively non-self-sufficient relative to y if, and only if, x is unambiguously non-self-sufficient relative to y and y is unambiguously non-self-sufficient relative to x.

x is existentially non-self-sufficient (or 'abstract') if, and only if, there is an entity relative to which it is (ambiguously or unambiguously) non-self-sufficient.

4. Existential dependence / independence

Fourthly, Ingarden makes a distinction amongst self-sufficient entities (Streit I, §15):

An existentially dependent ('seinsabhängig') entity is one that is self-sufficient and requires for its continued existence the existence of a certain other self-sufficient entity.

One example Ingarden mentions is a human organism, which requires for its continued existence the existence of a source of heat that produces the temperature that the organism needs (Streit I, 121). Another example would be a thing created by God which can only continue to exist if God sustains it.

Having done this part of *existential ontology*, which is the topic of the first volume of the *Streit,* we can move on to the topic of the second volume: formal ontology. But first let me explain what Ingarden means by 'form'.

Form and matter

The idea underlying Aristotle's distinction between form and matter ('Form und Materie') is that if something comes to be, there must be something out of which it comes to be, and if something changes there must be something underlying the change. His favourite example is a statue coming to be out of bronze. The shape of the statue is then the form and the bronze is the matter. Ingarden's distinction is different. His concept of matter is broader, it would include the shape of the statue too, because it is something qualitative. With the concept of matter he wants to capture everything qualitative, with the concept of form he wants to capture how and where it stands in the ontological structure of that to which it belongs. Consider the Moon's density of 3.34 grams per cubic centimetre, which is an individual, a moment, a trope. It has a form: the form of a property. That which makes it different from, for example, my mass, is its matter. An entity's matter is that which is purely qualitative in it. The entity's form is that 'in which the matter stands'; it is that which gives the matter its place in the ontological structure of the entity. Ingarden calls it the *how* of the object's attributes, implying that it gives the matter its form.[8] Other examples of forms are: the form of an autonomous individual object, the form of a purely intentional object, the form of an idea, the form of a state of affairs, the form of a relation. These forms are the subject of chapters of *Streit II/1*.

Ingarden's concept of form reminds us of what other philosophers call 'categories'. That which makes an entity belong to a certain category Ingarden calls its form. That in respect of which it resembles, or differs from, other entities in the same category, Ingarden calls matter.

Each entity has the 'trinity' of a matter, a form, and a mode of being (Streit II/1, 96, 100f). The task of 'formal ontology'[9] is to analyse forms.

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[8] For Ingarden's distinction between form and matter see Streit II/1, 12f, 33f. For an analysis of Ingarden's discussion of different concepts of form and matter (Streit II/1, §§ 34–35), see (Wachter 2000a, 82–87). Ingarden's concepts of form and matter are based on Husserl's disinction between the sphere of the formal and the sphere of the material (*III. Logical Investigation,* § 11).

[9] Today, there is a discipline in information technology that is called 'formal ontology' or 'ontological engineering'. The aim there is to develop formal theories with defini-

Results of Ingarden's research in formal ontology are, for example, that a property is an individual, that heteronomous objects have places of indeterminacy, that ideas exist non-temporally, etc. Let us now have a closer look at the form of a substance, or 'autonomous, individual object', as Ingarden calls it.

Substance

The things we see with our eyes are all individual. Some portions of them, as well as perhaps some portions of other stuff, are substances. Something is special about them. They are what Ingarden calls original ('ursprunglich'), individual ('individuell'), self-sufficient ('seinsselbständig'), autonomous ('seinsautonom'), temporal ('zeitbestimmt') objects; often he calls them simply 'individual objects'.

Independence is one of the traditional distinguishing features of substances (which also plays a role in many contemporary accounts, e.g. (Lowe 1998, ch. 6); (Smith 1997, 112). On the background of his existential ontology, Ingarden is able to spell out with much ontological detail what this should mean. Individual objects are *seinsselbständig,* existentially self-sufficient. All its ontological constituents, its abstract parts, could not exist on their own, as described above when we discussed self-sufficiency. He distinguishes their material from their formal self-sufficiency (Streit II/1, 91). It is in virtue of their matter that none of a thing's properties can be taken away without being replaced by another property of a certain kind. Not only is it impossible for a single property to exist, also that which remained if one property were taken away could not exist, it would not be self-sufficient. You may lose your weight of 81 kg, but only if you acquire another weight instead, e.g. 83 kg. That a thing is *materially* self-sufficient means that it requires no further properties in this way.

