1  Kant on the unity of judgment

- David Bell was the first to recognize that Frege’s theory of the unity of proposition owes a lot to Kant’s theory of judgment (See D. Bell [1979], Frege’s Theory of Judgement, Blackwell, Oxford), as exposed in the Critique of Pure Reason. This has been emphasized also by Robert Brandom (See R.B. Brandom [1994], Making It Explicit, Harvard University Press, Cambridge, Mass.).

- Kant didn’t know the post-Fregean distinction between propositional content and judgment, but the Kantian (and Hegelian) “judgments” are taken as:

  (a) objective, shareable contents expressed by declarative sentences;
  
  (b) bearers of truth-values;
  
  (c) objects of de dicto beliefs (the belief that...). Kant distinguishes between belief (Glauben) and propositional content: beliefs are “postures of the mind” in which propositions are found to be subjectively sufficient or “subjectively valid,” and thus are “taken-for-true” (fürwahrhalten) (A820/B848).

So judgments are in many respects close to what philosophers nowadays call “propositions” – although according to some interpreters Kant’s judgments still display some psychological features only post-Fregean thought got rid of (See P. Kitcher, [1990], Kant’s Transcendental Psychology, New York, Oxford).

1.1.  Why are predications objective?

- A decisive problem for Kant, as is well known, is how can the categories, introduced by Kant as the most general “concepts of objects”, or the “pure concepts of the intellect [Verstand]”, have objective validity when applied to the empirical world?

- Answering to this question is a decisive step in the solution of the fundamental problem of the Critique: “How are synthetic a priori judgments possible?” (That synthetic a priori judgments are possible is for Kant a datum: for it is a datum that sciences exist, and sciences cannot be based only on analytic and synthetic a posteriori judgments).

- Now it seems that the problem of the objectivity of the categories for Kant goes together with the problem of the objectivity of judgment, and this in its turn goes together with the problem of the unity of judgment.

- One of the central aspects of the so-called (objective) transcendental deduction of the categories in the Critique is Kant’s remark that the “unity of the content of thought” which makes it objective is displayed by “the link (Verbindung) of the object with its attributes”, and this link is expressed by the judgment.
Kant’s example in the Critique is the (synthetic a posteriori) judgment expressed by the sentence: “Bodies are heavy”. One who makes this claim, says Kant in disagreement with the empiricists’ tradition going from Locke to Hume, does not merely relate her subjective representations. The claim is not some such thing as “When I bear some body, I have an impression of weight”. The claim is that it, the body, is actually heavy.

Kant remarks that logicians (before him) tended to define judgment as a “representation of a relation between two notions” (B140). This pre-Kantian definition did not explain the unity of a judgment, which corresponds to the unity of nowadays’ propositions, and the difference between a judgment and a mere list of concepts – which is exactly Frege’s problem, as we have seen: how a mere n-tuple of objects such as <Socrates, mortal>, differs from the proposition that Socrates is mortal.

And Kant’s solution is also close to Frege’s. Kant characterizes the activity of judging as the application of a pure concept (that is, one of his categories), to the stuff provided by intuitive (that is, for Kant, perceptual) knowledge. In a pre-Critical essay, The False Subtlety of the Four Syllogistic Figures, he says that “a judgment is an act of logical predication whereby a concept is applied to a thing, as expressed by the copula ‘is’ or ‘are’”. And in the Critique of Pure Reason:

“A judgment is nothing other than the way to bring given cognitions to the objective unity of apperception. That is the aim of the copula “is” in them: to distinguish the objective unity of given representations from the subjective.” (B141).

“[Pure general logic] deals with concepts, judgments, and inferences, corresponding exactly to the functions and order of those powers of the mind, which are comprehended under the broad designation of understanding in general... If the understanding in general is explained as the faculty of rules, then the power of judgment is the faculty of subsuming under rules, i.e., of determining whether something stands under a given rule (casus datae legis) or not” (A130-132/B170-172)

Of course, Kant lacks the fundamental Fregean intuition that a concept is a rule, being a function: a concept is a function that maps the objects falling under it to the True, and those not falling under it to the False. However, the Kantian idea that to judge is to “subsume under a rule”, that is, to “determine whether something stands under a given rule or not”, is quite close to the (obscure) Fregean idea of the unity of proposition being explained by the “saturation” of a concept by an object, or the “falling under” a concept by an object.