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tions of categories like substance, state, property, etc., and with underpinning axioms for the design of date- and knowledge-base systems. Such theories can be improved by taking results from philosophical ontology into account. Philosophical ontology may help to make the theories fit reality. For a discussion of the relationship between philosophical ontology and ontological engineering, see (Smith 2003). Further, see http://formalontology.it and http://ifomis.org.

This we can distinguish from a thing's *formal* self-sufficiency, which Ingarden also calls 'formale Abgeschlossenheit', formal completeness (Streit II/1, 62, 67, 91). A property is formally incomplete because its form 'property of' requires the form 'subject of properties'. That is, something that stands in the former form can only exist if properly united with something of the latter form. Summarising both, the formal and the material aspect of self-sufficiency, Ingarden says that an individual object is self-sufficient because all moments' need for complementation is saturated (Streit II/1, 91).

The form 'subject of properties' and 'property of something' complement each other and together constitute the 'basic form' of the individual object (Streit II/1, 64).

The property bearer

What is the bearer of a thing's properties? There are two main options: it is a bare substratum, i.e. a substratum that itself has no quality at all, or it is a kinded substratum, i.e. a substratum that itself has a quality (what Thomas Aquinas called 'forma substantialis') and belongs to a kind (a defender of the first view is LaBossiere (1994), defenders of the second view are Lowe (1989) and Loux (1974)). Ingarden chooses the latter option. A property is borne by a property bearer, a subject. Like the property, this property bearer is itself qualitative. It has a matter ('eine Materie'). The matter of a property stands in the form 'property of something'; the matter of a subject stands in the form 'subject of properties'. However, the matter of a property and the matter of a subject never resemble each other, they can never be of the same kind. An '83-kgs in mass'-matter cannot stand in the form 'subject of properties', only in the form 'property of something'. A 'is a man'-matter cannot stand in the form 'property of something', only in the form 'subject of properties'.

The way in which a subject is not bare becomes clearer when we consider the role of universals in Ingarden's ontology. It is a 'tropes plus universals' ontology (Armstrong 1989b, 18). A property is an exemplification of a universal. There is the universal, and there are its exemplifications, which are individuals and constituents of things: of all those things that re-

semble each other (exactly) in this respect. Now, there are two kinds of universals: *besides those universals whose exemplifications are properties (tropes), there are universals whose exemplifications are property bearers.* They are not bare substrata but belong to a kind; or, more precisely, the thing of which it is the property bearer belongs to a kind in virtue of having this property bearer in it. Ingarden calls the bearer of the properties the 'subject', and the kind to which the thing belongs the thing's *constitutive nature* ('konstitutive Natur') (Streit II/1, 64). The subject is 'immediately qualified'. That it is qualified means that it is not a bare substratum but a substratum with an intrinsic quality. That it is 'immediately' qualified means that it has this quality not because it bears a quality but because it is itself an exemplification of a universal, a kind universal.

This provokes the following objection. That the subject is qualified must mean it bears a certain quality. You can distinguish the bearer of the quality from the quality. Ingarden's idea of an 'immediately qualified subject' is incoherent. He should either assume that there are no property bearers (and that things are bundles of properties), or that properties are borne by bare substrata, or that the property bearer itself consists of a kind-quality and it's bare bearer.

Ingarden's reply would be that this is a confusion between the 'ontic formal structure' and the 'merely intentional formal structure' of the thought about the thing (Streit II/1, 105); in other words, between the ontic structure of the thing in itself and the semantics of the description of the thing. The claim 'subject x is of kind y' has the subject-predicate structure, but this does not show that there is the kind and the kind's bearer. The qualified subject is ontologically simple, despite the fact that we can truly say of it that it is the property bearer as well as that it is of kind y. The objector assumes that whenever we can say something of something, i.e. make a claim of the form 'this is so-and-so', there is an ontological distinction between that which is predicated and that to which it is predicated. Ingarden disagrees.

Further, he criticises the view that everything that is predicated is a property. He has a narrower concept of a property and calls it a misleading automatism of thinking ('Denkautomatismus') to take everything that can be distinguished at a thing is a property of the thing (Streit II/1, 96, 100;

Streit I, 60).[10] Not every predicate corresponds to a property and not every-thing that can be distinguished at a thing is a property of the thing. For ex-ample, the constitutive nature of a thing is not a property. Neither is its form nor its mode of being ('Seinsweise'). Ingarden's ontology is a con-stituent ontology: he tells us what a thing consists of. Do not approach In-garden's ontology by looking at the propositions about the thing.

So each thing has a property bearer, which is an exemplification of a kind universal. So each thing belongs to one kind (Streit II/1, 82). But con-sider this apple here. Isn't it a fruit, an apple, and a Braeburne? But Ingar-den insists that the thing of only one kind, one 'constitutive nature'. What the other sortal concepts under which the thing falls refer to Ingarden calls quasi-natures ('Quasi-Naturen'). For example, being a fruit is a quasi-na-ture of this apple.

But what distinguishes the constitutive nature of a thing from its quasi-natures? Being a fruit is a quasi-nature of this apple here because there are different kinds of fruit. Ingarden postulates that in the hierarchy of kinds to which a thing belongs, there is one that is the lowest, most specific kind. There is one kind of which there are no further sub-kinds. That is the con-stitutive nature of the thing. The medieval philosophers called this the 'in-fima species'.

I would object that we have no reason to believe that of the many kinds to which a thing belongs there is one that the lowest kind. For every kind you can form a concept of a lower kind by making it more specific. We are free to decide what we take to be a variation of a kind and what we take to be a different kind. In zoology, for example, we have decided to say of all those animals that can cross-breed that they belong to the same species, although we could form more specific concepts of species. But Ingarden says, there just is one lowest kind to which a thing belongs, even if we cannot discover it. We can always form a concept of a lower kind, but there comes a point when we can only form a concept of a lower kind by referring not to a lower kind but to a property. You can form the concepts 'fruit', 'apple', 'Braeburne', 'red apple' but 'red apple' presumably does not refer to the constitutive nature because 'red' refers to a property. He

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[10] Ingarden's writings had no influence on the contemporary debate in ontology, but Armstrong (1978b, ch. 13) later made the similar point that there is no one-one corre-lation between predicates and universals.

just assumes that there is a lowest kind of each thing because phenomeno-logical insight reveals that such is the ontological structure of things.

The nature of a thing cannot be reduced to a set of properties. Amongst the qualitative constituents of a thing there are properties as well as a constitutive nature. But can we not define one kind in terms of another kind and distinguishing properties? Can we not define a man as a rational animal? Ingarden answers that we may be able to pick out in this way all the individuals belonging to a certain kind, but a thing's nature is distinct from it's properties. However, there is an explanation why we are able to form definitions as described. There are existential dependencies not only between the properties of a thing but also between the constitutive nature and the properties. A thing's nature is existentially non-self-sufficient upon certain properties. This may be an ambiguous or an unambiguous dependency. If it is ambiguously non-self-sufficient upon its properties P, then that thing can only exist if it has one property from a certain set of properties of which P is one. If it is unambiguously non-self-sufficient upon its property P then it cannot exist without P and it would cease to exist if P were destroyed.

Thus there is a net of existential dependencies between the ontological constituents of a thing that glues them together ontologically (Streit II/1, § 41).[11] There are ontological dependencies between the properties, between the properties and the constitutive nature (instead we can say between the properties and the thing), between each matter and the form in which it stands, between the forms, and between the matters. The dependencies can be ambiguous or unambiguous, reflexive or non-reflexive.

This view is opposed to the kind of empiricism to which many contemporary ontologists are committed. In Keith Campbell's trope theory, for example, 'individual, isolated tropes, compresent with nothing, are admitted as possibilities' (Campbell 1990, 59). There are no necessary links between the ontological constituents of a thing: 'It is *a matter of fact*, and not of metaphysical necessity, that tropes commonly occur in compresent groups.' (Campbell 1990, 21) Campbell wants to avoid the assumption that one entity could not exist without a certain other, distinct entity. Empiricists (of the Humean type) hold that all knowledge comes through sense

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[11] Simons (1994) reintroduces this idea in the contemporary debate.