With respect to Frege, Kant has the further trouble of intuition: famously, for Kant there is no intellectual intuition, so the faculty of the Verstand, which is the faculty of judgment, is only discursive, its essential activity consisting in judging. So the intellect has its object only because sensitivity provides the rough material of perceptual intuitions, unified only under the pure forms of space and time.

However, as Robert Hanna says, “The power of judgment, while a non-basic faculty, is nevertheless the central cognitive faculty of the human mind.” This is because judging “brings together all the otherwise uncoordinated sub-acts and sub-contents of intuition, conceptualization, imagination, and reason, via apperception or rational self-consciousness, for the purpose of generating a single cognitive product, the judgment” (R. Hanna [2004], “Kant’s Theory of Judgment”, The Stanford Encyclopedia of Philosophy, CSLI, Stanford-CA).

For Kant, judgments are the primary truth-bearers: truth is predicated of whole judgments, and “not a predicate of the representational proper parts of judgments” (A293/B350). Besides, Kant
accepts the traditional definition of truth as correspondence (\textit{adaequatio intellectus et rei}, as the Medievals said). But since for Kant truth is a property of whole \textit{judgments}, not of their proper parts, truth is ascribed to a judgment when there is a relation of correspondence between such judgment and an object such that “the form or structure of the object is isomorphic with the logico-syntactic and logico-semantic form of the proposition expressed by the judgment” (Hanna, \textit{Ibid}).

- So it seems that there is a fundamental ontological ambiguity in Kant:
  (a) On the one hand, it seems that we have to postulate \textit{propositional objects}, which are the \textit{correlate} of true judgments: for a judgment, or its propositional content, cannot certainly be “isomorphic” to an ordinary object (the proposition that Socrates is mortal cannot be isomorphic to a non-propositional object, such as Socrates). Are such propositional objects something like \textit{facts}, or \textit{states of affairs}?
  (b) On the other hand, it seems that the judgments themselves (or their propositional contents) are \textbf{objective} according to Kant, and thus have some sort of mind-independent ontological status.

- Such an ambiguity (from a contemporary, analytic and realistic standpoint) may be rooted in Kant’s \textit{transcendental idealism}. Kant's categories:
  (a) are sometimes taken as forms that exist in the mind of any human being since the birth. They are seen as being latent mental possibilities that become active during sense experience. But Kant’s categories
  (b) are also interpreted as the most general qualities or characteristics shared by objects.

This might depend on the fact that in Kant’s transcendental idealism the categories are \textbf{literally constitutive of the object} of experience, and this is a key thought in his (rather obscure) transcendentel deduction of the categories, which aims at justifying the objectivity of our synthetic a priori knowledge.

1.2. \textbf{Kant’s categories as the functions of judgment}

- Before engaging in the transcendental deduction of the categories, during the so-called “metaphysical deduction”, that is, the enumeration of the 12 categories, Kant claims that the guiding principle in order to build their list consists in \textbf{deriving them from the kinds of judgments}.

- Hence comes what Robert Hanna calls the Kantian \textbf{priority of the propositional}, that is, “the priority of the propositional content of a judgment over its basic cognitive-semantic constituents (i.e., intuitions and concepts)” (ibid.)