experience, and they try to avoid to assume that there is something one cannot know. The existential dependencies that Ingarden assumes are something one cannot know through the senses. Therefore many contemporary ontologists assume, like Campbell, that the ontological constituents of a thing are independent from each other. David Armstrong finds dependencies between distinct ontological constituents of a thing 'a rather mysterious necessity in the world' (Armstrong 1989b, 118) and proposes therefore a 'combinatorial theory of possibility' where all distinct entities are independent from each other (Armstrong 1989a). An empiricist typically holds that 'the source of necessity must be located in the words, or concepts, in which the propositions are expressed.' (Armstrong 1978b, 168) Ingarden has no worries of this kind, he rejects the 'radical empiricist's' (Streit II/1, 278) assumption of the independence of distinct entities and assumes the sort of necessities empiricists find mysterious, i.e. synthetic necessities (cf. Wachter 2000b). For him all the constituents of a thing are in some way ontologically dependent upon each other. Each existing thing requires for its existence each of its ontological constituents or a suitable replacement thereof. The non-self-sufficiency of the properties of a thing is the ontological glue that glues them together (as it is proposed by Simons 1994).

Essence and identity

By the essence of a thing Ingarden means that in virtue of which it is the thing it is. That means that a thing ceases to exist if and only if its essence or a part of it is annihilated or taken away from the thing. That something belongs to the essence of a thing means that if it is taken away from the thing the thing thereby ceases to exist. Ingarden puts it as follows: 'The essence of the object is that without which the object would not be the itself and would not be that which it really is.' (Streit II/1, 401)

The essence of a thing is individual (Streit II/1, 387). All the ontological constituents of a thing have the same mode of being as the thing (Streit I, 74). One mode of being is being real, which Ingarden seems to equate with being individual. So in an individual object, a substance, there are only real, individual entities. Also its properties are individual (Streit II/

236, footnote 4). The essence of a thing is a subclass of the ontological constituents of a thing. Therefore the essence of a thing is individual. So Ingarden does not mean by the essence of a thing the thing's kind, which it may have in common with other things. Rather, a thing's essence is its ontological core.

The centre piece of a thing and the thing's essence is the constitutive nature (which, although Ingarden calls it 'nature', is individual), the kinded property bearer. Whenever you face a question of the form 'Is this thing the same as that thing' ('this' and 'that' referring to things at one time or at different times), the answer depends on whether 'this' and 'that' refer to the very same individual nature.

However, *a thing's essence consists not only of its individual nature but also that relative to which the nature is unambiguously non-self-sufficient*.[12] This may include some of its properties, the essential properties, and its mode of being.

A thing's essence includes everything that is *necessary* for the thing (Streit II/1, 402), in the sense that it is impossible that that very thing exists without it. A thing's essence is not indestructible. It is possible to take away an essential property from a thing (Streit II/1, 234), but if it happens the thing's constitutive nature, and hence the thing, ceases to exist.

A thing can persist in time so that it remains the very same thing. Ingarden takes this to be basic phenomenon which cannot be defined in terms of something else, it can only be described and characterised (Streit II/2, 32). A thing that persists in time moves with all that belongs to its region of being ('Seinsbereich') into a new present. It may or may not change, i.e. lose and gain non-essential properties, while it persists in time. A thing's ceasing to exist consists in its constitutive nature ceasing to exist. A thing persists during a certain period of time if and only if its constitutive nature persists during that period. As the constitutive nature and the other parts of the essence are linked by necessity, this amounts to the claim that a thing

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[12] This is the result of my attempt to distil one clear account of essence from Ingarden's discussion of the essence of a thing (Streit II/1, ch. 13). It is most clearly stated on p. 393 of Streit II/1. Ingarden fluctuates between various conceptions of essence, but this is what I suggest makes most sense and fits best with the rest of his ontology. I shall not discuss the exegesis of Ingarden's text here.

persists during a certain period of time if and only if all parts of its essence persist during that period.

Ingarden distinguishes between *criteria* of identity and *conditions* of identity (Streit II/2, 33). Criteria of identity are evidence that the two things are in fact identical. To state the conditions (necessary or sufficient) of identity is to describe what has to be the case for the two things to be identical, regardless of whether or how we can recognise this. The briefest way to state the identity conditions of concrete individual objects is this:

A and B are identical (are the very same thing) if, and only if, A's constitutive nature is identical with B's constitutive nature.

The diachronic identity of a constitutive nature is something primitive, we cannot give conditions for it in terms of something else. That means that for Ingarden it is always something to be discovered whether some two things, A and B, are identical. Whether the ship of Theseus is identical with the ship with all the renewed planks does not depend on how we use the term 'ship' or 'the same ship' but it is a fact about things in themselves.

For Ingarden there is no problem of individuation because properties and natures are themselves individual. There can be two things that are exactly similar; similar in its nature as well as in all its properties. In my view, the problem of individuation arises only in a bundle-of-universals ontology. Anyway, for Ingarden the problem does not arise because the kind universals as well as the property universals have exemplifications that are individuals.

Ideas and ideal qualities

According to Ingarden there are in the realm of being three regions: individuals, ideas, and ideal qualities (universals) (Streit I, 39). What are ideas and ideal qualities? (Ingarden discusses this in Streit II/1, Kap. X, und Streit I, 39–47.) Ideas and ideal qualities are ideal entities, that is, they exist non-temporally. Individual concrete objects *fall under* ideas. You, for example, fall under the idea of a man. Everything in the realm of the individual has a correlate in the realm of ideas. However, ideas and ideal qualities are *not concepts* (although they look a bit like concepts) and not meanings. They are independent of any act of referring and of thinking,

independent of anything mental. They are also not immanent to the things that fall under them. They are transcendent with respect to anything mental and anything physical (Streit II/1, 253). An idea exists independently of whether there exists something that falls under it (Streit II/1, 204).

An idea has a content. Every property of a thing has a correlate in the content of the idea under which the thing falls. For example, in the content of the idea of a man there is as an element 'being alive', which is an ideal correlate to your property of being alive. In order to understand what sort of thing this ideal correlate is we need to introduce the third region in Ingarden's ontology: ideal qualities.

Ideal qualities ('ideale Qualitäten', 'reine Wesenheiten') are roughly what other authors have called transcendent universals. As examples Ingarden mentions redness, colouredness, sadness (Streit II/1, 60). Every property (trope) is an exemplification of an ideal quality. But ideal qualities have not only exemplifications (or 'concretisations', as Ingarden calls it) in the realm of the real but also in the realm of the ideal. They have two kinds of exemplifications: 'real exemplifications', which are properties of concrete, real things, and 'ideal exemplifications', which are elements of the contents of ideas. So your property of being alive is a real exemplification of the ideal quality of being alive. Your property of being alive also corresponds to an element in the content of the idea of a man which is an ideal exemplification of the ideal quality of being alive.

There are not only ideal qualities whose real exemplifications are properties, but also ones whose real exemplifications are constitutive natures, i.e. property bearers, ones whose real exemplifications are existential moments, etc. Ingarden calls anything that we can distinguish at something one of its moments, and, at least in some places, he assumes that every moment is an exemplification of an ideal quality.

For every ontological constituent of a thing there is an ideal correlate in the content of the idea under which the thing falls. There are two kinds of elements of the content of an idea. Every man has the property of being alive. But not every man has the property of being 81 kg in mass. Some have '79 kg' instead, others '72 kg'. But every man has to have *some* mass. So some properties are necessary for falling under a certain idea, for other properties there is a range of properties one of which a thing needs to have in order to fall under the idea. This is determined through the content of the

idea. There are constants and variables in the content of an idea (Streit II/1, 238). A *constant* is an ideal exemplification of an ideal quality of which a thing needs to have a real exemplification as one of its properties (or as one of its other moments) in order to fall under the idea. A *variable* is an ideal exemplification of the necessity[13] of the things' having one real exemplification of an ideal quality from a certain range of ideal qualities as one of its properties.

Possibilities about which moments a thing of a certain kind can and cannot have are thus grounded in the content of ideas. *All facts about what is possible and what is impossible are grounded in facts in the realm of ideas*. That there cannot be something that is green and red all over is grounded in the fact that in the idea of being coloured there is a variable which ranges over being green as well as over being red (Streit II/1, 246). Ingarden's main reason for believing in the existence of ideas is that there are modal facts, e.g. the fact that nothing can be green and red all over and the fact that a tone necessarily has a pitch. (Streit II/1, 278) These facts Ingarden explains by postulating that there are ideas with constants and variables in their content.