- Notoriously, Kant divides the kinds of judgments into quality, quantity, relation, modality, each item having three sub-items:

  (1) \textbf{Quantity}:
  \begin{itemize}
  \item \textbf{Universal}: All Fs are Gs \quad \Rightarrow \quad \text{Unity}
  \item \textbf{Particular}: Some Fs are Gs \quad \Rightarrow \quad \text{Plurality}
  \item \textbf{Singular}: The F is G. \quad \Rightarrow \quad \text{Totality}
  \end{itemize}

  (2) \textbf{Quality}:
  \begin{itemize}
  \item \textbf{Affirmative}: Fs are Gs. \quad \Rightarrow \quad \text{Reality}
  \item \textbf{Negative}: No Fs are Gs. \quad \Rightarrow \quad \text{Negation}
  \item \textbf{Infinite}: Fs are not-Gs. \quad \Rightarrow \quad \text{Limitation}
  \end{itemize}

  (3) \textbf{Relation}:
  \begin{itemize}
  \item \textbf{Categorical}: Fs are Gs. \quad \Rightarrow \quad \text{Substance (and Accident)}
  \end{itemize}
(b) Hypothetical: If $P$, then $Q$ (if $Fs$ are $Gs$, then $Hs$ are $Is$). ⇒ Causality
(c) Disjunctive: $P$ or $Q$ (Either $Fs$ are $Gs$, or $Hs$ are $Is$). ⇒ Reciprocity

(4) Modality:

(a) Problematic: Possibly, $P$ (Possibly, $Fs$ are $Gs$) ⇒ Possibility
(b) Assertoric: $P$ ($Fs$ are $Gs$) ⇒ Existence
(c) Apodictic: Necessarily, $P$ (Necessarily, $Fs$ are $Gs$) ⇒ Necessity

• There are various troubles with this classification from the standpoint of post-Fregean logic:

(1) Kant’s logical forms are all either modifications or else truth-functional compounds of simple monadic (i.e., 1-place) categorical (i.e., subject-predicate) propositions of the general form “$Fs$ are $Gs$.” So Kant seems to ignore relational predicates, the logic of relations, and multiple quantification.

(2) Besides, it is likely that his treatment of modality is influenced by some kind of psychologism (for instance, Kant mixes the actuality of a proposition, that is, its holding in the actual world, with its assertion, but assertion is a pragmatic act).

(3) Next, Kant’s distinction between negative and infinite judgments needlessly distinguishes between a wide-scope sentential negation and a narrow-scope predicate negation, thus creating a systematic ambiguity.

• But the central point of Kant’s procedure is that the categories have objective value precisely because they show up in judgments. Kant claims they are “functions of judgment”, which means that we can grasp a category as such only starting with the logical form of the judgment it comes from.

• It has been remarked that Frege’s context principle in the *Grundlagen der Arithmetik*, that is, "Never [...] ask for the meaning of a word in isolation, but only in the context of a proposition”, has a precise anti-psychologistic function. One of the reasons why the meaning of subsentential linguistic items should be sought only in the context of sentences, according to Frege, is that otherwise we would have to assume, as the meanings of words, mental images (e.g., says Frege, if we are simply asked to consider what "two" means independently of the context of a sentence, we are likely to simply imagine the numeral "2", or perhaps some conglomeration of two things). This would go against the first fundamental principle of the *Grundlagen*: “Keep the logical (the semantic) and the psychological strictly distinct”.

• But this overcoming of psychologism had been largely anticipated by Kant. Just like, for Kant, the Verstand is essentially the faculty of judgment, so that the categories, that is, the pure concepts of the intellect, have to be obtained from the forms of judgment, so for Frege:

(a) at the level of Sinn, the thought expressed by a predicate is an “incomplete thought”, for it is a part (in some sense?) Of the thought expressed by a complete sentence.

(b) At the level of Bedeutung, the denotation of a predicate is a concept, and a concept is an “unsaturated” entity, which somehow needs an object to be “completed” and to become ontologically stable.

• This is why since the Ideography Frege had claimed that “The formation of concepts cannot precede judgment, for this presupposes an independent existence of the concept. On the contrary, the concept is formed by analyzing a judgeable content” (G. Frege [1976], *Wissenschaftlicher Briefwechsel*, eds. G. Gabriel and H. Hermes, Meine, Hamburg, p. 135).