Ingarden could have simplified his ontology by saying that the content of ideas consists, not of ideal exemplifications of ideal qualities, but of the ideal qualities themselves. One could hold that modal facts are grounded in certain relations between ideal qualities. These relations could be called existential dependence grounding relations and exclusion grounding relations. Nothing can be green and red all over because there is an exclusion grounding relation between greenness and redness. A tone needs to have a pitch because some of the other qualities of a tone are ambiguously existentially non-self-sufficient relative to the pitches, which is grounded in relations between the corresponding ideal qualities. Likewise a man's body needs to have a mass, e.g. 83 kg or 79 kg, because some of its other properties, e.g. its shape or its density are ambiguously existentially non-self-sufficient relative to the masses. Ingarden would have replied that although that may be simpler it is not true, because 'being alive' in the content of the

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[13] Ingarden writes 'possibility' here (Streit II/1, 238) but the context makes clear that he is getting at what I have written here.

idea of a man is numerically distinct from 'being alive' in the content of the idea of a snake.

However modal facts are grounded, the most remarkable feature of Ingarden's ontology is the net of various kinds of ontological dependencies that connects the ontological constituents of a thing. Contra Humean empiricism, distinct entities may be dependent upon each other, and there are true synthetic modal statements. No property of a thing is independent from the other properties of the thing.

Is it true?

Is this world as Ingarden's ontology describes it? Let me give one reason why there is reason to doubt this. An Ingardian world consists of autonomous, concrete (i.e. independent) individual objects; substances. It is made up of single things. Not every portion of stuff is a substance. The left half of my body is not a substance, and an H_2O-molecule probably is not either. For any portion of stuff it is something to be discovered whether it is a substance. The alternative view would be that all portions of stuff are ontologically equal and there is hence no ontologically privileged way of carving up reality.[14] Ingarden's ontology (as I think every ontology with universals) excludes this view for the following reason.

Consider an egg that has everywhere a density of 1.5 cm³. Consider a certain part of the egg yolk of size 1 mm³ (at a certain time) and call it A. A has a density of 1.5 g/cm³. There is the universal '1.5 g/cm³', and there is an exemplification of it. Now the question arises whether A's density is a part of an exemplification of the universal or whether parts of A's density are exemplifications of the universal. One cannot assume that both is true because then one would have to assume that the density of 1.5 g/cm³ would be present twice at the same position. As there cannot be two densities piled up at one position there is a fact of the matter where one density trope

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[14] The ontology I have proposed in (Wachter 2000c), a 'field ontology', entails such a view. It claims that the material world is a certain amount of stuff. At every spatiotemporal position there is stuff, there is no empty space. No portions of stuff are ontologically privileged over others.

ends and another one begins. There is therefore only one true way of carving up reality.

The same becomes clear if we consider property bearers. A has density 1.5 g/cm³ because there is a property bearer that bears an exemplification of the universal '1.5 g/cm³'. Either something of which A is a part is a property bearer that bears an exemplification of that universal, or several parts of A are property bearers that bear exemplifications of that universal. It is impossible that both is true because otherwise there would be several individual densities piled up at one position. Only something that is an exemplification of a kind universal is a property bearer. There cannot be property bearers that overlap each other, and there cannot be parts of substances that are substances.[15] Ingarden assumes that there are composed things ('individuelle Gegenstände höherer Stufe' or 'fundierte individuelle Gegenstände') but they have a different ontological status than the substances of which they are composed, the basic things ('ursprünglich individuelle Gegenstände'). Composed things have properties only in virtue of the basic things of which they are composed having certain properties. A complex of material substances can be truly said to have a certain mass M, but that is not true because it itself bears an exemplification of the mass universal 'M' but because the basic material things of which it is composed bear exemplifications of certain mass universals. The world is made of basic things, and there is only one true way of carving up reality into basic things.

Ingarden assumed that our world consists of substances, even if we philosophers do not know which things in our world are these substances. It is the task of physics to find out (Streit II/1, 62, 144). If our material world consists of little bits with empty space between them, then these bits may well be Ingardian substances. But as far as I understand, modern physics points in a different direction, to a world of fields, or at any rate not to a world with little atomic things. If there are smallest constituents of the material world at all (perhaps 'strings'), they are not like classical substances because they lack determinate conditions of identity. At any rate, if

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[15] This is explicitly stated e.g. by Smith (1997, 108) in his substance ontology: 'A substance has no proper parts which are themselves substances.'

physics discovers that not everything is made of substances then Ingarden's ontology is false.

References

Armstrong, David M. 1978a. *Universals and Scientific Realism I: Nominalism and Realism*. Cambridge UP.

———. 1978b. *Universals and Scientific Realism II: A Theory of Universals*. Cambridge UP.

———. 1989a. *A Combinatorial Theory of Possibility*. Cambridge UP.

———. 1989b. *Universals: An Opinionated Introduction.* Boulder: Westerview Press.

———. 1997. *A World of States of Affairs*. Cambridge UP.

Campbell, Keith. 1990. *Abstract Particulars*. Oxford: Blackwell.

Ginsberg, Eugenie. 1931. 'On the Concepts of Existential Dependence and Independence'. In *Parts and Moments: Studies in Logic and Formal Ontology*, ed. by B. Smith. München & Wien: Philosophia Verlag, 265–287.

Husserl, Edmund. 1913a. *Ideen zu einer reinen Phänomenologie*. Hamburg: Meiner.

———. 1913b. *Logical Investigations (German original: Logische Untersuchungen)*. Translated by J. N. Findlay. London: Routledge, 1970.

———. 1913c. *Logische Untersuchungen II/1*. Tübingen: Niemeyer, 1980.

Ingarden, Roman. 1925. *Über die Stellung der Erkenntnistheorie im System der Philosophie (Habilitationsvortrag)*. Halle: Karras, Kröber & Nietschmann.

———. 1964a. *Der Streit um die Existenz der Welt I: Existentialontologie*. Tübingen: Niemeyer.

———. 1964b. *Time and Modes of Being*. Translated by H. R. Michejda. Springfield, Ill.: Charles Thomas.

———. 1965a. *Der Streit um die Existenz der Welt II/1: Formalontologie*. Tübingen: Niemeyer.

———. 1965b. *Der Streit um die Existenz der Welt II/2: Formalontologie 2. Teil*. Tübingen: Niemeyer.

———. 1974. *Der Streit um die Existenz der Welt III: Über die kausale Struktur der realen Welt*. Tübingen: Niemeyer.

Küng, Guido. 1975. 'Zum Lebenswerk von Roman Ingarden'. In *Die Münchener Phänomenologie*, edited by G. Huhn, E. Avé-Lallemant and R. Gladiator. Den Haag: Martinus Nijhoff, 159–173.

LaBossiere, Michael C. 1994. 'Substances and Substrata'. *Australasian Journal of Philosophy* 72: 360–370.

Loux, Michael J. 1974. 'Kinds and the Dilemma of Individuation'. *Review of Metaphysics* 27: 773–784.

Lowe, E. J. 1989. *Kinds of Being: A Study of Individuation, Identity and the Logic of Sortal Terms*. Oxford: Blackwell.

———. 1998. *The Possiblity of Metaphysics: Substance, Identity, and Time*. Oxford: Clarendon Press.

Meixner, Uwe. 2004. *Einführung in die Ontologie*. Darmstadt: Wissenschaftliche Buchgesellschaft.

Scheler, Max. 1916. *Der Formalismus in der Ethik und die materiale Wertethik*. 6. ed. Bern, München: Francke Verlag, 1980.

Simons, Peter. 1994. 'Particulars in Particular Clothing: Three Trope Theories of Substance'. *Philosophy and Phenomenological Research* 54: 553–575.

———. 1999. 'Review of D. M. Armstrong, *A World of States of Affairs*'. *European Journal of Philosophy* 7: 119–124.

Smith, Barry. 1997. 'On Substances, Accidents and Universals: In Defence of a Constituent Ontology'. *Philosophical Papers* 26: 105–127.

———. 2003. 'Ontology'. In *Blackwell Guide to the Philosophy of Computing and Information*, edited by L. Floridi. Oxford: Blackwell, 155–166.

———, ed. 1982. *Parts and Moments: Studies in Logic and Formal Ontology*. München & Wien: Philosophia Verlag.

Strawson, Peter F. 1959. *Individuals: An Essay in Descriptive Metaphysics*. London: Methuen.

Wachter, Daniel von. 2000a. *Dinge und Eigenschaften: Versuch zur Ontologie*. Dettelbach: Verlag J.H. Röll.

———. 2000b. 'Synthetische Notwendigkeit'. *Metaphysica*, *Sonderheft* 1: 155–177.

———. 2000c. 'A World of Fields'. In *Things, Facts and Events (Poznań Studies in the Philosophy of the Sciences and the Humanities, vol. 76)*, edited by J. Faye, U. Scheffler and M. Urchs. Amsterdam and Atlanta: Rodopi, 305–325.